

THE M.A.D.C. MAGAZINE

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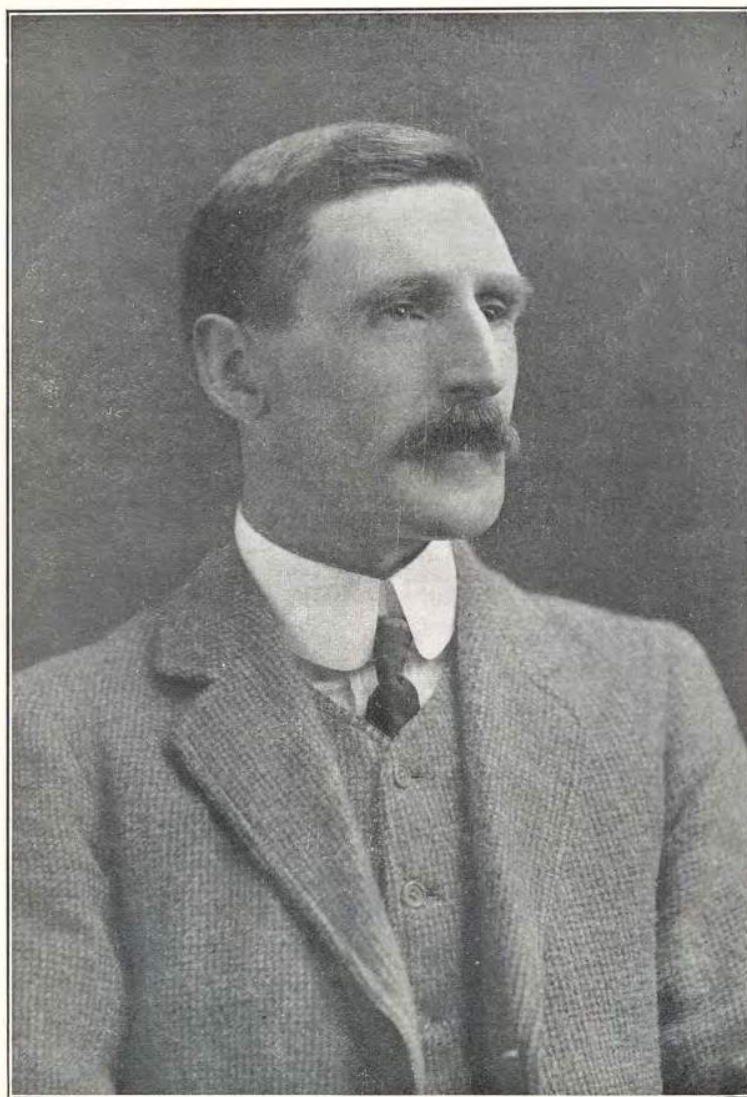
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1910-11.

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EDITORIAL.

Congratulations to all ; behold the M.A.D.C. Magazine !

No apology is needed for its appearance ; the publication supplies the missing link of the chain of usefulness of our Students' Association.

The summer of 1910 will be long remembered on account of the first re-union of students at Kingston who congregated to bid Mr. and Mrs. Blackshaw good bye ! Let us hope that 1911 may be "starred" by the success of the first number of our Magazine.

We welcome Dr. Goodwin—the subject of the frontispiece—to the Principalship of the College, and we are fully confident that the new Honorary President will look well after our interests.

After wishing Dr. Milburn every prosperity, in double harness, we had to bid him a fond adieu and, also, his fleeting successor Mr. Harrison, who has gone out to South Africa.

Here, once again, there is consolation in the advent of Mr. Stokes to our midst. Mr. Dobbin has caught the infection ; following Dr. Milburn's lead, he, too, takes up an important position with the Lancashire County Council, Preston.

No one has worked harder, or done more for the Students' Association than our President, and the least we can do is to wish him all success in his new sphere of influence.

The M.A.D.C. is ever the scene of changes ; Students come and go ; friendships dissolve in the natural trend of events, but the changes of the Permanent Staff leave blanks filled only by happy memories.

Little comment is necessary on the articles of this issue, save that we have tried to make them representative of all sections of College life. No difficulty has been encountered in getting copy, and we invite all readers to contribute to the Magazine. In the future, it is hoped that MS. will pour in unsolicited, and that topics of common interest will be sent from time to time by all members who would practice the art of wielding the pen. This is the only way to put the Magazine on a secure footing and make it appear more often than once a year.

The thanks of the Editorial Committee are due to the writers who have contributed to this number, and especially to Mr. Strickland Brown—a former student—who designed the cover ; without their assistance the Magazine could not have been issued.

REUNION OF STUDENTS ON SEPTEMBER 29TH, 1910.

It was of the 29th of September, 1910, that your Editor issued his mandate commissioning me to render a true and faithful account.

When our late Principal, Mr. J. F. Blackshaw, was about to leave the College and take up his new appointment under the Board of Education, he expressed a wish to see once more his past students, and in order to make this possible an invitation to meet Mrs. Blackshaw and himself was issued.

The Officials of the Students' Association had, for more years than I am permitted to state, been anxious that a College Magazine should be published, and, while some attempts at this had previously been made, the question of finance had always been a stumbling block. Further, there had been an unexpressed, but none the less decided, feeling that the hundreds of students who had passed through the College would highly appreciate some arrangement which would allow of old friendship being renewed, and old faces "reviewed."

The Committee was unanimously enthusiastic, and as the reader well knows this means business when it is the Committee of the Students' Association.

Finally it was decided that such an excellent opportunity as that afforded by the above mentioned invitation must not be allowed to go by, and a circular was accordingly sent out to past students of the College.

The day came: and a goodly number of former staff and students having arrived, all repaired to the lecture room and at once proceeded to business.

The whole matter was thoroughly gone into and eventually the meeting pledged itself to support the Committee in the effort to publish a College Magazine, this support to be moral, active, and financial.

It was further definitely decided—amid marked applause—to arrange for periodical reunions (all details, however, being left for the officials to arrange).

Back to the Quad, repaired the squad, and tea was the order of the day; it was here that the interested onlooker saw the real meaning of a reunion.

The present waited on the past; and the pleasure those of the past experienced at having those of the present to minister to their material wants, was only equalled by the obvious delight it gave to the present, to have the past again present with them.

Tea over an interesting function followed. The Rev. A. Thornley, on behalf of the staff, presented Mr. Blackshaw with a massive gold albert watch chain and a cigarette box.

Our lecturer in Nature Study has his own unique way of making a presentation, and it is sufficient to say that on this occasion he was at his best.

From the students past and present, Mr. Blackshaw was asked to accept a canteen of table silver, and an album containing the names of those who had subscribed, the necessary forms of conveyance being ably attended to by Mr. F. Wilkinson.

In reply, the recipient paid a warm tribute to the manner in which both the staff and students had supported him throughout.

Then, through the friendly offices of a camera, a *record of the gathering having been made for the benefit of posterity, the gathering dispersed and all departed their several ways.

WILFRID SADLER.

*Copies of a "Souvenir," giving an excellent account of the proceedings—with photograph of Mr. Blackshaw and the Group—can be obtained on application to Mr. J. W. Russell, *Trader Office*, Nottingham, price 6d. each (prepaid).—ED:

KINGSTON. PAST.

Kingston in Oct., 1900!

The Institute, as it was called by all and sundry, the M. D. I.!

How vastly different from the College of to-day! Kegworth station. Well, it always *has* been so! The long drive in the fly, "Black Maria" of so many musty memories! Pouring rain and gypsum mud; it *can* rain at Kingston in October, and generally greets the new long-course student with a sample of its powers in that direction. And the road! Ruts like young ravines in the drive, no steam-rolled luxury then, no football field, poultry pens, Hostel, trial plots, iron railings, or shrubbery at the entrance. The quad. as now, low one-storied buildings forming the Dairies, with a door on to the lawn in the centre, the vine-covered old farmhouse front, and practically new wing of dining-room, sitting-room and dormitories.

The girls' sitting-room opened off the present dining hall, taking up one-third of the room—Mr. Dunstan's room, where is now the Reference Library; Mr. Blackshaw's office which is now the staff room; the smoke-room dates from the beginning of things.

Above the smoke-room was a quaint place with gauze shutters, the home of ripening Stiltons, where students in disgrace were required to sweep up mites as a punishment. Who remembers the old butter room with the ladder going up to ripening and lumber room above, the door into the cooling room, where one could stand and "shy" hot scotch hands, etc., into the huge lead-lined cooling tanks? The Dairies were not full then, plenty of room to work off one's energy: five long course girls, three factory managers, four short coursers; Mr. Blackshaw and Mr. Todd, for cheese making, and first thing in the morning taking temperatures in the butter room. "Bill," who, like the sun, always has been, and "George," then quite new and young."

The engine-room opened out of the press-room, there being no passage, but each room communicated; beyond that the boiler house, resort of iron-warmers, wet boots, and agricultural labouring lunchers. Bill getting excited about the fixing of a wee dynamo to drive the equally small sewage pump. Builders galore working at the erection of a Hostel to house the invaders from the Agric. Dept. of Notts. University.

No Agricultural boys, no Hockey or Football Clubs, no Tennis Courts: Concerts and Dances unknown.

Who remembers Lucy, the one-sided good natured housemaid? Miss Ison promoted from student ranks to under-matron; and her good old-fashioned farmhouse puddings?

Who remembers Tommy the cow-man, and old Mike, with his quaint dialect?

Mr. Marx and his beloved fowls? Father Luckhurst's pretty drawings on the blackboard, and his bottle of tomatoes?

Mr. Kirk, the scribe, doing accounts in the outer office where now the billiard table stands?

Mr. Golding, even then deeply involved in nodules!

Mr. Matthews Meggitt and Parrot?

Lassie, the collie, who stole and worried all our brushes! Vally, the South American Spaniard, who objected to "cheese-meets," and even requested "warmth" in his bedroom!

Dicksey Ball, full of puns and pranks, Della Fontaine with her French airs and beautiful handwriting; and Patty Needham, typical of N. Derbyshire pluck and good humour; Ridley, Castledine, Goff, Jackson, the dusky Swami, who stole apples for all, and Danarius Campbellis, of N. D. D. fame! Names to most, but what memories to some of us!

Lectures from Mr. Dunstan, then our much loved "Head;" lucky students who heard him; even now the memory retains distinctly the ins and outs of "The Agricultural Holdings Act."

The fruit trees in the new garden all in their infancy, the cherry-plum hedge only 2ft. high, and the pride of Mr. Luckhurst's heart.

The croquet set which all wanted at once.

Jim Lacy's Phonograph, then a rare thing indeed, which performed in the smoke room, whilst the owner and Camp, like big and little *i*, waltzed on the lawn.

Who went to steal apples from the attic, and who locked them in? Who can picture Kingston without Miss Hawkins?

Kingston at four years of age, but just as fascinating to her children as she is now, when nearly reaching her 21st; grumble and growl as we may sometimes, who would not stand for Alma Mater against everyone and everything?

FLOREAT KINGSTONIA.

LINES WRITTEN ON A FORTNIGHT'S
COURSE AT KINGSTON.

By "OLD CROW."

We'd only just a fortnight been,
Yet many were the things we'd seen

In our brief sojourn here.
And if you'll patient list awhile,
I will the moments short beguile

With brief account and clear.
Now, first of all, I'll speak of food,
It's good 'tis plain; it's plain 'tis good;
There's plenty of it too.

Our rooms were airy, lofty, clean
And lighted by electric sheen,
—That light of subtle hue.

And pleasant sounds fell on the ear,
The oxen's low, the student's cheer,
And must I—must I tell?

The sweetest of all sounds that fall,
To some I mean, tho' not to all
Are th' tones of th' dinner bell.

But dinner bell, and breakfast bell
May far and wide their clamour swell,
Whatever else may hap,
There's one or two can't hear a sound
In lecture room or aught around,
When they are having "Nap".

Before each meal a loud bell rings,
This speedily the students brings,
Into the dining hall.
A tap is heard, then bends each head,
And o'er the meal a blessing's said,
Then all to business fall.

P'raps breakfast time was looked for most,
All 'spected something by the post
And strained was every neck.
And each would take a longing peep,
And sort his own from out the heap.—
And hope to find a cheque.

We studied Entomology
The moth, the bee and butterfly.—

And "'Tis a marvellous thing."
In bees we can discern the queen,
And drone, and worker whene'er seen.
We found that some can sting.

There's Horticulture on the list,
A science that can't well be missed,
"A most important thing."
"You on the quince stock graft the pear
If soil be poor; but if 'tis fair,
You pear to pear-stock bring."

Manuring was important too.
I now advise you what to do,
Take this as my initial.
"On farm manure you place your hand,
If not—I hope you understand—
Fall back on artificial."

We loved to cull the way-side flowers
When rambling,—often 'twixt the showers
That round about us fell.
And all the lordly forest trees
That waved so proudly in the breeze
We learnt their names to tell.

And now the pen of The Old Crow
Would feelings in his heart that glow
Towards Kingston dear impart.
Of this he's certain, you will find
That your instruction's reached each mind
Your kindness touched each heart.

Tho' years may come and years may go,
None will forget those days I know
And this I truly say.

"Of being here no soul did tire,
And this my one and true desire
"Next August brings you May."

J.S.M.

AN OFF-SIDED VIEW OF MILK-PRODUCERS' ASSOCIATIONS.

BY STANLEY S. TREVOR, N.D.D.

The farmer who sends milk to London or other large towns is being bombarded with arguments encouraging him to combine with his fellow farmers to raise the price. The views put forward are very one-sided, or what I call "near-sided." The view expressed here is equally one-sided so I have called it "off-sided."

The history of combines for raising prices is long and complicated, but I think that certain outstanding features are almost universal, the chief of which is that to be successful the combining producers must have a monopoly of the market and the article produced must be a necessity to the consumer (The danger of a successful substitute is therefore always present). Further, if successful, the combine is likely to be the subject of legislation (*e.g.* the U.S.A. Anti-Trust Laws)

Milk is certainly a necessity, but it should not be forgotten that a great deal of it is consumed not as a necessity, but as a luxury. A substitute in the form of condensed milk is already very largely used and any rise in the retail price is practically prohibited by its presence, unless the retailers are prepared to face an enormous reduction in their sales.

Any rise in the price to the farmer will therefore have to be borne by the wholesaler or retailer. The English farmer is told on all sides that he has a monopoly and can therefore force this loss on them; but has he a monopoly?

This winter the average platform prices of milk in London, as published by the Board of Agriculture, have been considerably lower than last year, the Christmas Eve price being less than one-half. I believe this to be due mainly to a large increase in the supply of long-distance milk.

The quantity of milk sent to London from Scotland may not be large but it is increasing.

The official quantities of milk imported in the United Kingdom for three weeks of this year and the corresponding weeks of last year (the only ones I have at hand), are:—

Week ending	Jan. 28.	Feb. 4.	Feb. 11.
1910	28 cwts.	55 cwts.	8 cwts.
1911	696 „	638 „	994 „

This shows an advance which may be described as passing from the experimental to the commercial.

I have not seen any official figures of the amount of milk coming from Ireland to London this winter but it is reported to have been 60 tons daily (about 13,000 galls.), besides which Manchester, Liverpool and the district around are largely supplied from Ireland, probably because the wholesalers could not see the humour of being controlled by the local farmers.

How about the future? Clean milk, in winter, roughly cooled (60°) as soon as milked will be accepted in London 36 or 48 hours old, and if it is further brine-cooled to 40° and kept cold it will keep quite three times as long. If Pasteurised and brine cooled it would, I think keep a fortnight.

This means that it is only a question of capital and organisation to bring milk to London from almost any part of Western Europe, if the price in London is high enough and the price at the source low enough to leave a margin of profit on the cost of handling a transport.

The North of France has already been tapped. The South of France, Holland and Denmark suggest themselves as further sources of supply. If once the capital is invested in opening up these sources they will continue working even in the face of a drop in the price. Excessively high prices do not pay the producer because they draw fresh competition into the business and it is notoriously easier to get into a business than it is to get out of it again.

The organisation of this long-distance milk traffic can only be carried out by the large wholesale firms. The small man is bound to buy from supplies already existing. The present rise

in the price of milk must in the end put the trade into the hands of the large middleman and will benefit him only. It is much easier to form a "ring" of six buyers than it is to form one of 60 or 600.

No one will deny that the combines have raised the price of milk, but I fear the benefit is temporary and that it will be more than balanced by the introduction of foreign competition and the forcing of the trade into the hands of a few large buyers.

If the energy which has been expended in this movement had been used to increase the productivity of our herds by the formation of cow-testing associations or otherwise, a more permanent benefit would have been conferred upon dairy farmers because the wealth of the country as a whole would have been increased, a result which is not attained by altering the price paid for an article.

FIRST DAY IMPRESSIONS OF A FARM PUPIL.

On a certain dark, cold, and rainy October morning, the writer woke up at the healthy and inspiring hour of 6 a.m., and upon looking out of the window found to his great disgust that rain was pouring down in sheets.

Thus dawned my first day on an English farm!

My keenness had evaporated, all desire to acquaint myself with the mysteries of milking had flown, and where was my proud boast 'that *nothing*, not even vagaries on the part of the weather, could daunt my love for early rising?

Feeling very ill-used, I went downstairs and into the yard endeavouring to look as though I were quite used to this sort of thing and enjoyed doing it.

My friend, the farmer, stood eyeing me with a curious expression upon his healthy old face, and after breezily bidding him "Good morning," we made tracks for the piggeries, to see their noisy occupants fed.

I use the word "see" advisedly, because I did very little that was useful on that eventful morning, at least so far as the pigs were concerned. They were in parties of twelve, half-grown, very healthy, and very noisy, and to feed them one had to go inside the sty (each lot had its own sty) and pour the food, usually in a liquid form, into a long trough running the whole length of the apartment. This requires a large amount of very careful manœuvring as I can testify, and my first attempt to effect an entry was not altogether crowned with success, more of the stuff being spilt on my person than in the trough; and there are nicer forms of liquid refreshment than pig swill!!!

This surely constitutes one of the occasions upon which silence is golden; casual observations under these circumstances are invariably dangerous!!!

I could dilate at greater length upon the eccentricities and general habits of these interesting animals, but must reluctantly refrain.

To proceed: After our exciting experiences in the piggeries we went in for breakfast, to restore our failing energy by means of hot porridge and ham and eggs.

But somehow the weather had put a damper on our spirits, and conversation accordingly languished. Some one was heard to observe sagely that if it kept on raining things would be "very damp and unpleasant!" Somehow I could not help but confess to a slight suspicion that things would.

After breakfast, however, the sky brightened, the rain ceased, and old Sol showed himself once more.

With his appearance, the birds I had heard so much about in Cottonopolis, emerged from their hiding places, and soon whistling and carolling was heard on every hand. Who could remain dull and stolid amid such glad surroundings?

Certainly not a townsman, and for the rest of the day work on the farm teemed with interest. Gradually my old enthusiasm returned, enthusiasm which has since then risen superior to all petty discomforts, such as wet days and early hours.

Who does not envy the lot of the countryman, so safe and snug in his little world, far away from the toil and glamour of city life?

And who but the farmer does not appreciate rest to the very fullness, when twilight steals o'er the quiet countryside, and the moon bathes the old homestead in her silvery beams?

These were some of my last reflections ere I fell asleep, after my first day's experience on a farm.

R. CLEGG.

AN AFTERMATH.

Hiliare Belloc has been able to write a book on the difficult subject of "Nothing" and written it so cleverly that one is almost persuaded to believe that "everything" is "nothing"—therefore, how is one to proceed when the Editor kindly invites one to contribute "something" to our College Magazine? In itself it is an innocent looking word, but it is very cleverly used,—it includes so much—or so little!! However, I take it that in this case the "something" means *something* in connection with our common interest—Dairywork.

It may interest some readers to hear about the experiences one gets after leaving Kingston. To start with at College one thinks "Oh, there is nothing like examinations to show you how little you really know" but there is still worse to come—when you are launched out on your first post with only your training, your own experience and books to help you—then the fun begins! Sometimes it starts with a simple (?) question asked by a new student "Does farming pay?" They expect you to say "yes" (or "no") at *once*—little realising that you have in your mind the memory of the sheets of paper you have used trying to solve this weighty question, and that ever afterwards it is a question not to be treated in an off-hand manner with unseemly haste—it commands respect.

Again, one feels rather like a target (I haven't actually asked a target to give me its sensations in detail) when a volley of questions is fired at one in this manner—

"Oh! you've just come from College, perhaps you can tell us why we have got so much moss in one of our fields?"

"Can you make cream cheese?"

"What do you think of this butter?"

"I bought this cheese in a shop in London—do you think you could make some like it?"

In time one gets used to answering (or evading!) such questions, but a real difficulty presents itself when one is expected to perform miracles—and that would be a grand addition to the syllabus at Kingston—to be able to make enough butter for all the extra customers and yet have enough cream for "those delicious cream cheeses" and "to be sure to send extra milk on the milk round"! It is a great disadvantage for a Dairy-maid not to be able to practise witchcraft!

There is any amount of fun and humour to be found in the day's work—people make such quaint remarks—the visitor looking round the dairy nearly always says—(if a lady) "Oh, how perfectly sweet," "Look, dear, isn't this just fascinating—there's a churn—I'm quite sure it's a churn, isn't it?, Oh! I should just *love* to come and make butter." They look astonished and amused when I ask them if they care for washing-up and swilling floors, and make unconnected remarks about "sun bonnets being so pretty."

There are many mothers who have strange ideas about agricultural work, who looking round farms and gardening schools—generally on bright sunny days when out-door work does look attractive, think that *their* daughters would be sure to like the same kind of work whether they have any natural love of, or ability for dairy-work or gardening. One mother wrote to say she was *certain* her daughter would make a good student as she loved flowers and kept a canary at home!!

The work itself is always interesting, especially if it grows at all—each new cow purchased creates fresh interest—I have learnt that *every* cow one wishes to buy *always* gives four gallons of milk a day—although, when questioned as to whether any record is kept, the man is not quite sure that you are not thinking him mad and answers you conclusively (as he thinks!) "Well, anyhow she 'allus fills this ere pail and sometimes half that other one too in the mornings."

Shows and demonstrations are always worth any extra work their preparation may require—There is pleasure in making every

detail as perfect as possible, and reward in seeing the crowds' interested, astonished, or curious face.

Dairy produce is always saleable at local shows, and can be made to look very attractive if cream cheeses are neatly done up in silver paper and other small cheeses well arranged.

I have mentioned how little one feels, to know when trying to impart that knowledge to others—but directly you have passed on your knowledge it seems to strengthen that which you already possess and to bring new knowledge in addition; for, just as often as necessity rouses the inventive power, so, simple questions will often lead one to think about natural phenomena until new discoveries are made or old traditions explained. To this end I would always encourage students to make experiments on their own account and if possible keep the practical side to the fore—no amount of diplomas or of training is very much use until we have learnt to be practical, nor must we think ourselves so well equipped that we are not able to take in and use the "tips" that many people can give us.

When the rain comes in the Autumn, the cold and snow in Winter, followed by mud, mud! mud!! one is tempted to think that dairy-work is hard work—but one fine day in Spring makes up for weeks of "bad" weather, and the finding of primroses and banks covered with violets is joy. An April sky over a sunny orchard full of blossom covers up the recollection of many dull days of rain, for by a wonderful natural law, it is the joys and beauties in life which make a more lasting impression than the grey and cold.

In conclusion, I would like to tell you of the highest compliment I received during my work. The other day I had done some little thing which pleased my employer and she said "Well you are a Midland Student!"

"M. MASON."

MY FIRST DAY AT "KOLL."

I was met by Black Maria,
At Kegworth Village Station;
In this I rode and thought I'd die a--
"fore" I reached my destination.

I signed my name and paid my pence,
To Peter—he's the clerk;
And from that man of great silence,
There came this weird remark:

How shall I know that you are free,
From Whooping Cough or Mumps?
And from my pocket I with glee
Brought out my Cert.' in lumps.

I left that room with heart so sad,
My pockets they were lighter;
And what was equally as bad,
My head felt not quite right—er!

I went around into the Host.
And there I found the 'el;
For oh! I felt as though I'd lost,
My home in which to dwell.

Shortly I wandered back again
To the main block for tea,
And as I entered in my train
What is it there I see?

Then Grace was said and I was glad
For now with might and main,
I took the bread though it was sad
And likely to give pain.

When tea was over we all went
To have a little smoke,
And as all were on pleasure bent
I "cracked" my little joke.

But what a change in faces,
When later we all sit
At supper, each one races
To get his "little bit."

And lucky he who gets it,
For some there are who "eat"??
As though it were the first bit
At a village schoolboys' treat.

And later I went sleeping
I thought well 'tis not so bad
Though at first I felt like weeping
I'm now like others—glad.

"WEARY WILLIE."

GEOLOGY IN RELATION TO WATER SUPPLY.

FRANK PARKIN, C.E., F.G.S.

Of the water which falls upon the earth in the form of rain and snow, part is returned to the ocean, seas, and rivers, from which it was previously evaporated by the heat of the sun, and part is absorbed by the strata composing the upper portion of the crust of the earth at their outcrop. The proportion of rainfall absorbed depends on the more or less permeable or impermeable nature of the strata exposed at the surface in a given district. Thus, in a district composed largely of clay, slate, or other hard and densely compacted rocks, the bulk of the rainfall finds its way to the streams and watercourses, only a small proportion being lost by absorption and evaporation; also, the steeper the slope of the surface the more quickly the water finds its way *via* the dykes, rills, and other channels to such watercourses, streams, and rivers, and the less the evaporation on the way.

In a district where the ground is pervious and absorbs the rainfall readily, the flatter the surface the greater the proportion which is absorbed and stored underground, and the less the amount returned to the streams and watercourses of the district or evaporated.

In their search for a supply of water from an underground source, the geologist and water engineer are guided by the nature of the strata over a large area, and their relative position and nature, whether permeable or impermeable to water and to what relative degree.

To this variation in the nature of the various strata composing the earth's upper crust, we owe the fact that in most districts, although there is no visible indication of water in the vicinity available as our source of water supply, by boring or sinking a well in a suitable position, decided upon after a careful examination of the formation of the district, we are able to find a satisfactory supply.

The depth of such well or borehole depends upon the relative positions and thickness, and also the dip or angle of slope of the

strata. The writer has heard of a borehole which was put down to great depth without any water being found, when a geological examination of the district revealed the fact that they had been trying to bore through a vertical bed of clay.

In cases where the only means of obtaining a supply of water is by sinking a well or borehole, the following examples of sections of strata showing the method and depth at which water is obtainable in the various cases will give some idea of the general principle.

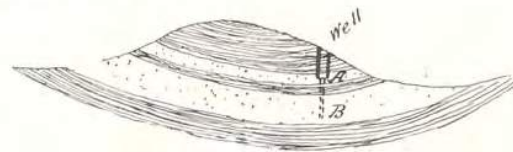


Fig. 1

LINES SHOW IMPERMEABLE STRATA.
PERMEABLE STRATA DOTTED.

Fig. 1 shows a well sunk through a depth of impermeable strata into permeable strata where a supply of water is found.

At the outcrop on the surface this permeable stratum has only a comparatively limited area, being only a thin bed, and therefore only collects a comparatively small amount of rainfall; also, as will be seen, the outcrop occurs on sloping ground, which is another factor to be taken into consideration, as the water passes more rapidly over the surface and a less proportion is absorbed.

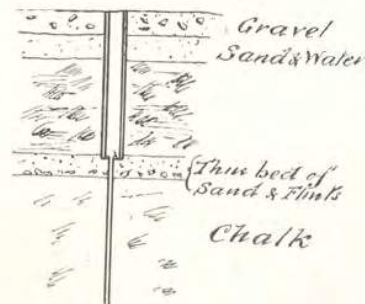


Fig. 2.

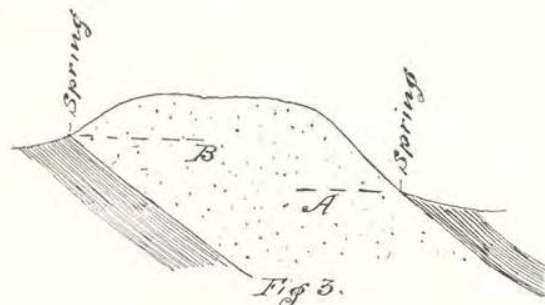
In this example it will be seen that by going to a greater depth as shown by dotted lines it would be possible to obtain a much larger supply by tapping the thicker layer of permeable rock under the next impermeable layer at B. At its outcrop this layer has also a much larger and flatter collecting area.

Fig. 2 shows the section of a well passing down through gravel, sand and water, clay, then through a thin bed of sand and flints and into the chalk, furnishing an abundant and pure supply.

Water would be found in the upper layers, but as this is near the surface and liable to all sorts of contamination, it will be seen the upper part of well is lined with brickwork in cement with the object of keeping out this water, and by going to a greater depth by means of a bore hole of iron tubing, which is cheaper and much more convenient than going down with the larger diameter well, a good and pure supply is obtained, probably rising to a good height in the well, depending upon the level at which the chalk bed crops out upon the surface.

Other sources of supply which are frequently available are springs, rivers, and streams.

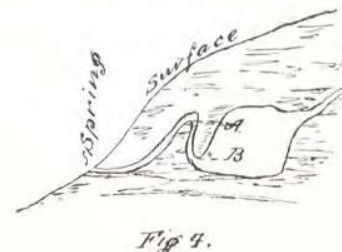
Springs are often found in most unexpected places, and are due to all kinds of natural phenomena, and their origin in many cases forms very interesting problems to be solved by the geologist.



A simple and obvious example of the origin of a spring is shown in Fig. 3, in which the spring occurs at the junction of the permeable and impermeable strata. When the line of saturation

or water level in the permeable strata reaches above the levels A and B, the levels of the outcrop, the springs at those levels serve as the outlets for the rainfall collected and absorbed, so that A would commence earlier than B, and would continue for a longer period, thus forming the better spring.

Another example of an intermittent spring which is not so easily accounted for without making considerable investigation is shown in Fig. 4.



In this case of a spring issuing from the limestone rock, the intermittent action is accounted for by the fact that a fissure in the rock has been enlarged by the solvent action of the water on a portion of the rock forming a large cavern, which, when filled with water up to the level* of point A, commences to discharge owing to the outlet fissure or passage being shaped, so that it acts as a syphon. On the syphon principle the water continues to discharge until it falls to the level below the end of the outlet B, and thus admits the air following the water from the cavern and puts a stop to the action. The spring will remain "dry" until the cavern is again charged with water up to the level of A, when the syphon action sets in again.

A supply of water may often be obtained from a convenient river or stream. In this case if pumping is to be avoided, it is necessary to select a point on the river or stream at a sufficiently high level to supply the place where water is required, if at a distance, and in cases where the surface may be liable to contamination it may be filtered through sand or similar fine sharp material and stored for use.

* Seen near Settle, in Yorkshire, and named the "Ebbing and Flowing Well."—Ed.

"DORM" DAY.

A day there is in all the week
Which brings forth grunts and groans.
Because we have to move our goods
From out our little homes.

It is the wretched "Dorm" day
That causes all this fuss,
To get our things put all away
It is an awful crush.

We think of it the night before,
For one of the girls will say
"Dorm day to-morrow," remember girls;
Oh! that wretched cleaning day.

In the morning after breakfast,
We rush up to our cubes,
And grab our dresses in a rush,
And pick up boots and shoes.

For we must change in the bath-room,
The floor it will not dry.
And if we trample on it
We hear a "fearsome" cry.

And then when we can enter,
What a sight doth greet our eyes.
All scrambled in a heap we see
Our boots, and clothes and ties.

But oh the "tidy" feeling
When we have put things right,
It compensates for anything
For things don't fit so tight.

The cubes now seem quite roomy,
And when them we survey,
We think you'd find it hard to beat
Our "Mansions" any day.

"BISCUITS."

A SHORT ACCOUNT OF MY JOURNEY TO CANADA.

By N. S. GOLDING, N.D.A., N.D.D.

After having booked my passage on the s.s. *Dominion* bound from Liverpool to Halifax and Portland, on the 8th of December, I said good-bye to my father at Euston station and took the train for Liverpool, where the passengers were met by porters and busses and taken down to the tugs which took us on to the liner. When I got on board I found two or three letters and telegrams wishing me good luck, which I was very pleased to get. After the baggage was all on board, and the tugs had drawn away, we steamed out of the Mersey and the lights of Liverpool slowly vanished from sight.

The *Dominion* is an Atlantic Liner of 7,000 tons with a speed of $12\frac{1}{2}$ nautical miles per hour; being one of the slow boats which take from eight to ten days to cross the Atlantic. She belongs to the White Star Dominion Line. The dining saloons (of which there are two) are very comfortable but rather small. The one on the citadel deck was the only one used for meals since there were only a few passengers on board. The state rooms contained two or four berths and appeared at first to be cramped, but after a time one gets accustomed to them.

It is best here to describe one day at sea, as there was little difference one day from another. In the morning I was wakened up by the first bugle at 7 o'clock, which was half-an-hour before the early breakfast at 7.30. About the same time the second sitting (to which I belonged) started to get up. At 8.30 after a few minutes walk on deck we used to go down to breakfast. For breakfast we had the following menu, fruit, porridge, fish, meat, eggs, etc., coffee or tea. After a good breakfast, I used to go on deck and sit in one of the deck chairs or go to the smoking room and play cards or chess. At ten o'clock beef tea was served on deck for those passengers who cared to take it. At 12.30 the first sitting went down for lunch and one hour after the second sitting followed. For lunch there was the following menu, soup, fish, meat both hot and cold, sweets, fruit, tea or coffee. In the afternoon, I usually went on deck and read a book or talked to

one of the other passengers. At four o'clock we had tea on deck, after which the passengers walked about or played cards. For dinner, which was at 7 o'clock, we had a good menu of soup, fish, hot and cold meats, sweets, cheese, fruit and tea or coffee. After dinner I read a book until bedtime about 10.30. The passengers, speaking generally, were a very jolly lot of men and I got to know some of them quite well before I landed.

In crossing the Atlantic, in the winter, the cold weather is not very noticeable until about 200 miles off the coast of Newfoundland when it suddenly becomes much colder. The second Sunday after leaving Liverpool we arrived at Halifax at 11 o'clock in the morning. It was a very pretty view entering the harbour with the sun shining on the hills on either side in a perfectly clear cold atmosphere. When first we saw the land it appeared dark green above and white below, due, as we saw later, to pine forests and the snow upon the open ground.

We landed at about 11 o'clock in the morning and went through the Customs and Emigration offices where I had but little trouble having no luggage except that of a personal kind. In Canada there is a very good system of sending luggage; the trunks are checked to the railway company who send them to your destination and there is no further bother with them. As soon as I had got through the Customs offices I went to the King Edward Hotel and had dinner with four of the other passengers.

In the afternoon I walked round the town, which is mostly built of wooden frame houses. Monday afternoon I took the train on the Inter Colonial Railway for Montreal. In Canada the trains are quite different to those in England, both the engine and the carriages being much larger. Each carriage is one long high compartment with rows of seats on either side. The stations have no platforms, which give the impression to most English people that the carriages are even larger than is actually the case. I expected when I was on the train to feel the severe cold, but this was not so, the carriage being kept at a temperature of 70° F. and are very much warmer than our rooms at home. The first part of the train journey from Halifax to Montreal on the Inter Colonial Railway is through rough rocky country with forests on either side. Some little time before reaching Quebec the scenery

changes to a more agricultural district, with a grand view of the St. Lawrence in the distance. I arrived at Montreal at about 8.20 Tuesday night and after having walked round I had dinner and took the 10.30 train to Toronto. The train was delayed considerably during the night, and I therefore missed my connection there next morning. I then spent about four hours in Toronto looking about the city which is built on the square block system, with one lot of streets going North and South, crossed by others which go East and West. I am sorry to say I did not see enough of Toronto or Montreal to give any description of them but I hope to see more of them later on.

On arriving at mid-day I took train to Guelph and was at once impressed with the contrast of this city of firmly built brick and stone houses with that of the towns which I had passed through in the train. After I had put up my bag at one of the hotels, had a wash and clean up, I took the street car to the Ontario Agricultural College and saw all over the Dairy Department, but was unable to see Professor Dean.

The Dairy Department is a large building, rather away from the rest of the College, and is built on quite a different system to any dairy which I have seen in England. The reason for this is that the practice of dairying in Canada is worked on a different method. There are cheese factories and creameries worked on a large scale. The soft cheese room which had been worked up by Mr. Rice, my predecessor, was fitted up much the same as at the M.A.D.C. The College is divided up into many different departments, each of which has its own separate building, and most of them are very well equipped. The Library for example is on the top floor of the Massey Hall and has a splendid collection of books both for reference and general reading.

There are many winter sports in Guelph such as indoor baseball, skating, and hockey on the ice. I went to a skating carnival, some weeks ago, given by the town skating club. The skaters were in fancy dress; Chinese lanterns were hung all over the rink, and it made a very pretty scene.

The weather out in this part of Canada is rather cold and the snow remains on the ground for the whole winter. Somehow I do not notice the cold as it is so much drier out here than in England.

THE MILKY WAY.

"Be thou diligent to know the state of thy flock; and look well to thy herds." "A merciful man regardeth the life of his beast."

"John, the clock is slow!"

"No, me' dear, I'm sure it 'aint!"

"Well, it was yesterday morn' when I heard the busser blow at the gypsum mines."

"Ger' away, I wadna' tak' any notice of th' cuckoos, if I wore you; they allus run th' clock at Gotham five minutes afore Keggurth Station."

"And, you might just peep at the Dairy clock in the morning; only last week I heard that Greenwich time had been installed in the dining-room. Besides, it is the one they look at when taking in the milk."

"Mak' no fuss, lass. I'll get th' milk theer betimes."

Now, it so happened that Tuesday morning was dull, and the day before was wash day, with a whist party in the Parish-room at night. John was late in starting the milkers and was quite ten minutes behind the usual time on leaving home. Putting the nag into a short trot, he heard his wife exclaim, "John, remember the clock is slow." Jerking the reins, he pushed the horse into a canter, and the milk began to fly from the top of the churn.

Quoth he, "This 'll ne'er do," and reining in his steed to a more sober pace, he mused, "I hope th' d — clock 'es stopped."

Continuing the journey, he consoled himself that "He wor'nt allus the last 'un!"

He had to pull up the horse at the first gate. "Just me' luck! Expect they'll all be shut; them at th' quad an' all!"

This negotiated, Jehu once again, and still another check, for the whip had fallen from the cart to the ground. With a frown he declared vengeance against bussers, clocks, wives, and whist parties.

Reaching his destination late, he found that all the milk carts had departed from the platform and a white-clad back disappear-

ing under the verandah. His anger was uncontrolled. The clatter of hoofs on the setts and the gruff "Whoa!" made the gentleman in white turn about face with this remark, "What time do you call this?"

(It has been said "A soft answer turneth away wrath," etc.)

Alas, in this case it was not forthcoming, and so, "Tuts, man, you take it back again! We cannot have milk coming here at lunch time. Sit up overnight and perhaps you'll get it here as soon as the West Leake folks!"

ONLOOKER.

REMINISCENCES.

To write an article in a magazine, when the writer is a novice and the Magazine the first of its kind, is a formidable undertaking. Still, "Nothing venture, nothing win."

In the first place, as this Magazine will appeal rather more to old students than to present ones, I think these "O.K.'s." should know something of improvements or otherwise in the social conditions of students. Old students can readily hear what the College is doing as a College, but information as to the life of students is not so easy to obtain.

Also, having been here two years I may be able to enumerate more improvements than a "one year" man. The first year I was here was specially marked by the introduction of tea at supper, in place of the "saturated solution of 'Ca SO₄ + 2 H₂O'" which was in vogue before.

From the tea-urns we have now gone on to tea-pots, as the urns developed the objectional property of depositing what was technically called by one of the staff at supper, "Calcium tannate," in your tea, which appeared as a thick scum on the surface of the liquid.

Jam, cheese, and bread still form the staple articles of food at supper.

With reference to the rules, these have been altered somewhat in regard to the roll at 10 p.m. When I first came the member

of the staff on duty came round and marked those present in a book. Then we got to the stage where you give a knock at the Staff's door, put your head in, and say, "Good night, Sir."

At the present time we are in the experimental stage of signing a book at 10 p.m., and locking up the hostel at 10.15. I may mention that in the experimental stage, book, staff, and students are having a warm, and in the case of the book, an "inky" time.

The much talked-of path from the Hostel to the College is still to come, or at least most of it is to come, as already a "path" of cinders, brick, and earth stretches about a hundred yards in the right direction.

This year we have initiated something fresh in the shape of organised "smokers," a magazine club, and bridge and whist tournaments.

The "smokers" take place once a fortnight, one of the staff usually being invited as a guest. To properly enjoy a smoker three things are needed, viz.:—A loud voice, a smoke-proof constitution, and tobacco.

I may mention, in order to give any of the uninitiated an idea of the volume of sound at a smoker, that we have been heard at the College.

There is usually a good entry for bridge and whist, and the excitement over a 1/- prize is really remarkable.

We now possess a set of boxing gloves, and as may be imagined, these sometimes result in temporary disfigurement.

One morning somebody comes down with a swelled head: "Hullo!" is the enquiry, "Had a rough time?" "Yes; got a straight left from ———," may be the reply, in appropriate "ring" slang. As to the other details of life in the Hostel, these are much the same as usual.

Windows get broken, "last night" is ever uproarious, and the dance is still the most important item in the whole term.

P. J. POWELL.

LIFE IN THE MIDLAND DAIRY.

"Life is said to be what one makes it," and equally true is this saying when applied to life in the "Midland Dairy."

The days of labour are six in number and the hours per day depend upon two things: firstly the time one arrives in the morning, and secondly the quantity of starter used or more correctly speaking its activity.

The first sign of life in the dairy shows itself about 7 o'clock. Of course it would be against the rules to come earlier, but needless to say this rule is seldom broken.

From this hour milk commences to pour in from all directions, though it does not all come in at once because farmers, like students, don't all get up as early as one another.

The milk is received at the platform, weighed and directed to the various parts of the dairy, which business is entrusted to our handy man known to all posterity as "Bill." While this is going on the previous day's cheeses are being attended to; two or three energetic people bandaging one lot of cheese while half a dozen go to look for the knife with which to put the caps on the others.

By this time work is in full swing, all kinds of "grains" are being obtained by the buttermakers from the size of a pin-nob to that of an egg, the latter needless to say being a very convenient size.

The acidity of the milk for cheese-making is taken and if circumstances permit the milk is renneted. If the rennet jar happens to be empty it is generally a toss-up who fetches some more. Our instructors tell us how important it is to know how to work a syphon, because rennet like beer when required in large quantities is procured in casks—not half-pint bottles. It is a glorious job syphoning rennet especially if the cask is getting low, and an important part of the operation is to see that the right end of the syphon is in the barrel. The writer well remembers his first attempt at the job.

It looks a very simple process and so it undoubtedly is, but it is still easier to get it into one's mouth than into the jar, but the student is consoled by the fact that it is not a poison but a stimulant and aids digestion.

At half-past eight prompt by the dining room clock upon whose veracity, as every student well knows, no doubt can be entertained, the breakfast bell goes, work immediately comes to a standstill; there is a general rush for the tap and then for the towel and everyone begins to move in one direction, viz.: that from whence came the welcome sound of bells well tuned.

Breakfast over, work is immediately resumed. If the supply of the favourite weed is plentiful, a pipeful is taken, in order to stimulate the system to enable one to endure the trials of the morning's work. Needless to say this only refers to the new students.

There is an old saying "The more the merrier, the less the better fare," but this is not so applicable to dairy life as "The more the merrier the less the worse one fares," because the more there are the less the work per head.

At half-past twelve lectures commence, at which time the Long Course dairy students are expected to attend, and in order that they may be punctual and not keep the lecturer waiting, it is deemed advisable to leave the dairy twenty to thirty minutes earlier; but, on the other hand, if a test paper happens to be the order of the day things are a little different, and it is surprising under these circumstances, what a vast amount of interest is evinced in that particular part of the cheese manipulation.

Should one of the Long Course students' assistance be required in the dairy for this particular hour, there is more than one willing worker ready to offer his or her services.

The Short Course Students are now left to finish off the work viz.: grind and vat the curd, and put the finishing touch on the whole dairy generally, and thus the day's work is brought to a close. The ladies are able to drink their cup of tea at leisure and the men to smoke their pipe of peace.

L. H. PARR.

REFLECTIONS OF A HEN IN A FATTENING COOP.

Here I am in the last week of my existence and perhaps my reflections may be interesting. I started life on a College Poultry Farm. Alas, I never had a mother! It was a what is called a brooder that I had to depend on for my heat and comfort in the first weeks of my life. This method of upbringing produces a spirit of great independence and besides having that I have been blessed with the blessing of this life, a healthy hardy constitution, and I was left to the care of students and really at times my hardships were many.

Oh those students! Some loved me, some loved me not. Some were interested in me, some not at all.

I must say I was well fed and always given a food with the correct Albuminoid Ratio. My healthy constitution was a great asset to me and helped me to survive when many of my neighbours pined away and gradually died. In case some may not know what trap nesting is I will explain the most trying business. The nest box is so contrived that once in it is impossible to get out without human aid.

Many a time I have impatiently waited the coming of the one in charge and then how clumsily I was clutched at by the wing or any part of my anatomy found convenient. It is a wonder I survived.

When I hear the tales of how some hens suffer I am thankful that I have been so fortunate. My houses always have been light and airy. At present I am being crammed and find in the hands of an expert the process is not so bad at all and then I have the comfort in knowing that my death will be done in the most scientific and painless manner and my last remains will be dressed in the manner to show off my good points, so what more can a mere hen desire?

"BONNIE SCOTLAND."

"KINGSTON FIELDS."

The ever-moving shadow flits across Kingston Fields,—that dividing line between past and future which we call the present. A line we know is length without breadth, and in the present there is no abiding place.

The song of the lark which we hear has perhaps been forgotten by the little feathery speck which is pouring its heart out up there in the sky this spring morning; before we hear one note, others are following in quick succession. The lark flits along with the edge of the shadow cloud above, and the notes of hope and joy which are poured out into the past have yet time to strike our present moment before they fade away into the voices of the spring.

We too could sing with joy at the beauties of the world which are disclosed as the dark shadow gives place to the bright sunshine, but we find there are other and more lasting ways of showing the fullness of our hearts and the joy of living in this wonderful world. Just where the shadow flits, in the passing of this dividing line we can act, and like the notes of the lark our deeds are things which may add joy to the beauties of the world which is being revealed.

Nothing can be done in the shadow of the cloud of the future; nothing can be undone in the bright recording sunshine of the past; all things can be done in the passing of the line which divides the two.

The joy of the lark is not the joy of a music lesson, in which the passing from a less to a greater perfection (which is at the root of all happiness), consists in producing more and more perfect music. It is bound up with the great act of the spring-time, with the growth of the little nest in the grass below and the smooth mottled brown eggs with all their latent power to gladden another spring with song.

Nature has a lesson to teach us in the spring-time, and the fleeting present is fraught with well directed action.

The leaves spread out to catch every ray of energy for their life work, the bees go forth to gather honey,—Nature is filling her store-house at Kingston Fields.

And we too are learning that lesson of bright confidence in Nature which is so necessary to all those who like the farmer live by her bounty. We shall not fear to put the seed in the ground in the autumn nor to provide it with food for its growth next spring. We are learning to walk with one foot confidently forward in the dim shadow of the future well astride of the fleeting line; doing, let us hope, deeds which will shine brightly when they stand out in the brightness of the past.

Now is the time for gathering energy for a life work, learning to act with Nature so that we may perchance do so great a service to mankind as to "make two ears of corn, or two blades of grass, to grow upon a spot of ground where only one grew before."

And then some day when we can see the cloudless fields as they are, let us hope they will be brighter and better for the spring-time at Kingston Fields.

WAYFARER.

WIT AND HUMOUR.

(Scene: Dairy Tent at an Agricultural Show.
Conclusion of Demonstration.)

WISE OLD COUNTRYWOMAN: "Quite right, me' dear. I allus tell 'em to use one of them temperatures; I keeps one stuck i' me' cream tin ivery day, an' 'tis wunnerful the flavour it do give to the butter."

IRATE OLD FARMER ON LEICESTER BORDER: "Cheese! Why, the girls don't know what cheese making is nowadays, always rushing things on with this new fangled 'fomentation.' What do they want to be helping Nature for, 'aint she quick enough in her own time? I was taught to finish my vatting just before bed-time, and then be up early to make another cheese. Those were cheeses!"

CURIOUS MAIDEN.

"My butter is very pale in the winter time, would it be possible to give it just a delicate tint by using the yoke of an egg?"

(For "tint" read "taint," and the answer would certainly be in the affirmative.—ED.)

HEARD IN THE BUTTER-ROOM.

When is fresh butter like Irish children?
When it is made into little Pats.

FROM THE PLUCKING HOUSE.

A Yorkshireman's classification of poultry is as follows: Them as lays—Them as don't—and cocks.

SPORTS.

CRICKET.—Eight matches were played, three were put off on account of wet weather, and one was foregone on account of the death of the King.

The season, on the whole, was a very disappointing one. Not only was the weather bad, but the talent at our disposal, with one or two exceptions, was poor. It was a great loss to the club when Campbell (Radcliffe-on-Trent) left us after the first match to go to Canada. He was one of the most promising bowlers (left hand) we have had for a long time. Ashworth was not only a good fielder, but bowled well on occasions, though he did not come up to his previous year's form with the bat. Cranfield was far and away the best bowler; unfortunately half a dozen overs was his limit! He promised well as a bat in the early practices but never got going in the matches. Stimson broke all records by playing in all seven matches without scoring. He deserves credit for his pluck and sportsmanlike conduct in playing when asked. This cannot be said of all our players! The Club will never do its best until the members look upon it as an honour to be included in the XI, instead of considering it a favour to the Club by condescending to play.

Highest score and best average—C. H. Dobbin.

Second best „ „ J. Matthews.

Greatest number of wickets taken—H. F. Cranfield.

C.H.D.

FOOTBALL. The season has not been a very successful one, three matches only being won, three drawn, and six lost, with a goal record of 29 against 34. Through the inclemency of the weather several matches were scratched which would doubtlessly have given additional victories. After two heavy defeats, great was the jubilation when the Old Loughburians bent the knee to the beef and brawn of the Kingstonians on Guy Fawkes Day. What a demonstration of fireworks was to be given in honour of the occasion, but, sad to say, they all went off together on being introduced to some humorists' match! St. Peter's Old Boys were

the next victims, our forward play on that occasion being much improved. With the same team a draw could only be made when they came to Kingston. Although they had a stronger team, we should have won had our referee been fully competent.

The next term's team was weakened by the absence of some of the old stalwarts, but strengthened by a new full back, Mr. Hogan, who delighted us with several brilliant displays. A new captain was appointed in Mr. T. Waddingham, the old captain Mr. J. C. Pindar being unsound. A brilliant start was made by beating Loughborough Clerks 5—1. Afterwards misfortune seemed to follow the team, for several matches were lost by the odd goal, and Rushcliffe should never have been allowed to divide honours at Kingston. The last match against Nottinghamshire exhibited a determination, the like of which is rarely seen on a football field. What a grand thing it was to witness the "Kingston Rush" in the last fifteen minutes.

Mention must also be made of Mr. Rayn's magnificent goalkeeping, Mr. Blunt's and Mr. Wilkinson's strenuous and effective work in the half-back line, "Charles'" terrifying rushes. Mr. Waddingham's sterling displays when in the defence, particularly on one occasion when he was "watched" from the line. Of the forwards, the less that is said the better, as, compared with the defence, they were distinctly poor, though they did their best.

"SPECTATOR."

HOCKEY. Seven matches were played during the season, and whilst the games were very enjoyable, the College team, with one exception, came off second best. This was very unfortunate for the Captain had no difficulty in getting an eleven for the matches. At times, however, though individual keenness was displayed, the practices suffered from the ever changing of students in the six weeks' course. The drawback to some extent, was nullified by two or three old students who came forward to help to make up sides.

"G.W."

PROGRAMME OF SESSION, 1910-11.

FIRST TERM.

- Oct. 14.—Annual General Meeting
 „ 21.—“Hab” Night.
 „ 28.—Whist Drive.
 Nov. 4.—Debate: “Town Life and Country Life.”
 „ 11.—Debate: “Tariff Reform and Free Trade.”
 „ 18.—Concert.
 „ 23.—Lecture: “British Columbia.” Mr. Torney.
 Dec. 2.—Debate: “Science v. Practice.”
 „ 16.—Dance.

SECOND TERM.

- Jan. 13.—Whist Drive.
 „ 20.—Debate: “Are Farm Schools Desirable?”
 „ 27.—Presidential Address—Dr. Wm. Goodwin.
 Feb. 3.—Cricket Concert.
 „ 10.—Debate (Ladies): “Professional v. Home Life.”
 „ 17.—Concert.
 „ 24.—“Lisbon and its Environs.” Mr. Hogan.
 Mar. 3.—Whist Drive.
 „ 17.—Dance.

NOTICES.

Miss E. Noble has been appointed Butter Instructress and placed permanently on the College Staff.

Mr. Edwin Russell succeeds Mr. C. H. Dobbin as Lecturer in Poultry Keeping.

Miss M. Mason is to assist with the work of the Migratory Dairy School.

The price of the M.A.D.C. Magazine is 6d., postage 1d.

Intending contributors to the Magazine should send their MSS. to the Editor, written on one side of the paper only.

No MSS. will be returned.

The MSS. pages should be numbered, accompanied by name and address of the sender, though a *nom de plume* may be assumed for publication.

Past and Present Students are requested to make the Magazine widely known amongst their friends.

RULES.

Title.

1. The Association shall be called “The Midland Agricultural & Dairy College Students’ Association.”

Objects of the Association

2. (a) To be a bond of union between past and present students of the College.
 (b) To exist for the mutual benefit of its members by organising debates and discussions on subjects of general interest and by providing for such other entertainments as may be deemed advisable.
 (c) To make arrangements with the College authorities to enable past students to avail themselves of the loan collections of books in the possession of the College.

Members shall be:—

3. (a) Members of the College teaching staff.
 (b) Past and present students of the College, and past students of the Agricultural Department of the Nottingham University College.
4. The Office-bearers who shall be elected annually, shall consist of an Honorary President, President, two Vice-Presidents (one lady and one gentleman) Treasurer, Secretary, Assistant Secretary, Librarian, and a Committee of two ladies and three gentlemen.
5. The subscription for long course students shall be 2/6 payable at entry, which shall entitle them to life membership. A subscription of 1/- shall entitle six week students to all the privileges of membership for the duration of their course. This can be extended to life membership if desired on payment of a further 1/6 on leaving. Members who wish to be posted up in the doings of the Association can have a programme sent to them on payment of 1/- annually to cover postage, etc.
6. (a) One General Meeting at least shall be held in the Autumn of each year, when office-bearers shall be elected.
 (b) Ordinary Meetings shall be held every Friday evening at 6.30 throughout the winter term.

Rules for Debates and Discussions.

7. (a) Opening paper shall be limited to 30 minutes.
- (b) Each subsequent speaker to 5 minutes.

Rules for Distribution of Books amongst Past Students.

8. (a) Applications for books must be made in writing and addressed to the Librarian at the College.
- (b) Members are not allowed to have more than two books at one time.
- (c) No book shall be absent from the Library for more than a fortnight at one time, except with the written permission of the Librarian.
- (d) Members detaining books for more than a fortnight without the written permission of the Librarian may be called upon to pay for each book a fine of one penny for each day over the fourteenth until the book is returned.
- (e) All outward postages shall be paid by the Association, but returned postages must in all cases be paid by the holder of the book or books.
- (f) Members marking or otherwise defacing any book, render themselves liable to be called upon by the Committee to pay for the book, or to supply to the Librarian a new copy of the book.
9. The Committee have full power to immediately suspend or stop the privileges of any member disregarding these rules.
10. Outside members accepting an invitation to the Dance are expected to take a ticket costing 2/-.
11. No person who is not a member of the Students' Association shall be invited to play in any of the games unless a General Meeting be called and the consent of 75% of the members be obtained.
12. (a) That at least 30 hours notice be given of any ordinary meeting of the Association, of any extraordinary meeting, and of any meeting of the Committee. Such notice to be posted upon the Students' notice board.
- (b) That four members of the Committee shall form a quorum.
- (c) That a list of the engagements for all meetings of the Association during each term be posted upon the Students' notice board as soon after the commencement of the term as possible.

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CAPITAL. The Capital of the Association is raised by shares of the nominal value of five shillings, and one share has to be taken for every ten acres in the occupation of a person desirous of becoming a member. Payment for shares is as follows, viz., one-fourth (1/3 per share) upon application, and the balance as the Committee may decide. A member occupying 100 acres would, therefore, have to pay 12s. 6d. upon application; he is responsible for a further sum of £1 17s. 6d. in such amounts as may be called up from time to time, upon payment of which all liability on his part ceases, the liability of the Association being limited. The first charge on the nett profits is payment of Interest at the rate of 5 per cent. per annum upon the amount of the paid up capital.

[N.B.—No application for shares can be entertained unless at least four shares be applied for.]

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