

## ISSUED BY THE KHAKI UNIVERSITY OF CANADA.

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## MAJOR - GENERAL SIR DAVID WATSON,

 K.C.B., C.M.G., is one of the big four.A newspaper owner from Quebec, Sir David is well known in Canada from the Atlantic to the Pacific. He is one of the most democratic and therefore one of the most popular Army Chiefs in the Canadian Expeditionary Force-which is saying a good deal. Officers and men would follow him into the jaws of death without a moment's hesitation. He has the faculty of never inviting officers to do what he would not do himself. He is one of the most notable figures in the great conflict. Those who knew him as a citizen soldier, and his enthusiasm and zeal in the Canadian Militia, expected he would attain a high post when he joined the O.M.F.C, and threw himself heart and soul into the war.
To Sir David it was a sacred cause which called for supreme devotion and abandonment of everything for the attainment of the end in view-the defeat of the Hun and the preservation of Freedom to the world. When duty and inclination go hand in hand success is sure to follow.

One of his greatest achievements in the war was the reconstruction of the old British line before St. Eloi after it had been battered to bits by German guns. General Watson was then in charge of the 5th Brigade. " So deep was the mud and slush," the official narrator says, " that the greatest difficulty was experienced in carrying up materials for the repair of the line. The Brigade, however, set to work to make trenches out of slush. It succeeded in reestablishing the trenches in the night under heavy fire, and the repairing of smashed-in parapets occupied as much time as the preparation of the renewed line."

The Battle of the Craters was one of the toughest propositions of the tough Flanders fighting.

## A DIVISIONAL COMMANDER.



Beaver Gallery : No. 9.
Major-General SIR DAVID WATSON, K.C.B., C.M.G., Commanding the 4th Canadian Division.

Defences were like a child's castle in the sand-as wave after wave creeps up the shore on an incoming tide." The remorseless gunfire from the enemy was decimating, and of a garrison of eighty men one returned unwounded.

Through such heroic fighting as this General Watson passed to the command of the 4th Division. Just before the 4th left Bramshott for France they were reviewed by Mr. Lloyd George, then Minister of War. In a magnificent speech he said: "The story of the great second Battle of Ypres, when The Canadians saved Calais, will be read for many a long day. Just as the Rocky Mountains hurl back the storms of the West so did these heroes in the Battle of Ypres break the hurricane of Germanic fury. Amid the flames and the poisonous fumes of Gehenna they held high the honour of Canada and saved the British Army." The War Minister closed his speech with this brilliant peroration: "As I saw these magnificent battalions march past to-day I was filled with pride in their prowess, their strength, their promise of what will be done. I know what they will do. I know the victories that they will help to bring to the cause of Humanity and Freedom. From the bottom of my heart I congratulate you, sir, who will command them; and in the struggle which is in front of you may the Lord of Hosts be with you.'

On August 8th, 1918, when the Division attacked before Amiens and broke through Hindenberg's "impregnable" line, it was the beginning of the end, and the fulfilment of Mr. Lloyd George's prophecy.
No one was prouder of this stupendous feat of arms than Sir David Watson, the Divisional Commander. The 4th is still in France, but will soon embark to England preparatory to returning to the Land of the Maple Leaf.

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## The Pure-Bred Ram v. The Scrub.

We hear from all sides and directed to all classes of stock " Swat the scrub sire.' It is acknowledged by all that the sire from a pure family bred for years for milk, beef, mutton, eggs, or whatever is desired, will so impress his good qualities on his progeny that they will be far superior to the offspring of the scrub sire

At the Missouri Agricultural College tests were made of the relative merits of a pure bred mutton ram and a scrub ram when used on range ewes. Two lots of seventeen range ewes identically alike were used in the experiment with the following striking results:
(1) The lambs from the pure-bred mutton ram at 3 months of age, weighed $3 \frac{1}{2}$ lbs. more on the average than did those sired by the scrub ram at 4 months of age
(2) The lambs from the mutton sire sold at $\$ 7.35$ per hundred lbs.-those from the scrub sire sold for $\$ 4.50$ per hundred.
(3) The quality of the wool of the offspring from the pure-bred sire was noticeably better than that from the stock sired by the scrub ram.
Figures talk for themselves. It is needless to say which is the more profitable ram.

## The Value of the Summer Pasture.

A small field of summer pasture is very valuable. If the ordinary pastures are short during July and August, the summer pasture field will provide the necessary forage. If they are good, then the summer mixture may be cut for hay or allowed to ripen. Moreover it is an excellent crop with which to seed down to clover and timothy.

In Ontario, the Commission of Conservation conducted many experiments on its Illustration Farms. It was found that oats and vetches gave best results, wheat, oats and barley next, and oats and peas last. Altogether five acres were sown, but the crop grew so luxuriantly that only half of the field was used for pasturage, the remainder yielding six loads of hay. The $2 \frac{1}{2}$ acres pastured, however, provided the main pasturage for 12 cows during July and most of August, and caused an increase of 35 pounds per day in milk yield which held up for more than a month. This field, further, enabled the farmer to save for hay another 5 -acre field for hay, which yielded 10 tons.
The following mixtures have given good results at Guelph:-

Oats, wheat and barley, one bushel each.
Oats and barley, $1 \frac{1}{2}$ bushels each.
Oats and peas, 2 bushels of oats to 1 bushel of peas.
Oats and vetches, 2 bushels of oats to 1 bushel of vetches.
In Saskatchewan, the most commonly used mixture is peas and oats, for 1-2 to 1 bushel of the former to 2 bushels of oats. The heavier and richer the land, the less peas should be used. Arthur peas and Banner, Victory and Abundance oats mix well together. The Department of Agriculture, Saskatchewan, further recommend the following mixture which is claimed to be a very yielder: Peas 60, oats 34 , millet 2, and rape 2. The rape should be omitted if the pasturage is desired for dairy cattle.-C.A.G.

Fruit Growing and Diversified Farming.
The Kelowna district in British Columbia was early recognised as valuable for fruit growing, and until 1914 fruit growing was practically the only type of farming practised. Live stock was comparatively scarce. Prices for fruit fell and farmers began to realise that the special one-crop business was not entirely lucrative. Practically all food products such as bacon, eggs, butter and milk were shipped in from outside, and the farmers began to see that something was wrong. Keeping livestock seemed to offer a part solution, and the dairy cow, being the most economical producer of foodstuff and especially those needed in the household, attracted considerable attention.

Accordingly a movement was set on foot to establish a creamery. The business men of the city realising that whatever would benefit the farmer would also benefit them gave their asistance. Farmers promised to buy cows if a creamery was established. A meeting was held and with the assistance of the Provincial Dairy Department the Committee located a building which could be equipped and converted into a creamery for approxi mately $\$ 1,600$. Stocks to the value of $\$ 1,750$ were placed on the market to be paid for by instalments, the banks taking care of unpaid balances. A competent buttermaker was obtained, and the work started. At first cream came in very slowly, but at the end of the month the cream checks came in and the ready cash looked good compared with the old system of getting a year's crop of fruit paid for in one block. Things went on slowly, but surely, and the profits, though small at first, were used to increase and improve the plant. To-day, only five years from the start, the Kelowna creamery is the most up-to-date plant in the Province, with a yearly output exceeding 100,000 pounds of butter, and besides which it supplies Kelowna and the surrounding towns with all their icecream supply. Modern Pasteurizing equipment and sceintific management is producing butter of the finest quality which has secured high awards in the Provincial and Alberta Dairy Exhibition.
The future of this district is assured for alfalfa, and corn grow to perfection, and the demand for first-class dairy produce exceeds the supply. Silos are springing up each year and the improvement going on in the dairy herds is truly remarkable. In 1916 several carload lots of heavy producing cows were introduced into the district and obtained ready sales. Many excellent sires have been procured both privately and co-operatively, and in 1918 a Holstein Breeders' Association was formed.

Thus in five years the community has built up one of the best creameries in British Columbia, and the spirit of co-operation is increasing prosperity and contentment in the homes to a marked degree.- "B.C. Farmer."

Financial Sensation, 153783, a yearling Jersey bull, was recently sold for $\$ 60,000$. One half interest was purchased by the Greystone Jersey Farm, Quebec, West Chester, Pa , and the remainder retained by Waterloo Jersey Farm, Waterloo, Iowa. The half interest sold brought $\$ 5,000$ more than has every been paid for any Jersey bull, and this animal is the second highest-priced bull of any breed.

# EDUCATION IN CANADA 

Notes Made at a University College Lecture.

In an address at University College, London, on February 20th, Colonel Adami, M.D., Sc.D., F.R.S., surveyed the whole field of education in Canada, praising it where praise was due, and criticizing it where its weakness and its defects are apparent.
In all attempts to draw up a system of education from the Elementary School to the University, the great difficulty which always presents itself is to preserve the proper balance between the requirement for a broad education, that is to say, a fair knowledge of many subjects, and for obtaining the highest degree of efficiency and specialization in one subject or in one branch of learning. To a certain extent the former is necessary in order to make the latter possible, and to develop the breadth of outlook so necessary in the citizen of to-day. The latter is equally necessary in this age, where the specialist is required in every subject, because the horizon of knowledge has become so extended that it is only the man who devotes his full thought and energy in one direction who can hope to bring to light anything new.

In this connection Colonel Adami criticized the High Schpols of Canada as attempting to cover too many subjects, turning out Matriculation students who do not know any one subject absolutely thoroughly. The long standing controversy as to the value of Classics was here touched upon, and the statement made that as the result of many years close study of Canadian students, the fact was established in the lecturer's mind, that they suffered throughout their College course in the Faculties of Law and Medicine from the lack of sufficient knowledge of Classics. In the subject of Pathology alone there are 2,000 terms of Greek or Latin derivation. A student who has not a good acquaintance of these "dead languages" is compelled to commit these terms to memory without the aid of the law of association which is such an important factor in helping the memory. In a broader sense he lamented the lack of more thorough classical training, purely on account of the mental discipline which it gives.

While listening to this outline of the need for keeping to a via media in education, neither going to the extreme of attempting to master too great a variety of subjects, nor to the opposite extreme of specializing so intensely as to be stullified, one's mind reverted to the paragraph in Robert Louis Stevenson's "Essay on Human Life," in which he sets forth the same thought in different words-"A man is one thing and must be exercised in all his parts: whatever part of him is neglected, whether it be the training of the muscles or the intellect or the taste for Art, that which is cultivated will suffer in proportion.

Thus the dilettante misses the kernal of the matter, and he who has wrung forth the secret of one branch of life, knows more about all the others than he who has tepidly circumnavigated all.'
Speaking of the Canadian Universities, Colonel Adami paid a warm tribute to the high standard which they maintain, and to
the widespread reputation which they have gained on both sides of the Atlantic. He referred especially to the magnificent training which is given in the Universities such as McGill and Toronto in the Faculties of Medicine and Applied Science. McGill was the pioneer among Universities in throwing hospital wards open to the medical students, in order that theoretical and practical training might be carried on at the same time-a system which has since been adopted by almost every one of the leading medical schools. With regard to the courses in Applied Science, he referred to the fact that just before the war, each year students from the British Isles came over in greater numbers to avail themselves of the unsurpassed opportunities for a thorough engineering training which the Canadian Universities offered. To a great extent he thought their superiority was due to the system of making it possible for the student to obtain between each of the four Undergraduate years, two or three months of practical experience in some of the finest works and engineering plants in the country.

Referring to the teaching power of the Dominion of Canada, Colonel Adami lamented the fact that the proportion of male teachers in the schools was very small and had been on the decrease. He said that the benefit could hardly be over-estimated of having a male teacher in charge of boys above the age of seven or eight years, a man who should lead them in their sports, inspire them with the thought of what citizenship in a developing country means, and hold them under a discipline and a control which a very small proportion of women teachers can exercise. It is time that the State formulated some scheme to encourage men to take up teaching as a profession by systematically aiding them in obtaining higher education and making possible their advance to the better positions such as those of High School Teachers and University Lecturers.
Regarding education as a whole, the lecturer said that the secret of a successful system was that each stage should be closely related to that which preceded it and to that which was to follow; thus only a sequence could be obtained which was so necessary if valuable time was not to be wasted by overlapping and by being misdirected at one time or another. He spoke in high terms of the educational system in the Maritime Provinces based upon the old Scottish traditions formulated so thoroughly by John Knox.
In order that education may play its fullest part in the life of the country and in its development along all lines of national or provincial activity, it is necessary that the educational institutions keep themselves in close touch and sympathetic understanding with the ordinary citizen, whether it be the agricultural labourer of the rural district, or the industrial worker of the cities. It is in this respect that the State University has an advantage otherwise almost impossible. It is the pride of every tax payer; it is quick to follow up every new line of activity, to encourage the best methods and the closest
co-operation between all members of the community.

Canada owes much to her education in the past, and as her population increases, her industrial wealth grows and her natural resources are harnessed, she will continue to owe yet more to her educational institutions if they maintain a breadth of outlook and sympathetic understanding of, and association with, all the problems which will arise in the country.

## FULLER IN THE FACE.

Tinwafer had never been what you might call plump, and since rationing had become general he certainly hadn't been putting on weight.

I say," he remarked to a friend, "I met Fuller yesterday, and he told me that I was getting fatter.'

Well, it's only natural he should say so," was the answer.
Tinwafer looked surprised and asked why.
"That's easy," replied the friend. "You were looking Fuller in the face."

## HOW !

Helen was a very inquisitive child who greatly annoyed her father each evening with endless questions while he tried to read the newspaper.

One evening, among other things, she demanded, "Papa, what do you do at the store all day ?

Exasperated at her persistance, he answered briefly, "Oh, nothing."

Helen was silent for a moment and then she asked, "But, how do you know when you are done?"

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A Live Weekly for Canadians Overseas.

London : March 8th, 1919.<br>Editorial Offices : 49 Bedford Square, W.C. 1.

## ACHIEVEMENT.

The achievements of the Canadian Army Corps are written high on the scroll of fame. St. Eloi, Ypres, Hill 60, Festubert, Givinchy, Paaschandale, Vimy Ridge-these are place names that thrill. No Canadian can recall them without emotion, and they will in future, and for all time, be borne on the badges and colours of the various units taking part in the historic struggles which raged with special fury wherever and whenever Canadians were engaged. It will also be recalled with a lively sense of satisfaction that when once ground was won and consolidated by Canadians it did not again pass into the hands of the enemy. Never has greater gallantry been displayed by British troops. The splendour of the victories secured by her indomitable troops has added lustre to the fair name of Canada. Someidea of the stupendous character of the work of the Corps may be gathered from the number of decorations awarded. Over fifty V.C.s have been won for exceptional bravery in face of the enemy, while other decorations innumerable have been given for distinguished and special service. Deds that excite astonishment and call forth admiration have been the rule. Boys fresh from school and counting house, University students, farmers' sons from the West, bank clerks and business men from the East, members of Parliament, have alike been marvellous under fire, and have been transformed by the greatness of their task into mighty men of valor. To the Canadian nothing was impossible. He has been courageous to a fault, dauntless under difficulties, conspicuous for daring initiative. The Hun was beaten at the war game by men to whom the word Freedom is the breath of life. That detestable pre-war tendency to regard the Colonial as a degree inferior to the home-grown product has been killed. Sons of the blood from every clime have proved their worth side by side with men of the Homeland to whom they have been equal in skill, in endurance, and in every fighting quality. Canadians by their magnificent exploits have added to the glory of the English-speaking race. By their valor and their chivalry they have taken proud place among the traditional heroes of the British Empire, and have earned the undying grati-
tude of their kinsfolk everywhere. When the battle was joined they fought like demons. When the victory was won they behaved like gentlemen.

FOR REFLECTION.
He who does well in war just gains the right to begin doing well in peace.-Browning.

## LOCOMOTIVE PLANT BUSY.

The Montreal plant of the American Locomotive Company is already beginning to feel the effects of the expansion of trade following the end of the war, having received an order for 40 locomotives for the South African Railways. The locomotives will be of the type known as the " Mountain." Twenty will weigh 97 tons each and twenty 94 tons each.

## CANADA AND RECONSTRUCTION.

Hon. A. K. MacLean, in a speech at Montreal, said "The Canadian reconstruction problem, in a sense, is not serious. Unemployment even for a month or so is always distressing, but with the same spirit as was shown during the war we will overcome the difficulties, and in a few months this country will march on to a development which has not hitherto been experienced in our history. By rapid strides in our trade and population we will add to the name which Canada has gained by reason of her great war efforts."

## GRAIN VALUED AT $\$ 286,500,000$.

According to the final report of the Sasketchewan Department of Agriculture for 1918, the total value of grain, including wheat, oats, barley and rye, raised in that province last year, reached upwards of $\$ 286,500,000$.

Wheat is the chief item in the list, with a value in excess of 193 million dollars, oats being second at over 80 million dollars.

In the matter of live stock the report shows a total increase in the value of exports of upwards of 21 million dollars, the largest increase being in horses, which were nearly 18 million dollars in excess of the exports of the previous year.

## PACIFIC COAST FISH.

The Fisheries Branch of the Department of Naval Service, in co-operation with the United States Bureau of Fisheries, has begun experiments with a view to establishing the Spring or Quinnat salmon of the Pacific Coast in Lake Ontario and the St. Lawrence.

A shipment of 400,000 Spring salmon eggs has been received at Thurlow Hatchery, Lake Ontario, from Fraser River, and will be placed in Eastern Canada waters after development.

Spring salmon has been successfully placed in New Zealand, where it is now firmly established.

## 225 TONS OF HONEY.

The production of honey in British Columbia in 1918 was approximately 225 tons, the largest yield yet recorded. The bee industry was first introduced into that province in 1869 by Colonel Moody, who imported five colonies of bees, which were set down where the village of Elgin now stands. The bees were neglected, but their descendants took possession of the hollow cedar trees, and in a few years the timber lands for scores of miles were full of wild bees. Here and there swarms were captured and housed, for the most part, in ordinary boxes. To-day there are 1,611 bee keepers in the province. The demand for the product is steadily increasing in the Prairie Provinces.

## THE HUMAN ELEMENT.

By LIEUT. H. E. WALLACE

(Dept. of Commerce-Khaki University of Canada).

In one of the lessons on Business Organisation issued by the Correspondence Depart ment you will find enunciated the principle of the human element in business. The subject is dealt with from the employers' point of view, and the kernel of the wheat is that the employer must recognise that his employees are not mere automata or cogs in his machine of business, but are very much alive and thinking human beings liked himself. There is also at the end of the lesson a question, which, if fully answered by every student, would cover all the foolscap paper which could be purloined from all the orderly rooms in England. The question is, " Why is it that there is so often a lack of co-operation in business ? Is it the fault of the employer or employee ?"
Like all people who examine students papers I have learned more from the divergent views expressed in answer to that question than I knew about it when I began. The majority of answers have been that the fault has been with the employer in not recognising the human element in his business. Such an answer cannot but claim full marks because it is the accepted view of the present day school on the subject.
Which leads me-out of pure cussedness perhaps-to take up the cudgel for the much abused employer, and to ask: What of the employee ? Is he doing his part in the co-operation which every business must have to succeed?
The situation was brought home forcibly to me the other day in conversation with a union mechanic working in a large works near London. Asked how the men had benefitted by the union he said: "Oh, I guess they've done all right, but it don't suit me."
"You see," he said, " a lad comes into the works and does what the union calls a day's work, and gets the same pay as me who's been at the trade ten years. I could turn out twice as much work in a day as that lad-and do it better, but the union won't let me do it. The standard day's work would be changed, they say. So I am prevented from earning twice or three times what that lad earns, although I'm capable of it.'
Now, I ask you, is that playing the game, and is the worker doing his best to promote co-operation and success in the business ? I have heard the same criticism levelled at union men many times, and I think that all workers, and especially soldiers who are going back to Canada to take their places as workers, and probably as union men, should know this and should guard against its becoming a truism.
I am a firm believer in Unions. What man who looks about him and sees the wonderful things that Trade Unionism has accomplished would not believe in them.

But, like every great, good movement, Trade Unionism has to be continually trying to better itself-to keep pruning away the false shoots which would sap the strength of the tree, and eventually kill it, were they not cut off in time.

The position is simply this: Trade Unionism demands-and gets-standard hours of work and standard rates of pay. The idler can do the minimum of work and exercise no ingenuity or personality in his work, and he gets the same pay as the man
who is brimful of initiative and desire to produce to hís capacity, and to get on in the world.

Are you going to accept the seemingly inevitable and become an idler, or are you going to demand more remuneration if you can produce more than the man at the next bench, and if your work is of a higher order and more valuable than his ?

To be just to yourself you must have opportunity to exercise your personality, your initiative and ambition in your work. Without this opportunity the world-old classes brawn and brains-will keep as far apart as ever. What true Trade Unionism should set up as its ideal is the bridging of the gulf which has far so long divided the two classes of Capital and Labour, and the fusing of them into one great body of workers. This can not be done unless the man of muscle, the worker, is allowed to use his brains, his personality, his initiative or whatever it is that always has brought and always will bring advancement to men of ambition, when the account of human accomplishment is added up.

The next ten years are full of possibilities for organised labour. The greatest of these possibilities is the realisation of the worker's dream of obtaining a greater share of the profits from his toil. But if organised labour takes all that it can get and gives as little as possible in return, the whole thing will fall to pieces like a house of cards. On the other hand, if the workers look upon the business as their own and work for it as they would for their own ; at the same time demanding a fair share of the profits arising from their labours, they will have grasped their opportunity and must get what they demand.

## CO-OPERATION ON THE FARM.

The Prince Edward Island Egg and Poultry Association, which has just declared a profit of $\$ 36,000$ on a turnover of about $\$ 500,000$, has obtained a Federal Charter and will be known in future as "The Canadian Farms, Limited," and can buy and sell and do business in any part of Canada. The object of the Canadian Farms, Limited, is to improve the quality of their farm products and to place these products upon the markets in the most favourable conditions for sale at remunerative prices. The farmers have cooperated to provide more and better products larger profits and consequently greater prosperity and wealth for all classes in "The Garden of the Gulf," as the island is called
The President of the Central Farmers ${ }^{2}$ Union of Prince Edward Island, in his annual address to members of the association, stated that the farmers of that province had suffered much through shortage of labour, the best and most efficient of the labourers striking out for themselves, and thus seriously lessening production. As soon as the army was demobilised, however, and transportation readjusted, the farmer would be placed on a new footing, and with proper co-operation should find a ready market for all farm products, especially for his live stock. He advised every Farmers' Institute on the Island to support the Co-operative Farmers Organisation, now known as "Canadian Farms, Limited.'

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The Agent-General of Quebec, 36, KINGSWAY, LONDON, W.C.2.

## KHAKI KOLLEGE KLIPPINGS

Reports for week ending February 15th, were received from fifteen areas where Khaki Colleges are in operation, namely, Basingstoke, Bearwood, Bovington, Buxton, Cooden, Epsom, Etchinghill, Eartham, Farnham, Ripon, Seaford, Shorncliffe, Witley, Witley "A" Branch, London. At these centres 1,370 enrolled during the week, and 391 withdrew from classes. 1,727 hours of instruction were given during the week, with an aggregate attendance of 36,561 hours, divided as follows :-

| Elementary |  |
| :---: | :---: |
| Elementary | ubjects ......... 7,857 |
| Agriculture | 6,836 |
| Commercial |  |
| Miscellaneou |  |

Definite reports have not yet been received of the work in the Canadian Khaki University at Ripon, but it is understood that the classes have started in Matriculation Subjects and First and Second Year work in Arts, Applied Science, Agriculture, Medicine and Law.

The work in the Reserve Battalions at Ripon is progressing. The Report from the Officer i/c Elementary Classes shows that there is deep interest exhibited by the men in the reserves and much solid work has been accomplished.

It is very satisfactory to know that definite classes are now made possible in some of the Forestry Company Areas. At Eartham there was an average registration of 17 , and at Farnham of 12 during the week, and at the former a high percentage of attendance.

Epsom still leads all the areas for regularity in their attendance, it being 93 per cent. during the week under review, closely followed by Etchinghill with 86 per cent.

The work in Shorncliffe area has received an impetus by the advent. of the Flying Corps at Napier Barracks for demobiligation. Several instructors have volunteered their services, and quarters have been provided at Moore Barracks for office and lecture rooms.

Orpington Hospital is now calling for help. They have a great many men there and are badly in need of instructors in all subjects. If you' can help, communicate with Headquarters, 31 Bedford-Square.

Women in London who are interested in Agriculture, will you please note that we are forming a new class in Dairying, Poultry, Bee-keeping and Gardening, to be held on Monday evenings, $6.45-9.25$, at University College, Gower Street. This class will open as soon as we have 12 enrolled.

The Agricultural Class of the London College had the good fortune to have Lieut.Col. K. C. Bedson, representative of the Land Settlement Board, address them on February 26 th. In a very clear and straightforward talk he explained away many of the present ambiguities of the Land Settlement Scheme, and settled many of the difficulties that had confronted the students,

The London College Library is well worth watching. Each week brings new volumes, mostly on History, Agriculture, Economics, and Science, to the shelves of the Lounge Room, at 49 Bedford Square. The Library is being found useful by the men in the Area as well as the London College students. On several occasions lately the rooms have been filled with men who had a few hours to spare on their way through London to Ripon, and again the invitation of a week ago is cordially extended to the men in the areas to make use of our Library and Lounge to their full capacity.

Congratulations to the Epsom College. There has been a constant increase in attendances as the following figures show:-

| WEEK ENDING | total <br> ATTEN. | AVERAGE PER NIGHT. |
| :---: | :---: | :---: |
| January 11th | 615 | 123 |
| January 18th | 545 | 109 |
| January 25th | 693 | 138.6 |
| February 1st | 853 | 170.6 |
| February 8th | 1037 | 207.4 |
| February 15th | 1203 | 240.6 |
| February 22nd | 1359 | 271.8 |

The classes in Agriculture and Engines and Motors were the most popular. Each of these classes now has a record attendance of 75 per period, and an average of about 60 for the past three weeks.
A new course in Agriculture of 8 weeks' duration starts March 1st, and many new enrolments for it are being received. On Friday, February 21st, the Agriculture instructors undertook some extension work and lectured in the Y.M.C.A. Hut to an interested audience of 350 .

## Seaford.

The latest returns show marked increases in the registration at Seaford, with the result that this area leads in point of numbers, and also in actual registration. The net total of students enrolled is over 1,100 , out of which the full attendance is over 1,000 , although the average falls to 900 as a result of area duties and other unavoidable parades, which necessitate the retention of the students in the Battalion lines.
The 18th Reserve Battalion heads the list of units with an enrolment of over 300 , whilst, in point of view of attendance, the percentage is evenly balanced between the C.M.G.D. and the 1st and 3rd Engineer Battalions, who have succeeded in maintaining a steady high percentage of attendances as compared with registrations.

The possibilities of Seaford have not been exhausted, and it is fully expected that the number of students will be doubled within a few weeks. It is now merely a question of accommodation, as to how soon this result will be attained.

It is interesting to note the factors which have made this extension possible.

The first step was military discipline strictly enforced. In this regard stringent orders for control of classes, etc., were issued, and the goodwill of the commanding officers thereby secured. The result was at once apparent, for students were encouraged to attend.

The next step was, commonsense lectures to the men, under the approval of commanding officers, whereby the advantages of education were propounded in language that would appeal to the most illiterate. Men were shown the necessity of making themselves acquainted with the development of business, commerce, mechanics, etc., during the past four and a half years. A few straight pointers as to the disadvantages which the returned soldier had to face in regard to being out of touch, at once appealed, and immediate results followed.

The third step was the establishment of an advisory bureau, to which the men were invited, in order that their studies may be directed into proper channels. From the syllabus, a man who desired to learn something of machinery, would put himself down for "mechanical engineering," when he probably lacked sufficient ability in common arithmetic to master the most elementary principles. Under the new system, he is asked what employment he follows, what he desires to become, his education in the past, etc., and he is then advised as to what subjects he should follow up to get the maximum benefit from his work.
The fourth step, was to increase the hours of instruction from two to four daily. This step met with the unanimous approval of the officers commanding, since it employed the man throughout the training period, whilst the students hailed the classes with enthusiasm, as they felt that they could gain material knowledge before they were demobilized. This system facilitated the teaching of several subjects having a common direction, with the most satisfactory results.

It would be extremely unfair to pass over an opportunity of expressing appreciation of the hearty support which has been given to the college by the General Officer Commanding, and his staff, and also the Commanding Officers of the units; and to the officers in charge of education in the units, who are in even closer contact with the work, and upon whom so much depends in gaining. success.

As regards the teaching staff, the figures of attendance are the best testimonial to their efficiency and enthusiasm, and the officer in charge of an area who has such a body of men about him as those representing the teaching staff of Seaford College, has a happy future before him in regard to the operation of his college.

Several new classes have been established, and are very popular, amongst the latest being a showcard writing class, whose products may be found all over the area, the demand far exceeding the supply; and a woodworking class, working in conjunction with the building contruction class. The latter has produced some very clever drawings, and since the class is largely composed of mechanics who have previously had the practice, but have never learned theory or draughted what they planned, the results are surprisingly good. The same may be said of the mechanical engineering class. An exhibition of work is to be arranged shortly, when the value of instruction will be apparent to all.

## LIGHT FARM TRACTORS.

## How they have simplified labour and revolutionized work on Western Farms.

By F. W. Kerr, Canadian Government Agent.

The concentration of all available manpower in the war areas during the past four years threw upon the wheat growers of Western Canada the tremendous responsibility of supplying to the Motherland and her Allies a very large amount of grain and flour, a duty which meant the maintenance of production, or rather increased production, under unprecedented handicaps both as to labour and machinery.
Here in the Old Land where woman help was available and where it was thrown without stint into the great gaps left by the enlisting legions from every district, the situation was met without such revolution as was experienced in Canada, where female help is even more scarce than male.

That the farmers of Canada met the crisis successfully, is evidenced by the fact that there was a gradual increase, during the war years, of acreage under cultivation. The success of the great task to which they set themselves is due very largely to the development and use of farm tractors for purposes of cultivation and threshing.
It will be a great surprise to our farmersoldiers who have been absent from Canada for two or more years to find on return that through the use of gasoline power their farms have been kept up to their usual standard of productivity, despite the very great reduction in manual labour through enlistment.
The earlier development of the gas tractor was atong the lines of the heavy type, which doubtless did very good work on new land and at threshing, but which, under the war conditions, was practically useless, owing to its being too heavy for stubble plowing and for damp soils, and that it required extra man-power to handle both engine and plow. Of course, the late development of the light tractor type has suggested improvements which have made the heavy tractors of greater utility than was formerly the case. They have now such improvements as small engines mounted on them for cranking purposes, automatic lifts for plows and engine-power steering, etc., and in prairie breaking they are being used to good advantage, more expecially in level lands where a large number of uniform furrows may be tnrned.

## Some Advantages.

I should like to discuss briefly the advantages of the light gas tractors, for the benefit of those who may have to do with them for the first time on their return, or for those who may be considering the comparative advantages of tractors and horse-power for farm work. There are in use in Western Canada some half-dozen types of these light tractors, each of which embodies principles having special values, according to the particular uses to which they are put. I will illustrate some of these types by considering the operation and care of certain well-known tractors, with whose practical working I am more or less familiar.

The tractor known as the Titan $10-20 \mathrm{~h} . \mathrm{p}$., is perhaps the most popular of the class of machine mentioned. It is well and strongly built, simple to operate, very easy to steer, with working parts, valves, governor, magneto, etc., easily accessible. It is a kerosene
burner, as are most of the tractors of the lighter class. The only adverse criticism I had to offer against the work of a Titan with which I broke a section of exceedingly rough and hilly land, doing the last half of the work in very dry weather, was that the fore-carriage was too light, and when mounting a steep hill there was a tendency for the front wheels to leave the ground, thus making the work of steering almost impossible. After further experience, however, I learned that with a little humouring-as with a crafty horsethis rather awkward hill trouble was almost entirely eliminated.

## Easily Handlod.

In the work of "striking out" lands, the Titan is most easily handled. The water tank, mounted above the front truck is directly in front of the operator, who has this and a pipe leading to it as guides along which to sight for the stake to which he is steering. On nearly every other engine I have seen, this matter of securing a perfect strike out is rendered difficult because of the fact that in order to secure proper sights the operator has to move from his normal position, thus increasing the difficulty of steering, which, when opening a first furrow, is at best a task requiring close attention at the wheel.

An especially strong point in the Titan is its automatic steering device (the same device is used with the Mogul tractor, made also by the I.H.C.). But in order that this device may do first-class work, the furrow must be straight; hence the important advantage of securing a perfect furrow to begin with. The apparatus weighs about 250 pounds, and consists of one large and one smaller diskabout 18 and 14 inches in diameter, revolving on opposite ends of a short axle and about 8 inches apart. The larger disk travels againt the furrow landside, and the smaller in the bottom of the furrow and tending slightly to run in toward the larger disk, thus keeping the latter constantly pressing against the side of the furrow. These disks being attached to the end of a steel bar about eight feet long travel this distance ahead of the front wheel, and in the furrow, and, being connected to the axle of the right front wheel, they act as a lever moving the engine wheels according as the lead furrow turns to the right or left. With a clean, straight furrow ahead, the operator may dismount from his seat and give any necessary attention to his plow while in motion. When the ground is very stony, or the furrow crooked, the steering device requires assistance from the steering wheel which operates on the motorcar principle.
The Titan is water-cooled by the ordinary tank system connected each way to the cylinders by pipes. While this method of cooling requires 30 to 50 gallons of water per day, owing to evaporation, it gives little or no trouble as compared with the radiatorcooled type. The latter, especially in rough work, is apt to get strained and cracked here and there, thus requiring constant repairing. It has one advantage, however, in that it requires very little water, which after all, is a secondary matter.

The "transmission" of the Titan is by
means of meshed gears arranged in three
sets, providing for two speeds forward and one back. Of course, before changing from one speed to another (as in an automobile) it is necessary to remove the clutch and thus bring the gears to a standstill. They are then shifted to "high,"" low " or "reverse" by means of a lever convenient to the operator's hand. On another type of tractor, of which the Heider is perhaps the best known, the transmission is effected by friction instead of by meshed gears. A small pulley in the end of the engine shaft travels on a large disk, the latter being connected either by chain or cog to the large drive wheels. As this pulley travels nearer to, or further out from the centre of the disk, the speed of the machine is accelerated or reduced. One advantage of this system of power transmission is that an indefinite range of speeds may be secured between the lowest (with the pulley travelling at the outside of the disk) and the highest (the pulley travelling at the nearest possible position to the centre of the disk). The great disadvantage in this, however, is that in uneven work, such as stony or hilly ground the disk surfaces become uneven through the varying pressure of work and in time give trouble.

Another advantage of the Titan type of tractor is that it has horizontal cylinders giving a stroke parallel to the direction of travel. In machines using auto-type engines, the stroke is delivered at right angles to the direction of travel, thus compelling the use of bevel gears in order to deliver the power in the desired direction.
The Titan is a two-cylinder motor, while the Mogul made by the same company is a single cylinder engine, and although the one cylinder engine gives excellent results where the load is steady and constant, I have found that for an uneven load the double, or the four-cylinder machines are best. In the case of the single cylinder engine it is necessary to have a much heavier fly-wheel to maintain speed and power during the intake and compression revolution. In the double cylinder machine, while one cylinder is on the intake stroke, the other is firing, and when this cylinder is compressing the other is exhausting. This means ignition at every revolution of the fly-wheel instead of at every second revolution, as is the case with the single cylinder.

## Fords, and Others.

The average farm tractor is not a fast traveller on the road. Its speed at work is very little faster than the walking speed of a good team. It is improbable that we shall ever see a first-class dual-purpose tractor-one that will give equally good service on the road and in the field. Perhaps the only dual-purpose machine on the marketthat is one combining the advantages of power in the field and speed on the road-is the Ford Car and the field attachment known as the Tracford (not made by Ford, but by another firm and sold quite apart from the car itself). In order to place the car on field duty, all that is necessary is to remove the two rear wheels, attach in their stead two small cog wheels (about six inches in diameter), and swing into place a pair of large iron wheels, each about three feet in diameter, fitted with lugs and having cogs on the inner surface of the rim into which mesh the small $\operatorname{cog}$ wheels already mentioned. With this equipment and the engine running at the average road speed to give twenty miles per hour, the speed of the Tracford is reduced, as will be seen, by these cogs, to about three miles per hour, but we now have the power necessary for a plow, a disk harrow or a (Continued on page 9).


## CANADIAN BOXING CHAMPIONSHIPS AT WITLEY.

A well-attended meeting with redcaps, and all ranks enjoying the sport.
The best boxer at the show was Broadway in the Middleweight Class, who boxed superbly and won with ease. His coolness and execution were very good.

There were hard slams, good slams and some really excellent boxing.

MeGrath and Moore put up a splendid exhibition in the final bantams. Then Bingham fought a magnificent fight with Clarke in the semi-final lightweight.
It ran to five rounds before the decision, and it seemed to me that Bingham was unlucky to lose the decision.

McCraken fought hard in the final lightweight and it proved a rare mill.
The final winners are as follows:-
Moore $\qquad$ Bantams.
Cole ................... Feathers.
Clarke...................... Lightweight.
Knox .................. Welters.
Broadway ............ Middles.
Alexander .............. Light-heavy
Clements $\qquad$ Heavy.
Clarke was the only man to win of those who appeared at the Albert Hall Tournament.

Particulars of the fights by rounds follow :

## LIGHT-WEIGHT.

## Clarke v. Payne.

Payne created a surprise by scoring a knockdown and forcing the pace. He won the first round.
Clarke won the second although both were fighting wild.
Clarke settled down in the third, used the left to good advantage, and secured the verdict.

## Fruish v. Bingham.

A fast, clever bout with Bingham showing very clever work and knocking his man down twice. The referee stopped the bout in Bingham's favour.

## O'Connell v. Holliday.

Holliday got a little the better of fairly even exchanges in the first round,
Rather tame in the second, with no advantage to either.
A poor round with neither showing to great advantage.
Holliday got the decision.

## McCracken.

A bye.

## BANTAM.

## Pelletier v. Moore.

A good clean bout evenly matched in the first round.
Second round still even.
Moore forged ahead in the third round and secured the decision.

## FEATHER.

Cole v. Moore.
Rather wild swings predominated, the first
session with Cole a little to the good on points gained.
Moore had quite as much in this round as his opponent, and evened the score.

Cole posed and did fancy gestures, but Moore persevered and to my mind won, but the judges gave the verdict to Cole.

## Landrigan v. La Plante.

A very tame bout in the first round, Landrigan being the better.

A little livelier, La Plante taking a hand in the game in the second.
La Plante scored several lefts, and did enough to win in the final round.

## WELTER-WEIGHTS.

## Knox v. Milligan.

Rather crude exchanges.
Warmed up in the second with Knox scoring hard with the right.

Milligan took a hard beating in the third, and the referee stopped the bout. Milligan was game; but signified he had had enough.

## Menton v. Martin.

Martin forced the pace, and put over the knockout in about 30 seconds.

## Cane v. Foster.

Cane was much too strong and aggressive for his opponent, and had a wide margin.

Cane continued fighting hard, and scored a knockout in the second round.

## LIGHT-HEAVY.

## Norman v. Barr.

Barr believed in covering up and looking out occasionally.

Heavy thumps were flying directed by Norman.

Norman tried hard but failed to connect.
Barr opened up in the third, and made a good show, but Norman had done enough to win, and got the decision.

## MIDDLE-WEIGHT.

## Broadway v. McNeill.

A good bout with McNeill forcing and Broadway fighting a cool fight. Nothing between them at the end of the first round.
Broadway boxed extremely well, and punished his man severely in the second round.
A real good final round, with hearty punches swapped freely, but Broadway won.

## HEAVY-WEIGHTS.

## Cline v. Clements.

A very good bout for the heavies, pretty even.

Clements showed good form and forged ahead in the second

Clements won by a wide margin in the third.

## SEMI-FINALS.

BANTAM-WEIGHTS.

## Eddy v. McGrath.

A nice fight between two good boys.

McGrath did good work in the second and forged ahead
McGrath forced scoring well with reft and right, and won well.

## Rhodes v. Moore.

A very good first round with an even break.
Moore had slight margin in the second. round.
An excellent round, with Moore slightly the better, and got the decision.

## FEATHER-WEIGHTS.

Woods v. Cole.
Very little to choose in a rather poor mix in the first round.
Woods showed up the better in the second, and scored with the left and right.
A first-rate clash going in favour of both in turn.
A verdict was given for Cole.
McDonald v. La Plante.
Very poor opening round, both being afraid to open out. McDonald scored in a fast rally, but the round mostly consisted of sparring. MacDonald warming to his work scored a knock-out in the third round.

## LIGHT-WEIGHTS.

## Holliday v. McCracken.

A heavy hitter in McCracken against a tryer with a good but weakish left in the first round. Fairly even.
McCracken landed several solid ones in the second round, but Holliday fought well against a more experienced and stronger opponent.
McCracken trying hard, with Holliday gamely carrying on.

The crowd did not like the verdict to McCracken, but he won.

## Clarke v. Bingham.

Bingham scored two beauties in the first round, and was ahead on points.
Bingham continued well, but the second round was very even.
A rather tame finish, with little between the men.
Extra round ordered.
Yet another extra round with Clarke getting the decision.

## WELTER-WEIGHTS.

## Lordon v. Knox.

A hustling bout, Lordon using swings and showing speed, but Knox quite equalled matters.
Knox scored two good rights, and had a little the better of a rattling good round.

The last round was a fine gruelling mixup, with Knox the winner.

## Martin v. Cane.

Like fighting roosters they came together, and they kept at it to the finish of the round. Still more of the same kind of cyclonic mixing with both trying hard.

A terrific third round, and an extra round ordered.
A verdict was awarded to Cane.
(Continued on page 10).

## Public Interest in Employment.

The Government may properly bespeak public interest in its policy of establishing employment offices under State control throughout Canada. The employment offices are for the purpose of fulfilling an obligation contracted by the nation in the recruiting offices. The men who left their work, sacrificing wages, prospects, the comforts of home life, to give their lives if needs in defence of Canada, are entitled to employment again on their return. The nation can do no less than see that every man is restored to work, whereby he can support himself and his dependents in modestly confortable circumstances. Many patriotic citizens gave their time, and employed much eloquence, in exhorting men to enlist. The same spirit of patriotic service by private citizens, in striving to find opportunities for the returned men through the employment offices, is likely to be necessary in the period of demobilisation ahead. Public support of the employment offices, in their endeavours to find work for the men back from overseas, is due ; it is the natural and just sequel to public support of the recruiting offices.

It is proposed to have attached to each local employment office an advisory committee of employers and employees; and the office will be kept in direct touch with the point of view of the returned men themselves by the representative of the civil re-establishment department, who will consult with an advisory committee of the local branch of the Great War Veterans' Association. Superintendents of local employment offices are likely to need the help and advice of employers and organised wage-earners, especially when a particular demand for labour may be made by an employer to fill vacancies caused by men on strike ; the use of an employment office as a medium to supply strike-breakers is not permitted in Great Britain, where state-controlled labour exchanges have been established for about ten years. In some cases, where labour disputes seem to be impending, or where a state of labour-unrest is prevalent, or where labour conditions seem to be unsatisfactory, it is difficult to decide whether the employment office should help to supply labour. The local superintendent will find it advantageous to consult with the local Advisory Council.

It will be the special work of canvassers or scouts, attached to each local office, to keep constantly in touch with the industries of the district. It will be their duty to do for the state, seeking to find employment for men, what the recruiting officers did for the State when they were seeking to enlist men for the army. They will, first of all, have to enlist the interest of employers in the national purpose of the employment offices, so that employers of labour may understand that it is their bounden duty to apply there whenever they require help, or can find work for a man. The public must be made to understand that, when employment offices are established to receive the applications of men for work, it is essential that men be employed through the employment offices, rather than at the factory gates. It would be on a par with discouraging recruiting in war-time, for an employer to refuse to co-operate with the state employment offices. Men who are looking for work will be induced to register their names at the employment office. They will be encouraged to do this on the understanding that the employment office is kept fully informed of all vacancies
and help wanted in the various industries of the locality. Their confidence in the employment office would be destroyed, if they heard of jobs being given to men who waited round the factory gates while they were trusting in the employment office to let them know of all such opportunities for work.

The general labour situation in such province will be kept under survey by a provincial clearing house. This office will be located in the capital city of the province, and it will be in charge of a general superintendent of employment offices for the province. The provincial superintendent will receive daily reports, by wire if necessary, from each local superintendent, telling of the activitics of the local office for the day. The provincial clearing house will thus have a record daily of the number of applicants for work in each local office, the number of requests by employers for men, the number of vacancies filled, the surplus labour available, or the extent and character of the unsatisfied demand for labour. Through the provincial clearing house it will then be possible to arrange for the transfer of men from places where work is scarce to elsewhere in the provinces where there is a demand for labour.

The Dominion Government is similarly arranging to establish interprovincial clearing houses, to arrange for transfers of labour from provinces where work may happen to be scarce to provinces where there are opportunities for labour. The federal clearing houses, or labour exchanges, will be set up by the Department of Labour. They will be situated in Ottawa, Halifax, and Winnipeg. The movement of farm labour to the West at harvest time, and similar movements of workers from one province to another, will be regulated by the federal labour exhanges. The information in the central exchanges will be available for workers who are thinking of moving to another province in search of work. They will know before they go whether there is employment awaiting them, and what the nature of the employment will be, what wages are offered, and what the working conditions are.
In addition to reports from local employment offices and provincial clearing houses, the Federal Department of Labour will keep the interprovincial labour exchanges informed by means of special field agents. The special agents will be men who have an intimate knowledge of such industries as lumbering, mining, and shipbuilding. They will visit the main industrial districts to keep in touch with conditions and prospective developments. Furthermore, the department will receive weekly reports from all Trade Unions, with regard to the extent of employment among the organised wageearners; and weekly question cards will be sent out to all employers of 25 or more workers. Employers will be asked to state on the cards each week the pay roll of the previous week, the number of persons leaving the firm within the same period classified by cause and by occupation, and the anticipated dismissals in the near future.
In this great undertaking to restore Canada to a steady state of industrial activity in the period of demobilisation, the Government should be assured of the full support of public opinion. The change from war service to productive industry can be made in an orderly way, provided there is an informed and patriotic public opinion beind the Government.

## LIGHT FARM TRAOTORS.

(Contimued from page 7).
binder. While it is very doubtful whether it will stand up for long under such work, I have operated one in its second year at field work. The most difficult matter in connection with this machine in the field is keeping it cool. A radiator of larger cooling capacity has now been devised by another firm for use with the Ford, and it appears to have given general satisfaction. The invention of a carburetor for Fords, enabling them to burn kerosene, is also an improvement of value.

I know a number of farmers who scarcely ever put the harness on a horse during the spring and summer seasons, and who, on rising in the morning, mount their tractor at their shanty door, strike for the field, eat their lunch on the tractor seat, and return at sundown-no worry over the horse proposition, and no late hours unless they wish to remain on the job in the field.
The Hamilton, Oliver, John Deere, Cockshutt, Canton, and in fact all the leading plow-makers now turn out a special tractor plow, so designed as to operate from the engine seat. By use of the automatic lift, operated by a small piece of rope, the driver is enabled to take the plows from the ground at a moment's notice, while, by reversing the direction of the levelling levers, so as to place them nearer the driver's hand, the use of a second man for the plow is done away with.

The modern light tractor will prove a boon to many who may have been partially disabled through loss of limb and who would be seriously handicapped were they to attempt farm work with horses.

While this rambling account is by mo means academic and does not pretend to cover the ground as it might, it may at any rate awaken an interest in a comparatively new, but entirely practical, farm machine which has come to stay and whose possibilities are greater by far than most of us realise.

## GAS WARFARE AMONG SAVAGES.

As is well known, the Germans were anticipated by some savage tribes in the use of poisonous gas for war purposes. Nature quotes authorities to show that tribes like the Tupinamba and Guaranis of the Brazil littoral and on the Rio Parana used poisonous gases in attacking fortified villages. Men went in front of the attacking party, each holding a pan with embers in one hand and ground red pepper in the other. When the wind was against the Spaniards they sprinkled the pepper on the embers. This was also done in attacks on the Spaniards in Venezuela. In the same way pepper was largely used in exercising demons and evil spirits. The use of this pepper, known as Aji, would soon be discovered by these Indians, who cultivated the plant extensively. It was only necessary for some one to upset a basin of Aji into the fire and a hut would soon be cleared of its occupants. The use of the smoke in warfare would be a natural development.

## ONE ON TOP.

Two soldiers, boys from the West, who had been hutried to the coast and on board ship in the dark, were next morning surveying with open-eyed wonder the boundless stretch of rolling blue around them.

Gee whiz, Bill," said one, "who would have thought there could be so much water as that?

I know it," drawled the other "And just think, Jim, you only see what's on top.'

## THE RED TRIANGLE <br> D/B

## ENTERTAINING IN GERMANY.

In the cosmopolitanism of war the Canadians have carried new-found phrases into Germany. In the lightheartedness of war and the subsequent armistice, they have applied one of them jocularly, but not ironically. Bonn, the Rhine centre of Canadian occupation, is described as "tres bonne." It is the soldiers' appreciation of comfortable billets, organised and continuous entertainment, satisfactory " eats," and not over-strenuous drill or fatigues.

There are billets in Bonn that have introduced the first touch of luxury in four years of military existence-warm rooms, soft beds, hot coffee in bed, hot water for shaving, clean clothing for the asking, every comfort they were accustomed to in the piping times before the war; and to some many more. Central heating, a la Canada, is in Bonn. There are no wet feet. There is no mud, no night wind, no dreary watches, no gunfire, no shuddering fatalism.

And above all there is entertainment for every one during the leisure hours.

This entertainment is in the hands of the Canadian Y.M.C.A., as usual-with the difference that every facility is at hand with the exception of unrestricted transportation. The peaceful interval before peace has not yet multiplied the resources of transportation to fillfll the requirements of a large army of occupation.

All the Canadians were not in Bonn, by any means, but that wealthy university city was the headquarters. What are known as the Corps troops were there-that large body of essential organisation distinct from the infantry divisions. For their entertainment the Y.M.C.A. found its peripatetic equipment inadequate. But its powers and energy were competent for the task. It set out to requisition and com-mandeer-buildings, apparatus, equipment, all with official sanction, of course.

The first building commandeered was a cabaret of the kind that would be outlawed in more civilised countries. The Gross Bonn was a two-story entertainment centre for Germans with no morals to speak of, and the money to indulge their excesses. Downstairs was a beer garden-with the "garden" an obvious misnomer. A huge, lofty, Lshaped room, with a stage, two beer counters, and an elevated section from which the sober might look down on the revels of the more impressionable, it changed in the hands of the Y.M.C.A. into a recreation room with an orchestra, a canteen, and a counter for free hot drinks.

For the crowding patronage of this canteen it was necessary to requisition four huge boilers and two hundred mugs. And during the eleven hours of free service of hot drinks the boilers were constantly in use, and the mugs had to be eked out by the use of thousands of individual pasteboard cups.

On the same floor was a newspaper and magazine stand where Canadian and American reading material was sold at prices almost on a level with those prevailing in Canada, and sometimes lower. Many English weeklies were given away for the asking.
Upstairs is the cabaret, an example of German extravagance and license. Around
the borders of the room are tables fixed between cushioned settees. The centre of the room has a glass floor, beneath which are many coloured lights manipulated at pleasure from a switchboard. So that the dancing was done on a blaze of light from below.

Later, the effect of soldiers crowding the settees, silently reading or writing, with the blaze of coloured light through the glass floor and the subdued radiance of indirect lighting from baskets of glass flowers overhead was almost bizarre. But so long as the boys enjoyed it, what matters?

Next to fall to the needs of the Canadians was a high-class and beautiful cinema situated, like the Gross Bonn, on the Market Square. The Germans were permitted to utilise it for their own patrons in the afternoon, but the Y put on two performances of British films free to the soldiers every nightin the German theatre, with the German projector and German attendants and German orchestra.

But still, the wants of the soldiers were unsatisfied. The Stadt Theatre, the leading theatre, was commandeered three nights a week for concerts and plays put on by the different units, either organised and equipped, or paid, by the Y.M.C.A.
The same care was taken of the units attached to Corps Headquarters, but situated outside the borders of Bonn. At Melham, Godesburg, and Friesdorf, where artillery brigades, ammunition columns, light horse, signallers, and machine-gun brigades were located, there were cinemas, canteens, writing and reading and recreation rooms. Small units were widely scattered, but to each was given every facility for filling leisure moments, as many as seven recreation rooms being opened for the units about Friesdorf.

There were no Canadians in Germany unserved, none who need have been lonesome for lack of entertainment or sitting rooms. The Canadian Y.M.C.A. never had the facilities it has had in Germany; it never utilised to better advantage its opportunities. Probably it was never more appreciated, not because its program was less intricate and exacting, but because the extent of its service was necessarily less complete.

## VEGETABLE IMMIGRANTS.

Celery originated in Germany.
The onion originated in Egypt.
The citron is a native of Greece.
Oats originated in North Africa.
The poppy originated in the East. Rye came originally from Liberia. Parsley was first known in Sardinia.
The pear and apple are from Europe. Spinach came from Arabia.
The sunflower was brought from Peru. The mulberry tree originated in Persia. Walnuts and peaches came from Persia. The horse chesnut is a native of Tibet. Cucumbers came from the East Indies. The quince came from Crete.
The radish is a native of China and Japan. Horse radish is from Southern Europe.

John Hancock Satchwell,
in the Canadian Farm.

## (Continued from page 8.)

## LIGHT-HEAVY.

## Alexander v. Shaw.

Alexander forced the pace, and won by a wide margin.
Shaw only showed a pose and a cover, which was finally penetrated, and he went to sleep.
Norman v. Carter.
Nothing between the men in the first round.

Norman tired palpably and Carter did most of the trying, but gained little in the way of points.

Carter tried hard, missed quite a deal, but connected enough to win the decision.

## FINALS.

## MIDDLE.

## Broadway v. Clarke.

Broadway boxed coolly and had a fair margin in the first round.

Broadway continued really fine work in the second.

Broadway won with ease in the third.

## HEAVIES

## Clements v. Arnold.

A whale of a mix like two elephants disporting. Nothing to choose.

Arnold took a flyer through the ropes and took a few heavy ones, but was game as a pebble in a rough second round.

A real hurricane, with Clements dealing out terrific punishment, and one of the gamest taking it and coming back. Clements won.

## BANTAMS

## McGrath v. Moore.

McGrath used a left to great advantage, and had a good margin in the first.

A great round, both men putting good work in, and a very even round.

McGrath had the best of the exchanges, but Moore battled well, and the judges found for Moore, which proved popular if a little wrong.

## FEATHERS.

## Cole v. MacDonald.

MacDonald boxed a sterling fight, and had the margin in the first round.

Fast boxing with neither gaining on the other in the second round.

The third was close, and an extra round was ordered.
The extra round was close, but Cole got the verdict.

## LIGHT-WEIGHT.

## McCracken v. Clarke.

Hard exchanges in the first round, McCracken using all his force but failing to connect a really damaging blow. McCracken's round.

Really fine round, McCracken scoring hard with left and right, and Clarke placing his left accurately. Very even.

Fine work by Clarke, and determined fighting by McCracken, with little to chose except that the more pretentious boxing ability caught the eye of the judges, and Clarke got the verdict.

## LIGHT-HEAVIES.

## Alexander v. Carter.

Alexander won by a knock-out in the first round.

Teacher (in class) : In this stanza what is meant by the line, "The shades of night were falling fast?

Clever Scholar: The people were pulling down the blinds.


## WHAT MEN OF ACTION SAY <br> (Actual experiences of Soldiers of the Canadian Expeditionary Force.)

(9) Staff.-Sergt. C. M. Bartlett, 13th Batt. Royal Highlanders of Canada.
"I have suffered considerably from nerves, causing sleeplessness. I purchased a small bottle of Phosterine and after only taking six doses, I obtained immediate relief, and thanks to Phosferine I am to-day a healthy
(42) Corpl. J. McFarlan, P.P.C.L.I.
"On my return for France I was in a very nervous condition. Phosterine was recommended to me and I started to use it., It has done me so much good that I am pleased to give you my testimonial herewith.
(5) Sergt. W. G. Cadby, C.A.P.C., Can. Expeditionary Force. "I have tried many remedies for Indigestion, but the best of all is Phosferine ; it has never failed me yet.'
(30) Sergt. C. N. Bywell, 16th Batt.

A comrade having recommended Phosterine to me as a remedy tor Indigestion, I took his advice, and after several bottles I find myself greatly improved in health and full of vigour.'
(6) Pte. W. J. Weir, 14th Canadians, R.M.R.

- Phosterine is without doubt a great asset to anyone who wishes to recuperate their health, as the Great War has no doubt run down a great percentage of the population, so I say take it and be 'an A I man.
(7) Sergt. W. C. Volkert, 14th Batt.

I have tound Phosferine to work very satisfactorily and to give instant relief, and would highly recommend it to all those suffering from Indigestion.

## PHOSFERINE IN GERMAN EAST.

In connection with the above, the Chief Editor of The African World writes :-
The case of PHOSFERINE which we dispatched to German East Africa during 1916, was opened at Dodoma Hospital, on the Tanganyika Railway, at the very fighting front. A personal letter from one of the Army Medical Service men to us, stated that PHOSFERINE was tremendously appreciated as one of the finest tonics in the numerous heavy malarial fever cases-thus bearing out Sergeant Blaver's testimonial, which we have seen in the papers this week.

## THE RED CROSS HOSPITAL AT THE FRONT IS USING <br> PHOSFERINE-DOGTORS KNOW IT KEEPS FIGHTING MEN FIT. <br> When you require the Best Tonic Medicine, see you get

# PHOSFERINE 

## THE GREATEST TONIC AND DIGESTIVE.

SPEGIAL SERVICE NOTE, Phosferine is made in Liquid and Tablets, the Tablet form being particularly convenient for men on ACTIVE SERVICE, travellers, etc. It can be used any time, anywhere, in accurate doses, as no water is needed.
The $3 /-$ tube is small enough to carry in the pocket, and contains 90 doses. Your sailor or soldier will be better for Phos-ferine-send him a tube of tablets. Sold by all Chemists, Stores, etc. The $3 /-$ size contains nearly four times the $1 / 3$ size.
Proprietors-ASHTON \& PARSONS, LTD., La Belle Sauvage, London, E.C. 4.

## WEDDING OF PRINCESS PAT.

The largest crowd London has ever seen in Whitehall or before the Abbey, greeted Princess Patricia on the day of her marriage to Commander Hon. Alexander Ramsay, R.N.

The ceremony was performed by the Archbishop of Canterbury and the Register was signed by their Majesties the King, the Queen, Queen Alexandra, and the Prince of Wales.

A large number of presents were received from Canadians, including a silver casket containing $£ 105$ from the officers of the lst Canadian Division, while the P.P.C.L.I.'s gift was a scroll. The women of the Dominion, headed by Lady Borden, are presenting the Princess with Victory Bonds in a silver casket.

Sir Robert Borden gave an inlaid mahogany sofa table, Sir Edward and Lady Kemp an antique fender stool, Sir George and Lady Perley a Crown Derby tea and coffee service, Sir George and Lady Foster two silver boatshaped sauce boats, the Duke and Duchess of Devonshire bowl in gilt stand, Lord and Lady Shaughnessy large glass oval tazza, Maj.Gen. Sir Henry and Lady Burstall a visitors' book, Lady Allan a Chinese writing-set, Lady Drummond silver cup with glass lining, Lady Strathcona diamond brooch in shape of nail, also cheque, Sir Charles and Lady Ross mother-of-pearl manicure set, Lord Mountstephen cheque, Col. Pelly, P.P.C.L.I., silvermounted inkstand (hoof of his charger) Mr. and Mrs. Percy F. Ridout silver beaker, Mr. and Mrs. J. K. L. Ross large engraved silver cigarette-case, Mr. Alfred Shaughnessy tall engraved cup, Daughters of the

Empire jewel-box, Canada Club writingtable.

Canadians everywhere will extend to the happy pair all good wishes for every happiness.

## Agricultural Students.

## Visit of Canadian Agricultural Students.

On February 22nd over thirty students of the Agricultural classes of the London college visited the British Friesian herd of Messrs. A. \& J. Brown, Hedge's Farm, near St. Albans. Probably the best herd of its kind in England, it was at once noticed that all the animals showed remarkable constitution coupled with great size for age. A distinct feature also was the great strength, thickness and levelness of the hind quarters, showing considerably more flesh through the thighs than is found in the American type of Holstein, which is usually somewhat spare in flesh. The shoulders also differ considerably, the American type being slightly more of the dairy wedge shape, but all the animals seen, although heavier in the shoulders, blended very smoothly into the neck and behind the shoulder. Six yearling bulls showed excellent quality and uniformity of type, and spoke well for the breeding operations of the owners. The herd sire, Bles Albert, an imported bull from Holland, was much admired for his size, quality, and exceptionally smooth shoulder. Weighing 2,500 pounds at five years of age indicates that size is being well looked after in the herd and, as he cost $£ 2,000$, his breeding is of the very best.

Although the cows are being fed only on
average farm ration, due to the scarcity and exceedingly high price of feed, the milking qualities of the herd are good, several heifers at 3 years of age having given well over 9,000 pounds in one year, while some of the mature cows have gone up to 13,000 pounds. These records could be much increased without any ${ }_{2}^{\text {T }}$ doubt, when feed conditions relax in the near future. Mr. Hobson, the Secretary of the British Friesian Association, was present, explaining the points as required by British breeders, and he rendered valuable assistance in giving the history of the various important animals in the herd. A good deal of valuable information was picked up, and an excellent tea proyided a fitting close to a most enjoyable and instructive afternoon.

## Return of Canadian Troops.

The first Canadian troops to leave Europe for home as a unit sailed from Liverpool on Saturday per the White Star liner Adriatic. The troops composing the company were the 42nd Canadian Infantry Battalion, the Royal Highlanders of Canada from Montreal, and the Royal Canadian Regiment from Halifax. At a farewell luncheon the Lord Mayor, himself a Canadian, told of his son's reassuring remark when he spoke of the danger which would ensue at Ypres during the war if the front line had been taken: "Oh! it is held by the Canadians, and they will never let us down" (applause). Major-General Loomis thanked the people of England for their hospitality, which, he said, had been so great that the troops felt they were now leaving home rather than going home.

## Further Adventures of Mick and Mac.



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[^0]:    Printed for the Khaki University of Canada by PAGE \& THOMAS, Ltd., $13 x$ Finsbury Pavement, London, E.C. a

