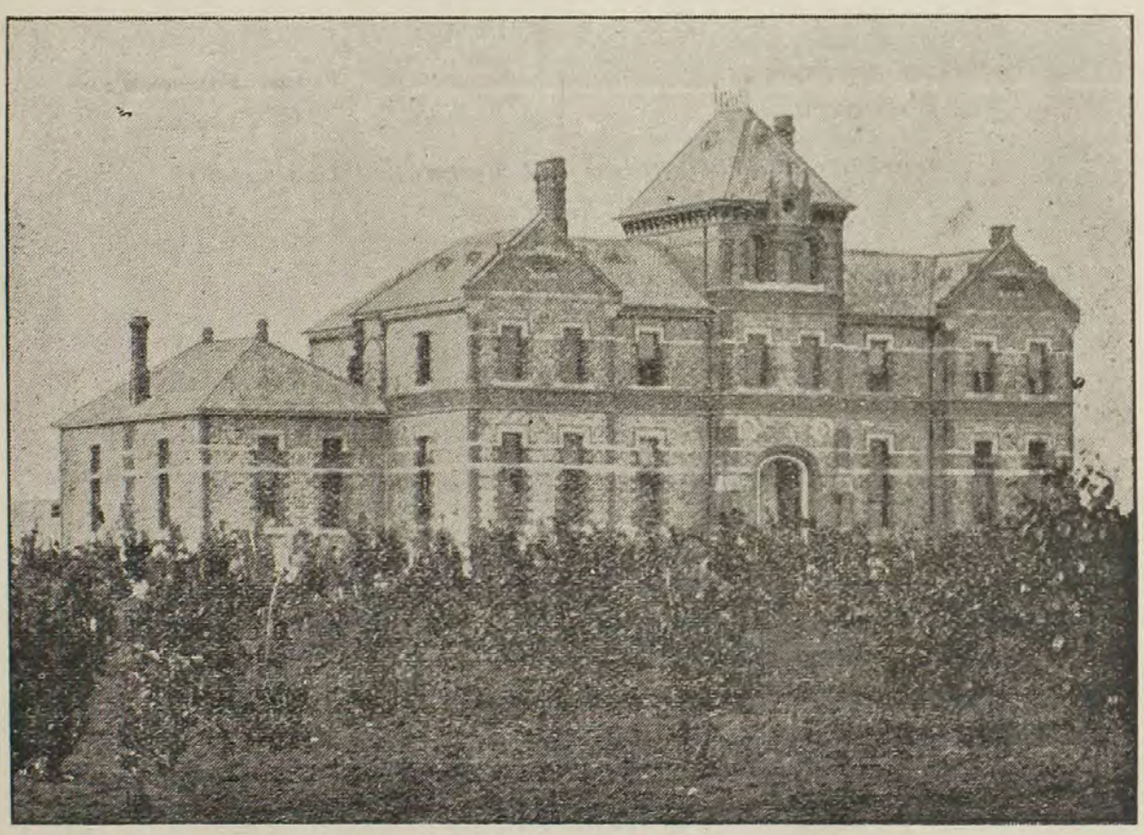
Vol. I.—No 3.

MARCH, 1898.

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

. . The . .

Roseworthy Agricultural College . . . Student.



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Agricultural College, Roseworthy.

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

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THE HON. JOHN A. COCKBURN, M.D., M.P.

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EWEN F. MCBAIN.

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.
H. A. Phillips.
W. B. Ralph.
W. B. Read.
J. W. Sandford.
S. P. Taylor.

Second Year.

A. H. Bills.
W. V. Camper.
F. Chapman.
J. H. Dawkins
W. L. Dickson.
A. V. Eyre.
W. L. Freebairn.
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.

Jno. Adams.
H. D. M. Adams.
P. J. Baily.
M. Le G. Halthouse.
G. S. Milne.
W. J. Sutherland.
E. Tavender.
G. Warnes.

THE

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

Introduction.

"Our new year" is now a month old. The erstwhile third year men have gone, and the new students are quickly becoming accustomed to College life. Amongst those whom we now call old students, but who were of the latest to leave us, Colebatch, Lewis, Pritchard, and Gordon deserve special mention just here because of their splendid work for this paper. Colebatch, as senior editor, displayed an intelligence and enthusiasm worthy of a much older scribe, and the skilful management of Lewis will be evident from the balance sheet to be given in our fourth issue. The new officers take this opportunity of expressing the hope that the same help which their predecessors enjoyed may be continued both by present and past students. We feel that only then will the "Student" be the success it ought to be.

We have started the new year well. Thirty-seven students are in residence at the time of writing, while at least three more are entering within a month. Then, too, work has been begun in real earnest, both in the lecture or study rooms and on the farm or vineyard. A good beginning has often proved to be half the battle, and we cannot have a better hope than that there may be no "turning back," but that the year's record will show a steady upward pull, to be crowned at the end with the success it will then deserve. *Respice finem.*

The College Wine Cellars and the Past Vintage.

THE FERMENTING ROOM.

Two years ago the College Wine Cellars were started, the first stage being the erection of the fermenting room, which is a stone building about 50 ft. x 25 ft., with an iron roof; the ceiling being covered to a depth of 6 inches with seaweed. In view of contemplated extensions, the north wall was let down to a depth of 18 ft. The east end of the building was put up temporarily with galvanized iron. Along the south side of the room are situated five cement fermenting tanks, each with a holding capacity of 1,000 gallons, and provided with a 3-inch draw-off pipe, corresponding to each of which is a similar opening through the north wall, to allow of a hose to pass through into the second cellar, and thus empty the tanks by means of gravitation into 1,000-gallon vats,

provided for the reception of the new wines. At the east end of the row of fermenting tanks is the platform which carries the crusher. A shute, provided with a trap-door over each fermenting tank, leads from the crusher to the press, situated at the west end of the tanks. The must can therefore be admitted, by removing the trap-door, into any tank it is desired to fill, or, as in the case of white wine, all the trap-doors are shut down, and the must run straight into the press, where it is separated from the skins before fermenting. Between the fermenting tanks and the north wall is a space of 15 ft., provided for the storage of white wines. This was our only storage space for the '96 and '97 vintages, and, as may be imagined, was therefore taxed to the utmost.

On a raised platform outside, and at the west end of the fermenting room, stands a 2,000-gallon water tank, connected with which is a water service pipe leading a little above and right along the front of the fermenting tanks; this pipe is so fitted as to be readily connected, during fermentation, by india-rubber hose with the coolers.

THE SECOND FLOOR AND UNDERGROUND CELLAR.

About December 1 last year Messrs. James and Co., of Tanunda, commenced operations on the second portion of the wine cellars, which consisted of an underground cellar, 50 ft. x 25 ft., with a storage room of the same size directly above it. The floor of the top storage cellar (or the second floor) is about 8 ft. below the floor of the fermenting room, and 9 ft. above the floor of the underground cellar.

Starting work with four men, and then increasing the number to five, and two drays, the excavation was completed in less than three weeks. This finished, building operations were commenced in real earnest; six masons, with the necessary laborers, bringing up the wall in very fast time, so fast, indeed, that notwithstanding the break in the works caused by the Christmas and New Year's holidays, followed (in spite of the efforts of the foreman) by the inevitable "swelled head" days, the whole contract, with the exception of finishing off the underground floor, was by the 1st of February completed. The substantial floor of the top room was no sooner passed by the Public Buildings Department, on January 31, than, to make room for the coming vintage, racking was started, and on the morning of February 2 all the wines had been transferred from the fermenting room to the second floor.

THE VINTAGE.

The next few days were spent in getting everything in readiness for the vintage, and on Wednesday morning the engine was removed from its accustomed place at the farm, with five horses to negotiate the "sand hill," and placed in position at the wine cellars, ready to work the crusher on the following morning. The students returned from their holidays on Wednesday evening, February 9, and next morning, favored by lovely vintage weather, thirty odd students, armed with buckets made from kerosine tins, and two more students each with a horse and dray, under the direction of Professor Perkins, started the picking and carting operations; while three more were allotted cellar work with Mr. McBain, and by 7 o'clock the College vintage had commenced.

Though there were not enough pickers to keep the crushers going continuously, still three days sufficed to finish picking the twenty-eight acres, and as the grapes from each variety of vine had to be kept separate, and weighed at the cellars before crushing, the cellar hands were kept busy.

Altogether three tanks were filled with must for red wine, and three puncheons and three hogsheads for white wine. Fermentation started in each case the following day after filling, and owing to the perfect vintage weather that prevailed right through, each fermentation was all that could be desired. The coolers, of course, had to be used. These were put on in each case as soon as the temperature reached 25° C., and a constant stream of cold water kept

running through them, so that there was no difficulty in keeping the temperature within bounds. The cold water problem had to a great extent previously been solved by thatching the tank to a depth of about 6 inches all over with vine cuttings.

As soon as each tank was filled with must, and before fermentation had started, the initial temperature and density were taken and noted down. After fermentation started the temperature and density of the liquid were taken twice a day till near the completion, when they were taken still more often.

As soon as the density reached 1,000 (the density of water) the new wine was run out into casks, and the skins thrown into the press to extract the remaining wine.

The whole of the notes on temperature, density, &c., taken during fermentation are written in the "Cellar Book" for future reference. After all picking and crushing operations were completed, and while fermentation was in full swing, all the students assembled in the cellars, to hear Professor Perkins explain the why and the wherefore of the various operations that had taken and were taking place, in the course of which they were advised to get a copy from Mr. McBain of notes that had been taken during vintage, so that they might be prepared to answer any questions bearing on this subject that might be asked later on in their examinations. After the last vat of wine had been run off, the skins pressed and carted out to the cattle, a general cleaning up in the cellars ensued, and a most pleasant and enjoyable vintage, resulting in about 2,300 gallons of wine, came to an end.

Round the College.

"No. 3."

"SHORT and to the point" aptly describes "No. 3" in general. His expression, his speech, his actions, bespeak activity, and intelligent activity at that. "No. 3's" moustache *is* growing, and just now he is devoting considerable time and trouble to training the budding article in the way it should grow. He enjoys a joke, and shows his appreciation of such by emitting the characteristic merry chuckle so often heard in and about the College. As to social qualities, our subject neither sings nor recites with much effect, but when the dining-room floor is prepared "No. 3" is quite at home, nor does he ever seem to lack a multitude of partners at our dances. Sunday is always a joyful day for him; if you ask him why, he will probably only smile. So do we. "No. 3" is an all-round athlete—football, cricket, and running claim his attention as their turn comes round. His brilliant rushes in the football season of '97 are still remembered, and on the cricket field he has improved a great deal. His work, inside and out, is always done well and with a will, and the one who is ahead of him next February will have beaten a worthy opponent.

New Students and our Roll Number.

As we "go to press" the number of students in residence is 36, but there are still other new students to come, and the prospect of a "record house" for 1898-99 is now almost certain. To the new-comers we offer a hearty welcome. Here are their names:—J. S. Malpas, Willunga; I. Way, Adelaide; W. A. Terry, England; W. L. Freebairn and A. J. Freebairn, Alma; U. W. Seppelt, Seppletsfield; J. P. Richardson, Saddleworth; H. D. M. Adams, Saddleworth; Jno. Adams, Smithfield; M. Le G. Holthouse, Kapunda; G. Warnes, Koomooloo; P. J. Baily, Adelaide; W. J. Sutherland, Millicent; E. Tavender, Lucindale; A. Eyre, Caltowie; G. S. Milne, Adelaide.

Obit.

We regret to announce the death of Stella, who served us faithfully on the farm for some years. Stella will be remembered as a fine, upstanding draught, who was never known to have shirked her duty in any way. Her valuable services will be remembered in connection with moving many a heavy load on more than one occasion. Her great friend Nevis, who lived next door, regretted her death so much that we found the only way to console him was to give him another neighbor. Till was therefore chosen, causing much jealousy on the part of Roy, who became so desperate that he took to bolting. Stella's death was due to inflammation of the bowels, following on colic ; all that we could do was done, but in spite of the efforts she passed quietly away. A *post mortem* held afterwards showed that she must have suffered intensely. We shall miss her very much in the seeding operations.

Farewell! Third Year Students.

With the end of our College year in February came the time for the third year students to leave us and take up their work in various parts of the colony. After the Diploma exams. there was general rejoicing ; suspense vanished when the results were up, and then they went in for a last good time before leaving the place.

Colebatch worked hard for the gold medal, and was rewarded for his pains. He also got quite a small library, to say nothing of that seed-sower so necessary to a poor, struggling farmer who cannot afford a drill. As he is going to England to study, he will not want it yet, and can look on it only as a memory of the past.

Great was the excitement when it became known that Pritchard had carried off the silver medal and also the Oenology and half the Viticulture prizes. It is rumored that he is seriously thinking of starting a circulating library at Brighton. He was always an energetic member of sports and dance committees, and could always take as well as give a joke. In years to come, when we hear of the famous wines of Mr. Pritchard, we will see the good which a thorough grounding in and close attention to the course at the Roseworthy Agricultural College will do. If questioned as to whether he would like to come back, he would surely answer, "Oh, yes ; probably I should."

Gordon (Brooker Bill) seems to have hard work in getting land to expend his labor on. At present he is in Adelaide, besieging all the land agents he can find, and as land is a scarce article in South Australia, he thinks of going to the West to make a start.

Yelland has gone home to Milang, and is occupied with dairy farming. Perhaps he will some day send us one of his cheeses to try, when he is in full swing and has a name for dairy produce.

James (Demer) got home in nice time to help in clearing up the harvest, and will be able to show them how they thatch at the College. He will have to work if he wants to thatch three stacks a day.

Lewis has gone to Port Augusta to take charge of a large orchard. He is exceedingly lucky in getting such a good start, as the place is on the direct line to Broken Hill, which depends on South Australian produce for its market.

Happy Burden has also had some difficulty in getting a start, and is at present at his home at Magill.

Last, but not least (except in size), we remember Lockyer (Crusty). He is chasing wild cattle on his brother's station. There is great curiosity as to whether he still is true to his vow, and keeps that mo. shaved off. Any information on this point will be gladly received.

I must not forget to mention the names of other than third years' who have left. Patrick is one of the departed students, though a second year. His memory is still as bright with us as those famous jokes he used to make. He became tired of agricultural life, and left us to take a tour round Western Australia, then perhaps he will proceed to England to study. I hope he will always remember us and send along a few of those puns and jokes for which he was so famous. H. Richardson, too, has gone, but only for a time we hope. At present he is assisting his father on an orchard in the South-East. His article contributed to this number of our magazine is a proof of the interest he still has in the College.

Whether third or second year students, when they leave we all remember them, and think of the times we have spent together at the College. We all join in wishing them every success in life, and hope that they may maintain the credit and good name of the College where they obtained their knowledge.

Speech Day.

[*S.A. Register.*]

THE annual demonstration and distribution of prizes in connection with the Roseworthy Agricultural College took place at that institution on Friday afternoon. A number of visitors, including the Commissioner of Public Works (Hon. J. G. Jenkins), and Messrs. J. Hutchison, M.P., A. Molineux (Secretary of the Agricultural Bureau), and H. Büring, journeyed to Gawler by the train, leaving Adelaide at 11.20 a.m., and on arrival at Modern Athens were met and driven over to the College in drags. The fair sex predominated; perhaps it was the anticipation of a ball in the evening that attracted the ladies, notwithstanding the intense heat.

THE COMMISSIONER OF PUBLIC WORKS (Hon. J. G Jenkins) presided at the distribution of prizes. He apologised for the absence of the Minister of Agriculture (Hon. Dr. Cockburn) and Mr. J. L. Bonython, the Chairman of the Council, and Mrs. Bonython, who was to have distributed the prizes. The Chairman said he was extremely pleased to see so many present, considering the heat. The people of South Australia were beginning to learn gradually what the College was doing, and what it would do in the future when it was further developed. Already old graduates from the College were to be found not only in nearly every part of South Australia, but in nearly every part of Australia. Many of them were doing good work, perhaps not in agriculture, but the experience they had gained at the College had been of great benefit to them in whatever undertaking they were carrying out. It was an old saying that he who made two blades of grass grow where only one grew before was a benefactor, but a man like Professor Lowrie, who made 100 stalks of wheat grow where nothing grew before, was a tenfold benefactor; and so was a man like Professor Perkins, who made beautiful vineyards grow were nothing but limestone used to decorate the plain. He must not talk about manufacturing wines, because the present Ministry had been accused of being a teetotal Ministry, and they had been told that they must never mention wine or they would be chid by some of their friends. While being a teetotaller himself he had nothing to trouble his conscience as far as advocating the export of wine was concerned. The wine was bound to be made, and so from a teetotaller's point of view what better thing could be done than export it out of the colony, and let somebody else drink it? Professor Perkins was trying to get the growers to make a good wine, so that they would be able to export it and get a high price for it. Truly, in the interests of temperance it was far better to manufacture a good than a bad drink. The work of the College was growing in usefulness year by year, and next year the number of students would be larger than ever before. It was a

pleasing fact to note that the students next year, with the exception of one, would come from the farmers, and that was one of the main points they had to deal with in order to settle the people on the land. The great object of every farmer's boy, it seemed to him, was to get to the town and get some soft situation. Situations around town were not so soft as they used to be, and the salaries were not so large. The farmer's expenses were less, and he went to bed far more comfortable and happy than the clerk. As Mark Twain said, "The agriculturist goes to bed knowing that his crop is growing if the grasshoppers don't appear." The Government were pleased in having such a capable staff to preside over the destinies of the College, and he thought the farming community as well as the commercial community recognised that the staff now at the College was composed of really able and practical men, and the farmers were beginning to take the advice which the College offered, knowing that it was correct and truly given. He referred to the great benefits the farmers had derived from the lessons taught as to the use of artificial manures according to soil and varying climatic conditions. He congratulated those who had taken prizes, and wished those who were leaving the institution every success. They must not, however, forget those who had not been successful in gaining awards, because there was no doubt a great deal of merit and perseverance to be found among this division. He exhorted those who had not taken prizes to so thoroughly go on with their work that in ten or fifteen years they would win higher prizes in the knowledge of agriculture in what they could get out of the soil. (Cheers.) Mr. Jenkins then presented the prizes as follows :—

CLASS PRIZES.

Angas gold medal and first on diploma list—W. J. Colebatch.

Angas silver medal and second on diploma list—A. G. Pritchard.

Professor Lowrie's silver medal, first in second year—A. Nicholas.

Second prize for second year students—W. B. Ralph.

Mr. Brunkhorst's silver medal, first in first year—G. Main.

Second prize for first year—H. Laffer.

SPECIAL PRIZES.

Professor Perkin's prize for viticulture—W. J. Colebatch and A. G. Pritchard.

Messrs. Marten & Co.'s prize for practical work—W. J. Colebatch.

Mr. Büring's prize for ænology—A. G. Pritchard.

Mr. A. J. Murray's essay prize, third year—W. M. Gordon.

Driving prize—H. P. Burden.

Mr. A. J. Murray's essay prize, second year—W. B. Ralph.

Mrs. Fowler's prize for viticulture for second-year students—F. L. Faulkner.

Mr. Haslam's prize for book-keeping—F. L. Faulkner.

Mr. Haslam's anatomy prize for first-year students—H. Richardson.

Mr. Morphett's prize for chemistry, first year.—H. Laffer.

Mr. W. J. Colebatch's prize for best farm work—Bills.

Second prize for farm work—Dawkins.

Mr. HUTCHISON, M.P., proposed "Success to the College and to the Principals." He said the College could not help being successful while they had such Professors. The people of South Australia were only beginning to realize the great work the College was doing. He trusted the Parliament would be as liberal in the future as far as the College was concerned as it possibly could. He believed Professor Lowrie could suggest many things which would be conducive to the interest of the College and the students, and if he did so he (the speaker) would be one who would be prepared to do the best in his power to support him. He trusted that year by year the College would go on increasing in usefulness, that the membership would increase, and that the standard of the teachers would remain as it was that day. (Applause.)

Professor LOWRIE, in thanking Mr. Hutchison, said that as far as climate would allow them to succeed they had succeeded fairly well during the past season. He remembered on the same occasion last year expressing the hope that they were at the end of the drought; that they had experienced two bad years, and in the ordinary course of events could fairly hope for the third year showing an improvement. In a way it had been an improvement on 1896, but it was far below what had been the average conditions for such a relatively dry district. At the same time the rain which had fallen, 12 inches, small though it was, had been distributed over those months of the year when the farming crops could especially benefit, and he believed that the revenue would approach if not surpass what it had been before. The wheat crops went from 8 to 22 bushels to the acre. They got a fair cut of hay also. It was the orchard that had suffered most; the trees were dying, and no amount of work nor any degree of skill could have altered those conditions. That, however, they looked on as one of the ordinary contingencies of trying to grow fruit. Professor Perkins and himself never had the notion that the district was suited for fruit, and if they had been taking up country for their own needs they would not have chosen a mallee limestone for an orchard plantation. The idea of growing fruit was that the place might afford sufficient facilities for teaching and giving demonstrations in pruning, &c. From the point of view of financial return it would be madness to attempt it. On the other hand the vines were holding on very well. The return in fruit and wine would be relatively small, but at the same time they had reason to congratulate themselves that they would get such a fair return of grapes as the vines promised. During the past year the work had been satisfactory to teachers and scholars. The work had been characterized by evenness, and they had had harmony throughout the year. Good honest work had been done, and he could say sincerely that they never had a better class of students leaving the institution. No matter in what district they settled they should be the means of demonstrating that the work carried on at the College was for the welfare of the rural industry of South Australia. Mr. Jenkins had been good enough to say that the institution was meeting with more confidence from the farmers of South Australia. It was much more pleasing for them to feel when they were discussing matters of practice that farmers from the various districts were less likely to look upon them as bookmen with visionary ideas, and to think that the opportunities they at the College had of comparing their experience with those of other men in other districts enabled them to express an opinion on many matters. In Professor Perkins' work all the younger generation of vinegrowers sat at the feet of Gamaliel. The last few years had witnessed a very considerable extension in the vine-growing industry, and the younger men took Professor Perkins' hints with absolute confidence. They were perhaps a little too demanding in asking for advice so frequently. That they took as a proof that the College was being found by the rural interests in South Australia not as an institution whose work threw out a challange. They considered that the influence of the College was undoubtedly tending to raise the average level of farming in South Australia. He would only instance the matter of the use of artificial manure which had been referred to by the Minister. It was only during the last two or three years that it had been taken up. Droughts had been against its proper success, but if they got a return to fairly ordinary seasons, with the attention farmers were giving to manures, farming would be raised to a degree that even the most sanguine never expected. He estimated that in a few years they would find the average up to 11 bushels, and that with very little more work. It would only be a question of the land benefiting to the full by the work. They were especially pleased at the class of students that would be at the College next year. They wanted to get hold of young farmers from eighteen to twenty-one, not that they passed any reflection on the students in the past, but the young farmer who paid the fees out of his own earnings came to learn something, and when he went away he

was likely to put his learning to the best use. The public had been particularly generous to the College during the last year. Amongst others he had to thank were Messrs. J. H. Angas, A. J. Murray, Martin & Co., and H. Büring. Mr. Büring's son, who was at Montpellier, had written to say that if they had a little more laboratory work at the College the institution would be ahead of the European institutions; that in direct practice the opportunities the students had for doing good outside work were better than they had in older institutions. Mr. Arthur Morphett had been to England and visited a number of the institutions, and he thought the work they did compared very favorably with that done in England. The Government had purchased more land and were, he believed, in a mood for extending the College, and he hoped to have opportunities of placing before the boys work in every line of rural practice. (Cheers.)

Professor Perkins said he might sing a tale of woe about the dead trees and the short vintage, but their harvest was the third-year students, of whom they had every reason to be proud. He had had an opportunity of comparing Roseworthy with European institutions, and there was a great difference between them. There they tried to turn out men who could take their place in any agricultural pursuit, and do the work themselves. In the European Agricultural Colleges they tried more particularly to turn out scientific men; not farmers, but men who could take an official position connected with agriculture. In a new country there was no place for such men. He thanked them for their kind wishes. (Cheers.)

Mr. A. Molineux, the Secretary of the Agricultural Bureau, said he was in his fifty-ninth year as a resident of South Australia, and during the whole of that time he had taken an interest in agronomy. He had seen the first crop of wheat grown on North Adelaide hill where the Chief Justice's residence was now situated, and he had seen wheat-growing extended to Hawker. The last was the most successful year they had had at the College. Notwithstanding that it was the third bad year, a fairly good crop was expected. Everywhere throughout the colony he heard both the work of the institution and of the Professors highly spoken of.

Mr. Buring, in proposing success to the students who were leaving, said he hoped the students who were departing would be able to find profitable employment, and be able to turn to good account the instruction they had received, and thereby benefit the colony. (Cheers.) Afternoon tea was partaken of, and in the evening dancing was indulged in, Setaro's string band having journeyed up from Adelaide.

Cricket Notes.

During every cricket season we are represented by practically two different elevens. Up till February the same team that battled for the last half of the previous season are still with us. From February to the end of the season progressing, we are represented by an eleven in which "juniors" from the old first and second years and new students take the place of the seniors who leave in that month.

In view of this somewhat unique division of the season, we come first to consider the *doings* (i.e. "performances," not always lickings!) of the A.C.R. C.C. from November, 1897 to January, 1898.

Bob James led us as captain, and the genial control which he exercised over the team made him deservedly popular. A tennis match in Gawler robbed the first game (against Queen's School) of a good deal of interest; in the absence of four leading players, the College cricketers left had to fight very hard, and then were beaten. For Queen's, Mr. Thompson carried off the honors both in batting and bowling, whilst for the A.C.R., Nicholas came out as a bowler, bagging six wickets.

The Willastons were the next visitors, and, although, we had our full team, we had to take second place. Alec. Thompson, of football fame, was the thorn in our side, taking six wickets, and scoring (with luck, be it said) 60 by hard, clean hitting.; Mr. Haslam was top score for the "farmers," with Phillips a close second.

The last struggle in this division was with the Lyrics, another Association club of Gawler. The complete scores of this match have been mislaid, but Colebatch was our chief rungetter with 38.

We have now to briefly review the cricket during the second half of the season.

On resuming work for the New Year, it was soon discovered that the new team was stronger than the old; later developments proved it to be the strongest eleven of the A.C.R for many a day. To test the calibre of the new students, two matches were arranged, which were styled "Old v. New." Though both won by the "Old," these tussles aroused keen interest, and the *civil war* waged for over a week. J. P. Richardson (a successful St. Peter's College cricketer), Way, H. Adams and Warnes of the new comers showed good form, and were included in after matches in the College Eleven.

The inability of a certain team to turn up gave the 3rd-years a chance of demonstrating their superiority over the 2nd and 1st combined. But serious business commenced with the arrival of the Zingaris from Gawler on a Wednesday afternoon. Landseer, our new captain, won the toss, and we took full advantage of his success by scoring 173. Of this number Bow Read obtained 49 by fine, free cricket, and was well backed up by Richardson and Phillips. To our surprise, the Zingaris scored rapidly and well, and at the call of time had only lost three wickets for 114; May and Cheek batted vigorously, but the former bore a charmed life.

On the following Saturday we entertained the Angle Vales from Gawler River. Our new slate wicket was all too fast for them, and victory remained with the "Agriculturals" by an innings and 52 runs. Bow Read again got going, and rapidly totted up half a century besides securing six wickets for 5 runs (five clean bowled). Bills jogged along merrily for 29, and Richardson bowled well. In our opponents' second try change bowlers were put on, and of these Faulkner shone, his tricky deliveries being too good for the Riverites. Fawks discovered a spot outside the wicket, and two balls breaking across from this spot, about two feet (!) caused two batsmen to mutter something under their breath. If the Angle Vales did not shine on the field, they certainly did at the tea table, and also afterwards in the Reading Room, when an impromptu "sing-song" was arranged. Up to date our last match was with the Lyndochs. They could not bring their strongest team; at the same time we did not expect to "whop" them as we did. The record score made by the A.C.R. C.C. was in Von Doussa's time—about 450. Our total against the Lyndochs is second to that—319. Their bowling was soon collared, and some of our averages rose considerably thereby. Landseer's innings was the best, and glad we were that his run of bad luck had at last come to an end; his hittng was hard and clean, and though only going in at the fall of the sixth wicket, he ran up 88, and was still piling on the runs when the last man was bowled. Richardson, too, showed good form for his 79, and his graceful leg glances were much admired. Mr. Haslam, Nicholas, H. Adams and Bills all had a "chip in," contributing 110 between them. With only a short while left in which to bat, we hardly knew whether we should be able to dispose of the Lyndochs in time; doubts were soon set at rest, however, and so also were the batsmen from the pretty German village. A procession started, and though our old friend Payne, of Sandy Creek, stuck to it manfully, keeping the balls from his timbers with legs or willow, his comrades simply came and went. Bow Read wheeled them up at a great bat, and with slow curlers sent down now and

again to vary proceedings, had the visitors on toast right through. Richardson, however, obtained the better average, and his bowling, like Read's, was little understood. One Lyndoch representative amused us by jokingly asking Read to give him a slow one off the wicket for a "trial." The ball he received, in answer, was on its way back to the bowler as the batsman was vainly swishing in the air.

A few matches are still on the list to be played, and we only hope that our good fortune will continue. The players from which the team is selected are Landseer (Captain), Phillips (Secretary), Bow Read, Richardson, Nicholas, Faulkner, Way, H. Adams, Bills, Camper, Warnes, Os. Read, Mr. Haslam and Colebatch (an old student doing special work at the College).

Bow Read is the best all-round man, and with oval practice would soon find a place in senior cricket. His best stroke is the "drive," which he executes to perfection.

Richardson bowls and bats with great skill, and well maintains the reputation he brought with him.

Landseer in form is an attractive bat to watch, and sets his team a good example in fielding.

Phillips, our long-un, delights in forward cutting and off driving, and it is a very short ball at which he cannot play forward.

Nicholas, the "brawny sprechen," is of the left hand type; useful as a change bowler, and bats well until he gets a "yorker."

Faulkner's nervousness at the bowling crease is against him, otherwise he puts great dash into his play, especially in the field.

Way has not yet got used to our wickets. His best strokes are of the defensive order, and his bowling consists of tantalising "donkey-drops."

H. Adams shows to advantage with either bat or ball. A stonewaller, he is a good man to be in with on a hot day.

Bills is noted chiefly for sage remarks on everything and everybody; nobody escapes his trenchant criticisms. He makes runs, aided by pluck and a good eye. If he dropped his "cross-bat" style he would do well.

Camper is closely allied to B. He has a pretty style of batting, and his on play, though dangerous, scores well. He is a fair change bowler.

Warnes is made of good stuff, and should develop into a good man next season.

Os. Read is our "Jonah" in action but not in pace. Has a good pair of hands in the field.

Mr. Haslam adds *weight* to the team, and delights in a "long, strong pull," except when he misses the ball. He keeps wickets fairly well.

Colebatch, a former captain and now old student, is a "slip" any team might be proud of. His back play is strong, but not very remunerative.

The order in which the above players have been discussed is not intended as an indication of merit.

We cannot close without a reference to our enthusiastic umpire--Terry. May our "John Bull" long continue to ajudicate on appeals, wides, and such-like matters.

Our new slate wicket is greatly appreciated after the old asphalt one, which had become somewhat worn. The total cost of putting down came to about £16. Of this amount the staff gave one-third, the balance being made up out of the fine fund.

The following prizes have been gained by old A.C.R. students:—Nuriootpa, February 16: A. B. Robin—Fruit, 10 prizes; dogs, 1; vegetables, 4; green fodder, 1. Angaston, February 23: A. B. Robin—Fruit, 9 prizes. Willunga, February 24: A. Longbottom—Cattle, 1 prize; eggs, 1; fruit, 3.

Vineyard and Orchard Notes.

ONCE again, as last year, is shown what tricks the weather can play us and how ignorant we really are. When I said last session that we would get a good vintage, I did not think we would get such a hot, dry summer, Rain in December or even in January would have altered the results considerably, but these did not come, and, consequently, the grapes were small and ripened before their natural time.

The young vines which did so well last session have also suffered severely, particularly at the end nearest the cellars, as the hot weather practically prevented cultivation, and the sand drifted badly. The plants in the nursery did not seem to enjoy the hot weather in spite of numerous waterings, and many of them succumbed to it. The hedge also, which was planted round the nursery, became no longer visible above the ground. The majority of the grafts also died away, and the trees were then budded by the third and second year students. Vines were tied up and other odd jobs done. A number of iron posts which were got for trellising were tarred, and the vines were staked with a lot of old gas piping. The new wine cellars were started and finished this session, Messrs. E. James and Co. having the contract.

A new tank, twice the size of the old one, was put up, and is intended for rain water. The wine was shifted from the old into the new building, and everything got ready for the vintage. The old tank was covered with cuttings, and a large bag was put round it to keep the water cool. Owing to the difficulty of not always being able to obtain the farm dray, the orchard bought one of its own, which will come into use at grape picking.

The rest of the work consisted in getting things ready for the vintage, such as making tin buckets to put the grapes into. A dam in the orchard, which was only in the way, and till lately had been a resting place for rubbish, was scooped in by contract.

Owing to the session ending earlier than usual, grape picking was postponed until after the holidays, so that the seniors missed the pleasure of once more getting up at 5 o'clock to pick grapes. On leaving for our holidays the crop was ripening fast, and as the heat did not abate while we were away, the grapes ripened too fast, and were consequently small and shrivelled to a great extent.

Farm Notes.

HAVING received the usual post card conveying its unwelcome message, we sorrowfully packed up and returned once more to graft. In last session's notes I remarked that we would get a fair crop, but I now find that, like the weather prophets, it is no easy task to foretell future events in this heat-stricken land.

As soon as we came back the binders were got ready, and in a few days stacking became a general thing. The binders soon ran away from the stackers, however, as the farmer began in the early morning and worked till late at night. After stacking came hay carting, which gave the third year students an opportunity of stack building, which I may say was done fairly well if you take into consideration the builders. The stacking was soon all finished, however, much to the regret of the seniors, and binding for wheat was commenced. In the interval, chaff-cutting, one of the usual tit-bits, was indulged in, some of it being for contract and some for the farm horses. After a sufficient quantity of chaff had been cut, the thrasher was overhauled, and was soon ready for work. The thrashing could not be got through as quickly as some of the students would have liked, owing to chaff-cutting for

wasted their time, but that there are still players at the old College fit to step into the places of those who have gone hence, and quite capable of making a bold bid for victory when they are called upon to uphold the honor of the College for which their predecessors battled.

The New Staff of the "Student."

At a students' meeting, held in the study, the following officers were elected for 1898-99 :—Editors, R. F. S. Martin and H. Laffer ; Managers, C. J. Landseer and G. Main.

Wheat Yield, 1897—1898.

I.—MANURE TEST (No. 4).

Plot.	Manure per Acre.	Area (acres).	Bushels per Acre.
1	4c. Basic Slag	1·592	16·23
2	2c. do.	·796	15·58
3	3½c. K.I. Guano	1.99	15·34
4	2c. Superphosphate	1·99	21·56
5	2c. K.I. Guano ¾c Sulphate Ammonia	1·99	12·53
6	90 lbs. Muriate Potash 180 lbs. Guano 68 lbs. Sulphate Ammonia	1·99	12·26
7	2c. Bone Dust	1·194	16·18
8	No Manure	·796	8·45
9	2c. Basic Slag 2c. Kainite	1·592	17·59
10	2c. Muriate Potash	·796	12·52

II.—BROADCAST V. DRILLING (No. 4).

Plot.	Area (acres).	How Sown.	Bushels per Acre.
1	2·985	Seed and Manure drilled	18·14
2	2·985	Seed and Manure broadcasted	16·37
3	2·985	Seed drilled and Manure broadcasted	14·00

III.—OTHER WHEATS (No. 4)

Plot.	Wheat.	Area (acres).	Bushels per Acre.
1	King's Solid Straw (east fence)	7·37	11·46
2	King's Solid Straw (late sown)	8·823	16·37
3	Early Para	3·608	13·88

FIELD (No. 16).

Plot.	Wheat.	Area (acres).	Bushels per Acre.
1 2	Early Para King's Solid Straw	18·856	7·29

FIELD (No. 6A).

Plot.	Wheat.	Area (acres).	Bushels per Acre.
1	After Oats	3·625	15·51
2	Super Guano	5·004	18·20
3	Unmanured	8·770	15 56
4	Abrohlos Guano	2·060	18·36
5	Bare Fallow	8·934	15·03
6	Medeah	1·624	15·20

Chaff.

HAY.
Show.
Wines.
Wheat.
Thatching.
Chaff-cutting.
New students.
Fencing begun.
Football coming! Hurrah!
Alas, all the grapes are picked!
Who wouldn't be able to stop a pig?
"Irish Bill" gone. Where's our wit coming from?
Tonic ale now a fashionable beverage at tennis parties.
Heard at Farm Class (the bull in question)—"He is big *for his* size!"
College Steeplechases.—Taffy, The Laird, and Billy. Billy took the double in fine style, and Taffy earned three months' holiday for his jumping.

It is not often the Professor is taken for Mr. Jarman, but such was the case when a new student recently saluted him at the Farm with the words: "Are you the *boss?*"

First Impressions.

By "NEW CHUM."

AFTER a dusty and jolty drive from Roseworthy station, in company with others, I arrived at the A.C.R. On the farm the haystacks first drew my attention. There were five of them then, nicely built in English style, and

partly thatched. Thatching, I soon found out, was to be our first job. The large ensilage pits were noticed to still contain a fine lot of "feeding stuff." The straw-press impressed me much *more*, but *not so favorably*, several days after arrival than at first, for it was then that I had to work it, and everything seemed upside down. [We have heard that steps are being taken to impress "the powers that be" with the fact that the instrument of torture here referred to would be a decided acquisition to Yatala Labor Prison. We would undertake to guarantee, if this comes off, a minimum number of "free boarders" in a very short while.—ED.] The dairy struck me as being a nice, clean building, but its output of butter was small at the time of my arrival, and I think the latter fact weighed with me more than the former, for it affected the supply at the table. The cattle looked very we l on the silage they had had as feed for over a month.

Walking over to the vineyard and orchard one noticed the new cellars, where everything was in readiness for the vintage. The grapes looked very tempting as we passed through the vineyards, but the attractiveness wore off amazingly after two days' picking. We soon got to the oval, where the sight of cricket pitch and tennis courts made me look forward to good times here in spite of heat and wind. Finally, I was glad to find myself located in one of the most comfortable bedrooms, and the first night's sleep was very sound. The "get up" bell, however, had a very rousing effect next morning, and I thought it loud enough to wake anyone, but only a few mornings had passed when this effect wore off, and strange to say (?) the bell that came to have the electric effect was the "*breakfast bell!*"

Norfolk Red Polled Cattle.

By "MARCUS."

(*Continued.*)

THE following is mostly made up of a series of extracts from the pen of Mr. H. F. Euren, editor of the "Red Polled Herd Book" :—

The modern Red Polled cattle have their origin in the Counties of Norfolk and Suffolk, having been worked up to the present state of perfection from the native cattle of those two counties.

Of the origin of these native cattle of Norfolk and Suffolk little is known, and in the absence of recorded facts, various theories have been put forth to account for their existence. The probability is that the two breeds were the descendants of an ancient breed valued by our ancestors for their large yield of milk. There is even yet a sort of superstitious regard for red cattle prevalent among some of the peasantry, the roots of which superstition archœologists profess to find in the religious beliefs of the Aryan race, that red typifies heavenly fire. At any rate it is an undisputed fact, that in the middle ages, and down to a comparatively recent period, the dun or dark red cow (for the terms seem to have been convertible with regard to cattle) was often invested with remarkable powers, her milk was deemed superior, and was supposed to possess health-restoring properties.

In support of the presumption that there was an old breed of Red Polled cattle, it might be mentioned that there is at the present day, in a remote district of Austria, a breed corresponding in every respect with the purest Norfolk and Suffolk stock. This fact we have on the authority of Prince Leichtenstein who, in the year 1869 purchased animals of Lord Loudes (an English breeder) in order to infuse fresh blood into his herd of native-bred cattle. He stated that the English and Austrian animals perfectly corresponded.

(*To be Continued.*)

Elder, Smith and Co.'s Wool Sales.

FRIDAY morning, November 12, found us all in good spirits, for it was the day appointed for an inspection of the wool warehouses of Messrs. Elder, Smith and Co., Limited, Adelaide and Port Adelaide. A fine day, with a breeze behind and a good team of horses before us, the distance to Gawler was soon covered, and the 9 o'clock train boarded. The shrill whistle of the engine sounded, "Modern Athens" left behind, and we arrived in Adelaide at about 10.30. Passing along a lane to Currie Street, the head office was reached, and we at once proceeded to the underground public sale room, where skins, hides, &c., were being offered by the various auctioneers, and knocked down, without reserve, to the highest bidder. The attendance was not a very large one, and bidding only fairly brisk, prices for wool varying from about 4½d. to 1s. 1d. per lb. for finest sorts. At the conclusion of the sale we were shown over the various departments and storage rooms, which contained large quantities of hides and various skins that composed the bulk of the sales effected previously in the auction room. Information on various points was supplied by our guide (Mr. Chapman), and the time being short, and the mid-day train to the Port having to be caught, we hurried off, leaving the strong aroma of raw skins, &c., behind us, and carrying away a keen appetite for the luncheon which we knew awaited us on our arrival at the warehouse of our hosts at Port Adelaide.

To say that we were well entertained is to express oneself only half-heartedly. The smiles that wreathed most of our faces as the viands disappeared were conclusive of our appreciation of the good things provided, and the good terms we were on with ourselves and all the world. But, *tempus fugit*, and we were again on the move, and under the guidance of the manager were making a tour of inspection of a very capacious warehouse, which is situated in St. Vincent Street. It is built principally of timber and galvanized iron, and has a basement, ground and first floor.

The ground and first floor are used for storing sample bales of wool. Here and there scattered over the building could be seen English and foreign buyers testing the sample bales and making notes on the quality, grade, &c. As we proceeded from bale to bale, the leading characteristics of the wool—length of staple, whether short or long, density, color, fibre, quality, &c.—were explained to us. We doubtlessly added to our scanty stock of knowledge on the subject, the information being clear and lucid, and it would take a few years to become thoroughly *au fait* in wool dealing, such as the foreign buyers and leading breeders of the present day are. The buildings are capable of accommodating several thousand bales, and at the time of our visit the space was taxed to the utmost. In the basement bales of wool were also stored. The wool presses were also inspected and explained. These consisted of a single and double press, the former turning out one and the latter two bales. The single press is found to be the most expedious and economical in the cost of dumping, a man and a boy only being required to work the press, which is put in gear by means of a lever. Leaving the stores, we made our way to a ship lying at the wharf near the stores, which was loading wool for Greal Britain, and a close inspection was made. Opinions were freely expressed at the manner in which the bales were stored away in the hold of vessel by the stevedores and lumpers. Before leaving, Professor Lowrie thanked the manager for the kind manner in which he had entertained us, and the useful information on various matters imparted, and three ringing cheers were given for the company and manager. On taking our departure the Professor was heard to remark that what we had seen and heard during the day should be worth £ s. d. to us in the future, and we echoed his expression of opinion. An interesting and instructive day having been spent, we returned to Gawler, where we passed a few hours, and when the drag conveyed us back to the College we were tired, of course, and all soon sought nature's sweet restorer—Lullaby.—H. RICHARDSON.

A Tennis Party.

By "ONE OF THE DEPARTED."

STUDENTS have passed many pleasant days in Gawler, more especially since the advent of the church drag, but none have been more enjoyable than that some of our number were privileged to spend at the residence of Mr. and Mrs. E. Lucas, of that town. The occasion was a Saturday afternoon, only a few days prior to our departure for the Christmas holidays.

Unfortunately, owing to stress of work at the farm, and, to a lesser extent, to the necessary expenditure of a few moments in removing the grime and growth of the week, we arrived at our destination later than had been expected, and found that quite a number of ladies were present, and awaited our appearance with much impatience—so at least our host and hostess informed us.

The interest which ladies—I refer more particularly to the younger ones—display in the students is very marked, and recalls to mind a remark of Professor Lowrie's with regard to the extraordinary fascination which promising young farmers have for eligible members of the other sex. However, I must leave the discussion of such a delicate subject for a more opportune time, and confine myself as much as possible to the matter on hand.

Several prominent gentlemen tennis players of Gawler were also present, so that, with the assistance of the ladies, most of whom have contributed not a little to the high degree of perfection to which tennis has attained in that small city at the present time, we quite expected a good afternoon's play, and were far from being disappointed, although, as usual on festive occasions such as that of which I write, and more especially when the fair sex are present in overwhelming numbers, the College players did not distinguish themselves as much as was expected.

The Professor, evidently with the students' welfare at heart, once stated in the hearing of a large assemblage of the youth and beauty of Modern Athens that he was strongly of the conviction that our inferior play on these occasions was in great part due to the distracting influence of the eyes of those young ladies present, to whose charm we, for what reason I fail to understand, are supposed to be peculiarly susceptible; however, I believe he would have been much nearer the mark, in the majority of cases at all events, had he said that the bad play was due to the overwhelming hospitality of our host, of which we had taken

"Not wisely, but too well."

But to return to a subject of more moment. The interest and excitement displayed in the different sets, several of which were hotly contested, never flagged throughout the whole afternoon, and play was continued until it was impossible to see any longer, and players had to own themselves defeated at last.

That happy afternoon will long rest in the memories of those students who were fortunate enough to be there to enjoy it, and third year students will always recall with pleasant recollections their last outing before the final parting in February.

We had tea with our host and hostess, and then adjourned to the balcony to enjoy the cool evening breeze, flavored with a cigar, and music provided by some of the party.

The evening passed rapidly in songs, recitations, and readings, so that it was verging on midnight when, having partaken of supper, we bade adieu to Mr. and Mrs. Lucas, whose kindness I am very doubtful whether we can ever repay.

At peace with the world, and very tired, we tumbled to bed early on Sunday morning to dream, not, as the Professor would have said, "of bright eyes," but the coming week of work.