

THE O. A. C. REVIEW.

The Dignity of a Calling is its Utility.

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THE O. A. C. REVIEW.

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BY THE LITERARY SOCIETY OF THE ONTARIO
AGRICULTURAL COLLEGE, GUELPH.

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Ex-students will confer a great favor on the Editors of this journal by sending news, particularly experiences of practical value.

EDITORIAL.

We are glad to present our readers this month with an enlarged edition, consequent on the meeting of the Experimental Union and trust the reports will prove interesting and profitable.

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We have been wondering for some time if our "Correspondence" column could not be made more use of by ex-students. It might be utilized as a valuable medium of communication on a thousand and one topics connected with the farm, in which all our readers would be interested. We shall be only too glad to publish short letters asking for information from brother tillers of the soil, or detailing personal experience in some special line of work. Let us have a few next month.



Ontario Agricultural and Experimental Union.

The ex-students, officers and students of the Ontario Agricultural College held their twelfth annual meeting of the Experimental Union, at the College on the 5th. and 6th. of February. Besides the members present there was a fair representation of farmers from different parts of the Province, many of whom manifested much interest in the different sessions and took an active part in the discussions which followed the various papers.

The work of the Union is increasing year by year, both in value and interest, and when we consider that the association is conducted principally by those who have had the advantages of the course of studies as given at the Agricultural College, who can doubt that this Union is destined to become the greatest Agricultural Association in the Dominion? During the past year through the Union upwards of three hundred experimental plots with fertilizers, corn, lucerne and promising new varieties of grain were tested over Ontario, and it is expected that this number will be more than doubled during the coming year.

Some of the papers read at the meeting and summary results of experimental work of 1890 will appear in the agricultural department of this and the next issue of the REVIEW.

The following is a list of Officers, District or County Secretaries and Committees for the present year:

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Horticulture Prof. Panton, Messrs. Lick, and Clinton.

Dairying Prof. Dean, Messrs. Beckett and Perry.

Live Stock Prof. Shaw, Messrs. Buchanan and Monteith.

Apiculture Messrs. R. F. Holterman, Husband and Haight.

PRESIDENT'S ADDRESS.

T. G. Raynor, B.S.A., Rosehall, Ont.

GENTLEMEN, It is with feelings of pleasure and gratitude that I call to order this the twelfth annual meeting of our Experimental

Union of pleasure because of familiar faces, associations, and recollections of by-gone days, of gratitude, because a kind Providence has smiled upon us and bountifully administered to our wants.

To you, the officers and students of our Alma Mater, the ex students, the honorary members, the visitors, and to all interested, we give a hearty welcome and extend the right hand of fellowship. We wish you all to feel at home in this meeting and free to discuss the important topics relative to our noble calling, agriculture. These gatherings, which are so conducive to the stirring of our nobler passions, true patriotism, and a love for our work, cannot fail to make lasting impressions for good on those who avail themselves of these privileges.

In reviewing the work of our Union since its inception we are struck with the progress it has made especially during the last three or four years. Our growth for the most part has been slow but firm. Formerly we were hampered by lack of funds; but now that our work is commending itself more strongly we are more liberally sustained, and I have the conviction that as we show the increasing importance and usefulness of our work we shall receive still greater aid. At present the Government grant is only \$200. To meet the growing tendency of our work fully double that amount is required. Some one has said that "this is the age of conventions." We think the statement true, and although farmers are slow in accepting the situation, yet a great deal of improvement in farming may be traced to suggestions made at such meetings. To-day we have opened such a convention and no doubt the discussions will be productive of much good. We must not stop at the convention, however. With the experiences of the past year we should be able to make this the best meeting of the series.

Greater energy and skill are required now than formerly to make farming pay. Keener competition, due to the development of the resources of other countries, the diminishing productiveness of our soils, and the financial depression now existing demand it. I believe, however, that our work in connection with this Union is helping and will help to a still greater extent this existing state of affairs. We, working in connection with other Experimental Stations of our Dominion, are arriving at results which will be of paramount importance to our agricultural interests.

Experimenting is the most practical side of our work, and to give some idea of what is being done, I may state that last year enough grain and fertilizers were sent out for over 300 plots. Six experiments of this nature were going on, and some sixty-eight experimenters engaged in it. Our experiments have not always been what some would call successful; nor could we expect them to be. They are none the less useful, however, as they may prevent errors of a like nature on a more extended scale. We are thankful for the hearty support given by those who have helped us conduct experiments in the past, and we still count their favor in the future.

We are grateful to the O. A. C. REVIEW, which should receive our liberal and hearty support for devoting so much space to our Union work. I agree with our last worthy President that the REVIEW could be made to serve a two-fold purpose, viz: its present object, that of bringing the present and past students into a closer relationship, and secondly, of becoming the organ of our Experimental Union.

While our motto is "ever onward," yet I do not think we should move too rapidly in our work, nor undertake much new work; but rather, we should by repeated experiment prove the tests already made and bring our work to greater perfection.

It is a matter for regret that more of the ex-students are unable to attend our Unions. There are many reasons doubtless, yet we think if more were earnestly solicited by our district secretaries that a larger attendance would be the result. The district secretaries are not altogether to blame, as they have no list of the ex-students belonging to their districts and have no means of getting one except by examining a number of college reports. Could not something be done to provide lists?

Now, gentlemen, I have to thank you for the honor conferred upon me in electing me as your president last year, and that in my absence, also for your kind indulgence in listening to these remarks. I trust this year may be marked by still greater progress than ever before in agricultural pursuits, and that each of us may be spared to contribute our mite, all of which I respectfully submit.

How to Make Farming Pay.

Simpson Rennie.

To make farming pay, three things above all others must be considered, and these are:

1st. The removal of surplus water. 2nd. Keeping up the fertility of the soil. 3rd. The destroying of all foul weeds. In the first place, if any of you have a farm that is too wet for the full development of the various crops usually sown, I would say by all means have the water removed, and I know of no cheaper or better way to do that than by underdraining, and there is no better material for that purpose than drain tile. Some of you may be ready to say, I can't afford to drain. Now, if any of you have wet fields on your farm, I would say, you can't afford to farm and not drain. In these times of close competition we cannot afford to pay, it may be, both rent and taxes on land that will yield little or nothing. While seeding on my own farm some 35 or 40 years ago before any draining was done on it, it was no uncommon thing to see the horses splattered to the very backs with mud and water, and to have the mud removed from the horses' bodies and legs, they were forced to wade through ponds filled with water before going to the stable, both noon and night, but underdraining has changed muddy fields and frog ponds to a thing of the past. I can safely say, in the Province of Ontario there are hundreds of acres of land left unplowed this fall on account of being too wet, or rather for the want of being underdrained. Now, suppose next spring is a wet and backward one, and these wet, unplowed fields that I have just mentioned have to lay in that state until the end of next May before they can be sown, the result will then be partial failure. Then we farmers are apt to say, the times are hard, markets are low and the grain is not turning out well; but we seldom blame ourselves. The lumbermen put sound logs into the millpond, and why so? that they may remain sound. They know that by placing them in the water the air is excluded and no change will take place, but how different where we want to grow grain, the air and light are required to act on these particles of earth before they become food for plant growth. Why then allow your broad fields to lie for weeks in the spring filled with water and destroy all plant life when it is so easily removed by underdraining? By so doing success is sure to follow, or, as the American Agriculturist has it, draining and good tillage lie at the base of profitable farming. Now, how can we till properly unless the land is drained? I know

that a good deal of underdraining has been done throughout Ontario, but a great deal more could be done with profit.

Secondly. To make farming pay we must keep up the fertility of the soil. We cannot afford to grow grain year after year and only put back the straw to grow the next crop, and some don't do even that. We might as well expent a large flow of rich milk from cows fed on straw alone as to expect a large yield of plump grain from land manured with rotten straw. I hold that to continue growing grain we must give back to the soil an equivalent in plant food to replace that which is taken up in the production of these crops. Now, to do this we must keep stock; yes, sufficient to consume a good portion of the grain raised on the farm. It is not for me to say if you are to go into breeding, feeding or dairying. Some may have a natural gift for one of these and not for them all. We are most likely to succeed in that for which we have the greatest liking. Some will ask, will it pay to feed grain to stock? I can safely say, where we are far from cities or towns and have no other source from whence we can get a supply of manure, unless from feeding stock, it will not pay to farm unless we feed a good portion of the grain raised to keep up the fertility of the soil. We are apt to forget that grain at the ordinary market price and fed through cattle is worth at least 25 or 30 per cent. of the whole cost for manure. Now, I will ask who are the farmers that have been crying out hard times? Is it those that have been feeding grain to their stock for years? No, not a bit of it; it is those who have been growing grain, selling it, and the yield getting less year after year.

Thirdly. It matters not if our land is drained and the soil enriched with manure if we allow the weeds to multiply, disappointment will soon be the result. Just think of a farmer cultivating, harvesting and threshing a crop that is nearly one half weeds. This will cost to harvest and thresh at least \$3 per acre; then it is clearly seen that any person farming in this way will have to expend \$15 for every 10 acres harvested (that is for weeds alone), and there will only be left half a crop of grain, which in these times of moderate prices will pay no farmer to grow. Often summer-fallow is resorted to to rid our fields from thistles or weeds, and how is this

usually done? I can safely say that in six cases out of every ten the land is only sufficiently stirred to ensure a greater growth of weeds the next year. Then again, many of us (instead of summer-fallowing) grow roots which answer a double purpose, that we may have roots for our stock, and at the same time clean our land from foul seeds; but, alas! how often do we see the roots harvested, with the land in a more foul condition than at the time of sowing. I have known some to look with a longing desire to see those good old times return with waving fields of golden grain, but gentlemen, we have robbed our land of its fertility by growing grain and giving little back in return.

To make farming pay mistakes must be guarded against, such as extravagance in the purchase of implements or thoroughbred stock or neglect in the caring for these, but the main principles to ensure the farmers' success are, as I have already stated, underdraining, manuring and destruction of weeds.

Now let me say in conclusion, if any of you have a farm and any portion of it is too wet for the full development of the various crops, by all means drain it. Secondly. Look after the supply of manure, so that you may be able to replace those elements taken out of the soil by growing grain and other crops; and lastly, unless the myriads of weeds are destroyed the farmer will be robbed of his labor, but with these things properly attended to success will surely follow.

The Future of the Live Stock Industry of Ontario.

Thos. Shaw, Professor of Agriculture, O. A. C.

The value of the live stock in Ontario in 1889 is computed at \$105,731,288. The crops grown in 1889, the greater portion of which was consumed by the live stock of the Province, is estimated at \$111,169,572. The entire farm property of Ontario is valued at \$982,210,664. These figures, which are taken from the Ontario Bureau of Industries, furnish us with an idea of the magnitude of the live stock industry of this country, which probably could not be obtained from any other source, unless it be through the export tables contained in the trade and navigation returns.

These tables inform us that the total amount of the live stock and products ex-

ported from the Dominion of Canada for the fiscal year, ending 30th. June, 1889, amounted to \$23,894,797, that the agricultural products exported, other than live stock, amounted to \$13,414,111, and that the export of agricultural products was \$37,308,818, out of a total export of \$77,201,804. It may also be mentioned here, that the export of live stock and live stock products from the Province in 1868, the first year of confederation, was \$6,893,167, and of all other agricultural products \$12,871,055.

From these figures the following deductions may legitimately be drawn, viz:— 1 - That agriculture is by far the most important single industry of this Province, as the revenue which it furnishes, including the food consumed at home, is far more than that of all other industries combined. 2 - That the revenue arising from the export of agricultural produce, other than live stock, is only 56 per cent of that arising from live stock and live stock products. 3 - That the revenue arising from agricultural products in 1868, or 21 years prior to 1889, was 185 per cent greater than that from live stock and live stock products, and that the amount relatively of the former as compared with that of the latter, has decreased in that time to the extent of 241 per cent. From the same authority we learn that in 1879 the export of the principal cereals grown in this country, viz: wheat, barley, oats and peas was as follows:

	BUSHELS.
Wheat	6,610,724
Barley	5,383,922
Oats	2,375,290
Peas	2,714,995

In 1889, ten years later, the export of these cereals was:

Wheat	490,905
Barley	9,948,207
Oats	337,185
Peas	1,982,853

During the ten years mentioned therefore the export of wheat had declined 90 per cent, of oats 85.78 per cent, and of peas 26.70 per cent, while the export of barley had increased during the same period by 84.77 per cent. The export of barley, nearly all of which went to the United States, has since been virtually cut off by the passage of the McKinley Act, as no doubt the framers of that Act designed that it should be.

In 1889 the import of corn from the United States, for home consumption, was 2,894,838 bushels. The amount of corn exported by the Dominion the same year, which was the produce of Canada, was 465 bushels. The cash outlay for corn imported into Canada in 1889 was \$1,266,910, that is to say the amount paid out for corn imported into this country in 1889, in the face of a duty of 7½ cents per bushel, was only \$283,139, less than the amount received for the combined export of oats and peas the same year.

The logic of these figures is simply irresistible. They say to us as plainly as language can convey ideas, that so far as this Dominion is concerned, from Ontario to the Atlantic, the grain selling era is forever gone, and that the best interests of the farmers in this portion of the Dominion lie in the production and sale of live stock, and the products of the same.

The gradual increase in the value of our exports of live stock and live stock products, and the gradual decrease in the amount of wheat and coarse grains exported, except in the case of barley, point to a time when our export of these will cease entirely from Lake Huron to the Gulf of St. Lawrence. Now that our barley trade has received a fatal blow that time has already virtually come. Any policy, therefore, which in the future, will enable Ontario farmers to buy feeding stuffs where they can, will tend to foster the growth of the live stock industry, through which this country is destined in the future to become superlatively great, if our farmers are only true to themselves.

It is impossible to do justice to the subject of the future of the live stock industry of Canada without considering our markets for the same. This I now propose to do. Our principal markets for live stock of all kinds and the products of the same that we have held for sale in the past, have been Great Britain and the United States, and judging by the indications of the present, they will continue to be so in the future. We do not export much to either of these countries in the dead meat form, and whether we will ever do so is one of the problems which the future alone can solve.

The amount of live stock and products exported to these countries in the living and

dead meat forms during the fiscal year ending June 30th, 1889, is as follows:

	GREAT BRITAIN.	UNITED STATES.
Horses.....	\$ 26,975	\$2,113,782
Cattle.....	4,992,161	488,266
Sheep.....	303,009	918,331
Wool.....	470	216,918
Cheese.....	8,871,205	31,473
Eggs.....		2,156,725
Bacon and Hams.....	378,736	87
Hides, other than fur..	7,070	454,105
Butter.....	174,027	7,879

From these figures it is apparent that our principal market for horses, sheep, wool, eggs and hides up to the present has been the United States and that our principal market for cattle, cheese, bacon and butter is that of Great Britain. The passage of the McKinley Act has greatly injured our market to the United States in horses, wool, and hides and it has practically annihilated the same in cattle and eggs. That it has destroyed our trade in store cattle is no matter of regret, for if our farmers can be taught the folly of selling store animals at the cost of the loss of a market to the extent of half a million of money, the gain will soon more than counter-balance the loss. The markets for all these products and many more in Great Britain remain as gloriously free as the winds that waft her ships o'er all the seas of earth, and so they will continue till we and our sons are dead, an object lesson to all the world of the value of unfettered trade.

That the future of our live stock industry will be greatly affected by coming legislation in the United States is beyond the shadow of a doubt, and the element of uncertainty that hangs over this legislation perplexes us somewhat as to how we should shape our course. The safe rule for us to follow at present is to moderate our production in those lines which are adversely affected by the McKinley tariff, to increase it in those which are not so affected, to still further increase our production in lines in which we have already captured the British market, and to strengthen our position there in every possible direction wherein we may be weak at present.

From this it follows that we should moderate our production of horses. The United States is our only market for these. The cheaper classes of horses are now shut out of that market. Our only hope, therefore, in

this respect in the meantime lies in the production of horses of a better quality. The rapid extension of new modes of travel and of communication say to us quite as loudly as the McKinley legislation that we should moderate our production of horses.

There is great reason, however, for the extension of the sheep industry. At present the whole number of sheep in this Province is only 1,344,180 head, that is but one sheep for every 16½ acres of the assessed lands of the Province. By raising sheep of the right class we would get a ready market for one million more lambs than we now raise. These would be sold in the markets of the United States and Britain and would bring in the former country in autumn an average of \$5 per head, and in the latter country when one year old from \$8 to \$10 per head. In the item of sheep alone we would more than make up for the loss from an injured trade in horses and poultry, and we could do this without interfering with any of the other lines of live stock production if we pasture judiciously in summer and feed properly in winter. We could fatten one million lambs in the autumn on 100,000 acres of rape which is only the one hundred and fourteenth part of the arable lands in Ontario. The style of sheep wanted for this purpose is the progeny of such ewes as we have, and from dark faced rams, particularly those of the large types, as the Shropshire, Oxford and Hampshire Downs. If we now can get from Great Britain about \$5,000,000 annually for our beef, why may we not grow beef enough to secure \$10,000,000 annually from the same source? If we now can procure about \$8,000,000 a year for our cheese from the same country, why may we not produce enough to bring us a return of \$16,000,000 a year? The market for both these products is unlimited, and the extent to which we occupy it, may only be hedged in by our desire and ability to produce beef and cheese.

The market in Britain for our pork is as wide as our ambition may care to make it. It is true that in that market we come in competition with American pork. But with our beef and our cheese we have a similar competition, and when Canada comes in competition with the United States in the line of live stock and live stock products the results are always the same, the beaver has been found more than a match for the eagle. Our cheese industry substantiates this statement. The same is true of our beef industry, and it finds further

confirmation in the millions of our exports which, during recent years, have climbed over tariff walls and found a place side by side with American products on American shambles. That our production of live stock and live stock products may be doubled within 15 or 20 years in quantity, and also increased 100 per cent. in quality, that is, quadrupled in value, may seem a strong statement, but it will only seem so to those that are not conversant with the possibilities of this country. The increase in quantity may be brought about through a better method of farming, and the increase of the latter through improved methods of breeding and feeding. Two of the principal factors in the former will be the growth of corn and rape, and in the latter, purebred sires and feeding done on the lines laid down in the bulletins issued by our Experimental Stations. If only purebred sires were used for the time indicated by simply repeating the upgrading in the same lines continuously all the live stock of this country would be as good as pure for practical purposes, and our possessions in this line in quality would present a spectacle without the approach of a parallel in any country in the world. Our live stock would then be worth \$121,925,152, and not \$105,731,288 as now. And all this could be effected without clearing another acre of the forest, or drying another acre of the swamp. But this is only a picture of what may be, rather than of what will be in the coming days of great improvement.

The possibilities of live stock improvement and production in this country in the future are very great. The unparalleled growth of American cities will in all probability arrest the great volume of the export of American agricultural products before two or three decades pass away. Then, if not till then, tariff walls will fall like those of Jericho, and our live stock and products will then have unfettered access to the markets of both England and America.

The cries of loyalty and disloyalty fill the air at present. They resound on every hand and in those days of independent thinking every man probably frames his own definition of loyalty. It is my purpose to do the same and I give it for what it is worth.

In view of the transcendent importance of the live stock industry to Canada, I regard every citizen thereof as in a sense disloyal who discourages the growth of more and better stock and live stock products and who en-

courages the export from Ontario at least, of the food that should be fed to these, that it may be returned again to the soil.

The live stock industry of Ontario will, therefore be immensely greater in the future than at present, if the farmers of Ontario are true to their own best interests, and true to themselves. It is now the great mustard tree of the country, beneath the branches of which all other interests find an existence. Take away the live stock interests from Ontario and you leave only the husks of grain selling to an impoverished people. You stop the water wheel that drives the manufacturing establishment, and you leave the merchant in his counting house preparing for the inevitable crash of disaster which is to lay his business in the dust, a forlorn and hopeless ruin.

Whoever, therefore, introduces better methods of stock raising and will teach men these, is more worthy of the gratitude of his country than Wolfe, who bled at Abraham, or Brock at Queenston Heights.

To return again to loyalty, there is no loyalty to this Province at the present time that is to be compared to that that devotion which persistently brings before our people those methods of live stock improvement, which will keep us in the van of other nations as a live stock producing country. Those men who are instrumental in filling our country with silos and butter and cheese factories, to say nothing of fields of rape, are worthy of being enshrined forever in the grateful remembrance of a people made prosperous and powerful through their loyalty to duty.

The influences that conjointly will lead to his improvement are many. They include the teaching of the press, the encouragement given by live stock and agricultural associations, which now are happily numbered by the hundreds, and legislation in the interests of the farmer, which, like sunrise in December, though long in coming has come at last.

But there is yet one influence, not mentioned sooner, on the principle that the best wine should be kept to the last, the influence of the teaching of the Ontario Agricultural college through her graduating classes. Every student of this College should prove a centre from which the light of better methods will emanate and radiate for the uplifting and advancement of agriculture. He will, or

should, prove leaven in the neighborhood in which he follows the plough, which, like that put in the meal, went on with the work of transformation until the whole was leavened. He should never forget that the roll of parchment which he bears away from this College on graduation day was given him as a sort of Magna Charta, empowering, authorizing and requiring him so to conduct his farm that its management will secure from the people that admiration and respect for this College of which it ought at least to be deserving.

The signs of the times are certainly auspicious, at least so far as the indications of live stock improvement are concerned. The breath of advance is at last stirring the dry bones of old time practice, rendered venerable through the approval of a departed generation. A banner with a new device has been raised amongst our people. It has depicted upon it, in colors that never fade, the sketch of a span of horses, a fat steer, a dairy cow, a mutton sheep, with dark face and legs, a pig, with a rather long body and deep sides, and a platter of eggs on the farmer's table, not on that of a New York restaurant. The horses are not on the race course, but drawing the plough. The steer and cow are feeding out of the side of a Silo. The pig is gathering up gleanings thrown to him by the side of a pen, which is so constructed that it will resist all adverse influences of weather, and the sheep is pasturing in an immense field of rape, into which other flocks are being driven. On one corner is inscribed the words: "Better education for the Farmer's Son and Daughter," and on the other a mighty monument with the inscription: "The live Stock Industry the Greatest of all the Industries of Canada."

Jones—(who sees Brown laughing on the sidewalk inordinately) "What are you laughing at so hard, Brown?"

Brown (pointing to a dog that had managed to get its tail in its mouth) "Can't help laughing with joy; glad to see somebody can make both ends meet."

An American boy's opinion of the chaperon in one of the college papers, is written in a way which would lead us to believe that the boys, or at least the students in particular, do not care for the importation of foreign customs and manners in the great republic on our southern border.



THE THIRD YEAR.

TEXT "The College Gown."

Oft by our graduates we've heard
Their mighty third year deeds extolled;
And listening to each weighty word,
Our breath, in silence did we hold.
But now as third year men we speak,
That all assembled here may hear
The amount of knowledge we must seek,
To graduate in the third year.

CHORUS TUNE, "Litoria."

The third year! The third year!
Thus we shout and thus we cry.
The third year! The third year!
It must and shall be done.

All that pertains to field or flock,
In agriculture must we know;
And trace the course by which the rock
Into the golden corn can grow.
Nor stop we at the golden corn,
But mould it into cow or steer,
Whose beef at noon and milk at morn
Fresh vigor gives to the third year.
We sound the depths of alchemy
And her dark mysteries unfold,
How mixing earth and air and sea,
We'll line our pockets all with gold.
And analysing, we may test
What fertilizers are too dear,
In soil what lacks and what's the best
To enrich the fields of the third year.
Dame nature, too, we force to tell
Which of her children are our foes,
That birds and beasts and bugs we'll quell,
Check blights with spray, and weeds with hoes.
Beneath the microscope, we see
Sights that do fill our hearts with fear;
Tiny spores slaying mighty trees,
And bacilli threat'ning the third year.
O'er authors new and old we pore
Of reading books there is no end,
That speak, or write, our thoughts may soar
With grace and power that rhetoric lend.
In drawing plans, we must excel,
Show elevations front, or rear,
Of dove cots where we hope to dwell
When we've completed our third year.

From morn to eve, all day they toil,
 Regardless that they're growing thin,
 Fred, Harry, Shamman, Hewgill, Boyle,
 Joe, Charlie, Holliday, Dave and Jim.
 These ten and Hutt make up the class,
 In size and deeds without a peer,
 Which hopes in May exams, to pass
 And glory win for the third year.

—H. L. H.

SPORT IN INDIA.

F. W. H. Grey, '91.

Sport in India as compared with sport in more civilized countries is hard and dangerous work. To get it out there one must rough it considerably, and be prepared to face death at any moment.

The tiger is the king of all beasts, and therefore the most sought after. When a man has killed a tiger or two he may then indeed call himself a *shikari*, i. e., sportsman. The tiger is generally "bagged" in the following way:—The sportsman goes to a good tiger jungle, say the Dera Doon Forests in the lower Himalayas, and camps near some village where the villagers have lately had buffaloes killed by tigers. If, when he arrives there he finds that there has just been a "fresh kill" his work is made easy for him, as all he has to do is to go and "sit out." If not, he buys a young buffalo and ties it by its leg to a stake or a tree (as the tiger does not see the rope as easily as if it were round the buffalo's horns or neck) near to any pool of water where the tiger's trail is seen. The sportsman then camps near by and waits for a kill. When the tiger kills he generally breaks the rope and drags the buffalo away to the recesses of the jungle, unless the pool is in a very unfrequented place. A tiger has been known to drag a buffalo weighing 500 lbs. or more for 2 or 3 miles. As soon as it is found out where the carcass is left preparations are made for "sitting out," which is done in two ways:—one by tying a bed up in the branches of a tree close by, this is not a good method as one cannot see the tiger clearly against the dark ground. The other method is to dig a hole about three feet deep as close to the carcass as possible but on the leeward side. As evening draws near the sportsman gets into the hole and then waits patiently. It is much better when sitting out at night, whether for a tiger or other game, to sit out alone as even the best native hunts-

man will sometimes get tired and by yawning or stretching frighten the game. When the tiger does come he will give ample warning by a sudden and pronounced roar, which if you are not accustomed to such demonstrative greeting will bring your heart into your mouth and see you dimly wondering whether it is fear or simply excitement that makes your heart beat so quickly. Then he will come sniffling and growling up to the carcass and commence his meal. Let him get fairly well started and then carefully and silently slip out the muzzle of your rifle, aim either behind his shoulder or between his eyes and let him have it. After you have fired you must crouch down, for if he is only wounded it will mean certain death to you if you stand up after you have fired, for the tiger, even if mortally wounded has sometimes strength enough to kill you before he dies.

The animal that comes nearest to the tiger in ferocity when wounded, and even excels him in pluck is the wild boar. No tiger will dispute the right of way with him, and even elephants are afraid of his tusks. The boar is killed with spears by men riding him down and sticking him. To have good pig sticking one wants a fairly level bit of country not too much cut up by water courses and with but little jungle on it. The boar is generally hunted at daybreak as he is then to be found in the short jungle bordering the fields where he has been feeding all night. He is hunted out of this by the aid of dogs and beaters. As soon as he takes to the open, a tally-ho is given and the huntsmen make a dash for him, each man urging his horse to the utmost so as to be first up with the boar and draw first blood. The boar is very fast, very plucky, and very quick on his feet. He may be running for dear life away from you and suddenly before you can turn your horse or do anything, he swings round and charges like a whirlwind. In the words of an old Indian song:—

"The noblest animal God ever made,
 Is the boar that will charge like the Light
 Brigade!"

If you are unlucky and do not manage to stop him with your spear he will make one leap at your horse and, with tusks as sharp as knives, tip him even from stifle to girth. A wild boar never squeals when he is stabbed, but dies without any sound except perhaps a grunt or two of rage.

The next highest sport is either ibex shooting in the Cashmere mountains or gurrel

(chamois) shooting in the higher Himalayas. Never having done any of the former I am unable to speak upon it. The gurrel are very hard to shoot as they are so timid, they live on the sides of precipices which are impassable to any feet but their own. To get gurrel one must do a lot of difficult and dangerous walking and must be a fair shot. As it is impossible to scale the precipice after them, the only way to get them is either to stand below at the foot and send beaters round to get on top and throw stones down to frighten them out and trust to their coming down, or to sit on the mountain side opposite the precipice and fire as you see them crossing the ledges of rock. The latter is the best way, but it makes very long shooting as you seldom if ever get a shot under 250 to 300 yards, and as the gurrel stands barely 3 feet high it is hard shooting. I have always shot them by this method and never got a shot under 300 yards. Since shooting such small game becomes so very uncertain, a man who has bagged 3 or 4 gurrel may consider himself something of a shot, as a man who has killed the same amount of tigers may consider that he has the nerve necessary for a sportsman, for without plenty of nerve and a sure, quick hand a man need never start shooting in the jungles of Upper India.

Next in line of honour comes the bear. He is generally found in the lower Himalayas, but is found up to the altitude of 10,000 feet. He is hunted with the aid of dogs and beaters who rouse him from his lair and drive him past the place where the sportsmen are all lying concealed whence he is shot at by the first man who has the luck to see him. The bear is an ugly customer on the level if you are on foot, and also on the hill-side if he happens to be above, as he runs very fast and rolls down a hillside at an amazing rate. But a bear will seldom attack you if he has to come up hill to you, even though wounded. The only place to kill a bear outright is through the brain or right through the heart; he will sometimes fight with 5 or 6 bullets in him if neither of these places is hit. Bears are often mobbed by a party of villagers who kill them with hatchets and knives. They get round the bear and when he charges one of them, another fellow hits him from behind with an axe, and when he turns on his assailant he receives a blow from an axe or a thrust from a knife in his back from another of the villagers, and so on till he dies. A bear seldom attacks a man

unless wounded, but some cases have occurred where they have made unprovoked attacks.

When a man goes to shoot in India he should take as arms a 500 bore doublebarrelled rifle, and also a double barrelled No. 12 smooth bore with shells, as a spare gun in case of charging animals; this with a good shot gun and a long heavy double-edged hunting knife is all that is necessary. The express bullet is best for deer and tiger, and the solid ball or shell for bear. I have purposely said nothing about the elephant shooting as lately there has been a law passed which imposes a fine of Rs. 1000 against any one who shoots an elephant.

I have not mentioned the smaller kinds of deer or the feathered fowl, for when we can get big game we don't go much after hares and partridges except for the pot.

Agriculture in Japan.

F. A. Wilkin, '91.

We, the inhabitants of Canada, where land can be had almost as a gift, can hardly appreciate the exertions of those in other countries, who strive to obtain as good a return as possible from their small holdings.

Intensive agriculture is only brought to perfection in those countries, where land is very expensive, and labour very cheap. Wherever we find those two conditions present, we will surely find this system of farming in vogue. It probably exists in the highest perfection in China, where small patches of ground, but a few feet in extent, on the face of cliffs, will often be cultivated by Chinamen, who let themselves down by rope ladders.

In Japan we see peasant proprietorship in perfection. Here every countryman owns a patch of ground, from one to two acres, or even less, in extent. All the labor in connection with it, the sowing and the harvesting, is done by hand, the wife and children helping. Horses in this country are only used by the natives as pack horses, never in connection with agriculture. Cattle are not kept either, so that the farmer need only grow those crops that are directly used by man.

The staple crop is rice, the seeds are sown in small beds, and when the plants are about six inches high they are transplanted. For this crop the land is irrigated, and at the period of transplanting you see the Japanese farmer wading about, up to his waist in mud. The water is kept on

until the plants are well grown. The grain when ripe is cut by the sickle, and as fast as it is cut it is set up in shocks. After letting it stand thus in the field for some time, the farmer appears on the scene, armed with a flail, and spreading a cloth on the ground, proceeds to thresh out every shock separately. As soon as the rice is off, the ground is immediately prepared for roots and vegetables, and in this way two crops are always obtained every year from the same ground. Of course even in the mild climate of Japan, this could not be done but for the liberal manuring practised, the manure being generally applied in the liquid form.

Fences, a source of great expense to the farmer, do not exist in this country. Here one man's land is marked off from his neighbour's by narrow paths. Perhaps, you may ask, if the Japanese have no horses, how do they get their produce to market? Well, they simply carry it there in baskets, slung one on each end of a pole, and in this way a load of 150 pounds can be easily carried. Arrived at the "foreign settlement," they go from one house to another, till all their load is sold.

The chief article exported from Japan is silk in the raw state; tea is also shipped to some extent. Silkworms are kept in large houses, or rather barns, which consist of five or six stories, with from four to five feet of space between them. The floors are made of eight bamboo laths, which will not bear a person's weight, but passages run parallel down them, on which attendants may walk. The floor is kept covered with mulberry leaves, on which the silkworms feed, and which have to be changed several times during the day. When the silk worm has developed into a cocoon, the silk is unwound by hand, the cocoon being first dipped into a pail of hot water which loosens the threads. I have seen the women engaged in this work eat the grub, found inside, with much relish. The silk is then spun and shipped in skeins.

The tea plant, as most of you are aware, is a shrub from two to five feet high. The young, tender leaves are plucked and roasted over a fire. In country villages this firing is accomplished by placing the leaves in a framework covered with netting and shaking them over a fire, but in towns the firing is done wholesale in "godowns," (stone warehouses) when the process becomes rather disgusting, owing to the manner in which the leaves are handled.

IS PHRENOLOGY A SCIENCE?

And What are its Practical Teachings?

(MISS L. HENDERSON, GUELPH.)

(CONTINUED.)

The dictionary defines the word "Science" as knowledge arranged under general truths and principles—truth ascertained. "The principles of phrenology are simply the recital of truths, which lie open before the eye of every human being," says Dr. Jacques. Let us see, then, if these principles can be proved: The first principle of phrenology is: "Brain is the organ of the mind." Dr. Drayton says: "In the lowest class of idiots the circumference of the head, above the ears, measures from 12 to 13 inches. In a full sized head, circumference is 22 inches. A low degree of mental power invariably accompanies a marked deficiency of brain. Heads of barbarous races are smaller than those of the civilized." According to Prof. F. G. Morton, the Seminole and Occidental Indians have a brain measurement of about 90 cubic inches. The measurement of English and German skulls, internally, is placed, by the best authority, at over 100 cubic inches. Prof. Austin Flint, of New York, weighed 404 white and negro brains. The average weight of white brain was 52 ounces, negro 46 9/10.

Whenever the head does not exceed 13 or 14 inches in horizontal circumference, idiocy is the invariable consequence, thus the larger the brain power the larger medium, mind will have to work through, and the stronger will be its manifestations. Size is a measure of power: quality being good. An idiot may have a mind grand and fine as a Shakespeare, but brain media being lacking, there must be less manifestation of that mind.

Another proof of this position is, in disease of or injury to the brain the mind is always affected. Sir Wm. Ellis, Physician to Asylum, Middlesex, England, in his "Treatise on Insanity," reports that out of 221 cases of dissection, he found that 207 showed decided marks of brain disease 4 of the remaining were born idiots and must be excluded from the list, thus leaving only 10 cases in which he could not detect organic disease, and of these 10, seven were recent cases, being only about one month ill. Sir Astley Cooper said of a young man, who was brought to him, having lost a portion of his skull above the eyebrow:

"I distinctly saw the pulsation of the brain. It was regular and slow. But at this time he was agitated by some opposition to his wishes and directly the blood was sent with increased force to the brain the pulsation became frequent and violent." "If, therefore," Sir Astley continues, "you omit to keep the mind free from agitation, your other means, in the treatment of injuries to the brain, will be unavailing." Hundreds of cases might be cited in support of this principle that mind works through brain, and that in order to have vigorous manifestations of the mind we must have a healthy, large brain, supported by a strong, healthy body. "*Mens Sana in Corpore Sano*" is a very true proverb.

Another principle of phrenology is "The brain is made up of as many individual organs as there are distinct mental faculties." Curvier says, in his "Anatomie Comparée," Vol. II: "The certain parts of the brain in all classes of animals are large or small according to certain qualities of the animal." The great Haller, Swiss anatomist, assigned a function to each department of the brain, but it was reserved for Dr. Gall to give a substantial basis to the theory "That the brain is a compound organ, by discovering the respective places in it, of the different mental faculties."

Blind Tom had musical talents, but was an imbecile in most other respects. People have different degrees of talent. Some have faculties for mechanics, others for business, others again for books. Some have ten talents, others only one. Partial genius, partial insanity and idocy are utterly incompatible with the idea that the mind has but a single organic apparatus—but a single unit, but is clearly and rationally explained on the supposition that the brain is composed of a number of organs.

Dr. Gall was directed almost entirely by observation in his discovery of these different brain organs, and the locality of each one was discovered as the result of careful and extended study. Then Dr. Spurzheim classified these organs with a regular system; that system is phrenology (from Greek Root *Phren* the mind *logos* a discourse). But the essence or mode of operation of the mind itself being scrutible, its manifestations can only be studied through the brain, its special organ.

Phrenology does not now claim to be a completed science. As far as it has now advanced it consists of a science of two parts,

viz.: (1) A system of physiological facts and their corresponding mental phenomena. (2) A system of mental philosophy deduced from these facts and from other facts and phenomena related to them.

The physiological part of the science may be stated thus: 1st. Brain is the special organ of mind. 2nd. The mind is made up of about 40 different faculties, each of which is manifested by a particular part of the brain, set apart exclusively for it and called its organ. Faculties may be possessed in different degrees by the same person. 3rd. When other conditions are the same, viz., quality and health good, the larger the brain the stronger it is, and the larger the portion of brain occupied by a faculty the stronger its manifestation. 4th. The brain is divided into regions or groups as well as into organs. 5th. Each group has its collective function. The selfish and domestic propensities located above and behind the ear at the base of the brain. Ambitious sentiments placed at the crown of the head. Moral and religious sentiments located at the superior frontal and superior parietal region, or at the top of the head. Intellect in the frontal lobe or forehead. The selfish and propelling faculties give force in all actions and lead us to take care of ourselves; the intellectual enables us to understand men and things—whatever is to be known; and the means of dealing with them. Ambitious faculties make us value the respect and esteem of others, and rise to better things. Moral and religious are meant to control all the rest, by subjecting them to the tribunals of kindness, justice, and of the Divine Law.

Each faculty is susceptible of improvement or deterioration, and may be strengthened, perverted, neglected or weakened. Each faculty is in itself good, and was given by the creator for good. The improvement of man, therefore, does not imply the extinction, distortion or stunting of any faculty, nor the creating of new ones, but the culture needed by each, and the harmonizing of all, with the right degree of activity. The student of phrenology should have at hand a phrenological bust, showing the exact location of every organ, then compare living heads, one with another, and note the difference. Compare characters of those having broad heads with narrow ones, high heads with low ones, and however sceptical you may be, you will be compelled to accept the general principle of phrenology.



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Local News.

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WORKING ON ice—a (n)ice job.

ONE of our undergraduates keeps Lent.

WHO stole the cake the night of the Union supper?

DO NOT fail to hear our Mezzo-Soprano Price-letts.

HOW is it that Haight cannot get hot water out of the cold water tap?

IT is whispered, Morgan, that you were out till 1.30 a. m. the other night.

C. N. NOTMAN, A. O. A. C., '86, of Toronto, spent a few days here last month.

THE new Ayrshire bull, bought from Mr. Youill, is a model dairy animal.

THERE is a new conon in town, a dozen of them in fact, and now our total attendance is 94.

FOUND, 23 pairs of boots. Owners can have same by proving property and paying fines.

QUERY—Which would Haight rather do,—show the ladies about the museum, or lose his dinner?

LOST! lost!! lost!!! Harrison's goatee.

FOUND! found!! found!!! Jackson's moustache.

ONE dog at least has escaped from the sausage machine, in spite of "Dave's" predilections.

SOME Pantonians were astonished to find hams in their beds for several nights after the Union supper.

MR. McINTOSH has expended considerable labour on the stable doors, so that now it is possible to shut them.

MR. CROSS, who has been successfully ranching in Alberta for the last seven years, spent a week here last month.

A NEW innovation, started this term, consists in having the agriculture lectures printed on sheets, instead of taking them down from dictation. This is greatly appreciated (by the lazy ones especially).

WE have at the College, a Black, a White, two Brown's, a Grey, B. Scarlet, and the color Green is well represented in the 1st. year.

MR. DOHERTY having obtained the position (without seeking it) of errand boy at Bollert's, will in future be employed in delivering carpets.

NEWCOMEN (corner of post office) "Darling when shall I see you and where?" Rude undergraduate around the corner laughs loudly.

JUDGING from the life-like sketches so frequently seen on the blackboard, Carpenter will probably be "Grip's" future cartoonist.

TALK about H. Rider Haggard's or Jules Verne's tales of improbable adventure, those are more than surpassed by some of Youill's exciting experiences with horses.

EX-STUDENT—"Yes, I'll send you down a wolf skin from the North-West."

YOUNG LADY—"How nice; I'll have a sealskin jacket made out of it."

PROFESSOR "Hurry up, our time is so short."

STUDENT—(Plunging into York's speech in Richard II) "Tut! tut! why, foolish boy."

PADDY, with the able assistance of his roommate, has been busily engaged in hatching a plot, whereby he hopes to have the potatoes mashed on week days as well as Sunday.

P. R. C. BAYNE, our football captain of 1889-90, visited the College last month, on his way back to England. His many friends will be glad to hear that he was quite as merry as of old.

WAS there ever a youth so fastidiously neat and tidy as "Sid?" If it were not for his overpowering bashfulness, his handsome face would surely break the hearts of all the young ladies in Guelph.

WE heard a weird, wild, unearthly sound echoing down the halls, and in terror lest it should be some supernatural visitant, swiftly fled to Counsell for protection, but it only turned out to be Soule practising his howl.

THE poet says,

"In the Spring a young man's fancy
Lightly turns to thoughts of love,"

which causes us to wonder whether it is a perpetual spring time with Harrison, or is he only an evergreen.

A PART of the reading room ceiling fell in some days ago, considerably astonishing all in the room. Judging from the large crack across the ceiling, this may be repeated at any time, if not attended to.

A CORRECTION. In our last issue we stated that Mr Eaton had not increased in weight, since his arrival here, but he informs us that he has gained 27 lbs. in the last two months. We wonder if Carlyle cannot beat that record.

THE Union Supper, held on February 5th, was a great success. A variety of toasts beginning with "The Queen" and ending with "The Press" was proposed during the evening, which was most enjoyably closed by an exhibition of magic lantern views, kindly given by Prof. Panton.

"DOCTOR" Cleugh, '87, somewhat astonished us at the beginning of the term, by appearing in the dining hall, clad in a buckskin coat, ornamented after the North-West fashion by long fringes. He was on his way home, for a visit, from Assiniboia, N. W. T., where he has been farming for the last two years.

Written by Mr Price in an autograph album:

"I fain would be a minstrel,
To wander far away;
In every house be welcome,
And sing the live-long day."

Parody by an unkind friend:

"I would you were a minstrel,
And that you'd wander far away,
For in no house you are welcome
To howl the livelong day."

PERRY, meeting a visitor in the cow stable, who was deplorably ignorant of the composition of milk, and the elaboration of the lactic fluid in the cow's udder, instantly conceived it his duty to enlighten his mind upon these important subjects, and held forth with great vigor accordingly. It was noticed that the visitor decamped at the earliest opportunity, and now we hear that he is relating all over Guelph his exciting adventures with a escaped lunatic in the O. A. C. bars.

A GREAT many ex-students took advantage of the Experimental Union to visit once more their Alma Mater. We were especially glad to see the familiar faces of Brodie, Monteith, Shantz, and R. E. Cowan. They all seemed prosperous and happy, and we wonder if there is not some foundation for the report which

says that one, if not two, of them will, during the present year, lead a blushing bride to the altar.

PROF. SHAW drives the 3rd. year out, every Saturday, to some convenient cattle breeders' stables, and there points out the various excellencies peculiar to the breed under discussion. The 3rd. year's spirits are boisterous, however, and after these trips we hear tales of "The great woolling Holiday got," how many times Cowan was thrown out of the sleigh, and how many hats were dinged in, etc. Prof. Shaw, we believe, is seriously contemplating the necessity of taking with him one or two 2nd. year men to keep the rest in order.

THE programme of the weekly meeting of the Literary Society held on February 13th, was hardly of the usual length, and owing to the absence of music not as lively as it might have been. An interesting speech by Mr. Hunter on "Bow Park," was followed by the debate "Resolved that the American form of Government is superior to that of Great Britain." The speakers for the affirmative were Messrs. Gibson and Seale, for the negative Messrs. Mackenzie and Vanatter. Mr. Haight then gave an address on Prince Edward County and was followed by Mr. Copeland on "Strawberries," after which the house adjourned.

THE 1st. year held a meeting last month to arrange about getting their lectures printed. Apparently they had previously determined to remove every possible obstacle to the failure of the meeting, for proceedings were opened by electing Mr. Brown to the chair. After a stormy discussion of a quarter of an hour, during which every proposal brought before the house was rejected, a motion to duck the chairman was seconded and carried unanimously, but owing to the escape of that individual through the window had to be postponed. The house then broke up in confusion. (Our reporter being a 2nd. year man was excluded from the meeting, and therefore this account being based on rumors, may not be entirely accurate. Ed.)

A REGULAR meeting of the Literary Society was held on Feb. 20th. The programme was opened with a reading by Mr. Harrison, "The Last Fight of Odysseus." Mr. Doherty, our comic singer, who then chirped forth "Sam Seldom's Goat" was heartily encored. The debate, "Resolved that the

study of Agricultural Chemistry is of more benefit to the farmer, than that of English" was ably sustained by Messrs. Wilkin and Harcourt for the affirmative, and Messrs. Morgan and Harvey for the negative. The committee, on the merits of the speakers, decided in favour of the affirmative. The house, on the merits of the question, decided in favour of the negative. Mr. Hurley's instructive speech on the "Hog" was followed by an amusing recitation, by Mr. Ruthven. The regular critic being on the debate, his place was ably filled by Mr. Sharman. A great fault in the programme was the scarcity of music.

AN INTERCEPTED LETTER.

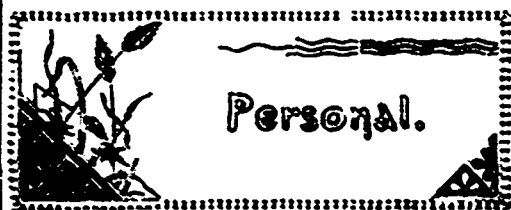
"My dearest Mary.—

They say writing is the next thing to speaking and I am sure the person who said this must be right, for not being able to speak to you I feel I should go crazy if I did not write. If I thought that my hopes for our future should not be verified then I would try suicide again, for once having met you I cannot imagine a life, without you to kiss and hug the livelong day. Oh! my darling, you don't know how dearly I love you. Before your many charms, the dusky beauties of my native Indian jungle fade and are completely forgotten. Even those girls I met at Muskoka last summer, who, till I saw you, seemed to me the very ideal and perfection of feminine grace and beauty, are as completely eclipsed, as is Arnton when Doherty appears on the scene." * * * At this point the feelings of the writer seems to have completely overmastered him, the remainder of the letter being nothing else than the incoherent ravings of an unbalanced mind.

An open meeting of the Literary Society was held for the special benefit of the ex-students, on Feb. 6th. The programme was opened by the President's address; a song by Mr. Soule, which followed, was loudly applauded; Mr. Wilkin then gave us an interesting address on Calgary; Mr. Worthington's solo brought down the house, but unfortunately owing to the length of the programme encores were not allowed. Mr. Shaw's recitation created much amusement; Mr. F. Field, of Cohourg, by special request favoured us with a song, which was loudly applauded; a reading by Mr. Newcomen was delivered in that gentleman's usual effective manner, followed by Mr. Whitley's excellent solo. Then Mr.

T. B. Willans favored the audience with one of his clever essays (an interruption by Mr. Newcomen during this piece was promptly suppressed). Mr. Buchanan's recitation caused much laughter. Mr. Soule then favored us again, and as usual was loudly cheered. Mr. Field's comic reading was followed by a recitation from Mr. Whitley, who kept his audience in breathless suspense from beginning to end of his piece. A number of ex-students gave short speeches, when the meeting was closed by singing "Good-night Ladies."

THE fourth annual entertainment of the 3rd. year was held in No. 1 classroom on January 30th. Mr. Harcourt, B. S. A., in opening the meeting, remarked that since they had first been inaugurated they had always been looked forward to with intense interest, and certainly from the excellent way in which the first-class programme was rendered, all in the audience will look back upon this evening as one of the most pleasant they have spent in the O. A. C. Literary Society. Instead of a regular orthodox debate, four speakers brought before us the merits of their favourite authors as follows: Mr. Holliday Bacon; Mr. Palmer—Shakespeare; Mr. Sleightholm—Addison; Mr. Whitley—Milton. The speeches of all were most entertaining, the advocate of Milton being judged to have brought forward the best arguments. Mr. Sharman's "Character sketch of Lord Macaulay" was pithy, concise, and very well put together. Mr. Linfield's essay "Nature under the Microscope," proved highly interesting as well as most instructive. The recitations of Messrs. Hewgill and Cowan were loudly applauded, while the comic reading, "Too Awfully Lovely Philosophy," by Mr. Field, brought down the house, being delivered in our 3rd. year cherub's sweetest manner. The various choruses greatly enlivened the meeting, and much credit must be given to their talented composers.



J. S. Rayden, '87, is ranching west of Mitford, Alberta, N. W. T. Mr. Rayden has been in the country for three years and intends settling there permanently.

Messrs. Jameson, Henry, and Parker, of '83, are three of the most enthusiastic farmers in the vicinity of Thornton, Ont. All are large stock breeders; also extensive fruit and grain growers. They always take an active part in Farmers' Institutes and are successful exhibitors at the County Shows.

The friends of R. Elliot, '90, will be glad to hear that he has been appointed experimental cattle feeder at the Ottawa Experimental Farm. Mr. Elliot has had charge of the sheep at the College since October, and has always done his work in a highly creditable and satisfactory manner.

J. J. Fee, B. S. A., '88, writes us from Portland, Oregon. Mr. Fee is in the mining business, and is assistant assayer to a large mining company. He seems highly pleased with his surroundings and has, we are sure, made many friends among the Yankees.

S. P. Brown, A. O. A. C., '88, has recently returned from Michigan, where he was running a large dairy farm, and is now farming near Whitby, Ont. Mr. Brown is an enthusiastic dairyman and seems determined to devote all his energies to that particular line of farming in which he has had so thorough a training.

A. S. Paterson, '87, is studying medicine at McGill College, Montreal. He will graduate next summer.



One of our welcome exchanges is *Student Life*, from Washington University, St. Louis. Its interior is excellent, the only fault we could find has been with the engraving on the cover, which was very indistinct. However, we were glad to see that at Christmas it came out in entirely new apparel, the design being a credit to its originators.

The *Young Men's Era* has lately come to us full of, and even overflowing with, excellent advice to young men. To any one who takes any interest at all in College Y.M.C.A. affairs it cannot fail to be of incalculable benefit. We would, therefore, strongly advise all those, who have access to its pages, to closely and thoughtfully peruse its open columns.

Once more we have the extreme pleasure of seeing *Acta Victoriana* placed upon our exchange table. In its literary character it equals, and we have no hesitation in saying, excels many of the papers now on our exchange list.

It gives us great pleasure to be able to state that one of our most pleasing exchanges comes from Kansas in the name of the *Advance*. Its columns throughout are of a very high order and we cannot but predict success for the paper which chooses such a name and shows such great progressive spirit.

When we peer into the columns of the sober and sedate *Adelphian* we generally expect to find something of a high order and in which hope we do not very often find ourselves disappointed. An article on "Systematic Study," says: "Every man is as lazy as he dares to be; but alas for the one who permits himself to yield to this spirit. To overcome this leaning to slothfulness there is nothing better than self-imposed duties, below which we resolve not to fall. Never put off till tomorrow the amount of reading which can easily be done today. Take care of minutes, as when these are used a vast amount can be accomplished. Each step that has brought us to our present standing counted for little in our progress, and each added step upward will seem but a little matter, but one to the left or one to the right may undo long years of toil and trouble. Let our motto be 'Onward and Upward,' for

"The heights by great men reached and kept,
Were not attained by sudden flight,
But they, while their companions slept,
Were toiling upwards in the night."

THE BACHELOR.

Returning home at close of day,
Who gently chides my long delay,
And by my side delights to stay?
Nobody!

Who sets for me my easy chair,
Prepares the room with neatest care,
And lays my slippers ready there?
Nobody!

Who regulates the evening fire,
And piles the blazing fuel higher,
And bids me draw my chair still nigher?
Nobody!

When sickness comes to rack my frame,
And grief disturbs my troubled brain,
Who sympathizes with my pain?
Nobody!