

The Agricultural College Student.

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LUCERNE GROWING in the HUNTER RIVER DISTRICT.

[BY A. H. M.]

Having a desire to see lucerne where it is grown on an extensive scale, towards the end of last year I took a trip to the Hunter River district north of Sydney. To me it was a new and very pleasing sight to see the broad alluvial flats, which constitute the valley of the Hunter, clad in a verdant coat of most luxuriant lucerne, interspersed here and there with fields of maize, which at the time of my visit, had just made its appearance above ground. For some thirty or forty years past these flats, which evidently have been made by the sediment carried down and deposited through countless generations by the flood waters of the Hunter, and which are still subject to occasional inundations, have been devoted very largely to the cultivation of lucerne, which when converted into hay and pressed has hitherto found a ready market in Sydney. The usual and apparently the most satisfactory method of cultivating lucerne on the Hunter is briefly as follows :—Instead of sowing in the spring, which used commonly to be regarded as the correct season, the majority of the farmers who appear to obtain the best results take advantage of the spring and summer seasons to thoroughly work and clean their land preparatory to sowing in the autumn. Having the land in perfect order as they do by March, the lucerne seed is then sown broadcast at the rate of 15 to 25 lbs per acre ; if the land be very rich up to 25 lbs are sown, and less in proportion as the soil becomes lighter. The farmers claim that if less seed

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than above mentioned is sown the individual plants grow very strong and rank, and the stems, although apparently of great thickness, are very hollow, and in consequence the return per acre is not so heavy as that obtained from lucerne more thickly sown, where there are several times the number of stalks, which although individually thinner yield in the aggregate a much greater weight of hay per acre than the thinly sown crop. The main object in autumn sowing is to enable the young plant to successfully combat the weeds, which, clean as one would imagine the land should be, invariably seem to make their appearance. The young plant makes a certain amount of growth before the cold weather sets in, then during the winter it is partially sheltered from the frost, which does not, however, appear to be very detrimental to it, by any weeds which may have started, and by the spring it has a fair root and comes away quickly; of course the weeds also make rapid growth, but the first cutting checks the latter considerably, and at the same time seems to stimulate the former, with the result that after the next cutting the lucerne is fairly clean, from this time the lucerne makes such dense and rapid growth that all weeds are effectually choked. If any patches of autumn sown seed should have missed, they are re-sown in spring. When the general sowing is made in the spring the weeds get ahead of the young plants, which in the early stages are inclined to be weakly rather than otherwise, and in consequence frequently large patches are completely choked out and of course cannot be resown until the Autumn, thus entailing a loss of a season. As already mentioned the lucerne in the Hunter district is grown almost exclusively for hay, and on an average a lucerne field will yield a cut every six weeks, or about five cuts a year. The plant is not, as frequently understood, always allowed to come into flower before being cut, but the indication which guides the farmer as to when to start his mowing machine, is the appearance of small shoots at the base of the stalks; as soon as these appear the crop is if possible cut, for should it be left until these minor shoots have grown sufficiently to be cut by the mower the field lies idle until another crop of shoots appears; but provided the farmer is able to get his crop cut immediately these base shoots appear, his hay is no

sooner off the land than the field is green again with a fresh growth, consequently no time is lost, and the maximum annual return is obtained from the land.

The points above mentioned demand careful attention if the farmer wishes to make much profit out of his seasons crop, for as much as two or three pounds per acre is quite a common rental for this Hunter River land. Lucerne is a plant which cannot stand being under water for any length of time, hence it may easily be understood that the occasional inundations which portions of these flats are subject to, as well as having a very fertilising effect upon the soil by the deposit of a considerable amount of rich sediment, also have on the other hand in some instances a very harmful effect upon the lucerne. A rapid rise and fall of water will do no great amount of harm to the lucerne, in fact in many instance a deal of good, but should it remain on the land for a few days the lucerne is almost certain to succumb.

The lucerne fields are practically never cultivated after they are once laid down, the reason being chiefly that were the land disturbed a considerable amount of soil in the form of lumps and dust would be raked up with the hay and in consequence its market value would rapidly be diminished. When a field begins to sicken and does not give satisfactory yields it is broken up and put under maize for a year or two when it may again be sown down with lucerne.

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MY FIRST IMPRESSIONS OF A.C.R.

[BY FIRST YEAR.]

Arriving at the Roseworthy station, after a long journey by train, I found that I had to ride out to the College—a distance of four miles—in a heavy dray loaded with students' luggage, and drawn by a certain animal which is not, even among the draught horses noted for her speed. The animal referred to, is known to the students, and to all connected with the College farm, as "Esk."

These circumstances did not serve to improve my impressions of the general surroundings; but on my arrival at the College

proper everything encountered tended to alter the impressions formed when jolting over the almost proverbially bad road between the College and Roseworthy.

After being refreshed by a substantial and typical College dinner, and also having recovered from the effects of my journey, I began the first day of my sojourn, by going through the buildings, the farm, and many other places of interest connected with the College. Of course I began my "tour of inspection" at the main building, which impressed me as being a fine edifice. This impression was gained to a great extent by the symmetrical shape of the building, which I thought was very substantial and strongly built. Passing inside I was first impressed by the comfort of the rooms in general, but especially with some of the students' bedrooms, which were greatly improved by the miscellaneous assortments of decorations collected by the inmates.

Leaving the interior, and passing to the rear of the main building, I was favorably impressed by the general conveniences, and also by the combined lavatory and change room, which is situated in a convenient position for the students. A strong and very commodious poultry yard, situated a short distance from the change room, is especially worthy of notice.

Passing from the immediate vicinity of the College, I next visited the oval, which I thought was rather small, but which was in other respects as good as I expected. I was not long on the oval before I had inspected the two cricket pitches, which I thought were all that were required by the limited number of students. Another special feature of the oval was the tennis court, which is asphalted, but was slightly out of repair.

After leaving the oval, I directed my steps towards the place which I was sure would be the scene of my many labours: the farm and buildings connected with it. Here I was very favorably impressed with all I saw, but more especially with the large and cool dairy, the chaff-house, blacksmith's shop, and stables. On inspecting the stock, I was at once convinced that they were the best collection I had seen.

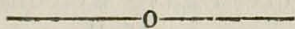
I was greatly impressed by the neatness and efficiency of the machinery, and also by the condition of the implements on the farm.

As I looked over the various machines my hopes of a fairly easy time were in the ascendant, and I began to anticipate the pleasure of being able to work and understand the complex arrangements of some of the machinery.

After spending some time on the farm I returned towards the College and from there into the orchard. Here the trees appeared healthy, but as it was late in the season they could not be expected to present a very favorable appearance. From the orchard I went into the vineyard, which was also in the same state. Most of the vines in the vineyard through which I passed were very young, and as they had not been pruned they presented a rather scattered appearance.

Passing through the vineyard I arrived at the wine cellars, which were at that time shut, and I therefore had to be satisfied with a view of the exterior and its surroundings. The cellars, I thought, were large in comparison with the vineyard, but were small in comparison with the cellars in the surrounding districts. I was greatly impressed by the neatness and general appearance of the exterior of the cellars, and also with the appearance of the young trees and vines in the nursery. The appearance of the cellars was greatly improved by the creepers and shrubs which were planted round and which appeared to have made a very vigorous growth.

With the inspection of the wine cellars my tour came to an end, and I returned to the College tired, but well pleased with my first day at A.C.R.



VICTORIAN VINEYARDS.

Some months ago, the writer, being desirous of seeing a few Victorian wine cellars and the methods therein practised, took the opportunity of a few days' holiday for making the projected visit. En route thither, at the invitation of Mr. McBain, a couple of

days were spent at Coonawarra Fruit Colony, of the cellars and several of the vineyards of which that gentleman has control.

Carbenet, Shiraz, and Mataro are the predominating varieties. Pinot, unfortunately, were a failure, and after several years of unprofitable cultivation had to be uprooted. The vines are trained either as Bordelais Spalier or on the gooseberry bush system; the former method, however, is the more common. The last vintage, owing to severe spring frosts, was decidedly small—about 8,000 gallons—and, as the grapes were in various stages of maturity at the time of picking, rather lacking in body and colour.

The abandonment of the system of smoke fires in vogue a year or two ago over these 300 acres of vines is much to be deplored.

Even at this early stage in the life of the viticultural industry of the South-East, one can detect in the wines stored at Coonawarra that quality which justifies the statements of some who believe a high-class wine will in time be produced.

So far no diseases affect the fruit-trees of the settlement, but unless the utmost care is exercised whilst cases are coming and going to prevent the introduction of codlin moth, there will be another tale than that of a bumper crop such as gathered this year. For citrus fruits the climatic conditions at certain seasons of the year are too strenuous, and it would seem likely that they will not succeed as have apricots, peaches, and apples. In the case of several growers the present season was the turning of the tide, and to those especially who entered upon the campaign of fruitgrowing with but light equipment, both of knowledge and gear, the result must be particularly pleasing.

The journey to Mount Gambier and thence by coach, forty-eight miles, to Casterton, need not be commented on. Suffice to say, the autumn rains had set in, the marshy country in the vicinity of the Border was in many places a sheet of water, the mail coach (let it be known as such) a ridiculously small conveyance, which, in endeavouring to accommodate itself to the undulations of the track, seriously incommoded the few passengers.

A night's rest at Casterton gave welcome relief and preparation for the more tiresome stage to Melbourne, begun at 9 a.m. next day, and terminated, after many forced halts, some of considerable length, as the midnight hour was approaching. The abominable and unaccustomed noise of cables running the greater part of the night, and the suspicion of, at the very least, one too attentive bedfellow, rendered sleep out of the question. That day was employed tramping the city. Facilities were most kindly given by Mr. Martin, Secretary for Ag-

riculture, for inspecting institutions connected with that department, and, as a few hours yet remained, a hurried run was made to Richmond to see the Burnley Horticultural School. This establishment has had a somewhat chequered career, but under the present regime bids fair to take a place of considerable importance in rural education. The students attending at the gardens number a hundred, of which not more than half a dozen are male.

The following day the first available train was taken for Rutherglen, which was reached at 11 o'clock that night. Means for conveyance to the Viticultural Station were to have been made available in the morning; but the fates were unpropitious, and recourse had of necessity to be taken to Nature's propellers. All the buildings are of wood and quite recent erection, and, so far, unsoiled by the destructive agents for whose habitation they are intended. A serious fault in the arrangement of rooms is the absence of any communication between the two dormitories excepting around the outside of the College. Office quarters for members of the staff, and the lecture and dining halls occupy the front of the structure. About fifty yards to the rear, the laboratory, with some foresight, has been placed, and at considerably less expense than if procured in the colony chemicals and apparatus have been imported from France, and the room fitted with all requisites to the work of analysis. Pipes, &c., for the supply of gas to the benches are in position, and connected with a generating plant.

Originally, it is understood, the cellar site was decided upon in order that the grade of the hillside might be utilized for facilitating the manipulation of the juice. That admirable intention has not been given effect in the ultimate plan, but, on the contrary, the three compartments have a common floor, underground at the back and meeting the surface soil in front so that no racking may be done without requisitioning a pump for the purpose. The 1900 vintage was picked into large baskets, which were stacked in a cool portion of the winery and sprayed with water to induce, by evaporation, the radiation of the heat of the berries. Early the succeeding morning these cooled supplies were put through a continuous press, and the resulting must placed to ferment in cement tanks of 700 gallons capacity at a far more desirable and manageable temperature than could possibly be obtained by having recourse to the general practice of crushing the fruit whilst yet warm from the vineyard. For the manufacture of red wine marc was added to the must in the proportion thought fit to se-

cure the desired depth of colour. To control the temperature of the must whilst fermenting a Mintz-cooler was used, and with fairly satisfactory results. As the juice circulates through the tubes of the cooler, water, supplied from a tower above, is caused to drip over them, and in its course from tube to tube, and ultimately the receiving pan on the floor, deprives the metal of some of its must-given heat. By this means the temperature of a vat, so it was said, could be reduced by 7—10 C.

The wines are characteristic of the district, full-bodied, and strong, and, in a few cases, pleasantly tart, but not by any means possessing those distinctive qualities which mark the high-class article. Owing to the antagonism of private makers the Government is debarred from marketing the stock on hand, so officials imagine that eventually it will be turned to irrigation purposes.

When the foundation of the College was so strongly urged by vignerons, a statement was made to the effect that at least thirty youths would be available from that neighbourhood alone to attend lectures, but after completion of preparations for the reception and instruction of students had been made, the scheme was boycotted, and since its inception three students, at the most, have entered for brief periods, and then finding the solitude pall, returned whence they came.

Twelve employes are at work on the property in various capacities, so that the Government must be spending money in no niggardly fashion in the endeavour to make the Viticultural Station instructive and attractive to the community.

Whilst returning to the railway station in the company of a Phylloxera Inspector, opportunity was vouchsafed of watching eight men injecting carbon bisulphide into the soil of an infested vineyard, situated on the outskirts of Rutherglen township. The advance of the parasites could be distinctly marked by the poverty-stricken aspect of the vines, and, in the words of the guide, "by the peculiar scarlet blotches on the leaves." The destruction of infested vineyards by means of this insecticide entails the expenditure of £50 per acre, a sum which when one notices the almost total absence of precautions for inhibiting the migration of the scourge, might be utilized in the enforcement of more stringent quarantine measures. As it is in the present, persons, apparently, may come and go very much at pleasure.

At Dookie College, eventually, after falling foul of a wayside cocky-farmer publican to the tune of a good sum in exchange for a lift from a wayside town, two pleasant days were spent. The residence is in many respects like that at Rutherglen.

Fear of a conflagration is an eternal nightmare. The cellar and vineyard, under Mr. Federli's management, are worked in a thoroughly systematic manner. From the crop of the twenty acres that full-bodied, strong type of wine is turned out, which is so much sought by buyers for the English market. The sherry tasted was peculiarly pleasant.

That apparently indispensable adjunct of a Victorian winery, a still, was here also in evidence, but put to better purpose than the majority of its kind.

Before returning to Melbourne a hurried glance was taken through Chateau Dookie, a few miles away. By means of a steam-lift working in the tower of the building, which, it should have been said, is constructed of galvanized iron, the vintage of the 300 acres of vines on the estate is elevated to a crusher on the second floor, whence it is conveyed in iron trollies, and tipped into huge wooden vats, placed on the floor beneath. No false heads were in use, but to control the temperature somewhat, the must was caused to fall over a series of copper tubes through which a constant flow of cold water was maintained. A loss of 1 per cent. of alcohol resulted from this excessive exposure to the atmosphere; however, Victorian wines can in many cases comfortably dispense with a few per cent. of alcohol.

That night was spent in Melbourne. At daybreak of the morning following train was taken, via Geelong, to Great Western, at which place, with a few hours of the afternoon to spare, haste was made to visit the vineyard of that name. The proprietor, Mr. Irvine, was absent, but the Manager, once of South Australia, courteously acted as escort, and described, whilst passing through the various compartments, their own practice in the manufacture of sparkling wines. Mataro, fermented, of course, from the skins, as well as Pinot, are used in champagne-making. A set of apparatus procured from Europe at considerable expense had been installed.

Extensive underground passages cut through a kind of natural cement, and unlined, serve for the storage of both bottled and bulk wine. As no building has been done to debar the moisture gaining access to the drives, mould is very prevalent, hanging in festoons in every alcove, and conducting, doubtless, in course of time, to deterioration of the wines stored there. A retail business is conducted in Melbourne, where the wines of Great Western may be bought at comparatively reasonable prices. A quantity of the produce is, however, exported abroad.

Thus was a most enjoyable fortnight disposed of, and it may be suggested that others might with profit and pleasure, on some favourable occasion, take the same route in their peregrinations.

UNDER CANVAS.

[By No. 4.]

At the end of the third session, when all the exams. are over, the spirits of the students were generally at a low ebb. This year eight of us speculated in a fortnight's camping-out at Milang. Our tent and provisions were bought and borrowed in Adelaide, the Saturday after the break up.

On the following Monday we left by the early train for Milang. We took entire possession of one compartment, and told other travellers that this one was "reserved," and they in return generally enquired whether we were going round the world or not. This was all taken in good part, and we arrived safely at Milang in high spirits. Alas! when we got there, no tucker, no tent, and no return train; but our fellow-student, "Billy Yelland," came to our rescue in grand style, and we drove off in state to our camping-ground, five miles from Milang. On arrival at the camp we were given a grand spread by Mr. Yelland, the last civilized meal we ate for a fortnight.

For the time being we camped in an outhouse near the lake. Some of our number went shooting in the evening, and returned home jubilant, having shot two swans and one pelican. Our tent turned up next day, and the "tucker" the day after, so that we were set up, and made things hum.

Two cooks had the arrangement of the meals each day, the turns being taken in alphabetical order, so every one knew what to expect.

Fishing, shooting, boating, swimming, cricket, &c., soon made the days seem short. On the first Saturday we went up to Milang to play cricket with the Milangs. After a very good game, the home team won by 9 runs.

We had the pleasure of seeing one of the old A.C.R. students, "Mother" Landseer. After the match he showed us the improvements he is carrying out on his dairying industry. Everything was looking nice, and I am sure we wish him every success.

On the following Thursday we made an excursion to the Murray Mouth, and when we arrived, after a ten-mile walk, and

found we had no dinner with us, the Murray Mouth paled alongside of the needs of the "Students' Mouths," but we managed to reach camp more dead than alive. On the following Saturday four of us played for the Point Sturt Cricket Club against the Point Macleay Blacks. Unfortunately, the visitors had rather a weak team, so the Point Sturts won fairly easily. The antics of our opponents were very comical, and they rejoice in such names as Possum, Jimmy Giles, Joe Darling, &c.

One day we arranged with two fishermen to sail us across to the Mission Station, but they did not turn up, much to our disappointment. The bill-of-fare presented at every meal was always of a high order. Fish were fairly plentiful, and owing to taking down plenty firearms and good men to use them there was always a good supply of game on hand, and we never troubled the butcher once; but, as we got our bread from Milang, the baker's reason was departing when we left, but we hope with the easy times he would get after our departure that he would survive. A fortnight after our arrival we broke up camp, and returned to our several duties, every one voting that we had had "an allright time." The thanks of the party are due to Mr. Yelland for his many acts of kindness towards us in lending boats, giving us fruit, milk, &c., letting us camp on his land, and in many ways making the camp the success it turned out to be. The wish was expressed that this camp should henceforth be an annual event. If it turns out such, may all campers have as pleasant a time as the 1900 party had.

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THE EXPERIMENTAL PLOTS.

In the agricultural districts of South Australia the value of artificial manures to cereal crops is year by year becoming more apparent, and the farmers are gradually learning to use the particular variety of manure that suits their soil and crop the best. In order to ascertain the most suitable manure for the land in which it is to be sown, it is always better to apply several different fertilizers to a small area of land, sowing also the same variety of wheat, and compare the results, and find out which gives the most profitable yield.

On ordinary farms, chemical analysis of the soil would not be practical, or, at any rate, convenient, and in the place of this by the practice of drilling small plots of the same wheat fertilized with different manures or mixtures of manures, it can be

ascertained in what particular constituent the soil is lacking. This test has been applied this year to one of the farm paddocks with manures supplied to the College by various manufacturers. Thirty-one plots of areas ranging from $\frac{1}{2}$ to 5 acres have been sown with King's Early Bearded wheat and these different manures. The plots, which have so far shown to the best advantage, are those manured with nitrogenous manures and soluble phosphates. Of these a 2-acre plot sown with 2 cwt. of Lawes' 36-38 per cent. solution superphosphates and 84 lb. sulphate of ammonia to the acre, the wheat having a good blue-green flag, and having stooled well, is decidedly the best. Next to this are two $\frac{1}{2}$ -acre plots sown with 2 cwt. of Lawes' 36-38 solution superphosphates, and 1 cwt. of rape meal, containing $6\frac{1}{2}$ per cent. nitrogen and 1 cwt. of rape meal, containing 5 per cent. nitrogen respectively to the acre. This looks very well, and is nearly as strong as the previous plot. Next several plots manured respectively with Lawes' Special Corn and Potato Manure, Lawes' Potato Manure, Adelaide Chemical Works Complete Manure, Dissolved Bone Compound, Lawes' Super 36-38 per cent. solution, and 38-40 per cent. solution are coming on very well. That the land is poor in nitrogen is demonstrated by the fact that last winter all the paddock was fallowed, while the winter before only half was fallowed, and all the wheat sown on the land that has been worked for the two seasons in succession is much stronger than that on the other half. This is due mainly to the restoration of the nitrates by the ferments in the soil, and partly to the extra conservation of moisture in the subsoil, and to the double-working the land had received. The difference in the growth of the wheat on these two parts is most marked on the plots which have been manured with non-nitrogenous manures, and on two which have had no manure whatever applied to them. Although this light class of land gives such satisfactory results with soluble phosphatic manures, the plots sown with insoluble phosphates, such as Basic Slag (Thomas's Superphosphate) and Bonedust have so far given very poor results, but will, later on in the season, most likely recover considerably. In fact the Bonedust plot even now is looking much more healthy than it did a few weeks ago. This is due mostly to the large amount of rain which has fallen lately, which besides promoting vegetative growth has also assisted in the chemical decomposition of the bonedust, rendering it in a more suitable condition to be absorbed by the wheat. The rain has also had a similar effect on the Basic Slag, but the difference is not so pronounced. With these insoluble phosphates the crops

are benefited for several years in succession, the phosphoric acid taking three or four seasons before it is all converted to a soluble form.

The two plots which have been sown on unmanured land look very poor, the flag being a yellowish-green colour, and very backward, and in many cases the seed has only given rise to one stem.

Still these two plots being so poor serve to further show the great contrast between the unmanured land and the land to which has been applied a suitable fertilizer.

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THE COLLEGE MATCHES.

This trip to town of the A.C.R. football team to play the three teams representing St. Peter's, Prince Alfred, and Way Colleges, which has now become an annual affair, was made on Thursday, June 14, the team returning on the following Monday.

Unfortunately, heavy rain fell the day before and also on the day the team went to town. On account of this heavy rain the members of the team went to the extravagance of hiring a drag from Gawler in preference to walking to Roseworthy in the mud—a very good excuse for the extravagance, as all who have made the trip to Roseworthy in the mud must admit.

Despite the inclemency of the weather, the students were in the best of spirits when they set out from the College, and most of them had fond ideas of repeating last year's splendid record.

Owing to the drag being ordered at an unnecessarily early hour we had some time to wait at the Gawler Station, during which we employed ourselves in arriving at the average weight of the team, which we found to be 11 st. 5 lb., a very fair weight for young fellows. It is very unfortunate that we did not know it sooner, for then we may have advertised it, and I am sure it would have materially helped us in our games.

We were fortunate enough to all get in the same carriage, and as is generally the case when football teams are travelling a good deal of merriment was indulged in, such as choruses; splendid compositions, I am sure. As to the rendering of them—well, we will leave it for the audience to decide its merits.

Last year, as most of you who read this will remember, the team went through with the splendid record of three wins, but alas! "how are the mighty fallen?" This year we could only muster one win.

We met the P.A.C. first on the Thursday afternoon, the ground

being in a very sodden, slippery condition. Whether it was the strange ground, or the slippery, heavy condition it was in, or whether it was that our fellows played badly, I do not know, but be that as it may the P.A.C. simply ran over us from start to finish. They deserved their win, which read at the final—P.A.C., 10 goals 12 behinds; R.A.C., 2 goals 6 behinds—for their combined play and quick passing was beautiful, and should prove of value to our team in the future.

On the second afternoon, when we met St. Peter's, the ground was still in a very slippery state. However, our fellows seemed to have "found their football legs," and played a much better game than on the previous day. Although the scores read as if the St. Peter's had much the better of the game, such was not the actual case, for at no time was the game uninteresting. It was a well contested struggle from beginning to end, and although I do not for a moment deny that they had a better team than we had, still I do say that had our forward men been more accurate in their shooting for goal the result may have been very different. I heartily congratulate our men for the plucky way in which they played an uphill game. The final scores were—St. Peter's, 5 goals 9 behinds; R.A.C., 1 goal 9 behinds.

Of the last match, against Way College, much need not be said, as the result was a foregone conclusion, although, indeed, our fellows were so stiff when they went out that they looked for all the world like so many leg-weary horses. However, after a little while their stiffness wore off, and we succeeded in winning fairly comfortably, the scores reading—R.A.C., 6 goals 12 behinds, to Way College 2 goals 3 behinds.

Then we dispersed, each to our own Saturday afternoon pleasures, which, speaking for myself, were of a very quiet nature. After spending Sunday as seemed us best, we caught the first train on Monday morning to Gawler. We again hired a drag to take us to the College, for seven miles is a little too far even for Roseworthy boys to walk, especially after three consecutive days' football, and after a wet drive we arrived at the College just in time for Professor Perkins to enlighten our minds on the mysteries of phylloxera, and also, as bad luck would have it, just when the first year's were out of a lecture, and ready to greet us.



MEMOIRS FROM AN IMPERIAL BUSHMAN.

THE VOYAGE TO BEIRA

[By DORG.]

We left the Port at about 4 p.m. amid the cheers of a very enthusiastic crowd. The first night out was uneventful, except for the novelty of being at sea and sleeping in swinging hammocks, which were swung over the mess tables.

The first light of day saw many unfortunate wretches clinging to the railing of the hurricane deck and feeding the fishes.

Nothing to cause excitement occurred on the voyage between Adelaide and Fremantle, except the throwing overboard of three horses, which died from seasickness.

We did not arrive at Fremantle until May 7th, at about half-past 6 in the evening. As soon as the boat was moored, we were marched ashore, and thence to the Fremantle Town Hall, to attend a social, where we had a splendid time. The following day we expected to get leave, and see Perth, but instead had to parade the streets of the capital, and then back to the boat, and off.

At Perth the Ministry entertained us, and gave us a social. Unfortunately the Western Australian Contingent had to embark, and consequently could not be present.

Here we met two old Agricultural College boys, namely, Os. Read and Harold Cargeeg. The former has a dairy farm now at Guildford, and the latter is looking for land. I was fortunate enough to travel from Perth to Fremantle in the same compartment with them both, and we had a grand talk about old times.

Perth is a very pretty little city, but the streets are extremely narrow; all were disappointed in not being allowed to see the town at night. From the day we left Fremantle till the time of writing very few events of interest have happened. The voyage was wonderfully calm, with the exception of about forty-eight hours, when we met with a very heavy sea, which caused the boat to roll badly. On May 28th we reached Beira, to find that both the New South Welshmen and Victorians had arrived before us—the former since have disembarked and cleared out—the latter will soon be leaving. From the boat Beira is rather a pretty little place, with its quaint houses of red brick and no chimneys, but from all accounts it is a very "Hell on Earth."

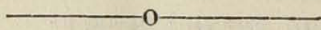
The inhabitants consist of Portuguese, Kaffirs, Greeks, French, English, and other nations, all of whom seem very quarrelsome.

The Kaffirs are a fine race, with tremendous shoulders and arms.

Water costs 6d. per bottle in the port, and meat 2s. 6d. per lb. All eatables are dear. The water in the port is disgusting, and even unfit for washing the decks.

According to all accounts the camp, which is about one mile inland, is in a dreadful state, and fever is raging among the soldiers, great numbers being down with it. There is no wharf at Beira, and all the unloading is done by means of barges, which takes a considerable time, for there are very few barges about.

Three days after arriving at Beira we received orders to move on to Durban, which is a port about 800 miles south of Beira, and after a delay of another three days, eventually we did clear out, and all were very glad to do so.



THE PRUNING MATCH.

[By a Competitor.]

This event took place on July 15. As usual, the third-year students competed. This year all the third-year students went, but as there are only six in the year the place was not overcrowded with Roseworthyites. We started away early from the College in order to catch the first train from Gawler, four of our number driving in the pagnel, whilst the remaining two, who were unfortunate enough to own bicycles, had to "pedal their own canoe." However, we arrived at Gawler safely, though liberally bespattered with mud.

At the Gawler Railway Station we met Professor Perkins, who posted us with all necessary hints. Whilst in the train several light showers fell, which, although undoubtedly very beneficial to the country, were not received with exclamations of joy by us, for we thought of the discomfort of pruning in the wet grass. We arrived in Adelaide up to time for a wonder, and having an hour to while away before our train started we busied ourselves in getting our lunch, which Professor Perkins very generously treated us to.

After about a twenty minutes' drive, we arrived at Mr. Hardy's vineyard, Bankside, which was to be the scene of our labours.

There was a large number of competitors, numbering thirty in all.

We drew our numbers, and it was so arranged that Nos. 1 to 15 inclusively should start pruning the spur-pruned vines, whilst

Nos. 16 to 30 inclusively should prune the rod-pruned variety, both sections starting at the same time.

I must confess that we students were not a little awed when we saw the size of the spur-pruned vines. They were veritable trees as compared with the College vines. We had twenty spur-pruned vines each, being allowed half an hour to prune them. In the rod-pruned variety no specified number of vines was given; we simply had to prune as many as we could in the half-hour.

Only one pruner succeeded in finishing his twenty vines in my division. The majority, however, only had three or four vines to do when time was called. The result, so far as the students were concerned, was rather disappointing, for, as most of my readers will remember, E. G. Spicer was the only one of us to secure a certificate, which he received for spur-pruning. I am sure we all congratulate him on his success. As soon as the pruning was over, we hunted round for a suitable place for lunch, and we were fortunate enough to find a fine bushy olive, under which the ground was comparatively dry.

Although we were not all able to obtain certificates for pruning, I am sure had there been any given for eating we should all have obtained first-class ones, for the excellent sandwiches which Mr. Stone had provided for us vanished like chaff before the wind.

After lunch four of us, with Professor Perkins, caught the tram for Adelaide, each to spend the afternoon in his own way. The two remaining stayed to hear the results.

We arranged to catch the 10 to 7 train, which, I am glad to say, we all succeeded in doing, although one or two of us only just succeeded in doing so.

On our arrival at Gawler it commenced to rain. We waited for one shower to pass off and then started, all of us being in the pannel, for it was next to impossible to ride bicycles with the roads in such a condition as they were. Alas! before we had gone far more rain began to fall, and it lasted until we almost reached the College, and as some of us left without overcoats we got wet through, much to our discomfort.

The drive home was an unsatisfactory finish to an otherwise very pleasant outing. Our entire thanks are due to the generous manner in which Professor Perkins treated us throughout the trip.



COLLEGE FESTIVITY.

[By H. E. L.]

The great festival of our College year, namely, the sports and dance, has come—and gone. Owing to alteration of the close of the session this function had to be altered to a much earlier date than in previous years. As the next session ends well on into October, in all probability we should have rather a warm time were the dance to be held then.

For weeks before training operations had been going on, and the decrepit performances of the runners when one of the probable handicappers was in sight were in many cases very evident.

Alas, for all the night running as well as stiff running it was decided that the committee, in conjunction with members of the staff, should do the handicapping. The result was on the whole more satisfactory, and each race was run on its merits.

Having the programme arranged, the next thing necessary towards success was a fine, bright day. Everybody was aware that there was a large chance of having a good soaking rain falling on the eventful day, which, however, much good it may do, is rather unpleasant to sit in while races are being contested.

There was, however, nothing worse than a strong north wind blowing, and though being rather unpleasant while it lasts, invariably dies down, and leaves everything beautifully dry and mild for the evening.

Owing to the efforts of our newly formed Athletic Club and its committee the sports were very successful. The fields were larger, and the events in general were more keenly contested than they have been at the other meetings.

The introduction of the Champion Athlete Prize, distinct from the Hundred Yards Championship, is a new departure which causes much excitement and hard training.

This coveted position fell to H. M. Main, whose performances throughout fully justified his taking first place.

Owing to the strong wind the round races were very hard, and taking this into account, Caw's quarter-mile of 59 seconds was very creditable. All the other events were equally well contested. The programme of sports over, the next thing was to entertain our friends at tea. Seldom does such a number sit down at once in our dining hall, and for an hour there was a continual rattle of articles necessary for such an occasion. As we dispersed to change our clothes there was a general feeling of contentment prevailing, for we all felt that at last we had a perfect night for

our great annual effort. At 8 o'clock the College did indeed look festive.

Art muslin, fairy lamps, Chinese lanterns, almond blossom &c., were hung everywhere, and gave the whole building a charming appearance.

Secretary C. P. Hodge and his committee have reason to be proud of their work, for never before have the decorations been so gay and so plentiful.

The dancing passed off with even more swing than before, and all too soon we got to the end of a long programme.

That which took so long to come has gone very quickly, and nothing remains but to see friends off next morning, and in most cases to go with them.

To those remaining falls the duty of removing decorations, and sorrowfully removing all (?) traces of what we shall always look on as the jolliest time of our College life.

THOUGHTS.

[By An Idle Fellow.]

I have dim recollections of a fable which at one time made quite an impression upon me, and the moral of which is now apparent to me every day of my life. Whether I read the same, or whether it was an emanation of my grandmother's fertile brain I cannot now say, nor can it possibly matter so far as my present purpose is concerned. It was something to this effect. A lion, a fish, and a bird each envied the other the advantages which its nature and environment conferred upon it. I remember that the moral particularly pointed out the way in which men, in their various and individual walks in life, so often sigh for something which they have not got, instead of trying to appreciate all that is desirable and pleasant in their own.

Later in life I began to speculate as to what was the cause of this state of things, and I believe I have at least found one factor which materially assists in bringing it about. It is this. That of that which they have not, or with which they are not brought into frequent contact, men by one means and another form more or less false ideals. It is their ideal for which they sigh, never dreaming that this much coveted "golden apple" would immediately crumble away to the bitter ashes of reality at their touch.

I will take the case with which I am best acquainted to illustrate what I mean. I have for some years been an agriculturist, and am told by my city friends that they envy my life in the

country, and that they would very much rather have a smaller yearly income if they could only have an opportunity of spending their lives as I do mine. If I have time I generally attempt to draw them out on the subject, and if possible get them to say what it is in the life of an agriculturist which they so much covet. If they have a flow of language they become quite interesting, and soon show me that I belong to a most privileged class, who work among "green fields," gather in "golden grain," own "flocks and herds," &c., &c.

Now, I am quite willing to admit that I do belong to a privileged class, but at the same time I protest that they almost invariably look at the matter through rose-coloured spectacles, and propose, if possible, to consider who put those spectacles on their noses, and what aspect the said spectacles give to those things which are to us in the country nothing short of the stern realities of life. In short, what factor is it in their lives which makes them wish to give up their elegant occupations in the city, withdraw themselves from the life and bustle thereof, to put on rough clothes and earn their bread, or often the bare rent of their land, in the sweat of their brows.

Clearly it is because their imagination has been strongly worked upon.

I believe the first stone of the airy castle which is built up for them is laid by the muse who sings:—

"Little boy blue, come blow up your horn,

The cow's in the meadow, the sheep's in the corn," &c., &c.

The pictures which illustrate this nursery rhyme are, to say the least, misleading. They depict a little boy in elegant blue clothes, generally with stockings and hat to match, reclining in a graceful attitude under some sheaves, while the cows are having a good time in some very yellow wheat, and a few sheep are strolling round on a very green sward studded with enormous daisies. So much for the earliest impression of agricultural life; but can it be a faithful picture of the real state of affairs? To begin with, "blueys" of the colour and fashion such as are represented in these pictures cannot be obtained at any establishment except a theatrical costumier's, nor would they be serviceable if obtained. Besides, the boy who slept under a haycock while his employer's cattle and sheep were becoming "hoven" on forbidden pastures would have a very rude awakening when the said employer came along. Nevertheless, the young idea is in a most inconsiderate manner allowed to shoot in a totally wrong direction. If ever the time comes when the idea must be disbudded, so

that it may shoot properly, the chances are ten to one that the disillusionment will be somewhat painful.

Another thing which helps to give them a distorted notion of things is the lyric relating to "Little Bo-Peep." Again, the misleading character of the sentiments therein expressed are accentuated by the accompanying illustrations.

In this case the sentiments are the worst part of it. It speaks of sheep, which being lost, will voluntarily come home again if only they are left alone. Ask any farmer whether he has ever owned sheep which were anything like so obliging; and I guarantee that he will sadly shake his head. Such sheep would be a curiosity worthy of any travelling circus, and would certainly be worth breeding from.

These are only two instances of how the first impressions of agriculture received by the infant mind are entirely false. As the children read for themselves they come across literature which piles up the illusion year after year. If I were to quote from the vast store of pastoral poetry which belongs to the English language alone, I could give hundreds of instances where writers have presented the commonest drudgeries on the farm in a purely ideal light.

Take a case: The first operation of the farmers' year, ploughing. I have even had men, who certainly had never tried the job, express envy of me when I have been trudging behind the plough. Such have probably read the lines:—

"Oft did the harvest to their sickle yield,
 Their furrow oft the stubborn glebe has broke.
 How jocund did they drive their team afield;
 How bowed the woods beneath their sturdy stroke."

Or other sentiment of an even finer nature. In reading those lines he has laid undue stress on the "jocund" part of it, because that is the only part which he can really understand; and allows it to crowd out the stern meaning of "the stubborn glebe." It takes those who have tried their hands at ploughing hard ground to understand what a tiring, temper-trying occupation is this breaking up of the "stubborn glebe." To us it calls up visions of a team of horses, ripping along as if their lives depended on it. Why horses invariably rip when they come to hard ground is always an aggravating mystery to me; while the plough jumps in and out in a manner that makes it quite impossible to forecast its movements two seconds ahead. Oh, yes, we know all about the "stubborn glebe," and are seldom "jocund" when the job is on hand.

I suppose the operations around which the most glamour of poetry has gathered is the harvesting. I need not quote.. Who has not read scores upon scores of beautiful lines relating to new mown hay, golden sheaves, the swinging scythe, merry laugh of gleaners, &c., &c., all true in their way, but misleading. No, harvesting, like war, "ain't what it is cracked up to be." In fact, as the American said of cooked rattlesnake, "I don't dislike it, but I don't hanker arter it."

Those golden sheaves become somewhat monotonous when one has to pitch them about all day. The scythe, and all the pleasant conceits which have accumulated around that classical grass-mower are now out of date. In its stead is the twine-binder, driven by "little boy blue;" and his blueys are generally very much the worse for grease. The said binder causes more anxiety during the short period of its use than all the rest of the farm put together.

The gleaners, of whom so much has been written and sung, picturesque and interesting though they undoubtedly were, are now an obsolete institution. Let no uninitiated townsman think that if he had to relinquish the pleasure of "doing the block" he at least would have a chance during harvesting of "doing a line" with a gleaner of extraordinary rustic beauty. Such do not exist outside of the covers of books nowadays.

Likewise could I show a seamy side to most of the other fancies which have gathered round the farm and its work. But there is no need for me to pursue that line of argument any further.

Now, I do not wish to seem by this to despise the life of an agriculturist. I merely draw attention to the fact that a great many men who are not on the land are continually wishing that they were, and talk in a semi-sentimental way about it that convinces me that they do not really know what they are talking about.

They seem to think that we enjoy a continual round of "beer and skittles," and that benignant nature throws a comfortable living at our heads. We get our share of the "beer and skittles" of life, but not in a way that a good many of our city cousins would appreciate; and we have to stick at work, which from an ideal point of view is all very well, but in reality is downright hard graft.

There is the other side of the question. The country man frequently hankers after the life of the city, and counts the advantages of his present life as little compared with what he could get elsewhere

How would it be if people could exchange billets for a while? Let the fish be brought to know what it is to fear the water, the bird to be restricted to the denser element, and the lion be deprived of his strength. Perhaps when they returned to their normal surroundings they would be more contented.

I once asked a friend whether he thought these surmises of mine to be correct. He said he thought not; but rather it was due to the sheer cussedness of human nature that men want what they can't get.

Possibly he is right.

Relief of Mafeking and Capture of Pretoria.

When the news of the relief of Mafeking was rumoured great excitement prevailed amongst the students, but when the news was confirmed there was still greater excitement in the camp. The news of the relief came on the Saturday morning, a telegram being sent by the Professor, who was in town at the time. The work-bell was rung vigorously for quite half an hour by two or three patriotic students. All work for the day was suspended, which was, I may say, an intense relief to both horses and men. Soon after the news was received a team of footballers from Angaston arrived, and after a light luncheon we proceeded to the Oval. Play commenced at half-past 2, and after a rather uneven although exciting contest we were victorious.

In the evening some of the students were told off to prepare the drag for the journey to Gawler. Arriving there with musical selections from the occupants, we formed forces at the top of Murray-street. At the word forward, and sound of the bugle blown by one of the students, we marched down Murray-street, singing patriotic songs and giving cheers for Her Majesty the Queen and the Hero of Mafeking. At the end of the street we disbanded. After remaining in Gawler for about an hour tracks were made for home. Two students had the misfortune to miss the drag for reasons unknown, and had the pleasure of walking home. Arriving home at 10 o'clock we found supper ready for us, and after doing ample justice to this we all retired to bed.

The excitement that prevailed at the news of the capture of Pretoria was as great, if not greater, than that of the relief of

Mafeking. The bell was rung till the chain broke; but, undaunted, three patriotic students climbed the tree, and kept it swaying for quite an hour and a half. One student swore he would have a pull at the bell, but when he found the chain broken and the necessity of climbing the tree to ring it his patriotism suddenly fell to the ground.

In the evening, by kind invitation of Professor Lowrie, we all proceeded to his house, where songs were sung by Professor Lowrie and one or two of the students, and Mr. Haslam kindly played. Then supper was partaken of, and after drinking toasts to "Her Majesty the Queen," "Lord Roberts," and "Professor Lowrie," we retired to our respective rooms at the College, and fell into the arms of Morpheus.

CLOSE OF THE YEAR 1899-1900.

The 1899-1900 session of the Roseworthy Agricultural College closed on Friday afternoon, February 23. The presentation of prizes took place in the dining-hall, when Professor Lowrie, the Principal of the College, took the opportunity of saying farewell to the third-year students, and of giving them some valuable advice. There were a number of prizes presented, and they were grateful in the extreme to the generous donors. He would like to mention Mr. Seppelt, who had ever taken a keen interest in the place. Then there was Mr. Buring. He would also like to mention Mr. A. J. Murray, who was magnanimous enough to allow a number of students to see the inner secrets of his work in stockbreeding. They were indebted, too, to Messrs Elder, Smith, & Co. for opportunities of looking at their wool-rooms, and to Messrs Martin & Co. for the pleasure of a visit to their factory; and last, but not least, to the College Old Students' Association. The following are the particulars of the prize-list:—

Diplomas—J S Malpas, Willunga; H E Laffer, Mitcham; G M Main, Mount Barker; U W Seppelt, Seppeltsfield; C A Goddard, Robe; Inman Way, Adelaide; F J Tothill, Gawler; A H Bills, Orroroo

Prize-list:—Third-year—Dux and gold medalist, J S Malpas; silver cup (presented by the Agricultural College Old Students' Association to the student obtaining highest marks in agriculture and veterinary science at the diploma examinations), H E Laffer; Seppelt's prize (presented by Mr B Seppelt to the student obtaining highest marks in viticulture, oenology, and fruit culture), H E Laffer; Buring's prize (presented by Mr H E Buring to the student obtaining the highest marks in viticulture), J S Malpas; oenology (presented by Professor Perkins, J S Malpas; essay on "The Past Season," H E Laffer; chemistry (presented by Mr W R Jamieson, B Sc.), H E Laffer; woolclassing (presented by Mr G Jeffrey), G M Main

Second Year—Dux (silver medal, presented by Professor Lowrie), D M Adams Saddleworth; second prize, C P Hodge, Adelaide; practical work, P J Baily, Adelaide.

First Year—Dux (silver medal, presented by Mr A L Brunkhorst), A E V Richardson, Thebarton; second prize, E G Hubble, Port Wakefield; practical work prize, T L Rose, Bunbury, W A; natural science, A E V Richardson, Thebarton, and E G Hubble, Port Wakefield, aeq; "The John Adams Prize" (in memoriam), A E V Richardson, Thebarton; book-keeping, A E V Richardson, Thebarton, E G Hubble, Port Wakefield, and P W Read, Clare, aeq