

Vol. I.—No 5.

DECEMBER, 1898.

"Et conflagunt gladios suos n vomeres
et lanceas suas in falces."



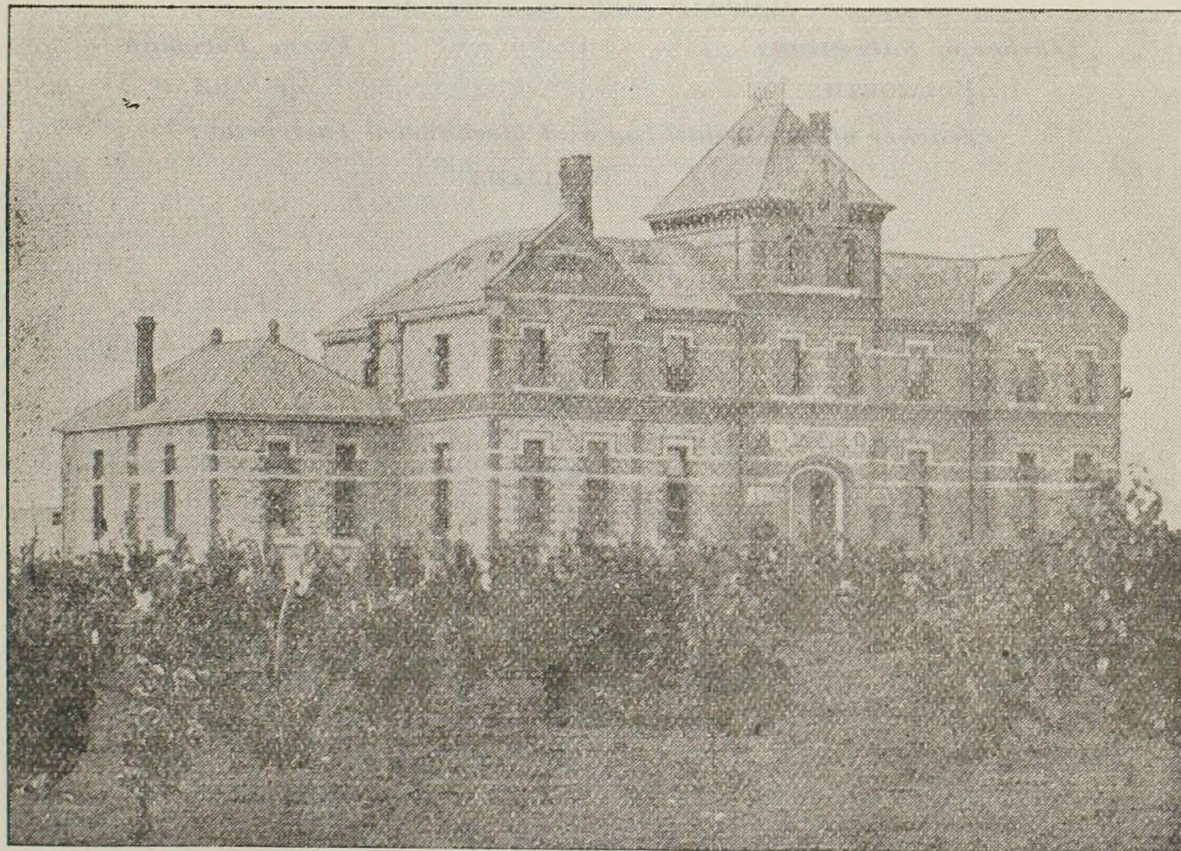
.. The ..

Roseworthy

Agricultural

College . . .

Student.



Agricultural College, Roseworthy.

Our Minister, Council, Staff, and Students, 1898-1899.

Minister of Agriculture :

THE HON. R. BUTLER, M.P.

Council :

JOHN LANGDON BONYTHON, Esq., J.P. (President School of Mines and Industries)
Chairman.

THOMAS HARDY, Esq., J.P.

L. W. STANTON, Esq.

F. E. H. W. KRICHAUFF, Esq., J.P., F.R.H.S. (Chairman Agricultural Bureau).

JAMES McLACHLAN, Esq., M.P.

ALEXANDER J. MURRAY, Esq.

Staff :

Principal :

WILLIAM LOWRIE, M.A., B.Sc., Edin.

Viticulturist and Oenologist :

ARTHUR J. PERKINS, Diplômé de l'Ecole d'Agriculture de Montpellier.

House Master, Secretary, Lecturer on Natural Science and Book-keeping

J. A. HASLAM, B.Sc., Ad.

Lecturer on Chemistry and Physical Science :

W. R. JAMIESON, B.Sc., Lond.

Assistant Viticulturist :

WILLIAM MURRAY GORDON.

Teacher of Surveying :

L. BOSWORTH.

Farm Foreman :

C. JARMAN.

Teacher of Blacksmithing and Mechanical Instructor :

J. L. WILLIAMS.

Students :

Third Year.

F. L. Faulkner.
R. Heggie.
C. J. Landseer.
R. F. S. Martin.
A. Nicholas.
W. B. Ralph.
W. B. Read.
S. P. Taylor.

Second Year.

A. H. Bills.
W. V. Camper.
H. S. Cargeeg.
F. Chapman.
J. H. Dawkins
W. L. Dickson.
A. J. Freebairn.
A. C. Goddard.
H. Laffer.
G. Main.
J. S. Malpas.
H. P. Nesbit
B. O. Read.
J. P. Richardson.
U. W. Seppelt.
W. A. Terry.
F. J. Tothill.
I. Way.

First Year.

H. D. M. Adams.
Jno. Adams.
A. Chillingworth.
P. J. Baily.
M. Le G. Halthouse.
G. S. Milne.
T. M. Rowe.
W. J. Sutherland.
A. Smith.
D. Smith.
G. Warnes.
F. F. Weaver.



THE
Roseworthy Agricultural College Student

VOL. I.—No. 5.

DECEMBER, 1898.

Price 8d.

SUBSCRIPTION.

Two shillings per annum. Postal-note for this amount forwarded to C. J. Landseer, manager, will be gratefully acknowledged.

Notes and Comments.

ON September 30 the comparatively short second session was brought to a brilliant close. Full details of the afternoon sports and the evening dance will be found elsewhere. It is fitting to say here, however, that *the* day of the year 1898 was crowned with perfect weather, that the sports were eminently successful, and that *on dit* the dance was one of the best that has ever been held in the College. It will not be out of place for us to refer to those who attended the latter function unasked. The heading of the invitation card bears the words: "The Staff and Students request, &c.," a sufficient indication surely of the private nature of the meeting; and yet we were again favored (?) with the presence of some who received no invitation, and who had thus been informed silently that they were not wanted. We hope by next year to have devised a suitable means of informing our over-generous friends that if they are so much in need of "a day's outing and a free feed" they are recommended to try elsewhere—say, North Terrace, Adelaide; it will certainly be inadvisable for them to patronise the A.C.R. in 1899.

The record of marks for the Session shows signs of steady work, work that will tell more after the bell for the final lap has been rung. A. W. Nicholas obtained the top place of the 3rd year, and therefore of the College also, with a total percentage of 90. G. M. Main (80 per cent.) and H. D. M. Adams (85 per cent.) headed the 2nd and 1st year lists respectively.

Two students left at the end of the 2nd session, and their names go to swell the total of the ever-increasing Old Students' List. W. L. Freebairn is required at home to help with the harvesting, and A. E. Eyre intends starting for himself as soon as possible. They were both doing good work, especially on the farm, and we trust the short time they spent at the College will serve them in good stead in their agricultural pursuits. As students amongst students they were exceedingly well-liked, and the memory of their many acts of kindness will remain while "this generation" lasts. We wish them every success.

Farmers' Day.—This day, so called, is celebrated annually by a visit paid by the farmers of South Australia, on the first day convenient after the R. A. & H. S. Show in September. The object of the trip is purely and simply to give the producers of the colony a chance of seeing the work done at the College, in order that they may be helped, if possible, in the solution of many of the difficulties which are for ever cropping up in the practice of rural economy, and that they may judge for themselves how far the College here is fulfilling its mission. Of course the gathering can only be representative at any time, but the value of such a visit from even a limited number must tend to impart useful knowledge to all; to inspire to renewed efforts the unfortunate or discouraged, and to lead to a fuller recognition of the value of the training afforded to those who may be sent as students to the Roseworthy Agricultural College. The assemblage this year was the largest on record; the majority came by the special train from Adelaide, others from our own district drove, and when the whole force collected on the oval for lunch, the total number present was estimated at 450. It was at this stage that many indulged in the "grab" policy, and the others as well as the victuals suffered in consequence; this was the only blemish on an otherwise most successful outing, and we would fain hope that the offenders were "producers" for the day in question only. Keen interest was taken in all the operations of the farm, vineyard, orchard, and wine-cellars. Criticisms and discussions, sandwiched in between the many impromptu lecturesses given by the professors, gave life to the whole affair. At the send-off it was freely recognised that the 1898 trip had achieved a record not only in the number of those who had attended, but also in the success which had marked the occasion. Amongst the more distinguished visitors were the Hon. Minister of Education and Agriculture (Hon. R. Butler, M.P.), who is ever ready to do good things for the College when opportunity offers, the Hon. Jas. Martin, M.L.C., a friend, practical and generous, the Hon. A. W. Sandford, M.L.C., Hon. W. McGillivray, M.L.C., Messrs. J. Miller, M.P., whose beaming face betrayed the kindly feeling he always has for us and our work, W. Blacker, M.P., Henry Kelly, A. J. Murray, who, in the Council or at Mount Crawford, has so often been the means of giving us pleasure and instruction.

Other Visitors.—On Monday, October 31st, a smaller edition of the previous gathering paid us a visit. The trip was arranged in connection with the Eudunda Agricultural Bureau, and the fifty odd farmers who came were accompanied by Sir Jenkin Coles and Mr. Moody, the members for the district. In thanking Professor Lowrie for the trouble he had taken to make the trip interesting and educational, Sir Jenkin referred to the fact that he was the controlling Minister of this College some 11 years ago when the Professor first took charge, and he well remembered the difficulties with which they had to contend in the early periods of the A.C.R.'s history. The trip they had made that day gave sufficient evidence to convince the most hardened sceptic as to the value of science to agriculture.

On November 11th, the pupils of the Adelaide Agricultural School were conducted here in charge of their headmaster, Mr. Ferguson, and a member of the staff. The boys seemed to thoroughly enjoy themselves as they were shown about the place. Some of them are preparing to come here, and to them the visit was especially interesting.

Amongst others who have inspected the place have been Messrs. R. W. Foster, W. Duncan, C. R. Dumas, M.P.'s, R. Barr Smith, and a small party from Saddleworth, including Mr. F. G. Richardson.

Some months ago Mr. R. McEwin presented a young pure-bred Jersey bull to the College farm. He was a fine, sturdy fellow, and the generosity of Mr. McEwin was greatly appreciated. We had already, however, had one of the

Government Jersey bulls stationed here, so on September last arrangements were made for Mr. McEwin's animal to be put in charge of the Brinkworth Agricultural Bureau for the benefit of the farmers in that locality.

The rainfall for the second session fell as follows:—July, 2·340; August, 3·040; September, 0·565. Thus it will be seen that the splendid rains of July and August were followed by comparatively long dry spells in September; so hay-making was brought on early, and the usual long holiday in October was considerably shortened. The total rainfall to the end of September is 15·272 inches.

The old "straw-press"—so-called—has received its death warrant. Some months ago, Mr. Thos. Hardy, a member of the Council, decided to make a trip to England, and advantage was taken of this to arrange for him to purchase a hay and straw press of the most improved type. Enquiries and inspections in conjunction with the Agent-General led Mr. Hardy to advise the purchase of a first-class press, and his advice was acted upon. Before our next number we hope to have had the pleasure of seeing the new press at work, and a full description of it can then be given. The old article will be remembered by many an old student as well as by those present now; and we venture to think that no tears will be shed at its entrance into rest.

Our College farm has been directly and indirectly interested in many local shows during the session. Directly at the R. A. and H. Society's Show, held at Adelaide, in September; here we scored a first for fat lambs with a pen of five merinos, and a second for Berkshire sow, any age. The Dorset Horn merino cross-bred lambs, which competed in the class "any other breed," were unsuccessful from a prize point of view, but as fat lambs, some idea of their merit may be gained when it is considered that the average live weight turned the scales at 97 lbs., age about five months. Their wool, too, for cross-bred lambs, was pronounced by experts to be amongst the best, and it will be interesting to note later on whether the quality of the wool is maintained at the ewe or wether stage.

Indirectly we have been represented at many country shows by old students, and many were the prizes they gained for stock, grain, fruit, &c. We regret that a full list of the successes must be held over until next issue.

Yet again, stock sold from the College farm was exhibited by the purchasers in several instances with success.

In this connection it will be of much interest to our readers to know that at the Northam Agricultural Society's Show in W. A., Berkshire pigs, sold originally from our farm, were the most successful. We are indebted to an old student, Mr. W. L. Graham, for the following information:—"Berkshires were practically the only class shown; of this type there were some splendid representatives. There was close competition between the pigs introduced by Mr. Crawford from the colonies for Mr. Throssel, and some animals imported from the Roseworthy Agricultural College by Mr. Morton Craig, and now owned by Mr. Rowell, the exhibitor." As it happens, the pigs introduced by Mr. Crawford were also from this College, so that it was a case of competing against ourselves. The prize list shows that out of eight prizes available, Mr. Rowell scored two firsts and a second, and Mr. Throssel one first and two seconds.

DEATHS.

YARROW (Canine).—During the October holiday, of influenza, faithful friend and follower of the Principal.

ROY (Equine).—On November 3, of acute indigestion, following on enteritis. Wise and willing; beloved by all who knew him.

Agricultural Old Collegians' Association.

THE first annual meeting of this Association was held in the office of the Minister of Education and Agriculture on Friday evening, October 9. The committee appointed to draft rules submitted the result of their labors, and the rules slightly amended were adopted as drafted. The election of officers resulted thus:—President, Professor Lowrie; Vice-Presidents, the Minister of Education and Agriculture, Sir Langdon Bonython, Professor Perkins, the President of the R.A. & H. Society, and Messrs. J. F. Martin, A. J. Murray, J. H. Angas, and H. Kelly; Treasurer and Secretary, Mr. T. E. Yelland; Committee, Messrs. H. A. Parsons, LL.B., L. H. Muecke, E. F. McBain, W. S. Birks, H. Robson; Auditors, Messrs. Leo Buring and P. Valentine.

FIRST ANNUAL DINNER.

The first annual dinner of the newly-formed Association of the Old Students of Roseworthy Agricultural College was held at the Old Exchange, Pirie Street, on Friday evening. The president (Professor Lowrie) presided over a large number of old students, and had on his right the Minister of Education, the chairman of the Agricultural Council (Sir Langdon Bonython), and on his left the Commissioner of Crown Lands and Mr. J. F. Martin. Mr. J. Miller, M.P., and Mr. H. Kelly were also present.

After the loyal toasts had been honored,

Mr. LEO BURING proposed the toast of "The Ministry and Parliament." The Government had done a great deal for the interests of agriculture and viticulture, and not the least part of the assistance given to the producers was that afforded by the educational work at Roseworthy. The Produce Export Depot was of great importance, not only in helping people to dispose of their wares, but in advertising the colony, and the Government were to be praised for what they had done in establishing the depot. The pastoral industry had not been treated as well as some others, but he hoped that would be ended when the present Bill was passed.

The COMMISSIONER OF CROWN LANDS, in responding, said the idea of the Association was a splendid one. He was glad Mr. Buring recognised that the Government were doing all they could for the industries of the colony, but they were merely doing their duty. As to pastoral legislation, if the present Bill would not revive the industry, then he was afraid that they must come to the conclusion that the pastoral country is no good, and that they must take a second place to countries which were richer and better. (Sir Langdon Bonython—"Impossible;" laughter and cheers.) The troubles of the pastoralists were caused not so much by bad legislation but by low prices for wool. He believed, however, with the aid of science applied to farming the colony, would go ahead very much. The Agricultural College and Professor Lowrie were entitled to great credit for the gradual diffusion of scientific knowledge, which was doing so much good. (Cheers.)

Mr. MILLER said he recognised that Professor Lowrie and the other masters at Roseworthy were really capable men, and well fitted to occupy their positions. (Cheers.) He was sure they were turning out agriculturists who would be a credit to the colony and who would advance the industry to a high standard. (Cheers.)

Mr. H. A. PARSONS proposed the sentiment, "Agriculture," which, he said, would commend itself to all present. He felt it an honor to have present the Minister of Agriculture, the Commissioner of Crown Lands, and Sir Langdon Bonython, whose great efforts in the cause of education had been justly rewarded by the Queen. (Cheers.) They also had Professor Lowrie with them. (Cheers.) And they could all call up pleasant and cordial recollections of their

relations with him and Professor Perkins in the old days at the College. (Cheers.) There was much truth in the observation of London—"The importance of agriculture is obvious, not only by its affording the direct supply of our greatest wants, but as the parent of manufactures and commerce. Without agriculture there can be neither civilization nor population." The agriculturists were, without doubt, the backbone of the colony, and they seemed about to realise those hopes of better times which had been so long deferred in a magnificent harvest. (Cheers.)

The MINISTER OF AGRICULTURE said the mantle of eloquence, which adorned the shoulders of the Hon. J. L. Parsons, seems to have fallen on his gifted son. He only regretted that he had adopted a profession which was, perhaps, not so noble as his father's. (Laughter.) He fully recognised that he was addressing a gathering of young men who knew a good deal more about scientific agriculture than he did, and he was only sorry he had not had their advantages while he was young. He fully agreed with Professor Lowrie that improved methods of agriculture were going to double the yield from the industry in South Australia. He hoped and believed that most of the students would settle in the colony, and that they would benefit, not only themselves and their neighbors, but the whole colony. They could not look to intercolonial markets very long, and they must look to foreign countries for the disposal of much of their surplus produce. He believed the Export Department was doing a good work in this direction, and one which deserved every support from producers. (Cheers.) He had learned a great deal from the Roseworthy farm and the methods adopted there, and he hoped to extend his knowledge still further by observations of the object lessons provided there. (Cheers.) He thanked them heartily for the way they had received the toast.

Sir LANGDON BONYTHON, who was received with cheers, on rising to propose the toast of the evening, "The Old Collegians' Association," said he would not like to say that without this Association the College could not exist, but certainly without it there could be no banquet that evening. (Cheers and laughter.) As Chairman of the Council of the Agricultural College he had to thank them for their courtesy in asking him to be present, and he highly appreciated the honor. (Cheers.) He warmly congratulated them on the establishment of this Association. Its existence showed that the old pupils were proud of their connection with the College, and there was every reason why they should be. (Cheers.) As they knew as well as he did, the College had a great repute not only in South Australia, but throughout Australasia, and even further afield, and this reputation was thoroughly well deserved, because the institution was thoroughly well officered. (Loud cheers.) In Professor Lowrie they had a gentleman who was the embodiment of scholarship and scientific farming—(cheers)—and the House Master (Mr. J. Haslam) enlivened the dreary places of science, for he supposed there were such, by the charms of music. (Cheers.) Then there was the sweetness and light inseparable from the presence of the Professor of Viticulture (Cheers.) In these circumstances it was no wonder that the students loved the old College—the wonder would be if it were otherwise. He sincerely hoped that this was only the first of a long series of annual dinners, that each would be better than its predecessor, and that in the success of the Association there would be conclusive evidence that the College was doing in the best possible way the work for which it was called into existence. (Loud cheers.)

Professor LOWRIE, who in rising to respond was heartily cheered, said he took the cheering as their wish that the Association, of which he had the honor to be the first President, should grow and thrive. The fact that so many old students had responded to the invitation to form an Association had pleased him very much. (Cheers.) He thanked Sir Langdon for the way in which he had proposed the toast. It was impossible to get all the old students together at

any one time, because they became scattered when they went out into the world. An instance of this was found in his own college in Scotland, men from whom were to be found in New Zealand, England, Egypt, Great Britain, Switzerland, America, and other places. Men from Roseworthy were scattered all over the North, and in New South Wales, Victoria, West Australia, and other countries, and good men they were, too. (Cheers.) In the circumstances he thought they could congratulate themselves on having got so many together, and he trusted they would be able to do a great deal to advance the interests of agriculture. Those who had attended the College had it in their power to prove its worthiness or unworthiness, and he hoped they would do credit to the tuition they received. (Cheers.) Apart from the students, he believed the College was returning at least something of the amount that was being spent on it by improving the methods of agriculture—(cheers)—but students should not forget that they were going out as examples of the worth of the teaching, and that critical eyes would overlook their work. They should resolve that their training should be a means of doing some good in the cause of agriculture in this colony. (Cheers.) He wished them every success in their future spheres of action. (Loud cheers.)

The other sentiments honored were "The Agricultural College," proposed by Mr. W. S. Birks, and responded to by Professor Perkins and Mr. J. A. Haslam; and "Absent friends" proposed by Mr. T. E. Yelland, and responded to by Mr. L. H. Muecke.—"Advertiser."

Notes.

E. B. Mugg is managing Menindie Boiling Down, Freezing, and Meat Preserving Company, at Wilcannia, N.S.W.; he is also an alderman of Wilcannia, and vice-president of the local hospital.

J. H. Stuckey is doing well, with his brother Norman, at Boogardie, W.A.

J. H. Goyder has written from Frome Downs, Waukaringa, congratulating us on the formation of the Association.

This opportunity is taken of impressing upon old students who have not yet joined the Association the desirability of doing so at once. Those who are already members are enthusiastic and hard-working, and it is sincerely hoped that by September, 1899, the membership roll will have been doubled at least. Subscriptions and communications to be sent to

38 Waymouth Street,
Adelaide.

T. E. YELLAND,
Hon. Secretary.

Trip to "Werocata" Station.

DEAR OLD PALS—To you, who, wherever you are, and whatever you are doing at present, still look back with pleasure to the jolly trips we have had together while fellow-students and bosom friends at the A.C.R., and who still like to hear of such expeditions on the part of the present students, with all details of the same, so that by the aid of such accounts and your own vivid imaginations,

"Your hearts may go back to wander there
And amid the dreams of the days that were,
You find your lost youth again,"

I feel it my duty to give a true and faithful account of one of the jolliest trips on record, which came off on October 29, 1898, to no other place than "Werocata" Station, near Balaklava, the property of Mr. S. S. Ralli.

About a month before the end of last session the invitation came, and gave us something to look forward to, even beyond the holidays, and was a star to lighten our gloom when we packed our portmanteaus prior to returning for the third session.

Now, if I tell you of how the weather changed suddenly two days before the date of our much-anticipated pleasure, and how it rained "cats and dogs" on Thursday night, and the Friday morning dawned cold and stormy: there being at the same time I don't know how many acres of unstooked hay waiting for us at the "Island"; of how on that Friday morning the "Pro" strode about with thunder on his brow until dinner time, and read that barometer until he must have known the thing off by heart; of how at times our hearts were sick with the fear that he would want all that hay stooked, and again were bright with the hope that after all it would be far too wet to attempt such a thing that day; and how just before dinner our worst fears were more than realised when we read a notice in the hall:—

"No 'Werocata' to-morrow. Every one out stooking after dinner."

Of how at first we stooked like mad, just to give vent to our feelings, and then stooked for dear life because we saw some hope of getting it all done that night.

Of our joy when the "Pro" relented and said that we should go after all; and of our triumphal procession home, and our enthusiastic entry into the College, which enthusiasm communicated itself to the house authorities, who in their excitement served up ham and eggs for tea. I am sure you will understand it all; having been here before and, therefore, quite able to fully appreciate the circumstances.

There is nothing like a little adversity to make us appreciate the sweets of this life as we should. The narrow escape from not going at all made us feel so "unfeignedly thankful" that we thought nothing of walking to Wasleys to catch the train; and instead of comparing walking with riding on the drag, we exalted it high above stooking hay; and we felt as the train hurried us on our way to Balaklava, that after all life was not altogether a "blank."

Alighting at Balaklava our kind host met us and put us in charge of "Robinson," an old student, who first took us over Mr. Blake's foundry, and from there led the way to dinner.

After dinner we drove at a spanking pace over to "Werocata" Station, and there began our tour of inspection.

Everything had been arranged so that we should see as much as possible. Unfortunately, all the shearing had been done; but there were samples of wool saved for us to examine, and the shearing shed is one of the finest. It is appointed with every convenience for clean and rapid shearing and subsequent treatment of the wool.

From the shearing shed we wandered wheresoever our host led us. Round sheep-yards, stock-yards, and out into the paddocks to see the stud "Shropshires." Among the things which we do not usually see when we make these expeditions, were throwing and riding a colt and de-horning cattle.

The latter operation was rather a trying one to witness. The poor brutes were crushed into a pen, their heads fastened down, and the horns shorn off as close to the root as possible. The knife used was, no doubt, very effective, and did its work quickly; but for all that, when it sliced its way through the horn and the blood spurted out, one could not repress a shudder. I am sure it should be

a solemn warning to us all, and to you my dear boys to whom I am writing, so to comport ourselves in this life so that in the next we may not develop horns that might be shorn off, or tails that might have to be docked.

After we had satiated our thirst for admiring sheep, horses, and cattle, we took a turn round the garden, and then afternoon tea was announced.

This was served in the shearers' kitchen, and we sat down in true shearer fashion with a tin pannican, tin plate, knife and fork, to Cornish pasties, hot scones and butter and tea.

There was nothing left after that but to drive back to the station and catch the train; and really I think that we had all seen and walked about enough by that time.

The College drag met us at Wasleys, and you may be sure we were all glad to see it. It was all very well walking *to* Wasleys, but walking *from* Wasleys would have been too much of a good thing altogether.

Since then the ordinary course of hay-making has gone on without interruption and almost without a hitch, and while I am writing some of the fellows are out carting hay; one binder is going, and the other is looking like a dismembered Chinese puzzle, from which you may gather that something has gone wrong.

Well, I can't go on writing for ever; "I must away." Your humble servant is on stock, and the "lowing herd" is patiently waiting for him, most probably in the farthest corner of the paddock. Heaven only knows when I shall "plod my weary way" back to the College to-night. Until our next happy meeting, believe me,

Yours very sincerely,

HARRY.

Trip to Kingsford.

IF there is anything which materially increases our knowledge as to the breeding and management of stock, it is the numerous invitations from some of our foremost stock breeders to spend a day in examining the fruits of their labors.

One of these much-looked-for outings is to Mr. J. H. Angas' station, "Kingsford." Here, under the guidance of the energetic manager, Mr. Forbes, we see, and have a chance to critically examine, one of the finest herds of short-horn and Hereford cattle in Australia. To once see these cattle as they were last August is to remember them for a lifetime.

They were then ready to go to Melbourne for the Show, and it caused a lot of excitement when Professor Lowrie asked us to vote as to the probable prize winners. This was rather a difficult matter, as the cattle are so even in quality. The general opinion seemed to waver between the white cow Lily Waterloo and Rose of Connaught, both excellent beasts, such as any man should be proud to have bred.

The old champion shorthorn bull, Lord Waterloo, has a close rival in a young two-year-old, Duke of Connaught, who threatens to outshine the imported animal in point of excellence.

Mr. Forbes was just preparing a number of yearling bulls for show which had just come up from the South. They were all well-made beasts, and next year should take a leading place in the show ring.

Among the Herefords, the old imported bull, Magician, still holds the first place, but he is getting old, and will soon have to give place to some of his stock. One yearling bull especially, if he does not depreciate, will put his sire "in the shade" in a year or so. He is an exceptionally good beast, and Mr. Forbes assured us that it is the best bull that he has ever seen.

After seeing all the stock on the place, we gave cheers for Mr. Angas and Mr. Forbes, and then journeyed home, all feeling that we knew a great deal more about cattle than we did before.

Vineyard Notes.

THE operation which stands out above all others during the winter and spring months is, of course, the cultivation of the soil, and with it the conservation of moisture. The whole of the orchard and vineyard was given two ploughings and such scarifying as was necessary.

A little hand hoeing was also necessary to kill such weeds as might have escaped the scarifiers.

Grubs were very bad this year, and to prevent them destroying young vines Paris Green was spread around that portion of the vineyard that was planted this year.

Dis-budding was carried out in the orchard as well as thinning of fruit. Some of the trees were cut down and used as stocks for grafting operations. Stray vines, which were out of this part of the vineyard, were also grafted with the surrounding variety.

Manures were applied to various parts of the vineyard and, judging from present appearances, have had good effects.

The vines are looking in first-rate condition and promise a heavy crop of fruit if the north winds do not scorch them up.

A considerable amount of wine has been bottled in the cellars. This is the first time any quantity has been bottled, and already satisfactory results have been obtained.

Other operations, such as tying up vines to protect them from breaking with the wind, have been done. All the young vines have been well manured with half-a-pound each of superphosphate, sulphate of ammonia, and kainite to give them a good start, and with the soaking the land has had they should grow well.

Farm Notes.

DURING the Second Session, fallowing, horse hoeing, &c., occupy a considerable portion of the time. The remainder of the new land has been broken up, together with some two hundred acres near the farm buildings.

Owing to some of the land being very stiff and the unusual amount of rain which fell, operations had to be suspended for a while, and in consequence we were somewhat late in finishing. However, the land is very clean now, and should carry good crops next year. One of the fallow paddocks was worked down and sown with Sorghum, along with nearly 1 cwt. bone-dust per acre. It is suffering from want of rain, but with a few showers it should do well.

Field No. 6A., which was sown with peas, and which looked so well in September, was completely ruined by the few weeks' hot, dry weather in October, just as the pods formed. The caterpillars also attacked the crop, and so the stock were turned in to eat it down.

The green fodder increased the yield of milk considerably, and the horses, etc., are looking first rate on it.

No. 6B. had a heavy self-sowing crop of clover, wild oats, and poppy on it, and in order to obtain good stuff for ensilage, and at the same time to get rid of the weeds it was mown and carted into the silos. Altogether it made about one hundred and fifty tons of silage.

Hay-making has been pushed forward since the 17th October, the binders going from daylight till dark. All the hay is cut now, and altogether about 500 tons have been made.

Some of the late wheats suffered from the hot north winds last month, thus considerably lessening the yield and, in fact, making it necessary to cut a lot for hay which would otherwise have been left for wheat.

In the manure experiments, so far as one can see, there is nothing to choose between that which has 2 cwt. super. and $\frac{3}{4}$ cwt. sulph. am. and $\frac{4}{5}$ cwt. kainite, and the one which has no kainite, thus showing that, at present, the land does not require potash. The only way to tell accurately is when the two are thrashed, and even then any difference may be due to the variations in the land. Of the single manures, English super., Burnard and Alger's concentrated manure, and Adelaide Chemical Works' super. are the best. The "no manure" plot looks well, and is probably feeling the effects of a dressing the land had in '95.

Of the wheat tests, Smart's purple straw, and King's look best. Smart's particularly should yield well. Several others which showed up at the early part of the season have been blighted off by the hot winds.

In the land plots there are a large number of first-class wheats which have done very well, whilst others are practically of no use at all, for this district at any rate. Among the best I may mention:—Innominate, Sunrise, Jerkin, Racehorse, Darwick, Bearded Innominate, Gluyas, Steinlie, Boart x Steinwedel, and Velvet Pearl, which have all done exceedingly well, and when grown more extensively should be amongst our foremost wheats.

In consequence of the heavy rains we have plenty of water in the dams, this saving a lot of carting.

The lambs this year are exceedingly good, especially the Dorset Horn and Merino cross-breds. This cross is likely to be a very useful one in breeding fat lambs. One of the lambs at five months old went 105 lbs. live weight, whilst the average was considerably over 90 lbs. Shearing was done after the holidays. Some of the ewes cut up to 13 lbs. of very fair wool. The advent of a professional wool-classer should be of great benefit to the students.

The mares and foals are doing extremely well this year. We have lost a good and willing worker in "Roy," who died last week from inflammation, caused through eating off the heads of the wheat while in the binder. His death will be greatly felt whenever there is heavy, hard work to be done.

Visit to Two Wells.

W.A.T.

THIS excursion took place at the close of last session, and was a welcome relief from the burden of sessional examinations.

The trip had been looked forward to with pleasurable anticipations for some weeks previously, and why on the arrival of the day every student did not

avail himself of the combined chance of instruction and amusement is an unanswerable question.

The start was made in the afternoon, a visit first being paid to the extremity of No. 3 paddock, in order that the hay crop might be compared with those passed on the road.

The drive was uneventful, but dusty, enlivened by occasional tootings of the bugle, and a little excitement as to which of our three cavaliers would first gain the turn into a straight piece of road.

On arrival at our destination we were kindly received by Mr. J. G. Dawkins, who at once commenced the exhibition of his stock. We began with sheep, being first shown a flock of Shropshire-Lincoln crossbreds.

Then Professor Lowrie went over the points of an imported Shropshire ram from which Mr. Dawkins expected to breed good mutton rather than wool.

Amongst other animals was noted a good Shropshire ewe, which had gained champion prize at Gawler Show.

Battle next claimed our attention, six rowdy young Jersey calves being critically examined in order to pick out the best.

Coming to the Jersey herd we were shown several good animals remarkable for milk yield, pedigree, and victories at Shows.

Notable among prize-winners was a precocious two-year-old bull, a son of Progress, who notwithstanding his youth had already won eight distinctions at various shows.

Having "done" the stock, shearing was the next item. After inspecting the shearers, Mr. Dawkins demonstrated the method of woolpressing, with which press and another press well known to Roseworthy Collegians a student ventured to draw a comparison.

True, the wool press worked quickly, easily, and neatly. But what is that in the face of the memories and associations that, like the old armchair, linger around our straw-press.

Returning to the shearing, with a little persuasion, our "long man from Caltowie" showed us how to shear. The exhibition, however, was cut short by the sound of the tea-bell, which peremptorily summoned the students to the garden, where under shady trees the refreshments were daintily set.

Amongst the attractions were well got-up buttonholes, which the guests gallantly wore in honor of the ladies who so kindly waited on them.

Tea concluded, and the usual speeches delivered, our host, hostess, and friends, and also the buttonholes, were heartily cheered. Then preparations for the return journey were made, but while these were in progress a wily shearer tempted one of our horsemen to mount and ride a buckjumper.

The evening was growing dusky and the general feeling pointed to it as a foolhardy feat in the uncertain light and in a strange paddock.

However, preliminaries arranged, the mount was accomplished with comparative ease, but alas for our half-raised hopes. The horse had hardly commenced performing before blue sky appeared between saddle and rider. Once, twice, and then our hero is secure—on the ground, whence he quickly rises to impart the information that he is "hanged."

After such a catastrophe it is thought best to hasten the departure, on which, when there is no danger of having to display their prowess in the saddle, the other great horsemen of the College show great prowess as critics.

No doubt, it was the anticipation of, and as training for the coming sports that induced several students to perform a great part of the trip on foot

—running behind the drag—but it would be interesting to compare the feelings of those men sometimes when they are obliged to walk to Roseworthy from the College.

No incident of note occurred on the way, and on arrival at the College everyone voted that it had been “an alright time.”

Norfolk Red Polled Cattle,

By “MARCUS.”

(Continued.)

Not only have the beef producing qualities of the Red Polled Cattle been worked up to such a meritable standard, but their milk yielding properties have also commanded special attention.

Stephen in his Book of the Farm says:—“The Red Polled Cattle are good beef producers, and are possessed of excellent dairying qualities. Indeed it is with very good reason contended that there is no other variety of cattle in existence which in so high a degree combines dairying and fattening properties. They are, moreover, a hardy race of animals, and exceedingly docile, mature at a moderately early age, and on the whole are an eminently thrifty and profitable class of cattle.”

There are many dairying establishments in England the produce of which is kept up exclusively by red polled cows. The milk records of the constituents of these various herds are periodically published in the “Live Stock Journal.”

To enable the reader to form some idea of the milk-producing properties of these cattle I have extracted the few following records from those tabulated in some of the numbers of the “Live Stock Journal” :—

RECORD FOR YEAR IN LBS.

Stud No., Name, and Tribal Distinction of Cow.	Calf.	1896.	Per cent. Butter Fat.	1895.	1894.
3,953 Countess—QI	6th	10,876 $\frac{1}{4}$	3·8	8,795 $\frac{1}{4}$	9,496 $\frac{1}{4}$
4,375 Stalham—U5	5th	10,217 $\frac{3}{4}$	3·5	—	4,003 $\frac{3}{4}$
6,192 Blossom 5th—A5	5th	8,529 $\frac{1}{2}$	4·0	10,024 $\frac{1}{2}$	7,352 $\frac{3}{4}$
6,330 Elmham Rosebud 4th—A1	4th	9,023	4·7	—	6,273 $\frac{3}{4}$
3,491 Handsome Belle—W2	—	7,220 $\frac{1}{4}$	3·8	5,360	12,056
4,891 Fawn—R11	6th	8,692 $\frac{1}{2}$	4·2	7,572 $\frac{3}{4}$	9,655 $\frac{1}{4}$
4,807 Carlista 2nd—A4	6th	8,097 $\frac{1}{4}$	4·3	9,182 $\frac{3}{4}$	7,838
4,997 Maggie—N2	6th	7,427 $\frac{3}{4}$	4·7	7,207 $\frac{1}{4}$	7,764 $\frac{1}{4}$
5,852 Pop 2nd—I Norf.	5th	7,355 $\frac{1}{2}$	4·1	6,813 $\frac{3}{4}$	9,402 $\frac{3}{4}$
5,409 Dolly—R11	5th	8,899 $\frac{1}{2}$	3·7	4,744 $\frac{1}{2}$	9,122

The above are selected from a list of some sixty-two cows, which is published in the “Live Stock Journal,” of May 28, 1897, and which comprises a portion of the famous Whitlingham Herd, where from 120 to 130 head of pure Red Polled cows are kept for dairy purposes. This Whitlingham Herd of Red Polls is probably the largest of its kind in the world. When I was in England in 1892 I had the very pleasing opportunity of seeing these same cattle. It is a grand sight to witness the herd quietly and peacefully grazing on the gentle slopes of their native habitat. They present a very striking aspect to one who has never before seen a herd of cattle, the individuals of which are so like each other in conformity, color, and disposition; and to see them stalled in their respective byres preparatory to being milked is, perhaps, even more impressive.

For want of space I have omitted the inclusion of the whole of the 62 records, from which those above are selected and have taken ten of the highest as being sufficient example with regard to the milking propensities of this class of cattle. The lowest of the 62 records was given by 8,391 "Buttercup"—P3, who in 1896 gave 5,322 $\frac{1}{4}$ lbs. of milk, containing three per cent. butterfat.

The percentages of butterfat were taken when the cows were on pasture (rye grass) only. The highest percentage of butterfat comes from one 8,686 "Little Lass"—A22, who gave in 1896 6,032 lbs. milk, containing butterfat 5.5 per cent. The lowest comes from 7,787 "Daisy Girl"—H2, who in the same year gave 6,809 lbs., containing 2.8 per cent. butterfat.

I myself have had little or no practical experience with regard to the milk-yielding properties of the Red Polled cattle, except when an odd cow or two has been milked at different times; thus I am not in a position to quote any results in this respect from the cows under the influence of Australian soil and climatic conditions, but I can corroborate very substantially what has been said of the experiences of English breeders with regard to their hardiness, adaptability to put on fat and docility, also their prepotency.

The last three years has given me ample opportunity of judging for myself the amount of hardship these cattle will endure. During that time we have had—as has unfortunately been the case over the greater part of Australia—three successive bad seasons, and it has been a very difficult matter generally to keep stock on their feet.

It is not my intention in these lines to extol the merits of the Red Polled cattle at the expense of any other variety; but since the qualities of any one thing can be best arrived at by the comparison with others, it will be necessary for me in order to gain my point to compare the merits of the Red Polls with those of other cattle, existing under precisely the same conditions.

There are on the Belmont Park Estate, cattle of the varieties of Shorthorn, Black Polled Angus, and Red Polled. The whole of the female section of these breeds run in paddocks together in the winter time, and are subject to the same general conditions of life.

From careful observation taken during the period of the three years of drought already mentioned I have arrived at the following results:—

Out of 85 Shorthorn cows	25 died=30 per cent. nearly
" 8 Black Polled Angus cows	4 " 50 "
" 42 Half-bred R. Polled x Shorthorn heifers		nil
" 7 Half-bred R. Polled x B. Polled heifers		nil
" 24 Pure Red Polled cows and heifers		nil

All the above stock had exactly the same treatment, and were not receiving any artificial food whatever, except in the case of four of the Red Polled cows that were being treated for the show in 1896. In fact, nearly all the deaths occurred in the winter of 1895, which was a particularly cold one, and pasture was exceedingly scarce. The whole of the stock were running in the same paddock during the period spoken of.

I leave it for the reader to draw his own conclusions in respect to the thriftiness and adaptability of the Red Polled cattle in this country.

The absence of horns is a very potent factor in the utility of these cattle for back country stations, whence they have to be trucked to the metropolis. They take up much less room than horned breeds, and cannot injure each other in the same degree. It is a very pitiful sight to behold the conditions horned cattle are subjected to during their transit on the railways. Crammed in as tightly as possible in the trucks, with scarcely enough room even to admit of the free use of their respiratory organs, gored and bleeding from the effects of their struggle for more room, the conditions under which these poor animals have to exist are to be seriously deplored.

While the Red Polls and their crosses hold their own with impunity in the test for the survival of the fittest, they respond very gratefully to generous treatment, and during good seasons they put on fat very rapidly.

At the stall the many young bulls and heifers that I have had to do with behave very kindly. They are possessed of a very quiet and docile temperament, feed well, and it requires a very small amount of fodder to maintain them and promote them in their growth.

My experience of the prepotency of the breed bears out precisely what has been found in England. While a good many of the crossbred steers, the result of Red Polled bulls and Shorthorn cows, have small snail horns, only two out of the forty-two heifers of like breeding in the Belmont Park herd have small slugs, the rest being totally polled. They are all uniformly red in color, except in the case of two or three, which have a little white or roan.

These half-bred heifers, although their dams are poor milkers, exhibit splendid shows for milk producing, and rear their calves up in the pink of condition, while their beef-producing qualities are still maintained in their large-framed, blocky bodies.

Now, it has been declared by many that the milk-producing capacities of cattle are quite incompatible with their flesh-forming qualities. It has also been stated by experienced breeders that the beef of good milking cows, when they are fattened, is far superior to that of poor milkers.

Be these as they may, it is not my intention to discuss them here. The records, both of fat stock and milkers already mentioned in this article, might be some guide to those who desire to know how the Red Polled cattle stand with regard to beef and milk-producing qualities—qualities which, in my opinion, should be eagerly sought after by Australian dairymen, especially those whose holdings are somewhat remote from towns and comprise many acres. In such places as these the general purpose cow is the most desirable, inasmuch as when she has gone through the best of her lifetime as a milk-producer she is ready to be fattened to take her place in the markets as a beefer. Moreover, the male section of her progeny has not been deprived of life in its very early stages, as is very often the case with the steer calves from milkers proper, but they have been reared up without much inconvenience and sold at good market rates either as fat calves or bullocks, thus forming a very valuable adjunct to the farm.

The Annual Sports and Dance.

THE second session sees the curtain fall on the 1898 football season, and attention is turned to the Students' Notice Board, where a long and attractive programme is set up for our Annual Athletic Sports.

The Committee generously agreed to present 18 events, to give each one of forty students a chance of showing his prowess in his own particular branch of sport.

So well was their magnanimity rewarded that 35 students responded with their entrance fees, and this enabled the Committee to considerably augment the prize fund this year.

Besides the aggregate collected from the students, our prize-list was handsomely enriched by specials from the two Professors—a barometer, the gift of Professor Lowrie, and a handsome silver cup from Professor Perkins.

Several gentlemen interested in the College also came to our assistance with donations, and our thanks are greatly due to them.

Soon after the entries were out a few of the students began to make an early preparation of themselves, and all sorts of rumors were about of the great doings of some on the track.

Great interest is always taken in the year's recruits, to see whether any good material would be revealed. It was soon evident that the fresh men had good stuff among them, and that they were going to have a great say in the results.

Sports day turned out to be perfection, as far as the weather was concerned, and this led to a large assemblage of onlookers.

Good fields, exciting finishes, and fast times provided an interesting afternoon's sport.

One feature of the 1898 sports was that four of the College records were broken, Tothill managing to surpass all previous results in the 100 yards scratch, the 440 scratch, and putting the weight, whilst Read accounted for the other record, his high jump of 5 ft. 8 in. not being likely to be beaten for many years.

The first event proved a good thing for Nicholas, who kicked fairly well, though his distance fell far short of previous years' attempts.

The 135 Yards Handicap, previously run off in heats, brought out seven candidates for the final, and Rowe's 10 yards handicap was too much for the rest.

Tothill, as stated above, accounted for putting the 16 lb. weight, with the remarkable distance of 27 ft. 7 in.

The Half-Mile was won by a new student, Weaves, and his performances during the afternoon show that he will have to be watched carefully next year.

H. D. M. Adams, on the 18 yards mark, walked in easily in the 120 Yards Hurdles.

The High Jump, with three competitors, was a good contest. Though Read cleared a remarkable height, yet Eyre and Rowe proved worthy opponents, and in justice to the former it ought to be said that he was suffering from a very sore pair of knees, which accounted to no small degree in his disappointing his supporters, who were confident of his capabilities of beating the winner.

Tothill won the 100 Yards, after a splendid finish with Rowe and Martin, and got over the distance in $10\frac{2}{3}$ seconds.

The Mile was not a success, and demonstrated a lack of training in the runners. Rowe was successful in winning the Cup, but such a prize was worthy of keener support and a better result.

Goddard threw the cricket ball further than Freebairn, and so became owner of his missile.

The Scratch Hurdles brought Read to the fore, showing his adaptability once more in clearing the sticks. He also accounted for the next event, the Long Jump.

The 440 Yards Scratch was a most exciting contest until 5 yards from home, when Martin had the misfortune to trip, whilst leading by about a foot. It was a ding dong struggle until this piece of ill-luck, and our sympathies ran high for our energetic Secretary.

The Sack Tournament and Obstacle were amusing, and Read took both prizes, but Baily might have accounted for the latter if he had had three years hard training at "rockies" like the winner.

Many old acquaintances appeared to face Mr. Williams, the starter, for the Old Scholars' race, and Formby, by his performance, appears to have been on the track since he left us.

Rowe caught the greasy pig, and so the unwilling captive became his property.

The Consolation was won in good style by Chillingworth, and this brought to a close a thoroughly enjoyable sport.

A rest and a good tea and the first event for the evening's sport—the Annual Ball—was started.

Secretary Faulkner and his committee had worked very hard to make everything a success, and the great array of decorations, the supper, and the floor all bore testimony to their excellent preparations.

Indeed, the double enjoyment was such as to cause all the lucky ones present to remember the afternoon and evening of September 30, 1898.

The Shearing at Concordia.

BY A THIRD YEAR.

THE annual visit of the third year students to Concordia, in order to witness the shearing of Mr. A. J. Murray's prize sheep, took place on Monday, September 19th. The students, to the number of seven, were accompanied by the Professor and Mr. Lowrie, who but recently arrived in this colony from Western Australia.

The morning was by no means propitious, numerous dark rain-clouds obscuring the sun's rays; and at frequent intervals clouds of dust would be blown with no very gentle force upon any person brave enough to expose himself to their fury. This dust spoilt the drive, which would otherwise have been a very enjoyable one, for as the day wore on the threatening rain-clouds were gradually dispersed by the accumulated heat from the sun, leaving us to make the best of a warm, gusty day.

A start was made at 9 a.m., the pagnell as well as the trap having been called into requisition. The familiar although by no means dreary drive from the College to Gawler was accomplished in a little under an hour, the city of Modern Athens being reached a few minutes before 10.

From Gawler to Concordia is a drive of some six miles in an easterly direction through hilly country. This we safely accomplished, arriving at Mr. Murray's station at 10.45 a.m.

The shearing of the sheep afforded an object-lesson to the students, who were greatly impressed by the careful and yet seemingly easy manner in which the shearers did their work. So closely is the wool clipped off that no more than a third of an inch of wool is left on the sheep, and yet so evenly are they shorn that they have the appearance of having just emerged from a mould.

In the shearing of these prize sheep much more care is of course taken than would be given to each individual sheep in a flock of say 100,000. In fact hurry is a thing quite alien to Mr. Alick Murray and his able assistants in the performance of an operation in which the difference of half-an-ounce one way or the other is serious.

The sheep having been caught, the shearer lays it carefully on its back. He then makes an opening in the wool with his fingers on one side of the sheep, just in front of the junction of the hind leg to the body. Having made the opening, he inserts his shears and very carefully proceeds to clip the wool off. When half the wool has been removed, that is to say, when the wool from half the back, half the stomach, from one front leg and one hind leg has been clipped off, an assistant standing by carefully straightens it out on the floor, and covers it up with a piece of clean white calico measuring about 4 ft. square. This is done to keep the wool clean and to prevent the accidental introduction of foreign matter. The remainder of the wool is then removed from the sheep by

the shearer, and the sheep removed by him to one of the pens at the back, set apart for the reception of the shorn sheep. The cloth is then removed from the wool of half the sheep lying on the floor and placed on one side.

The wool is next carefully gathered up and laid out on a piece of oilcloth spread out on a bench. In this position the little skirting necessary is performed by Mr. Hamilton, Mr. Alick Murray's head assistant. The fleece is then again covered with the calico, after which it is carefully picked up by two men, one stationed at either end, turned completely over, and again placed on the floor. The oilcloth on top is then removed.

It is now that the great skill of the shearer is rendered most manifest, for on removing the oilcloth, the whole of the fleece is discovered to view in exactly the same position—staple for staple—as it would occupy if removed from the sheep by some automatic machine.

The fleece is now carefully folded in at the neck and sides, after which it is rolled up in the calico by two men, one at either end, both of whom working towards one another, give the wool, when rolled up, the appearance of a double knapsack. In this form the fleece is again placed on the table, sewn up, weighed, and marked.

Hurry is a thing foreign to the whole proceedings from start to finish, Mr. Murray's object being accuracy before everything else. To demonstrate this it may here be said that at no time were more than four sheep being shorn together, and when these were finished all the fleeces were carefully gathered up, skirted, weighed, marked, and stowed away before four more sheep were brought out to be shorn. This, although entailing considerable loss of time is, undoubtedly, the best course to be followed in shearing and weighing the fleeces of prize sheep. The length of time occupied in shearing each sheep was about 20 minutes.

Having thoroughly inspected the method of shearing and getting up the wool, we next followed Mr. Murray through a door at the back of the shearing room, which opened into a large room temporarily divided into two by a moveable wooden fence, about 3 feet 6 inches high. Those sheep which had been shorn were relegated to one half of this enclosure, while the other half was occupied by those animals still in possession of their fleeces.

Among these latter we saw six very fine ewe lambs, barely six months old and yet when shorn (only an hour or two after being seen by us), these six youngsters actually averaged 6 lbs. 11½ ozs. of wool each.

Soon after one o'clock the shearers knocked off work to partake of the dinner which they had so well earned, an example which was followed very shortly afterwards by Mr. Murray and his guests.

After lunch Mr. Murray entertained us with a few practical hints on sheep-farming. Among other things on which Mr. Murray expressed himself with particular strength, was the slipshod, slovenly manner in which really first-class farmers breed their sheep. These men, who are using the most modern implements in their practice, take the greatest care in the selection of their wheats, and manure their crops, actually put out their lambs to fatten, and as soon as the majority of these are in good condition, carefully separate the fat ones from the weeds which won't fatten, and while drafting the fat lambs off to market, reserve the weeds to breed from.

On the face of it this seems a very short-sighted policy, and yet we are assured that not only has it been practised in the past, but that it is still practised, and that, too, by farmers who are looked up to as really first-class men.

By this time the six ewe lambs, before referred to, had all been shorn, and their place were now taken by twelve very fine ram lambs, only just six months of age. Before being shorn these embryo rams were first de-horned. This de-horning, which consists in stripping off a piece from three-quarters-of-an-inch to

an inch in length, from each horn, and effected by means of a very ingenious but very simple instrument, is done in order to prevent the rams from spoiling the wool on the backs of the other rams or ewes.

Mr. Murray mentioned that although the sale of merino rams by auction in Adelaide during the September Show week was a partial failure, yet he had sold more rams privately this year than ever before. Among the more notable sales may be mentioned a consignment of several to South Africa at prices varying from £50 to £130.

Queensland also succeeded in attracting a portion of Mr. Murray's attention, some half-dozen rams being shipped to Bananaland, the prices of which ranged from £50 to £70; while several more at the same price were sent to New Zealand.

The majority of the rams sold by Mr. Murray, however, vary in price from £10 to £30. These animals, although of course inferior to the high-priced prize ones, make excellent flock rams, and serve to greatly improve the quality of the wool grown by the men who have been fortunate enough to secure them.

Both Mr. Murray and Mr. Waite, who was present to witness the shearing of these prize sheep, were agreed as to the almost uniform impossibility of purchasing sheep by their teeth, after two years old, such sheep having been fed on country north of Gawler, as the rough feeding knocks the teeth out. As far north as Gawler, or south of Gawler, it is possible to tell a sheep's age by the teeth up to $2\frac{1}{2}$ years, as of course, the sheep feeding on this country have an easier time than those running on the dry and arid districts further north.

Mr. Murray breeds from between 400 and 500 stud ewes and about 2,500 flock ewes. These sheep are only kept at Concordia during the winter-time. When the hot weather comes on they are drafted off to Mt. Crawford. This is done owing to the grass-seeds and other objectionable matter, which is more plentiful at Concordia than at Mount Crawford, and which getting into the wool spoils much of it.

A little before 4 o'clock, having thanked Mr. Murray to the best of our ability, in the shape of three hearty cheers, a start was made for the College, which was reached at about 5 p.m., after a most instructive as well as enjoyable outing.

The following weights are those of the fleeces of the prize ewes. They should repay perusal.

ONE YEAR CLASS.			TWO YEAR CLASS.		
Prize.	Weight of Fleece.		Prize.	Weight of Fleece.	
1st	..	16 lbs. 2 oz.	1st	..	18 lbs. 1 oz.
2nd	..	14 lbs. 10 oz.	2nd	..	17 lbs. 13 oz.
3rd	..	16 lbs. 9 oz.	3rd	..	16 lbs. 8 oz.

In reference to the ewes shown in this class, the judge, remarking on the great difficulty he had in placing the first and second sheep, mentioned that the ewe which secured first prize was a little longer in the body, possessed a slightly better neck, and was a trifle denser in the wool than the reserve champion.

THREE YEAR CLASS.

Prize.	Weight of Fleece.	
1st	..	15 lbs. 4 oz.
2nd	..	15 lbs. 4 oz.

In addition to these ewes, and the six ewe-lambs which averaged 6 lbs $11\frac{1}{2}$ oz. each, the twelve ram-lambs which were also shorn during the day averaged 7 lbs. 1 oz. of wool each.