

PAGES

MISSING

THE O. A. C. REVIEW

"THE PROFESSION WHICH I HAVE EMBRACED REQUIRES A KNOWLEDGE OF EVERYTHING."

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Keeping Alive The Rural Teachers' Problem.

By O. J. STEVENSON, M. A., D. Paed., Professor of English at O. A. C.

A YOUNG girl of my acquaintance recently gave up her school in the country and took a position in a town because, as she herself expressed it, she would "die of loneliness" if she had to stay there another year. She boarded half a mile from the school, with two old people who went to bed at nine o'clock every night. There were not half a dozen young people of her own age in the whole section. There was no water for boating and no library for reading. It was two miles to the country church, and the town with its "movies" was five miles away. In a section like that it was easy to see how one might "die of loneliness" and how a teacher might long to escape to the town. But it happened that I knew this particular section well, and it seemed to me that even here there was a possibility of the teacher *keeping alive* if only she went the right way about it. Death from loneliness overtakes only those who make no effort to live.

The possibilities of the rural school teacher really living and enjoying life in the country depend, it seems to me, on three things—her interest in the work of her school, her interest in the

social life of this community, and those interests that have to do with her own personal development. The rural teacher who has these three interests may die of overwork, but never of loneliness.



PROF. O. J. STEVENSON,
M.A., D. Paed.

The chief interest in the work of a country school lies simply in the fact that it *is* in the country and that the work of the classroom must be adapted to suit the experiences of country life. No live, progressive teacher would ever think, or *should* ever think, of teaching the same things in a country school as in a city school. The official course of study is the same for the country and city schools, and the text-books are the same; but the experience and the home surroundings and interests of the pupils are different. In teaching arithmetic, for example, I cannot imagine a real teacher confining herself to the dead mechanical, unpractical questions of a text-book when all around her on every farm are problems in proportion and measurement, in profit and loss, which make up the real arithmetic of the farmer. I cannot imagine a teacher with any resourcefulness teaching composition from the

dry-as-dust subjects of the average text-book when she has the whole world of a farm boy's occupations or a farm girl's interests to choose from. There is no subject on the course of study,—literature, history, art, geography, hygiene, nature study, in which the work of the class-room can be wholly the same for city and country pupils.

Yet, strange as it may seem, any attempt to adapt the course of study to the needs of the country pupil is sometimes looked upon with suspicion even by well-meaning, intelligent farmers. "I don't want my boy to be a farmer, I want him to be a lawyer," I have heard farmers say. "I don't want to have him taught agriculture. I want you to teach him the same things as city boys, for he will have to live in the city some day." Such an attitude is due to a fundamental misunderstanding. The rural school does not aim to teach agriculture in order to make farmers out of the boys or to fit them only for country life. It teaches agricultural literature and agricultural arithmetic because the farm is the basis of the boy's experiences and interests and it is only in terms of his experiences that he can learn what is useful to him whether in town or city.

But in any case surely no apology is needed for adapting the course of study in a rural school to meet the needs of the farm! Teachers who have read "The Brown Mouse" will remember the scene in which the farmers' wives interviewed the new teacher to protest against the farm arithmetic and other agricultural subjects which he had on his course of study.

"It's a fine thing" said Mrs Bonner, "to work hard for a life time an' raise nothing but a family of farmers! A fine thing!"

"They will be farmers anyhow" cried

Jim, (the teacher) "in spite of your efforts,—ninety out of every hundred of them! And of the other ten, nine will be wage-earners in the cities, and wish to God they were back on the farm; and the hundredth one will succeed in the city. Shall we educate the ninety-and-nine to fail, that the hundredth, instead of enriching the rural life with his talents, may steal them away to make the city stronger?"

The great need of the country school is teachers who know the experiences of pupils in rural districts and who are able to make all their teaching revolve around these experiences. And just there is the tragedy of it—no, "tragedy" is not too strong a word—that we have in many of our rural schools today teachers who know nothing of country life, who do not want to know anything of it, and cannot or will not adapt the work of the classroom to the needs of the country. I recently saw the following as the subject of a debate: "Resolved that no teacher should be granted a certificate to teach in a rural school who has not lived at least three years in the country." There is much to be said on the affirmative side of such a resolution. But mere knowledge of rural conditions is not in itself sufficient. The teacher, whoever she may be, must be "rural-minded." She must see in the course of study, not a mere body of facts to be drilled home, but a means of translating and developing the rich experiences of a country boy or girl in such a way as to fit them for life whether in the city or the country. Inspired with such an ideal there is small possibility that the rural teacher even in the dullest country community will ever have a chance to "die of loneliness."

But the teacher who wishes to "keep alive," must also take an interest in

the rural life of the community. This means, in the first place, that she must know something of the home life of her pupils and something of the difficulties and problems of these individual homes. The teacher who imagined she would die of loneliness in her particular section had never visited in the homes of the community. She knew nothing of the individual kitchens in which tired farmers' wives worked out farm problems. The supper table and the dish-pan, with a friendly talk over the progress of the boys and girls, are great antidotes for the die-of-*loneliness* disease. But to get into the heart of the family you should know something about farm conditions and farm problems. Upon what farm topic can you talk with intelligence? What, for example, do you know about poultry? Can you discuss the respective merits of barred rocks and leghorns? Do you know anything about feeding poultry? Can you suggest anything that might increase the egg yield? And if it is not poultry, what is it? Fertilizers, farm drainage, weeds, tractors, good seed, smut in the grain, or even the effects of the weather on the crops,—on some one farm subject surely you can make yourself proficient. An old neighbour reminded me the other day of an experience that she had had, which must be typical of the experience of many farmers or farmers' wives when the school teacher comes to visit. "I remember," said she, "one day when I was staying with my sister, a visitor came to the house whom we could make nothing out of. To everything that was said to him he replied in monosyllables. No one could find anything to talk to him about, and when at last after vain attempts at conversation, my sister had to leave the room, she cast a pitying glance in my direction. There was a long awkward silence.

I racked my brain for something to say, and at last almost at random I ventured the question, "Have you many cheese factories in your part of the country?" Ten minutes later, when my sister returned, to her astonishment the visitor was talking in a loud voice and arguing with the greatest vehemence on the cheese industry in Ontario. I had by a lucky chance struck upon the one subject in which he was interested and had something to say." When you visit the farmhouse are you the dour visitor to whom no one can find anything to say? Upon what farm topic can the farmer talk to you with the chance of finding any intelligent response?

And then, aside from your interest in the farm and its problems, there is a whole field of activity in the social life of the community itself; and in this social life the teacher must always play her part. Is your school house a social centre for the section, a place where the farmers' club and the women's institute and other local organizations may meet? Is there a farmers' library in your school-house, with bulletins, farm magazines, and books that you can circulate in the section? Is there an open air skating rink where the young people may meet in the winter? Or do you hold a school picnic in the early summer? Have you organized a boys' bird club or a girls' canning club? Have you a school garden? What have you done to interest the boys and girls and parents of your section in the rural school fair? Is that school room of yours merely an institution for assigning homework or doing "sums," or is it a radiating centre of social influences which make for greater co-operation and community improvement and good will among the families of the section? The idea that the school should be a community

centre and the teacher a leader in rural progress is not a mere Utopian dream. It is already an accomplished fact in the most progressive rural communities in the province. Is the teacher in your community progressive? Or is she one of the kind that are ready to "die of loneliness" in a rural school?

And, furthermore, the rural school teacher who wishes to "keep alive" must have interests that have to do with her own personal development. But what chances of self-development are there in a country school section? In the first place there is no rural school section in which the teacher has not free access to Nature,—birds and flowers, insect life, trees, wild fruits, a whole world of living, growing things crowding in upon her to the very school-house door. In the section in which the die-of-*loneliness* tragedy was almost staged I knew one bit of woodland close to the school, which was simply thronged in springtime with wild birds—field sparrow, indigo bird, towhee, oriole, thrasher, catbird, cuckoo, vireo, and a score of others, a little bird-lover's paradise at the bend of the road; but of all the bird songs that went up from that bit of woodland in May and June none reached the ears of the lonely school mistress as she passed night and morning along the country road to and from her school.

She was not a reading girl or I might have suggested books,—David Grayson for instance, whose "adventures" provide a wholesome panacea for the ills of a lonely country life. I have some idea that even if she had read a chapter of David Grayson aloud every evening in her boarding house the quiet old couple with whom she boarded might have shared her enjoyment; for in reading more than with most other things the greatest pleasure comes from sharing it with others.

As for music, she could play passably well, but none of the half dozen pianos in the section ever felt the touch of her fingers. I remember when I first taught in a rural school, one of my best-prized possessions was a cheap violin. Many a time the old violin helped to put me on good terms with myself and with the rest of the world; and even if in the years since then I have forgotten how to play "Money Musk" and "The Fisher's Hornpipe," the old violin was in a rude sort of way something of a musical education. If I were back in that school section now I should have a phonograph in the school,—I should raise the money somehow,—and every morning and evening I should put on a fine piece of music,—Schubert's *Ave Maria*, let us say, or a nocturne by Chopin, or an overture from one of the operas. There is nothing like the haunting memory of a beautiful melody to keep one in his loneliest moments from being too lonely.

The walls of that country school room are bare,—plain bare, plastered walls, with no adornment whatever! And yet, for the expenditure of a few dollars they could be tastefully covered with good pictures,—not with tawdry prints, but with cheap reproductions of the finest things in the history of art,—The Old Temeraire, The Horse Fair, The Gleaners, and other pictures that have stood the test of time. Along with good music and good books there are few things that supply the lack of companionship better than good pictures.

And then at night there are the stars! "Why did not somebody teach me the constellations?" cries Carlyle, "and make me at home in the starry heavens which are always overhead and which I don't half know to this day?" There is some one, I forget who, who says of

the procession of stars that "it is the most astonishing spectacle offered to men. It is hung out for us every night and we hardly give it a glance. And yet it is well worth glancing at. It is the best corrective for this agitated little mad-house in which we dwell and quarrel and fight and die. Even the war seems only a local affair of some ill-governed asylum in the presence of this ordered march of illimitable worlds."

It is not easy to study the sky from the city with its tall buildings and its glare of lights, but in the country the conditions are ideal. The difficult thing is to make a beginning, but with a good star book ("The Beginner's Star Book," or "The Friendly Stars") it is possible to learn one constellation at a time. Next to a phonograph and a lantern in a country section I should wish to have a good telescope at the community centre.

Nature, books, music, pictures, the stars,—these are general interests in which all teachers should be able to find pleasure. But there are a thousand and one special interests, any one of which may become the rural teacher's particular "hobby." Teachers as a

class are often accused of "getting into a rut," or of "going to sleep," and perhaps the charge is true. The rural teacher, of all people, must not be satisfied with the progress she has already made and must labour to "keep alive" her interest in new things and her delight in the beauty of the old.

"If power were mine to wield control

Of Time within my heart and soul,
Saving from ruin and decay

What I hold dearest, I should pray
That I may never cease to be

Wooded daily by expectancy;
That evening shadows in mine eyes
Dim not the light of new surprise;

That I may feel, till life be spent,
Each day the sweet bewilderment
Of fresh delight in simple things—

In snowy winters, golden springs,
And quicker heart-beats at the thought
Of all the good that man hath
wrought.

And may I never face a dawn

With all the awe and wonder gone;
Or in late twilight fail to see

Charm in the stars' old sorcery."

"But most I love," says David Grayson, "that which lies beyond the hill."



"I believe that the dignity of labour depends not on what you do, but on how you do it,..... that my success depends not upon my location but upon myself; not upon my dreams, but upon what I actually do; not upon luck, but upon pluck."

—Edwin Osgood Grover.

Agricultural Journalism

The Student's Duty and How to Do It.

BY WADE TOOLE, B. S. A. Professor of Animal Husbandry, O. A. C.

AGRICULTURAL Journalism offers to the practical farmer, to the agricultural college student, and to the graduate in scientific agriculture, unlimited opportunities not only toward the betterment of their own conditions and the improvement of their own knowledge, but more particularly in the extension of knowledge gained to others who are in need of it and who appreciate the efforts of those who have had the advantages of wide practical experience to spread the gospel of better agriculture broadcast over the field in which it will do greatest good. The man on the land, who finds out something of value to himself as a result of certain methods in his farming operations, owes it to his fellow farmer that he spread the knowledge so gained. The graduates and undergraduates of the Ontario Agricultural College should feel it their duty to contribute to the columns of the press their advanced, yet practical, ideas on subjects connected with agriculture and upon which they should have special knowledge. I have contended that every good student of agriculture has found out something of value to the man on the land and in view of this fact he should be

able in simple, plain English and in concise, readable form to pass his findings or his ideas along to the great rank and file of the producers upon whom we all depend, not only for our agricultural colleges with the opportunities which they offer to those fortunate enough to be able to attend for short or longer terms, but for our very existence. Writing for the press is a duty none should shirk.



PROF. WADE TOOLE, B.S.A.

Besides being a duty to others, preparing articles for publication is of distinct advantage to the author of those articles; I care not how familiar he may be with his subject, if he is in earnest he will further improve his knowledge in the actual preparation of material for print. The intense thought necessary and the care in expression of the ideas one wishes to pass on, is advanced education and training in itself. If the man who would write is not prepared to give thought and care to his work he had better not write at all. Articles should not be made up of words used as space fillers but rather of phrases so arranged as to clearly, concisely and convincingly carry ideas to the reader.

Aside from the value which the writer of articles for publication re-

ceives from the improvement of his English, which comes with use, and the betterment of his knowledge of the subject in which he is interested there is the fact that in this day good material so supplied is liberally paid for by all of the leading publications. The farm paper editor is glad to use his publication as a medium through which anything of value to agriculture may be carried to his clientele.

The foregoing facts considered, every student of an agricultural college should plan to do at least some writing for the agricultural press. Most of this will, of course, be in the form of contributions. A few may become regular contributors on the staff of a certain paper or papers, but most will only be occasional contributions. There is also an opening for a certain number of men (and women too) from institutions like the Ontario Agricultural College to go into farm journalism proper as editors. The work is strenuous. The life is one of action and quick decision. The associations are without parallel. The remuneration is fair. The training is an education perhaps equal to the same time spent in a post graduate course in general agriculture and the economics of agriculture if such a course were possible. Few O. A. C. men can hope to be editors because the field is limited; all should strive to be contributors.

What is required in a man to do farm newspaper work? First, that all too uncommon commodity known as common sense. This applies to the man who writes occasionally, and is increasingly important as we go up the ladder to the point of staff correspondent, associate editor, and editor.

Next in importance is a practical knowledge of agriculture gained by experience on the farm in the particular part of the country which forms

the constituency of the paper written for. Farm papers prepared for and sold to farmers should be written and edited by farmers of wide practical experience.

A scientific knowledge of agriculture is also essential where extensive work in agricultural journalism is to be done. The practical farmer without scientific training can do much good by sending an occasional article based on his experience to his farm paper. The man with scientific training can go farther in the interpretation and explanation of results. Always, however, these must be clothed in simple, easily-understood language which the reader cannot fail to grasp. The scientific man must not write "over the heads" of his readers who, he must remember, have not had the advantages of college training such as he has enjoyed.

The journalist should be a broad-minded man able to grasp public questions from a national viewpoint and not from an individual or class aspect. He should have a fair English education and the use of words will come easy with practice. Actual writing for publication is the best possible training in this regard.

The writer for publication must have what journalists call "a nose for news." He must be a good mixer in order to get news. He must have a thorough knowledge of his subject no matter what kind of journalistic effort he attempts. He should be broad-minded, clean, respectful of the opinions of others and able to grasp other people's ideas. In short, the agricultural newspaper man should be an all-round man, and graduates of the O. A. C. should fill the bill. They should be able to gather, prepare and compile for publication items of news, short stories, historical sketches, interviews and technical information dealing with sub-

jects of interest and value to all those directly or indirectly interested in agriculture and should also be able to handle sane, unbiased, educative and instructive editorial discussions of agricultural and public questions of the day, and to carefully elucidate all problems concerning the farmer and his household, in particular, and human life in general. Mr. Student and Mr. Graduate, do you measure up to specifications?

Assuming that the majority of those who peruse these columns will never become editors of farm papers but that all will at some time care to write articles for such papers it may not be amiss to give a few hints regarding the kind of articles most desired by editors. First and always be brief. Long-drawn-out articles are often jumbles of words. They are tiresome and no editor has space to waste. Brevity is a virtue in writing as well as in speaking. Remember that the farm paper is a clearing house for agricultural information. It is a history and reference library of the time and welcomes agricultural news and views, results of technical findings, results of experimental work and discussions by practical men and women of the problems presented in everyday farming and everyday housekeeping. Confine your articles as indicated. Make news articles strictly news, giving views of others without comment; recording current happenings and doings of men, societies, etc., with no added ideas of the writer of the item. Comment on such news and views is editorial writing but this is permissible and to be encouraged in discussions. That is, a man's ideas contributed to a paper are really his editorial comment and most papers have a special place for such forms of discussion and are particularly pleased to get them.

In all writing, the author should be

careful that he has his facts correct. Facts should be related according to their relative value in the form, if it is a news story, of indirect narrative. Get the most striking thought first in a news item with a complete story in the first paragraph and details in order of importance. A literary story as contrasted with the news story must have a central thought with everything having a direct or indirect bearing on that thought. In it interest is increased by the clever use of contrast, figures of speech and other literary effects and the interest must be held to the end. In news, the most important point goes first; in the literary story all paragraphs develop to a climax at the end.

The first commandment of journalistic style is contained in the following: "What? Where? When? Why?" Do not forget the actors, place and time. All writing is done for some one else to read, consequently the writer must take into consideration his readers. He must never forget their viewpoint. He must never be rash in his statements or unfair in his criticisms. Write to get the sympathetic attention of the readers. In a farm paper, articles should contain something in which the farmer is interested through meeting the conditions described in his own life and work in his own particular community. It is not necessary to agree with everything but where it is found imperative to disagree with the views of others, it is not good policy to resort to carping criticism. Unless the writer of contributed articles feels that he has a particularly pungent heading with the "punch," as journalists say, it is generally advisable to allow the editor to supply the heading. He has special training and will usually headline the article so that the main point contained therein is driven home at once. All paragraphs should be separated and

the general rules of English followed, but the average editor will pay more for an idea poorly dressed than he will for the wordy dressing without the idea. No one should hesitate, when he has a good thing, to pass it on. The editor is a past master at putting fine clothes on bare ideas. Ideas count most and we take it for granted that O. A. C. students and graduates are able to use the English language in such a way as to make good reading when expressing their ideas in print.

• Students and graduates do not write

enough for papers. All should do more of it. Be practical; be brief. Have something to say and say it. Write neatly and on one side of the paper only. Leave plenty of margin all around the page. Number each page carefully. Use short sentences but avoid a jerky style. Avoid the use of personal pronouns. Be accurate. Separate lines well. Try it. The practice is worth while. Remember that the press is the one great medium designed to carry information quickly to the greatest numbers. Use it.



The Study of French at the O.A.C.

By G. H. UNWIN, B. S. A. Lecturer in French at O. A. C.

IS the study of French in any way profitable to the student of the O. A. C.? If a general census of opinion were taken among students and ex-students the answer would be an emphatic negative. There is no doubt that most students look upon French as an unpleasant necessity, that they learn just enough to pass the examinations, and afterwards forget all about it as quickly as they can. This hostility to a foreign language is not in the least unnatural, nor is it confined to the O. A. C. I well remember the shameful uproar of the French classes at school, and the futile efforts of a polite but bewildered Monsieur to keep order. It is an admitted characteristic of Anglo-Saxons to affect a lofty contempt for anything they do not understand; and it would be quite safe to say of English-speaking students generally, that except among specialists, foreign languages are looked upon with mistrust and learned with reluctance.

The object of this article, however, is particular and local. It is not to champion the study of French in general, but to consider the question as applied to this college that I venture to write on such a subject. It may seem strange that a member of the staff should discuss in a college magazine the value (or non-value) of a subject which he himself is teaching; but I believe such questions should be frankly treated. Moreover, this par-

ticular question is a perennial one and discussion of it is always in season. The Editor having asked me for an article on some seasonable topic, I have decided to lay before those who are interested, the reasons for and against the study of French at this college.

A Arguments Against the Study of French

1. Lack of Preliminary Training.

Since there is no entrance examination at this college we must work on the assumption that our pupils are ignorant of French. Thus when a student has climbed to the dignity of the Third Year; he has to begin the study of elementary French, a subject belonging to the schoolroom. Elementary work in languages is most uninteresting to adults, chiefly because the

sentences have to be made so simple as to become positively inane. Speculations as to the probable whereabouts of "my aunt's pen," or the number of pieces of chalk possessed by an imaginary Mary, cannot be made absorbing to the mature mind.

A comparatively large proportion of Third Year men have their matriculation or have studied French elsewhere. These men could proceed to a more advanced and profitable course, were it not for the presence of others who have never learned French. Thus we have two-thirds of a class marking time while the remaining third crawls



G. H. UNWIN, B.S.A.

painfully onward. I say "painfully" because that word aptly describes the progress of some of those men who have never studied a language. I have frequently been assured by students that they spent more time on their French than on any other subject, and this in spite of the fact that the work is so elementary.

2. It is impossible to learn much French in two years.

It is claimed that two college sessions, allowing three periods a week, is too short a time to make any profitable progress and that at the end of these two years a student is not in a position to increase his knowledge if he so desires. This is true of certain individuals but not of the majority. With ordinary application the average student can certainly gain a fair reading knowledge of French in two years, even if he has to start at the beginning. The time allowed is enough, if the student is sufficiently interested. Here again, however, lack of uniformity in the classes is an obstacle to the work.

3. The time could be more profitably bestowed on other subjects.

This is a very strong argument against French. The number of subjects taken up by the B. S. A. is large. Many students have felt the difficulty of concentrating upon their special subjects, because time and energy are diffused over too wide a field. It follows, then, that any reduction in the number or kind of subjects should be an improvement, particularly if the subjects discarded were, like French, of little direct or visible benefit to the agricultural student. From time to time various substitutes for French have been suggested, such as Farm Management, Civics, History, or extra work in English. These will not be discussed here; no doubt each subject would have its advocates. It is, how-

ever, absolutely necessary to consider a question from all angles before initiating a reform. College authorities are not given to changing their curricula until there is satisfactory evidence that a change would be an improvement.

B. Arguments in favour of the Study of French

The arguments in favour of French are, at this time, of considerable strength. For the purpose of clearness I shall give them categorically.

1. The value of a modern language in teaching the student how to use his own language.

A knowledge of grammar, idiom, and sentence construction is necessary to any man, be he farmer, banker, minister or lawyer. This is exactly where many of our farm boys are at a disadvantage, having been forced to leave school at an early age. The study of grammar is not particularly interesting, but it can be made interesting with the help of a foreign language. I believe that the teaching of French should always be made "comparative," that is to say, every opportunity should be taken to point out characteristic differences (or resemblances) between the English and French ways of expressing the same idea. Such a method of teaching spoken French is advocated by the International Phonetic Association. The basis of their method is the comparative study of sounds, and this should go hand in hand with the comparative study of syntax. Thus French can be made the medium of acquiring a clearer knowledge of English grammar and construction — something which a great many of our students would appreciate.

2. A knowledge of French is use-

ful to men teaching agriculture in Canada.

In Eastern Canada, even outside the Province of Quebec, there are many sections where the farming population uses French almost exclusively. These men write frequently to the O. A. C. for information, and presumably some of the District Representatives receive letters of the same kind. An enormous amount of time and trouble would be saved if these letters could be read immediately by the person to whom they are addressed. It does not require an arduous training to learn to read a French letter on a familiar subject. Even if the recipient were unable to answer in French, he could give the information in English, and the farmer could get a neighbour to translate for him. The point is, that even a slight knowledge of French, such as is called a reading knowledge, is likely to be of direct benefit to the man engaged in agricultural education.

That vexed issue, the bilingual question, cannot be discussed here. I had a conversation last winter with a farmer member of this college, who is now farming in a French community. He was of the opinion that a better understanding between the races would be reached if the attitude of each side were less uncompromising. I give his opinion for what it is worth, merely remarking that a knowledge by each side of the other's language might contribute something towards this end.

3. French and English Literature are the only "cultural" subjects on the curriculum.

The word is placed in inverted commas because of its outward resemblance to the most detested word in any language—"Kultur." Actually, however, the word "culture" has come to mean the exact opposite of the German word. It is used here in its special

sense, in contradistinction to such words as "technical" or "vocational." English and French are the only subjects studied in which the literary or artistic sense necessarily plays a part. It is true that all sciences and arts have a harmony and a proportion of their own. But a student of literature deals with humanity in a broad sense, and his impressions crowd in upon him from all parts of the world and from all ages. Hence it is generally considered that such subjects have a widening influence and supplement the technical and scientific studies.

There is no doubt that the learning of any modern language broadens a man's outlook. An acquaintance with modes of expression and points of view other than our own is a necessary part of what is called a liberal education. Moreover, history proves the influence of the French language upon our own to have been profound. The development of English prose style, for ordinary purposes, dates from our "excellent and indispensable" eighteenth century, which has been called the period of French influence. To those accustomed to associate French literature exclusively with paper-backed novels of questionable morality, it may come as something of a shock to realize that the English prose which we use in our letters, newspapers, periodicals, and scientific publications, received its distinctive character originally from French models. Without mentioning poets, such names as Montaigne, Descartes, LaBouyere, Rousseau, Hugo and Sainte-Beuve have exerted a deep influence on English thought and style. The American Constitution drew much of its material from the work of a Frenchman—Montesquien's *Esprit des Lois*. Anything which our prose possesses of clearness and precision was imported from France. We may be

thankful that it is so; anyone who has waded through the interminable sentences and clumsy inversions of scientific German will appreciate the legacy of a clear and concise prose style from our French cousins.

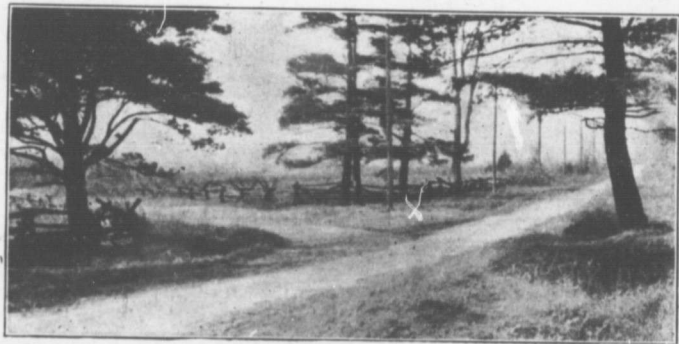
4. The increasing vogue of French on the American Continent.

In a recent number of a Toronto weekly there was an article by Anne H. Merrill on this subject. The writer quoted at some length from an American authority, who foretold a more general and enthusiastic acquaintance with French language and literature as a result of the present close alliance. Again Edmund Gosse, writing in a Paris journal, discusses the coming "Entente in Language and Literature." There is not the slightest doubt that after the war, the Allies will be drawn more closely together in all branches of national life. After the military alliance has played its part there will have to be the strongest bond in commerce, industry and science, among the nations now fighting together. Indeed, in a published statement by Lord Robert Cecil, an Economic Association of allied

nations is already in existence. Canadians and French have mingled their blood on European soil, and this fact is bound to throw another bridge across the Atlantic.

There is every indication that the study of French will receive a great impetus in this country, in proportion as that of German dwindles. If the authorities quoted are true prophets the time is coming when a man of education will have to know French, particularly if he is in a position of trust and influence.

From the arguments advanced on both sides it will be seen that the chief objection to French is the difficulty of teaching it without an entrance qualification. On the other hand the arguments in favour of French are mainly theoretical; they depend upon the question whether the study of the language can be brought up to such a pitch that the student can really profit by it. In fact unless the standard is raised and the traditional attitude of indifference removed, French will continue to be of comparatively little value to our students. Is it possible to make the subject really worth while?



"The Country Cross Roads."

Puzzled Propagandists

BY M. BARBARA SMITH, '19

WHEN Daisy and I left Mac, we went to spend the first week of the vacation with my Aunt Elizabeth. "I expect we shall be able to give her some hints on conservation and substitution," she said, on the train, "We have more advantages than most people, and we must disseminate our knowledge."

"Aunt Elizabeth is a very conservative person," I said, "but I don't suppose she has thought much about conservation. Probably she will consider our knowledge new-fangled nonsense."

"It will be our mission to enlighten her," said Daisy, cheerfully, "but I hope she won't think it unbecoming in girls like us to find fault with the methods of a woman of her age."

"You must use all the tact and diplomacy you possess, for I am quite sure Aunt Elizabeth won't have made many changes in her diet."

Aunt Elizabeth gave us a warm welcome and as a matter of course served afternoon tea immediately.

"You must want a cup of tea after your journey, dears," she said, "and a sandwich." Daisy did not refuse for she thought the occasion justified the indulgence.

"It is very refreshing when one is tired and warm," she admitted, "but of course no one has afternoon tea regularly in war-time."

Aunt Elizabeth looked a little surprised, but made no comment.

At supper, a leg of cold lamb was the principal dish. Daisy looked uncomfortable. "Did you say lamb? I thought there were no lambs being killed now!"

"Why shouldn't they kill lambs now?" asked my Aunt.

"Because, if they live to grow into

mutton, they can feed twice as many people," said Daisy.

"Lamb is so much nicer than mutton in hot weather" said our hostess.

Daisy blushed at her own boldness, but ventured to say:

"Do you think we ought to expect the nicest things now, when food is so scarce in Europe?"

"Well, there's no scarcity here, and we have the money to pay for it, I'm thankful to say!" This was a challenge which Daisy could not resist, and soon the old woman and the young one were deep in discussion; Daisy's ideas were obviously a revelation to Aunt Elizabeth and the old dear listened with great interest.

"Aunt Elizabeth, may we make some graham bread?" I asked.

There was only white bread on the table, "Why, yes, if you like, my dear. I suppose you want to practise what you have been learning." So we went out to buy bran and yeast cakes, and set our dough before we went to bed. Daisy insisted on our going down to look at it at 12, 3 and 5 o'clock; in spite of this lack of confidence, the dough calmly continued to rise steadily and the loaves were in the oven before breakfast. They looked and smelled very good when they were turned out of the tins.

Just then, an old man carrying an empty sack appeared in the doorway.

"Have you got anything for me?" he asked.

"I don't know," I said. "Who are you, and what sort of things do you want?"

Aunt Elizabeth came to the rescue.

"We give him the crusts and dry

pieces for his hens," she explained, "here they are!" She took from a cupboard a tin full of crusts, toast, broken biscuits and dry cake. They must have weighed at least a pound. The old man opened his sack and she emptied the box into it. With a word of thanks the man went away.

Daisy was flushed again.

"How often does he come?" she asked.

"Twice a week. I'm glad to know of someone who can use the crusts."

"But we can use them! They are fit for human food! They shouldn't be given to hens! Will you let me take them this week, and see how much bread you will save?"

"If you like, but hens must be fed, or they won't lay."

"Yes, but they can be feed on things that we can't eat. Think of all the poor little French and Belgian children who are needing bread so badly!"

There followed more enlightenment for Aunt Elizabeth.

Presently the baker called.

"We shan't want any bread to-day,"

I told him, "we have just made some. We don't eat much white bread now, you know, because we have to save the flour wheat to go overseas."

The baker stared and looked rather annoyed. "Save the flour?" he said. "That's all right, but what about the white bread they give to the animals in the zoo?"

"Isn't that stale bread that no one will buy?" suggested Daisy.

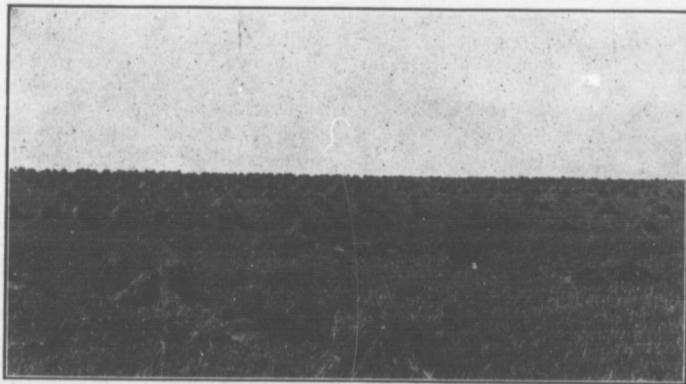
"No, it is not, it's baked on purpose for them, and the monkeys get special currant bread, and what's more, they just pick out the middle of the loaf and throw the outside away!

"I've seen them, myself! I tell you I'm not going to give up white bread as long as those beasts get it!"

For once the stream of Daisy's arguments dried up, and we gazed at each other in despair until the baker had slammed the door behind him.

Then we both said the same thing:

"Do you think that can possibly be true?"



*"There is no rhyme that is half so sweet
As the song of the wind in the rippling wheat:
There is no meter that's half so fine
As the lilt of the brook under rock and vine:
And the loveliest lyric I ever heard
Was the wildwood strain of a forest bird."—Madison Cawein.*

The Septic Tank

THE MOST SCIENTIFIC AND EFFECTIVE MEANS FOR THE DISPOSAL OF HOUSE SEWAGE IN FARM HOMES AND THOSE IN UNSEWERAGED DISTRICTS, WHERE WATER SYSTEM IS IN USE IN THE HOUSE

By R. R. GRAHAM, B.A., B.S.A.

Lecturer in Physics and Farm Engineering at O. A. C.

IT is a very gratifying fact that farmers generally are now taking more interest than ever before in the equipping of



R. R. GRAHAM, B.A., B.S.A.

their homes with water systems, plumbing fixtures and sewage disposal system. Our proof for this is the number of enquiries about these equipments that we have been receiving of late. It is the question of sewage disposal in particular that I wish to deal with in this article.

The reader is first directed to a

careful study of the mechanical side of the system in figures 1 and 2 particularly. The drawings are intended to represent fully a system suitable for the average sized farm home. They give nearly all the details required for the construction and equipment of the tanks, and the installation of the absorption bed. In planning the system, the aim has been to make the tank as simple in construction and as easy to build as possible so that the amateur, or even the inexperienced man in concrete work and engineering practice, may have no trouble in doing the work himself satisfactorily, if he puts the plan before him and follows every detail of it closely. There is, therefore, no necessity for a lengthy description of the details of construction.

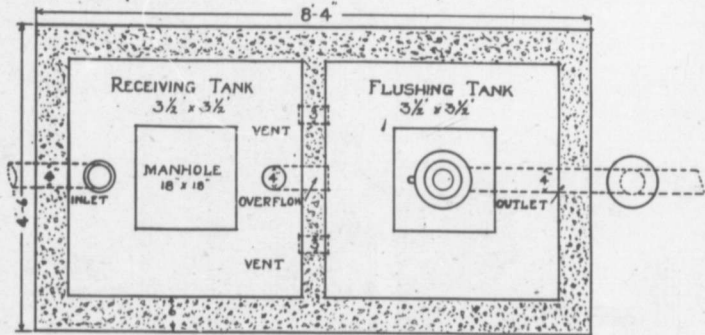
To every enquirer for information on building the septic tank, we mail a blue-print copy of these drawings, together with a copy of the following particular directions or specifications. Of course, every installation has its own particular features and difficulties, and this fact frequently is cause for the enquirer to write us again for assistance in his own peculiar difficulties. The special directions referred to above, are as follows:—

1. The tank may be located just outside the cellar wall, preferably under a back verandah or porch.
2. The absorption bed may be installed in the garden, under the lawn

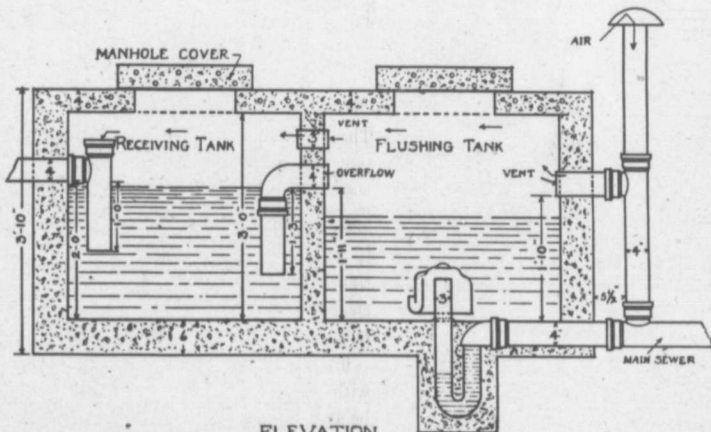
or in an adjacent field, but in any case keep it a safe distance from trees and shrubs, as the roots will in time choke the tile.

3. Remember that there must be some fall in the ground between the

laid the proper depth, and calculate the depth that the floor of the flushing chamber should be placed at, in order to give a little fall in the main sewer line between the tank and that point in the main where the laterals begin to



PLAN



ELEVATION

FIG. 1—SEPTIC TANK.

tank and the absorption bed, if the tank is to be built entirely or mostly below the ground, and the tile in the absorption bed be laid shallow. First secure the fall, then assume the tile

branch off. This fixes the depth of the tank, and if it should extend above ground, some protection in the winter will be required

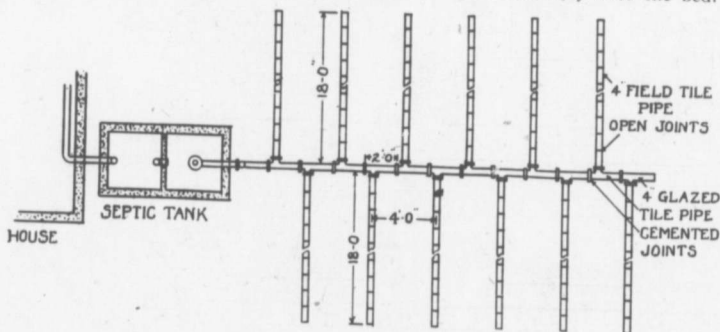
4. The absorption bed including the

main and the laterals must be laid level in heavy soil and with a very slight fall in light soil. Its depth should not exceed 15 inches, the rows of tile should be 4 to 6 feet apart, and not longer than 30 feet, and they may come off at right angles or obliquely to the main, and all from one side or partly from both sides. The main of the bed should be made of 4 inch vitrified sewer pipe and the joints should be cemented, but the laterals consists of 3 inch or 4 inch land tile, preferably the latter, and the joints are not cemented, except the one join-

complete and ready for use are illustrated in figure 4. All these fittings may be had in metal if desired.

6. The U-shaped or lower portion of the siphon is built in the floor, embedded in concrete up to the collar or ring on the upright pipe, and after the tank is finished, this part must be filled with water or primed, before the bell is put on top of it.

7. Before filling in the trenches, fill the flushing tank with water to test the siphon and see that the water distributes itself uniformly over the bed.



PLAN

FIG. 2—ABSORPTION BED.

ing the main in each lateral. The number of land tile required is about 35, 3" dia. for each occupant and 50, 4" dia. for the main; the number in the main depends on the distance the absorption bed is from the house.

5. If vitrified sewer pipe fittings be used for the tank, it would be well to make them up by cementing the necessary parts together a few days before the forms for the concrete are built, so that they may be placed in their positions in the forms, as they must be tightly embedded in the concrete. The separate parts used in these fittings, are shown in figure 3 and the fittings

Then fill the trenches and cover the tank tightly.

8. Twice a year, once in the spring and again in the fall, open the manholes to see that the siphon is working all right, and once in two or three years clean the sludge from the bottom of the receiving tank.

9. Protect the tank well in winter with strawy manure, particularly if it be above ground very much or exposed.

THE PRINCIPLE AND MODE OF OPERATION

It is nature's own way of disposing of raw sewage, the process being as follows:

The sewage is flushed into chamber No. 1, called the receiving chamber where it is decomposed to a very large degree by a certain type or two of sewage bacteria. Once this chamber is full, any further flushings causes

contents, in a minute or two, into the absorption bed where the decomposition and purification of the sewage material is completed by another type of sewage bacteria, while the flushing chamber is refilling. In order to facili-

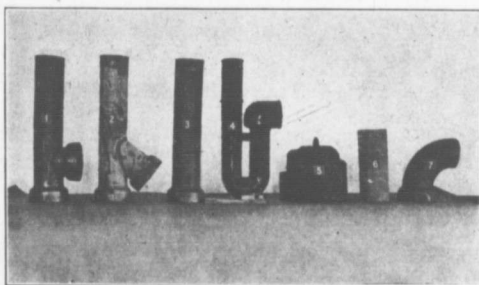


FIG. 3—Fittings or Parts used in Tanks and Absorption Beds.

- | | |
|--|--|
| 1. T, 4-inch, vitrified sewer pipe. | 4. U or trap portion of the Miller siphon. |
| 2. Y, 4-inch, vitrified sewer pipe. | 5. Bell of the Miller siphon. |
| 3. Plain 4-inch, vitrified sewer pipe. | 6. 4-inch land tile. |
| 7. Quarter bend 4-inch sewer pipe. | |

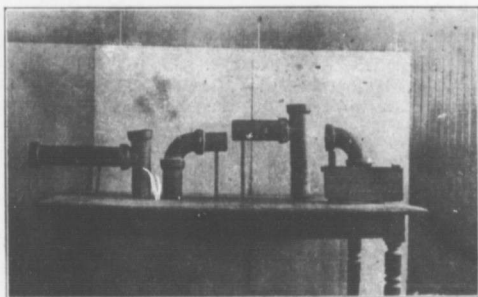


FIG. 4—Vitrified Sewer Pipe Fittings for Tanks.

1. Inlet to receiving chamber.
2. Overflow in partition between the two chambers.
3. Vent in the flushing chamber.
4. Two quarter-bends joined that may be used on top of vent above ground instead of cap shown in Fig. 1.

overflow of liquid containing probably some undecomposed sewage into chamber No. 2, called the flushing or dozing chamber. Here, whenever the liquid contents reach a height varying from 15 inches to 18 inches, the siphon automatically operates and empties the

tate the bacterial action in the tank, the contents must be kept as undisturbed as possible, and this is effected by turning down the intake pipe about a foot, as seen in figure 1. To assist the soil bacteria, the field tile are laid shallow, as these bacteria live and

thrive best near the surface, and the intermittent action of the siphon favors their activities further by preventing a water-logged and sour condition of the soil, and also by promoting a movement of fresh air through the top soil at each operation.

THE SIPHON

A very necessary part of the equipment of a septic tank as already explained, is the siphon. There have been many different designs put on the market, but the one that has given the best satisfaction to date, is the so-called Miller siphon, which is illustrated in figure 3, and as actually installed in the sectional drawing figure 1. This is the 3 inch size used in the ordinary septic tank for private homes, larger ones for hotels and various institutions may be secured also. The 3 inch size costs about \$12, and is handled by many plumbers and manufacturers in this country.

BILL OF MATERIAL AND COSTS FOR SEPTIC TANK HEREIN DESCRIBED AND ILLUSTRATED

The following estimate will serve to

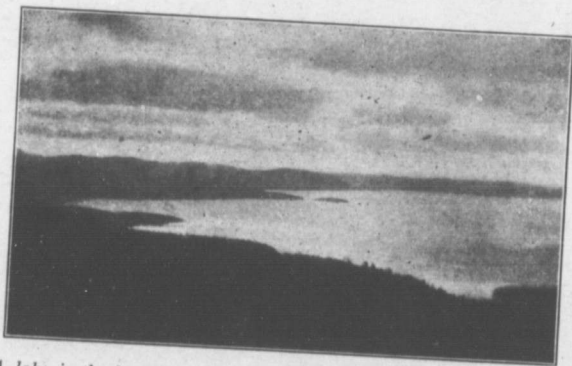
give the reader a general idea of the amount of material, the labour and the costs of the septic tank installation.

MATERIAL

4 bbls. of Portland cement at \$2.25 per bbl.....	\$ 9.40
4 loads of gravel at \$1.50 per load.....	6.00
8 plain 4-inch vitrified sewer pipe at 30c. each.....	2.40
15 "T" 4-inch vitrified sewer pipe at 65c. each.....	9.75
3 4-inch vitrified quarter bends at 65c. each.....	1.95
216 4-inch field tile at 5c. each.....	10.80
1 3-inch siphon.....	12.00
	<hr/>
	\$52.30

LABOUR

It would require the labour of two men for probably four days to complete the work, and as all the work can be done by the farmer and his assistant, no estimate will be submitted to cover the labour.



"A lake is the landscape's most beautiful and expressive feature. It is earth's eye: looking into which the beholder measures the depth of his own nature."—Thoreau's *Walden*.

The Ontario Farmers' Co-operative Wool Sale

THIS SEASON OVER SEVEN HUNDRED THOUSAND POUNDS OF WOOL HAVE BEEN MARKETED THROUGH THE ONTARIO SHEEP BREEDERS' ASSOCIATION FOR APPROXIMATELY HALF A MILLION DOLLARS.

BY L. E. O'NEILL, B.S.A., Live Stock Branch, Toronto

IN 1917 Ontario farmers began marketing their wool on a graded basis through the Ontario Sheep Breeders' Association. Approximately 270,000 pounds were sold in this way. So successful was the sale, that this year the amount of wool sold co-operatively on a graded basis, has increased approximately three fold, and the number of shippers has increased from 1,500 in 1917 to approximately 3,500 in 1918.

MAKING APPLICATION

In order that the grower may understand the conditions under which his wool will be marketed, and also to attain efficiency and accuracy in the office, each shipper is asked to fill out an application form and return it to the Secretary of the Association R. W. Wade, Parliament Buildings, Toronto. On the back of each application form, are the conditions of sale which must be accepted by the grower sending his wool. Application should be made early.

CONDITIONS OF SALE

1. Application forms should be received in the Secretary's Office, Parliament Buildings, Toronto, not later than May 1st.
2. Shearing should be completed so that wool may be received at the Winter Fair Building, Guelph, between June 1st and July 15th.
3. Wool must not be tub-washed, but shipped in the natural grease condition.

4. The fleece should be placed with the clipped surface down. Then fold in the sides and roll from each end to the centre, after having carefully removed the dung locks, and then tie with paper wool twine. Never tie fleece with sisal or ordinary binder twine, and avoid tying with neck portion. The dung locks should be placed in a separate sack from the fleeces.

5. The fleeces should then be packed in wool sacks, or in case of small shipments of 15 fleeces or less use ordinary jute bran sacks, being certain the inside surface is clean.

6. The wool must be kept in dry condition, both before and after placing in the sack, or otherwise it will be refused by the Association.

7. Shipping tags shall be supplied by the Association. These tags must be firmly attached to the wool sacks before shipping; extra tags must be placed inside the sacks for identification purposes, and the shipper must fill out all tags fully.

8. Each shipper's wool must be packed in separate sacks; never two or more in the same sack.

9. The wool is to be sent by freight, collect, to R. W. Wade, Winter Fair Buildings, Guelph, Ont.

10. The wool will be graded by wool experts of the Live Stock Branch, Ottawa, and will be sold through the medium of the Canadian Co-operative Wool Growers, Ltd., which insures all profits to you.

11. A Cheque representing an advance of about 75 per cent. of the appraised market value of the wool will be sent immediately upon receipt of the wool. The remainder will be sent upon completion of sale.

12. The Grader's grade and the Association weights must be accepted.

13. The Canadian Co-operative Wool Growers, Ltd., in selling the wool, will charge only actual operating expenses.

14. MEMBERSHIP FEES WILL BE DEDUCTED FROM PROCEEDS OF WOOL AS FOLLOWS:—For those having 15 fleeces or less, 50c. For all those having 16 fleeces or more, \$1. The latter class of members will be supplied with wool sacks.

N. B.—To those already members of the Ontario Sheep Breeders' Association no membership fee is required.

HINTS ON SHIPPING

In order that every shipper may receive satisfactory results from sending his wool to the Sheep Breeders' Association, it is essential that every detail must be looked after from the care of the wool on the sheep to the selling of the wool after grading. This year's experience has shown some common mistakes which may easily be avoided. The following shows the information asked for on the tag, which is sent to the shipper to be

attached to his sack. In some cases it happens that a shipper may live in one county, while his shipping point may be in the adjoining county, consequently, upon making application he gives the county in which his farm is located which is correct, but on the tags on his sacks he gives the county from which he shipped, which is incorrect. This leads to confusion on receiving the wool, because with so many shippers from every county in the province, it is very important that every detail be absolutely correct, in order to avoid mistakes. Another confusion, which may easily be remedied is, that the owner's name very often does not appear on the shipping bill. The reason for this seems to be that every farmer does not ship his own wool, but asks his neighbor, who is also sending wool to ship it for him. It should be remembered however, that the owner of the wool is the shipper and not the hired man or the neighbor, as the case may be, who takes the wool to the station. By having the name of the owner on the shipping bill, the freight companies are enabled to match the sacks of wool with the bills, and thus avoid delay in delivery.

Another very important matter is, to see that sacks containing wool are tightly packed. The reason for this lies in the fact, that wool is a very

From _____ County _____

 (Shipper's Name)

 (Address)

 Date of Shipment _____
 Total No. of Fleeces in shipment _____
 Total No. of Sacks in shipment _____

FILL IN FULLY

treacherous commodity when it comes to a matter of shrink. Farmers know well how cattle and hogs will shrink in shipping, but few, if any think of such an occurrence in wool. Nevertheless, it is true, owing to the fact that all wool contains a certain amount of moisture together with some, more or less, volatile oils. This being the case, if wool is loosely packed and exposed to sun, the shrink will often be remarkable. Proper shipping and tight packing tends to hasten delivery and a lessening of shrink which may occur.

RECEIVING THE WOOL IN THE WAREHOUSE

All wool delivered by transport companies must be accompanied by freight or express bills as the case may be. The wool is checked with the bills, to see there is no shortage and is weighed at once and is then ready for grading. Each shipment with the shipper's name, address, gross weight, charges, etc., are entered in a receiving book and it is upon this weight, minus the estimated tare that the grower receives an advance cheque of approximately 40 cents per pound for his wool. The balance due is remitted to the owner when the wool is sold. It may be here mentioned, that it is important that no two men ship their wool in the same sack. This insures each shipper a cheque for his proper amount. Should two men ship in the one sack, the man whose name appears on the bag tag receives the cheque covering the amount which should be divided between the two owners.

GRADING

All wool is fleece graded by expert graders from the Live Stock Branch, Ottawa. It is important, that the fleeces should be properly tied with paper twine and be free from chaff and dirt, in order to grade well. Tying

with binder twine is inurious to the wool, as the sisal fibres becomes detached and interming'ed with the wool. In the dyeing process of manufacture, these fibres refuse the dye thus giving the fabric an unsightly appearance.

Grade in wool, providing the wool has been properly cared for and is in good condition, depends upon three main qualities—length of fibre, strength of fibre and diameter of fibre. The following is a copy of the grading sheet as used by the Ontario Sheep Breeders' Association. (See page 546).

The approximate amount of each grade received, is as follows:

Fine medium combing ..	8,200 pounds
Medium combing.....	125,400 "
Medium clothing.....	2,300 "
Low medium combing..	219,000 "
Low combing.....	159,000 "
Coarse.....	99,000 "
Burry and seedy.....	12,000 "
Cotts.....	24,800 "
Dead.....	3,500 "
Gray and black.....	3,900 "
Tags.....	17,000 "
Washed.....	7,600 "

In addition to the above about 2,500 pounds of merino wool was graded into special grades.

There was a time when the practice of washing wool was advocated for certain good reasons, but at the present time wool should not be washed for equally as good reasons. When washing wool was advocated, there was a duty per pound on wool going into the United States where Canadian wool has for many years found a market. This made the American buyers seek washed wool in order to lessen the duty. Now, wool enters United States free of duty. Consequently, manufacturers prefer wool in the grease, as it can then be scoured in a uniform manner.

THE O. A. C. REVIEW

WOOL GRADING STATEMENT OF ONTARIO SHEEP BREEDERS' ASSOCIATION

Name.....

Address.....

Actual gross weight at time of receiving (Lbs.).....

Net weight (Lbs.)..... No. of bags..... Date.....

	Grader	Pounds Net	Price Per Lb.	Revenue
Fine Medium Combing.....				
Medium Combing.....				
Medium Clothing.....				
Low Medium Combing.....				
Low Combing.....				
Coarse.....				
Rejects {	Burry and Seedy.....			
	Cotts.....			
	Dead.....			
Gray and Black.....				
Tags.....				
Total.....				
Charges deducted {	Advance payment.....			
	Membership.....			
	Freight, etc.....			
	Selling charges.....			
	Payment on stock.....			

Balance due \$.....

Enclosed find cheque for this amount.

R. W. WADE, Secretary.

ONTARIO'S WOOL SOLD IN CANADA

Owing to the shortage of ocean tonnage, Canadian manufacturers have been unable to depend upon New Zealand and Australian wool. Furthermore, the supply of tops and 'nails' which came largely from England and United States is no longer so available as before the war, and as a result, all the wool graded by the Ontario Sheep Breeders' Association and sold by the Canadian Co-operative Wool Growers, Limited, has been sold in Canada. The prices received were as follows:

Fine medium combing.....	76 $\frac{1}{4}$ c. per lb.
Medium combing.....	76 $\frac{1}{4}$ c. per lb.
Medium clothing.....	73 $\frac{1}{2}$ c. per lb.
Low medium combing.....	73 $\frac{1}{4}$ c. per lb.
Low combing.....	67c. per lb.
Coarse.....	60 $\frac{3}{4}$ c. per lb.
Cotts.....	50c. per lb.
Tags.....	16 $\frac{1}{2}$ c. per lb.

The high price of wool and the improved method of marketing, is destined to have a marked influence upon the sheep raising industry of the province in the very near future.

Hidden Worlds

By ERIC HEARLE, B.S.A.—Dean of Residence, O. A. C.

MOST people desire to travel. They wish to see foreign countries and observe customs different from their own. The Orient calls with its blaze of color and its old romance; lazy Southern seas beckon alluringly. There is always a thrill attached to things distant and unknown.

How often do we realize that on our very thresholds, unknown worlds await the unsealing of our eyes? On every

well. To the former, the walk was an uninteresting ordeal of heat, dust, and yet more dust; he missed the small details from which the other was building up fascinating stories—the “pug-marks” of varied feet in the soft cushion of the road-dust, the strange insects mimicking their resting places among the foliage so exactly that the untrained eye could hardly see them, even when they were pointed out. So his vision was opened and he beheld the mantid with leaflike wings and stem-like body, holding out supplicating hands to its insect prey, as if they were the ducks in the nursery rhyme, “Dilly, dilly, come and be killed,” and the mottled grey and brown lizard sunning itself on the mottled grey and brown rock, the fluttering skin left behind by a snake now gleaming in a new suit of armour; the feather of a bird of prey dropped beside a handful of blood-stained down from a baby parouquet, and piece by piece he saw something of what was happening around him.

He had been like a man who travels and sees nothing but the telegraph poles.

The hidden world around us comes into view most quickly when we are tenting alone in the woods. Our own attention is more easily focussed on what is happening, and Nature reveals herself, a little shyly at first. As we learn the two secrets of quiet and sympathy, she later comes out openly as a real companion and an intimate friend.

While tenting recently, the writer has been fortunate enough to have a few brief glimpses vouchsafed him of the lives and habits of some other inhabitants of his camping ground.



ERIC HEARLE, B.S.A.

plant some insect drama is being enacted, and the excitement of exploration can be ours, if we will, without travelling farther than the back-garden. Only our blindness hides from us the mysteries and wonderful happenings in the underworld near by.

A newcomer to India was walking along a dusty “plains” road, with a keen naturalist who knew the country

The first neighbour to introduce herself was a beautiful little deer mouse, a delicately built aristocrat with pearl-grey and fawn fur, blending underneath to white. She pattered through the beech leaves to within a few yards of the fire over which the breakfast bacon sizzled, sat up, and cleaned her whiskers. A comprehensive survey having been apparently quite satisfactory, she took a couple of bounds towards the provision box and dived in as if she had pre-emption rights. This was too much for any cook, however interested in Nature study; and a piece of wood was thrown at the box. Instead of a scared mouse issuing thence, there came orth a fairy solo kettle-drum performance, and, on peeping in, the owner of the provisions saw her sitting on a tin can, with her front paws vibrating like a pair of drum-sticks. She was forcibly ejected, and during breakfast sat behind the nearest tree, peeping out with the most disconsolate expression, ready to pop into the box again as soon as that monster's back was turned—which she did. The explanation of her peculiar conduct was found when a piece of cheese-cloth was turned out containing five chubby little youngsters. After these were found, the mother lost all sign of personal fear, and, seizing one in her mouth, jumped on to a big beech tree, and climbed to the top, where a hole in a dead limb made a convenient hiding place. Then she sprinted back, and carried up the others, one by one. Interested to see where she had hidden them, the monster climbed the tree, too, but could not find a single trace of the family; so he came down again, convinced he had witnessed a first-class conjuring trick. Presently, his attention was attracted by a tiny wistful face peeping out from a crevice, and he kept quiet and was rewarded by

seeing the mother mouse, thinking all was clear, take her youngsters down to solid ground again. She was last seen disappearing through the grass to some place where interfering humans would not disturb her.

The secret of observing wild life consists in staying still. One day, while sprawling on the ground watching some luna eggs hatch, a rustle through the leaves drew my attention to a weasel only a few feet away. He was a beautiful chestnut brown fellow, almost lemon coloured underneath, and was sitting up on his haunches, shooting his whiskers forward and peering at me with his short-sighted eyes. He slid a few paces nearer and then his whole expression changed from interest and inquisitiveness to ferocity. He became instantly the relentless hunter, the cruelest thing in the woods. With nose to ground, and eyes sullen red with blood lust, he glided this way and that through the undergrowth, evidently tracking some unfortunate mouse. Now, the scent grows clear, and he bounds across an open space with sinuous, undulating movements, bent on murder and death. Suddenly, an orchard Oriole, returning to the swinging cradle where her young ones wait for food, spies the malignant shape and her alarm note raises the hue and cry. Squirrels chatter and scold, robins, anxious for their speckled fledgelings, fly frantically around the stump into which the unpopular one has beaten a hasty retreat. He is not afraid, for fear is unknown to him, but it is "bad business" for his movements to be too much advertised. So he stays still until the hubbub ceases, knowing that birds have short memories.

Once, when searching for a raven's nest in Lorna Doone's wild country, the writer rounded a great grey granite boulder and came upon one of those

grim tragedies which, common though they are, are seldom seen more directly than in traces left behind. A few paces in front a rabbit tossed about in the heather so violently that it was hard to see the small weasel clinging tenaciously and gnawing his way through the base of the skull. The rabbit's eyes were wide with terror, but the weasel's little eyes glinted green and fierce; and so intent was he on his killing that he never noticed the observer a few feet away.

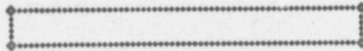
A few years after, while ploughing on an Ontario farm, I noticed a small weasel carrying a field mouse along the rail fence. A blow on the fence caused him to drop his plunder, which was picked up to ascertain how it had been killed. Presently a little pattering sounded along the fence, and there was the weasel, come back to see what was happening to his mouse! Amused at the audacity of the little animal, I held the mouse out by the tail towards the fence, and had the scare of my life when the weasel made a jump and hung on by the teeth to the mouse in my hand. I dropped the mouse.

Near my tent runs a stream, a thing of use and beauty. I wash my dishes therein, and the fishes have learned that the rattle of plates heralds a feast. Directly they hear the welcome sound, they swim up in crowds. One day, fifty were counted, and that was but a fraction of the company. So I have

seen the sacred mahseer of holy Ganges crowd round the steps of the bathing ghaut in old Hardwar, leaping over each other in their eagerness when the Hindu pilgrims and fakirs feed them. But no one would think of playing the venerable mahseer such a practical joke as my fish suffered the other day. The friendly stream is also Moab to me and into it go the soapsuds of my morning shave. Eagerly, the little fish followed down the floating bubbles, opened their mouths and sucked them in. I do not pretend that their expressions were disgusted, but their actions were; and the soap bubbles, shot suddenly out again, floated on their way down stream.

An innocent looking blackberry leaf near my door is the lurking place of a desperado. Each day as I go to work I see an increasing pile of the corpses of his dead victims. They litter the leaves around, a pitiful tangle of skeleton legs and wings. The murderer is an assassin bug — a veritable insect thug.

So we live in the midst of incidents tragic and comic, blind to them unless our eyes are opened and our minds trained. When we know, we find that not only species, but individuals, have their peculiarities, well worth observing and full of interest, but the worlds are hidden and the books are sealed to those who will not look.



*"We only know that we are here,
That life is short and death is sure;
That it is noble to endure
And keep the eye of conscience clear."*

—George Martin.

The School Fair

AN INSTITUTION THAT SHOULD RECEIVE THE HEARTY SUPPORT
OF EVERY RURAL EDUCATOR.

By G. B. HOOD, '20

THE school fair is essential to the successful teaching of agriculture. As the Hun trench is to the British gunner, or the examination to the student—even though it is to the much criticised Entrance—so the school fair, in part, is to the young agriculturist the target of his year's work.

COMPETITION STIMULATES

Several aspects of the question thrust themselves prominently forward. Without doubt the competition offered by an annual exhibition ranks high. Competition brings progress, as seen everywhere in the industrial world. Lack of competition causes stagnation. The crack ball team with weak opposition deteriorates; but keep such a nine matched against teams of equal calibre, and excellent ball results. Keen competition keeps the teams on edge.

The desire to come first is ingrained in human nature. Everyone wants to beat out the other fellow—Occasionally, of course, we find an "odd genius" who is indifferent, either being too lazy or too clever to exert himself.—This characteristic is fully utilised in the school fair. The prizes offered, which mean both honor and monetary reward, are an inducement to the children to exert every faculty towards producing something extra fine. This may not sound idealistic; but *who* enjoys working for a laurel crown? Without such a goal the children's efforts are quite apt to be more spasmodic and mediocre.

BROADENING EFFECT

Besides winning prizes, there is much to be gained by not winning them, in

other words, recognizing the abilities of the other exhibitors. A pupil may have some mangels that surpass everything in his section, but, when these are placed beside a similar exhibit from another section they are outclassed. The boy immediately realises that there are yet several points regarding the growing of mangels that he does not know. Probably, he will then try to find out how the other boy grew his. At any rate, he concludes that the growing of mangels is more complex than he had previously considered it. Again, the loss in placing may not be due to the superior size or quality of the winning exhibit, but may consist in the way the latter is trimmed up for exhibition. **Many** ideas can be gained by every exhibitor from the exhibits of others; each youthful gage of agriculture grows. Nor is the teacher exempt from this.

Also, the fair board is made up of pupils. This alone is an excellent point. Young leaders are developed who will later grow into adult leaders or, at least, farmers who if called upon can assist in similar organizations.

COMMUNITY SPIRIT NOURISHED

Not only does a boy desire to win as many prizes as possible, but he wishes to see his school win as many points as possible, and in the inter-section games and sports he cheers his team or the athletes competing from his school, developing a community spirit, a thing too often lacking. This may be carried farther. I have had a boy tell me that their fair was the most successful of any in the county.

A LINK BETWEEN PARENTS AND CHILDREN

Quite often parents regard jocularly, if not oppose, the "puttering" of the teacher and pupils on the silly little plots, the chasing of "bugs" and the learning of a lot of other useless trash. No better remedy can be found than the school fair. Parents will suddenly be very interested, especially if one of their sons or daughters received a first prize. Even though the people of the section may be behind the movement, yet they never have a chance to really know what is being done. This fills the gap—a gap that is altogether too wide at the present time.

To further exemplify, let me cite a personal experience. At our county show, a special department was set aside for rural school children, being much the same as the present school fair. I had a collection of weed seeds prepared for this exhibition. A neighbor saw them. "My!" he exclaimed, "did you get all those seeds around here? I never thought we had as many weeds as all that." Immediately, that man began to inquire about weeds, then other topics, dealt with at school were discussed, and he realized for the first time the importance of our teachers' course at the O. A. C.

A GALA DAY NOT TO BE DESPISED

Above all, the school fair is a holiday. On that day, children and parents from the various sections enjoy a social outing. They meet friends and strangers, they laugh, talk shop and gossip. Because of the exhibits of various kinds, their subjects will naturally be agricultural. Thus adults, as well as children, will be hearing "how I grow this or how I feed my calves, etc.," not by means of a tedious speech or more tedious pamphlet, but through a nice, sociable chat. Thus another ele-

ment, often a minus quantity, is assisted.

ENTHUSIASM REQUIRED.

With enthusiastic children to back it, the school fair can be made an effective instrument for the furthering of agricultural science. But the children will not likely grow enthusiastic by themselves. They require a leader just the same as a rooter's club requires a yell leader. An enthusiastic teacher means enthusiastic pupils—a very enthusiastic teacher means very enthusiastic pupils. Very enthusiastic pupils results in a very successful fair which re-acts on the school garden, nature collections, etc., thus forming a step in the raising of agriculture to its proper elevation—the greatest profession on earth.

The following letter from A. D. McIntosh, B.S.A., District Representative for Hastings County, explains the organization of school fairs.

The Rural School Fair Movement has been making both rapid and steady improvement, not only in the point of attendance and number of fairs, but also in the interest taken in them by the public in general.

In Hastings County, there is a spirit of hearty co-operation among the inspectors, teachers, trustees, pupils and the agricultural representative as regards school fairs. As for the public generally, they were heard to say at every school fair last year, "I would rather attend the children's fair than the fall fairs." At one school fair last year, the hat was passed around to secure sufficient prize money to pay off the Sports' Prizes, and so liberal was the donation, over five dollars was left to put into the children's Red Cross Fund. One of the outstanding results in the homes of the children is the

improvement in the home gardens, and greater interest in better varieties of seed.

Three pupils from each school are a local committee and all the chairmen of these committees in each township, constitute a School Fall Fair Committee who select their own staff of officers, president, vice - president, secretary, treasurer and directors. The agricultural representative acts as manager, and is usually one of the judges. The department generally furnishes assistant judge in addition to the inspector. The committee assist with the placing

and arranging exhibits and also assist the judges by placing the tickets and acting as secretary. Suitable badges are presented to all the officers of each fair by the Department of Agriculture.

Prize money is derived from township grants, school grant and private donation, and is distributed to the winners by cheque, signed by the manager and treasurer for each fair. The total for each school is sent to the teacher who presents the winners with their cheques, and cashes these cheques when properly endorsed.



"CHICKENS,"

Why Grow Alfalfa?

By C. LAMONT, '19.

ALFALFA is a perennial plant, and when well established will last four to ten or more years, depending on the character of the soil and the treatment of the plant. The mature plant is a vigorous feeder, its roots often penetrating the soil to a great depth. Its upright stems do not sprout on cutting, but die back to the crown, from which new shoots start immediately and grow rapidly. Three to four cuttings can be harvested annually.

It is adapted to a wide range of soil, provided the sub-soil is porous and well supplied with lime. The most favorable soils, however, are a deep loam perfectly sandy in nature, overlying a not too compact sub-soil. Good drainage is essential, and on soils overlying heavy clay or hard pan soils, free escape of surface water must be provided. The alfalfa plant will die where water stands for a few days.

The young plant is one of the weakest among farm crops, grows slowly, and is easily checked or killed by weeds or by unfavorable conditions of the soil, weather or treatment. The seed bed is therefore of prime importance, and care must be taken to give the young plants plenty of available plant-food and best soil conditions for the first year of their growth.

The treatment of the field for the season preceding should be such as to subdue all weeds to cause the sprouting and destruction of weed seeds in the soil. The manure is applied preferably on the previously tilled crop.

The soil should be thoroughly prepared in order to secure a good stand, and it is especially desirable that the soil be supplied with an abundance of

lime, phosphoric acid and potash. The young plant however, must have a supply of nitrogen in available form, or it will not thrive.

Alfalfa, like clover and other legumes, can make use of the free nitrogen of the atmosphere with the aid of bacteria, which find their way into its roots and usually cause the formation of tubercles. Fields new to alfalfa usually require inoculation of the soil with alfalfa bacteria, which gives a thrifty dark green plant well provided with tubercles. Commercial cultures, which are quite dependable when secured from reputable manufacturers, are possibly the best forms of inoculation.

Pure seed is essential and only that which is bright, plump and free from impurities should be used. Dodder, a common impurity is a growth which thrives on the juices of the plant.

Alfalfa seed can be sown either in the spring or late summer, but preferably in the summer. The advantage of August seeding is, that the land can be well cleaned of weed seed. A good crop to precede alfalfa is oat-and-pea forage. When it is sown in the spring, it is best to use a cover crop, like spring barley, that will check weed growth without injuring the alfalfa very much. The barley should be harvested for hay.

If August seeding be practiced, no cutting should be made the first season, but the growth should be left for winter protection. The next season, the alfalfa should be cut when buds are starting from the stalk near the surface of the ground, usually some blossoms show at this time and the cutting should be made then, even if the crop is

very light. When left to full bloom, the plants are injured and the quality of the crop is reduced. Alfalfa does not stand pasturing well. Alfalfa hay should be cured in the windrow or in cocks to avoid loss of leaves which quickly become brittle and fall off when exposed to the sun. As the leaves are twice as rich in protein as the stems, the necessity of careful handling is evident. In case the plants turn yellow from any cause they should be clipped with the mower.

Alfalfa is a heavy feeder and large producer, but it is a soil builder, filling the soil with organic matter, and getting its nitrogen from the air. It adds large quantities of humus to the soil through dead leaves and decaying roots. Thus alfalfa not only improves the mechanical condition of the soil, but also increases its fertility.

It makes hay that is not equalled by any other forage crop. All kinds of farm animals like alfalfa and thrive upon it. It furnishes an exceedingly nutritious, wholesome and much relished food, be it given to the animals in the green state or as hay. For dairy cows, alfalfa is particularly valuable. For milk production, it, as pasture, is worth more than any other composed of clover and grasses. As a soiling crop it cannot be surpassed, and well cured alfalfa hay has no equal as a dry fodder. Horses are very fond of it, and thrive remarkably well on it. For sheep, lambs and hogs it is also exceedingly valuable, its fattening and flesh producing qualities being universally recognised.

It is unequalled, because of its enormous yielding capacity, its palatability and digestibility render the plant of the highest value to the live stock feeder. For these reasons it is of greatest value in the form of hay.

In composition, alfalfa stands at the

head of the list of the legumes used for making hay. It will be seen from the following table that it contains more total protein and more digestible protein than any other kind of legume hay. In fact, it is worth nearly as much as wheat bran for feeding purposes. These comparisons should mean much to the dairyman or live stock feeder, inasmuch, as alfalfa may be made to take the place of a considerable portion of the commercial feeds now used for their protein. The value of alfalfa for milk production is so generally known, that it is not worth while going into detail.

Table showing composition of various hays compiled from analyses from various sources.

	Total Protein	Pounds per ton digestible Protein	Digestible Carbo-hydrates	Tot'l Fat
Alfalfa hay.....	308	220	854	44
Cowpea hay.....	178	116	852	52
Crimson Clover hay.....	304	208	692	54
Red clover hay	246	136	762	66
Soy bean hay....	301	216	772	104
Timothy hay....	120	56	838	60
Wheat bran.....	308	244	1078	160

A small percentage of alfalfa growers are attempting to grow alfalfa seed. Favorable conditions are rather dry, sunshiny weather from the beginning of bloom until the maturity of seed. If alfalfa is grown primarily for the seed, it should be planted in rows about twenty-eight or thirty inches apart and cultivated. The demand for home grown seed should make this a very profitable enterprise on the lighter types of soil. Profitable crops of seed may, however, be produced under certain conditions in the thickly seeded fields. The second crop of the season is the one to save for seed in Ontario,

(Continued on page xiii)

THE O.A.C. REVIEW

REVIEW STAFF

J. B. MUNRO, '19, *Editor-in-Chief*

G. B. HOOD, '20, *Associate Editor*

R. W. MAXWELL, '18, <i>Agriculture</i>	A. H. MUSGRAVE, '19, <i>Athletics</i>
F. L. FERGUSON, '18, <i>Experimental</i>	A. B. JACKSON, '19, <i>College Life</i>
C. F. PATTERSON, '18, <i>Horticulture</i>	WALLACE MURDOCH, '20, <i>Locals</i>
G. R. WILSON, '18, <i>Poultry</i>	G. H. SCOTT, '20, <i>Artist</i>
R. ALEX. BRINK, '19, <i>Query</i>	OLIVE LAWSON, '18, <i>Macdonald</i>
A. M. STEWART, '19, <i>Alumni</i>	M. BARBARA SMITH, '19, <i>Mac.</i>

EDITORIAL



G. C. CREELMAN, B.S.A., LL.D.

Dr. G. C. Creelman, President of the O. A. C., will leave shortly for overseas, where he will be for some time in connection with agricultural interests in the Khaki University. We hope that

on Dr. Creelman's return, we may receive many items of interest for our Alumni Department. It will be almost impossible for him to return without having met a few score of our boys who are over there. The Review trusts that many of the O. A. C. boys may be privileged to extend the "glad-hand" to their old friend during his stay in Europe, and also that he may safely return with good news from our mates.

GOING UP

Only a casual glance at the advanced prices of paper, labor, postage, express,—yes, and even ink—will convince our readers that the fifty cent rate charged ex-students, is not sufficient to cover expenses. We have been reluctant to advance the price of the paper to our old boys, not because we deemed the paper of less value to them, but almost

from sentimental reasons. Our ex-students are the scattered members of our big O. A. C. family, and for many years we have taken pleasure in sending out this monthly letter. Expressions of appreciation and sympathy have been received from scores of our boys, both over here and over there. The boys realize that we are trying to carry on the work, but they fail to appreciate the fact that we have a large list of subscribers overseas, who are getting this home news every month, and will continue to receive it as long as we can hold out. We will not cut them off our lists. They are the ones who most need the cheering items we can send. It is our aim to keep them supplied, but we must look to our boys here for assistance.

The Review Executive makes this announcement of the advance to one dollar, after January first, 1919, knowing that all loyal ex-students will respond to our appeal for help. We wish it understood that we are not appealing for charity, however. The high standard established by the various preceding executives is being maintained, and where possible we are making improvements. The articles are of equal interest to ex-students as they are to our student body of the present time, and our Alumni notes are even more personal to the boys of years ago than they are to our boys here to-day. We aim to link the boys of the past with each other and with those of the present, and especially to keep intact the bonds between the O. A. C. boys of the army, navy and farm, in our Alumni columns.

We have confidence in our boys, and we know that we can depend on them to stick with us. This announcement simply serves to express the urgent fact, that we need financial backing, which can best be given by the renewal of your subscription at one dollar a year.

THE OLD ORDER CHANGETH

The inauguration of a Farmerette's Course at the O. A. C. last May caused much unfavourable criticism of our institution and the "new-fangled" ideas of the powers that be. Now comes a bigger shock to our recalcitrant people and press; a wordier upheaval of popular sentiment is inevitable. The announcement has been made that several girls have applied for admission to the regular course at the O. A. C. The President, after considering the case in its various phases, has decided to accept these girls as students, and they will be admitted in September.

As usual, some will taboo this idea as they did the feasibility of training farmerettes, but we may point out that professional agricultural education for girls is not an innovation. Our 1917 Chicago stock-judging team competed against agricultural co-eds and were forced to recognize the ability of their fair competitors. An American girl, Miss Edith Curtiss, of Iowa, won fifth place in stock-judging at that International Exhibition. What has been done can be duplicated. So we may look for results.

This departure from the old order at the O. A. C. appears to us a progressive move. It bespeaks advancement and prophesies a broadening of the possibilities of the agricultural profession.

We believe that girls will "make good" in agriculture, as they have done in medicine and other "unsuitable" professions. We heartily endorse the action of President Creelman, and extend to the girls a sincere welcome.

THE TEACHER'S OPPORTUNITY

The teacher who, after completing the course at the O. A. C. College, includes agriculture in her curriculum is presented with an excellent opportunity to materially aid in the improvement of

agriculture. Because she comes in direct daily contact with the children and parents of her section, she has an advantage over other agricultural missionaries, an advantage that should be invested to the limit of her time and capabilities. If the rural teacher is a teacher she will be an enthusiastic agricultural leader as well as an expounder of figures and letters, then will she be a true citizen and not merely a human cork.

The greatest object a teacher can keep in view is, that farming is a profession that requires a limitless knowledge as well as hardened muscles. The opposite opinion is the great obstruction to better farming. Few rural people realise the bigness of their occupation. Parents know that if their son is going to be a doctor he must pass the Entrance, Junior Matriculation, and five years at medical college; but if he is going to be a farmer—it is immaterial whether he ever gets out of the third book. This antiquated idea holds back agriculture, and this antiquated idea is what the teacher must assist in sweeping away.

The chief method, of course, is through the teaching of agriculture to the children at school. The young mind is easily impressed and the ideas obtained in childhood will remain through life. The mere fact, that agriculture is an occupation worthy of study will impress children. As they proceed, they will learn that many previously unknown things play a very important role in agriculture. They will be surprised to know that the harmless looking moth that flies through the open windows at night, is the mother of innumerable destructive larvae; that very minute organisms turn milk sour and give bad flavors to butter, and that millions of dollars' loss are annually caused by plant diseases. Before very

long the children will realise that the soil beneath them alone, is too complex to be fully analyzed in a life time; that the air rustling through the grain is full of disease spores; that farming is no dunce's job, but that of a clever, energetic man.

But the teacher should not cease her endeavors in the school-room. Necessarily, she will continually be entering the homes of the section. Here, she will naturally be drawn into discussions on farm topics. This is a chance to be grasped. If the people of the community recognize their teacher as being well versed in agriculture, they will soon learn to respect her ideas, unconsciously progressing.

Because agriculture is such a complex business, the teacher should specialize in the branch of farming, typical in her section. Thus in a dairying district, she should acquaint herself with the various dairy breeds and their characteristics, familiarize herself with the chief bacteria affecting milk, milking machines and the manufacturing end. There will be many points vital to the business of which the average farmer is ignorant.

To accomplish this, the teacher will need to carry on her studies after she leaves the College. This can be done at little expense. Excellent pamphlets and bulletins are prepared throughout Canada and the United States for free distribution. Such a programme will entail more work—but, if everyone just did what was demanded of them, progress would be unknown.

G. B. H.

EXUNT

The 1917-18 Review staff have carried on to the end. This is the last number they will issue; for with the September number the new staff takes a hand.

O. A. C. Review Staff

1917-18.



Top Row—A. M. STEWART, '19, R. ALEX BRINK, '19, W. MURDOCK, '20, F. C. PATTERSON, '18.
Centre Row—G. R. WILSON, '18, F. L. FERGUSON, '18, G. H. SCOTT, '21, A. B. JACKSON, '19, A. H. MUSGRAVE, '19.
Bottom Row—J. B. MUNRO, '19, M. B. SMITH, '19, L. E. O'NEILL, '18, O. G. LAWSON, '18, R. W. MAXWELL, '18.

The Editor wishes to express to those of his staff who are away, his appreciation of the work they have done. He feels that he has had the support of every man on the staff, to the utmost of his individual ability. Owing to the present emergencies, it has been impossible for some to give full assistance, but no one shirked.

The accompanying photograph will give our readers a delayed introduction to the retiring staff. L. E. O'Neill, '18, edited the magazine during the year 1917. To him is due the credit—or blame—for having trained the present editor and staff. Louie is now with the Live Stock Branch at Toronto. Like all others of his profession, the editor is modest, so will refrain from bestowing undeserved laurels on his crest. He remains in office till Christmas, when the new staff will have been thoroughly schooled and prepared to bear the burdens of publishing alone.

Our Macdonald representatives have been very active this year and have contributed largely to the success of the Review. Miss Lawson is now in Alberta teaching Domestic Science. Mrs. M. B. Smith will be on next year's staff as senior representative.

The boys of the staff are scattered. Many of them are in khaki and their exact addresses are at present unknown at this office. G. R. Wilson, '18, is with the 64th Battery at Petawawa, as is also Bert W. Maxwell, '18. C. F. Patterson, '18, is farming about 17 hours a day, while F. L. Ferguson is engaged in keeping Ontario dry. He has charge of drainage work at Chatham. G. H. Scott is now with the Canadian Engineers,—somewhere in Canada. A. M. Stewart is working overtime on the farm at Waba, Ont., and gets time to contribute a few Alumni notes in spare moments. Wallace Murdoch is on drainage work for

the Physic's Department. At present, his work is in the neighborhood of Collingwood. R. Alex Brink is doing missionary work among the farmers in Northern Ontario. He is assistant to the representatives in Fort William and Port Arthur. He has taken quite kindly to the hills and plains of the north land, but we expect him to migrate back to college when winter sets in. He will have charge of "Experimental" on next year's staff.

A NATIONAL EMERGENCY

The following resume which deals with the lack of vocational training in the United States, deserves the attention of all progressive Canadians, as it is also a diagnosis of existing conditions in Canada.

The great war found the United States vocationally unprepared. It revealed the fact that we needed better trained men and women in the trades and industries and that we lacked the facilities for training them effectively. Our system of education, which has stressed the academic and cultural, has been slow to introduce courses purely vocational and, excepting in a few fields, where they have been introduced they have been unpopular. "Less than two months before the United States entered the war, the Smith-Hughes' Act was approved by the President and within three months after the declaration of war the Board created by that Act had been appointed and was at work. Thus, at a critical time in our national existence, a Federal agency came into being, charged with a duty the proper fulfilment of which in war or in peace is vital to national defense and prosperity."

This duty is to extend and democratize the school system so as to offer broad practical training for useful

employment to the growing millions of our boys and girls who, for want of such training, are going unprepared and inefficient to their life work.

The Smith-Hughes' Act provides a scheme of co-operation between the Federal Government and the States for the promotion of vocational education and undertakes to pay over to the States annually grants continually increasing until, in 1926 a maximum of \$7,367,000 is reached, these Federal grants being conditional on the co-operation and financial support accorded the Act by the States.

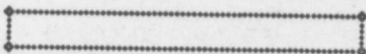
"The co-operation of the States with the Federal Government is based upon four fundamental ideas: First, that vocational education being essential to the national welfare, it is a function of the National Government to stimulate the States to undertake this new and needed form of service; second, that Federal funds are necessary in order to equalize the burden of carrying on the work among the States; third, that since the Federal Government is vitally interested in the success of vocational education, it should, so to speak, purchase a degree of participation in this work; and, fourth, that only by creating such a relationship between the central and the local governments can proper standards of educational efficiency be set up."

A new book which will be indispensable to educators as well as to employers and other persons who are studying the problem of domestic and industrial efficiency in war times is,

Leake's Vocational Education of Girls and Women.

The great field of natural activity for girls and women, that of "home economics," is recognized and generously provided for by the Smith-Hughes' Act. And Mr. Leake gives a careful and extensive survey of what has been done and what is being done to make the domestic work of women more effective and more profitable. He discusses the public school courses, elementary, secondary, and special in the United States and abroad; he considers them critically as to their good points and their deficiencies; and he discusses at length many expedients that have been used for extension and continuation training in this line for homemakers, for domestic servants and others.

The Act also provides for vocational training in "trade and industry," and here in these days of national emergency girls and women will be in greatest need of special training if they are to keep the wheels of our industries not only moving, but moving faster than ever they did in peace times. Leake's Vocational Education devotes 157 pages to the discussion of Women in Industry outside the Home, and covers fully every means of training women for greater efficiency in both skilled and unskilled trades: the evening school and other forms of part-time education in the public school for pupils, who are early called into industry; the trade school; the factory school; the business college; the school of salesmanship.





Dr. Creelman has kindly consented to the publication of the following letter from B. E. Foyston, '15. Our readers will be glad to hear that he is doing well, and that our boys overseas are upholding the reputation of the O. A. C. in athletics.

France, June 21st, 1918.

Dear Dr. Creelman,

Am writing you in order to obtain an educational certificate, necessary for me to have on applying for a transfer to the Royal Air Force. As it is necessary to have a character reference also, could I ask you to send one of these?

Am addressing this to the College, as I presume you are still there. My address is still the same, viz.

No. 307628 Gnr. B. E. F.

B. Echelon, 3rd C. D. A. C.

France

We have been having a very favorable time of it lately, everybody feeling fit and up to the mark. Our sports are being 'run off' just now, the final corps' sports being billed for an early date. At our Divisional Artillery Field Day held this week, Lieut. Culham won the broad jump, 19 feet and some inches. Will probably be a number of the boys from the other divisions present at the finals, and hope to see them.

Hoping Sir, that both yourself and

family are enjoying the best of health, and that I may hear from you,

Very sincerely,

B. E. FOYSTON.

The following letter from Bert Maxwell will be of interest to all who knew him here. We would like to see our Agriculture Editor with an army hair cut.

Petawawa Camp,

Sunday, June 2nd, 1918.

Dear Dr. Creelman,

I am sorry that I could not see you before leaving Guelph, but I left instructions with Cap. to say fond farewell for me. Although lacking in size, I know Cap to be man enough to give an appropriate handshake.

I came down to camp with the "Advantage Party" (consisting of eight men) to assist in preparing our battery lines for the 64th. Having been here for about a week before the majority of the boys, I am now quite accustomed to the heat and sand, whilst G. R. Wilson, among others is endeavoring to resign himself to the environment.

Tiring of the effect of a grizzling sun and of carrying about a cubic yard of sand on my head, I went to the barber shop last evening and had my locks cut (cut with capital C). My hair is now

so short that I almost find it impossible to grasp a hair between my finger nails. In a way it is an inconvenience, for now I don't know just how far up I should wash my face. As a guide henceforth, I intend to keep my cap on when I do wash—it's a useless practice down in this dusty hole. To further disguise myself I have an embryonic moustache nestling on my upper lip. It's very dusty down here. My "moustache" is most visible about 6 p.m. daily—we usually wash about 6.05 p.m.

About two hours ago the Sergeant-Major came along to my tent and asked me to report to the O. C. Gee! I just felt as I would imagine a freshman would, when asked to "report" to the President of the O. A. C. I tried to recollect whether I had been doing something "that I hadn't oughta" but I couldn't think of such a thing. I reported, clicked my spurs and awaited the "calling down." However, it turned out that he wanted to pick four "likely" men to take a six weeks' signalling (semaphore, Morse and buzzer) course. Four of us start tomorrow morning. I had thought my "plugging" days were over for a year or two, but if there are any stripes and education in it, I'm going to get them and it.

In the meantime, what with advance party and signalling course I am being "picked on," but "later on," when it comes down to the actual scrapping, I hope that the Germans will use sound judgment when it comes to "picking 'em."

Well, Doctor, I must cease my chatter as I have yet many more letters to write. Until sports and boxing start, letter writing will be the "king of indoor sports," so far as I am concerned.

Again thanking you for all past assistance, I remain,

Yours sincerely,
Gnr. Bert Maxwell,

No. 3132795

64th Battery, C. F. A., C. E. F.,
C. Brigade,
Petawawa Camp, Ont.

Mr. Neilson has kindly consented to the publication of the following letters from R. B. Hinman, '15, J. F. Francis, '15, and M. Kelleher, '14.

It will be noticed that all three are most anxious for news of the O. A. C. and old members of their classes. The least we can do for those fighting our battles overseas, is to keep them well supplied with letters.

No. 5 Can. San. Section,
Army Post Office, London, Eng.

May 13th, 1918.

Dear Dad,

Just a short note tonight as we are thoroughly upside-down now, on the eve of a move to the soldiers' haven. Before you get this, I shall be across the Channel, or I'm not a farmer. We had a kit inspection tonight and—well I must not say too much. Sufficient to say my dreams are about to be realized.

I was awfully sorry to learn of your difficulty in getting a letter from me. Personally, I must state that your letter of recent date, is the first I have received from you. I wrote you a card to M. A. C. last summer, but failed to get any response. However, I am very glad to know the line is all connected up again and the current complete.

Am very pleased to know of your change to Guelph. Maybe, Mrs. Neilson's health would be better in British Columbia. I have certainly learned one thing while at this job—good health is a great blessing.

Was very pleased to hear the news of all the fellows and of course you can send me another good letter by this time. Doubtless it will be very welcome in France. "Cock" Francis is in camp here, but as he is in segregation yet, I have not seen him. I will try to see him soon.

I occasionally hear from Ray Hall, he is still at Ashford in Kent. Saw "Dug" Townsend lately, also Tompkins, ('12). Most of the lads are overseas now.

Now must run and write home. The above address will catch me at any time, so please drop a fellow a line: Best regards to Mrs. Neilson and self.

Sincerely,

No. 528812 Pte R. B. HINMAN.

No. 2650704 J. F. Francis,

B Battery Canadian Reserve Artillery,
Milford Camp, Witley, Surrey, Eng.

June 9th, 1918.

Dear James,

At last I am starting to write you a few lines. I have only written 55 letters since I came here, so you can see what I am doing for pastime.

I am taking it for granted that you know I enlisted and am overseas. Have been here nearly two months.

This is a fine country so far as I have seen, but that has been mostly while on route marches. We were in segregation for one month, living in tents, then we moved into huts. A few days ago, one fellow developed mumps in our hut and as a result we are in quarantine, back in the tents for 28 days. I was nearly half way through my training here, and it has to stop now, and I will do nothing but fatigues while in here. They use us pretty well under the circumstances; food is not very plentiful and very expensive. The tobacco is not as good as that we used to have in our can in Winnipeg.

The country is very pretty now, lots of flowers and ivy, and climbing roses. You would laugh if you could see these trains, they look like toys, but say, they can go some. The trip on the boat was fine. The H₂O was not rough and the weather fine. I was sea sick nearly three hours, but some were shaky most of the way.

Well, I must close as it is nearly supper time. This is poor scribbling, but am writing on my knee.

Write soon and give me all the news.

Best wishes to all, I am,

always your friend,

J. F. FRANCIS.

P.S.—I saw S. H. Fortier, '15, the other day, he has been wounded, and is ready to go back again.

Somewhere in France,

May 24th, 1918.

Dear Mr. Neilson,

This is just a few lines to let you know I am still above "the sod" and out in France. I saw a Review some time ago, and that you were on the Horticultural Department, so I hope this letter will find you. I have heard practically nothing from the College since I came over, though from time to time I have written, so I trust that you will drop me a line just to let me know how things are going.

As you know, I was severely wounded in the jaw a year ago last September. I did not return to France until last June, and then rejoined my unit later. I made the trip up to — and got through the winter all right enough. The — trip was bad, but I got through it with a whole skin, more by good luck than anything else for I had some close calls.

This spring when most of the units started a farming stunt, I got the job of handling the one for my unit. So now I have an acre of ground laid out

as a garden. The crops are coming along nicely. If all goes well and Fritz does not come over and take the lot, it will give good results I think. The implements I had to work it up with, would be sold in Canada for scrap iron at the best, so you can imagine the job it was, however, as I said, I am getting along pretty good now.

My present address is 10th Canadian Infantry Brigade, Trench Mortar Battery, B. E. F., France. This is the unit I came to France with in 1916. Well I must break off for the present. Remember me to Professor Crow and the others that may remember me.

Trusting to hear from you soon, and that all is going well.

I remain yours truly,
No. 127072 PTE. M. KELLEHER.



J. P. SACKVILLE, B.S.A.

J. P. Sackville, '15, has left the Animal Husbandry Department here, to take up the position of Livestock Editor of the Grain Growers' Guide, the

official organ of the Grain Growers Association. Mr. Sackville was born and raised on a farm in Northumberland County, Ont., and has homesteaded in Saskatchewan.

As a student here, he showed great ability in debate and as a judge of livestock. As a lecturer, both in the class room and in the judging pavilion, his knowledge of livestock and his ability to emphasize and explain clearly essential points, have set many a troubled freshman on the road to becoming an experienced judge of livestock. These qualities and his knowledge of Western conditions, fit him admirably for the position he goes to fill.

Mr. and Mrs. Sackville will live in Winnipeg. May both they and little Helen enjoy the best of good luck and prosperity in their new home.

Tennyson Jarvis, '00, who is now Plant Pathologist for the Canadian Copper Co., Copper Cliff, Ont., was also a visitor at the College during July.

J. H. Grisdale, has been appointed Acting Deputy Minister of Agriculture for the Dominion. He is an associate of the O. A. C., and was for some time before his appointment, Director of Dominion Experimental Farms.

The College was, on June 29th, the scene of a very pleasant and successful re-union—the Annual Convention of the Waterloo County Association of O. A. C. and Mac. Hall graduates. This is the first time in the history of the Association, that the Annual Convention has been held here. The party spent a very pleasant and instructive day upon the campus and among the experimental plots, and listened to very interesting addresses by Dr. Zavitz and Capt. Latimer.

At the conclusion of the programme, it was unanimously decided that the Convention be held annually at the O. A. C.

E. A. Weir, '12, who was until recently on the staff of the Grain Growers' Guide, Winnipeg, is now at his home in Glencairn, Simcoe County, Ont.

G. C. Crawford, '15, who has recently been taking post-graduate work at Urbana, Illinois, is acting as assistant on the Department of Entomology at the O. A. C.

J. Buchanan, '99, who is now Superintendent of Co-operative Experiments for the State of Iowa, with headquarters in Ames, Iowa, spent several days here in July.

For ten years after graduation, Buchanan did much good work as assistant to Dr. Zavitz on the Department of Field Husbandry. We hear that he is making a great success of his present work.

M. J. McQueen, '15, formerly with the Farmers' Institute Branch, Toronto, is now with the Dominion Department of Agriculture on the Livestock Branch for the Western Provinces, with headquarters in Winnipeg.

Wiggins of '17, enlisted in the Royal Air Force.

H. W. Newhall, '11, has been appointed Associate Professor of Dairying at Michigan Agricultural College. Prior to his appointment he was for some time manager of a large dairy plant at St. Catherines.

A. H. McCullough, who is now Poultry Commissioner for New Brunswick, was in Guelph for a few days recently.

J. A. Bergey, '12, who is now connected with the Extension Department, under the Manitoba Provincial Government, paid a flying visit to the College on his way back from a convention in Massachusetts.

WEDDINGS

WALKER—BOURN

A quiet wedding was solemnized in Toronto on June 20th, 1918, by Rev. Wm. Patterson, D.D., Pastor of Cooke's Church, when Jessie A., third daughter of Mr. and Mrs. W. B. Bourn, of Spruce Lodge, Grant Valley, Ont., was united in the holy bonds of matrimony to J. Leslie Walker, '18, of Teeswater, Ont. After a short honeymoon spent in Toronto, Hamilton and Winona, they returned to take up their residence on the groom's farm near Teeswater.

OVERHOLT—PROUT

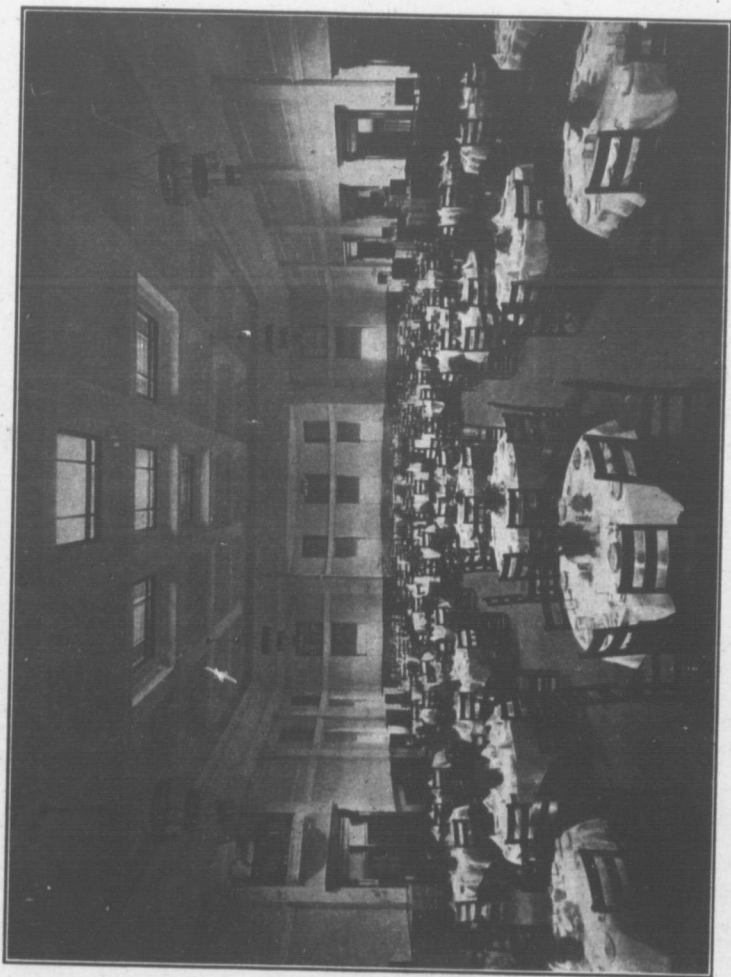
At "Bloomcroft," Chantler, Ont., on Wednesday, June 5th., Mindelwell Glenna, daughter of Mr. and Mrs. Elijah Prout, was united in marriage to Percy Misner Overholt, '18. The Review wishes this wise couple very hearty congratulations.

DEATHS

RENNIE

The death took place on Saturday, June 29th, in Toronto, of Rev. Ernest Andrew Rennie, '91, Rector of Christ Church, Covington, Louisiana, a brother of Colonel Geo. S. Rennie, C.M.G. Rev. Mr. Rennie was born and educated in Hamilton. He took the Associate Course at O. A. C. in '89-'91, and entered Wycliffe College in 1895.

The Review extends its deepest sympathy to his widow and little daughter, Margaret, aged 7.



THE O. A. C. DINING HALL.

SHAW

Professor Thomas Shaw, former Professor of Agriculture at the O. A. C., died on Tuesday, June 25th, at his home in St. Paul, Minnesota, after an illness that had confined him to his bed for six months. He was 75 years old.

Though Professor Shaw did much for the O. A. C. and for Canadian Agriculture, both as a farmer and as a leader of agricultural education, it is in the West that his influence has been most marked. Few men indeed played as important a part as Professor Shaw in the development of the West.

Professor Shaw was born on a farm in Wentworth County, Ont., on January 3rd, 1843. He lived on the farm helping with the work in summer and going to school in winter, until he was 15 years old. There his school education ended, but his farm education continued. At the age of 40, he was the owner and manager of a 500 acre farm, and when he was 45 years old, he was called to the position of Professor of Agriculture at the O. A. C.

It was his work in Guelph that attracted the attention of the late James J. Hill. Their acquaintance in later years ripened into an intimate friendship.

While on a trip through the West in 1893, Professor Shaw was offered the Professorship of Agriculture at the Minnesota Agricultural College at Minneapolis, a position which he occupied for some years. During this time he was Mr. Hill's chief ally and advisor in Western agricultural matters and the theory of dry farming which has brought under cultivation so many thousands of rich acres was originated

by him nearly 20 years ago. Although the time was not then ripe for the practical application of his project, he lived to see it accepted by Mr. Hill and put into practice successfully.

In 1907 the railroad president made him Agricultural Agent of the Great Northern and Northern Pacific Railways. From that time, until he was forced to cease active work on account of his health, he turned many semi-arid stretches of Montana land into productive grain fields.

The introduction of pure bred Guernsey cattle into the United States, was due largely to the efforts of Professor Shaw. He was commissioned by the late Mr. Hill to buy a herd of these animals to be used to breed up the dairy stock of the North-west. The first herd brought over were kept on the farm at North Oaks, where Mr. Hill was buried. Hundreds of farmers have benefited by raising Guernseys, descended from this original herd.

Before going to the West, Professor Shaw owned and edited the Canadian Live Stock Journal. In the West he was for some time Editor of The Farmer. He was a most prolific writer, having published, in all, fifteen books on agricultural subjects. It is safe to say, that few men have done as much as he for both the theory and practice of Western agriculture.

Professor Shaw is survived by a widow, two sons, Robert S. Shaw, Dean of Agriculture at Lansing, Michigan, Agricultural School and Professor William T. Shaw of Pullman, Washington; two daughters, Mrs. J. K. Robinson and Mrs. M. H. Reynolds of St. Paul, Minneapolis.



THE VALUE OF "THE SHORT COURSE"

Being a short course it is permissible I hope to allude to it as being a short-hand method of covering the longer courses. It is not to be inferred that all may be discerned at a glance, but rather that due consideration is given many branches of the work to enable a practical comprehension of it all.

The two outstanding features of the course, namely; cookery and sewing, in themselves justify a careful consideration of the value of the course.

In cookery, each branch of the work is dealt with, and as any experienced housekeeper knows, these are many and varied. The work is done in a very practical way, each girl actually practising all that is outlined. In this way the lessons taught make a more lasting impression, and when returning home it will not be necessary to rely upon theory only. It might be mentioned, because of present conditions which make us realize the necessity of substitutes for wheat, sugar and fats, that due consideration is given this important subject. In connection with the cookery the lecturers teach the proper valuation of our food and assist us in making a wise selection.

The sewing classes furnish instruction in the drafting of patterns, a knowledge of which is very helpful to everyone that is interested in sewing. Commercial patterns it is true are excellent, but alterations of these are sometimes desired, and in that event a

knowledge of drafting is very useful. In this subject an actual working knowledge of materials is considered to be the important part, experience which after all is the greatest factor.

Although, we have now considered the main features of the course, it is not sufficient to merely mention the other subjects.

The home nursing lectures given this past term, have been very instructive and so practical as to meet any and every emergency that might arise in the home.

The laundry classes are very practical, more so now perhaps than ever before, when the proper care and preservation of materials is so necessary. It is not only our food we must conserve but materials as well; and a knowledge of the proper care of these materials is necessary if conservation is to be effected.

Every one realizes the necessity of home sanitation, without which community sanitation would be impossible. It is a knowledge all should have, the ignorance of which causes much trouble, that might otherwise be avoided. The lectures then on this subject are very helpful.

House practice is also part of the course. Careful consideration is given each household task, and in this way the correct method is taught which means less work and more successful results.

Dairying, an optional subject, is very helpful at the present time, when so

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FIRE

STORMS

HOT SUN

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many are assisting in farm work. Horticulture, an optional subject, as well, is very interesting and no less valuable than dairying.

The work is taken with instruction and equipment that could not be found elsewhere, and due to these very conditions, a greater amount is covered than could otherwise be considered in the short time that is allowed for the course.

D. HAIRE.

Miss Germain is acting as House Mother in the Renner Camp, Jordan. She is working very hard, and likes the position, the only disagreeable feature being the mosquitoes, which are almost as big as young grasshoppers.

The girls are dears, all high school, college and university lassies, and as bright, happy and attractive as can be.

If they are at all discriminating, they

will vote their House Mother a dear, also. It is not a case of "all work and no play" at Renner, for there was a rumour of a dance in the village hall, and a seven piece brass band and a bunch of officers from Niagara.

WHY GROW ALFALFA?

(Continued from page 554)

as this allows the cutting of one hay crop and presents more favorable weather conditions for the filling of the seed crop. The third cutting develops too late in the season to mature the maximum amount of seed.

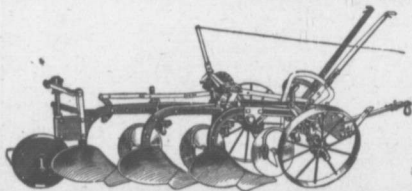
Alfalfa is no longer a new and untried crop, and the secrets of growing it have already been solved by many growers. The culture of the crop should be extended as rapidly as the true merits of the plant are recognised.

Any soil, any service successfully met

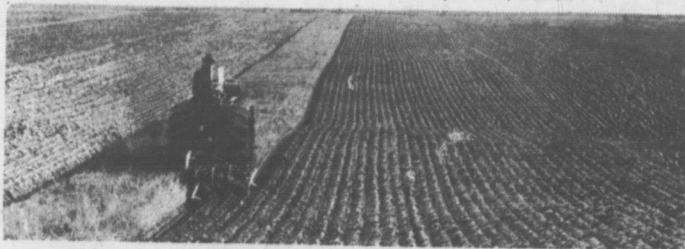
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Cockshutt 3-Furrow Plow



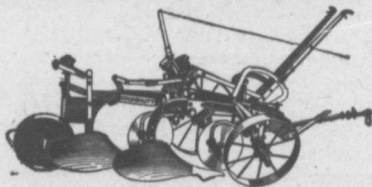
Can be turned into a 2-furrow plow in a few minutes when conditions demand it. Cord within easy reach of Tractor operator's hand works automatic power lift, raising bottoms high and level when you want them out of the ground, and lowering them again when you wish. Easily operated levers are also conveniently placed for varying depth of cut. The hitch is instantly adjustable to suit any make of tractor.



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Remember—your "team" is only half complete when you've bought your tractor. You must have the right plow because that is what actually works your land. We have so many splendid letters from successful farmers who use the Cockshutt Light Tractor Plow that we know it is giving every satisfaction—no matter how hard the service or how tough the land.

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