



THE STUDENT

ROSEWORTHY
LIBRARY
AGRICULTURAL COLLEGE



DR. A. E. V. RICHARDSON,

Director of the Waite Agricultural Research Institute.

Professor of Agriculture, Adelaide University.

Old Roseworthian.

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

Agricultural College

ROSEWORTHY, SOUTH AUSTRALIA.

Minister for Agriculture:
HON. T. BUTTERFIELD, M.P.

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Assistant Chemist:

Mr. C. S. PIPER, B.Sc.

Lecturer on Physical Science, Mathematics, Physics, and Botany:

Mr. A. J. ADAMS, M.A.

Lecturer on Field Engineering and Building Construction:

Mr. G. E. LANE.

Lecturer on Viticulture, Fruitculture, and Oenology:

Mr. D. G. QUINN

Lecturer on Dairying and Superintendent of Dairy:

Mr. R. BAKER

Experimentalist and Demonstrator in Agriculture:

Mr. R. C. SCOTT

Lecturer on Surveying:

Mr. L. C. CORNISH

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Mr. E. L. ORCHARD

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Mr. F. W. GILBERT

Gardener:

Mr. W. G. FAIRLIE.

Lecturer on Veterinary Science, Physiology, Anatomy, and Entomology:

Mr. F. E. PLACE, B.V.Sc.,
M.R.C.V.S.

Lecturer on Woolclassing:

Mr. A. H. CODRINGTON

Lecturer on Aviculture:

Mr. D. F. LAURIE

Supt. of Vineyard, Orchard, and Wine Cellars:

Mr. J. L. WILLIAMS

Mechanical Engineer:

Mr. H. R. NOURSE.

Assistant Mechanic:

Mr. W. R. HAYDON

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1924-5.

Special.

G. Welch

Third Year.

Ludbrook, W. V.
Pearson, J. L.
Martin, A. M.
Rogers, G. V.
Will, S. K.
Fornachon, J. C.
Bested, M. O.
Robinson, H. W.
Close, J. A.

Clarke, C. R.
Lewis, G. N.
Wilson, R. J.
Mair, A. M.
Magarey, N. V.
Tate, U. D.
Lord, J. H. G.
McNeil, W. D.

Second Year.

Phillips, J. S.
Panse, R. L.
Rogers, G. R.
Sinclair, K. W.
Scott, A. W.
Paxton, A. W.
Curlewis, J. B.
Stott, R. C.
Clifton, F. H.

Hague, D. C.
Jude, N. L.
Pike, K. A.
Hooper, A. V.
Eaton, H. G.
Thomas, R. S.
Bauer, H. W.
Ninnes, A. R.

First Year.

Cashmore, A. B.
Drew, A. S.
Hughes, J. B. G.
McBain, M. E. L.
Salter, F. K.
Chillingworth, C. A.
Fry, J. H.
Jackson, G.
Robinson, G. A.

Weidenhofer, K.
Cox, J. K.
Gross, F. C. C.
Johnson, J. L.
Rose, J. C. W.
Welch, F. A.
Winnall, H. H.
Yelland, C. E.

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1924-5.

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R. C. SCOTT, A. T. JEFFERIS, A. J. ADAMS,
E. L. ORCHARD, and C. PIPER.

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Students CURLEWIS (Vice-Captain), MARTIN, SCOTT,
and DREW.

"The Student" Committee:

Students LUDBROOK, FORNACHON, PHILLIPS,
CURLEWIS, CASHMORE, and COX.

Tennis:

Students TATE (Captain), SALTER (Vice-Captain), BESTED
(Hon. Secretary).

Councilmen:

Students ROBINSON, H., PHILLIPS, and ROBINSON, G.

The Student

Published by Past and Present Students.

Vol. XXIII.—No. 3.

December, 1924.

Editorial.

The number "Three" has been held as sacred through all ages and by all creeds. Ancient Egypt worshipped its "Trinity," Rome bowed to its "Tiumvirate," cats have "thrice three" lives. Roseworthy Agricultural College (note the "triple" appellation) offers a course of "three" years consisting each of "three" sessions, while every day is divided by "three" good meals. After which entertaining preamble we beg to remind our contributors that "three" copies of "The Student" are billed to appear annually. Rally round, Scholars and Old Scholars! There are many items of interest concerning Old Roseworthians; there are matters of agricultural moment; in short, there is news going begging which would brighten the pages of this journal were it written and sent in. Send it!

We are proud of our frontispiece. Roseworthy College has turned out many eminent men, but none have done it more credit than Dr. A. E. V. Richardson. All join in the heartiest welcome to "Richie" on his return to his native State, and in congratulations to the University in having obtained a Director for "Urrbrae" who combines a scientific outlook with a knowledge of Australian agriculture and with a proved business capacity.

The Farmers' School went off well. It was with some misgivings that the College embarked on this venture some three years ago. The interest, however, shown by the farmers in their work and classes in all departments, and the favourable reports made at Bureau meetings, augur well for this course becoming a permanent and useful feature of the College's activities.

The students have enjoyed their full share of sport. The withdrawal of the football team from the Gawler Association in order to compete with the Adelaide schools has many advantages, not least among which, in the opinion of players, is the opportunity of visiting town more frequently.

The cricket season has opened, and there seems good prospects of the College team again showing well in the Association rounds.

The sports and dances were well attended and appreciated by students and visitors. Bees and foxes have also had their share of attention, sometimes to the investigator's discomfort.

The new sports pavilion is practically complete, and the turf tennis courts are rapidly maturing. The College has now an oval and accessories of which any group of sportsmen might be proud. Thanks are due to a paternal Government for providing the means. We hint, however, that such paternity would not have been displayed except for the efforts and untiring interest of our present Principal, and we accord him our hearty thanks for the stimulus to sport these improvements have given.

Those of us who remember the old playing ground, where football in patches was comparable to switchbacking at Wembley, and fielding was fraught with almost as much danger as a Gallipoli landing, can fully appreciate the great advantages now obtaining in College sport.

We offer a variety of articles, none devoid of interest, and some worth more than a passing glance. The "Old Students' Notes" have been received with great interest by their confreres, and we wish the collector the best of luck in his continuance of the good work. An interesting letter from South Africa has been received from Mr. Fritz Tarlton, student at the College in 1886. This will be found at the end of the Old Collegians' Notes. Our photos show that life at Roseworthy develops both brain and muscle.

* * * *

Dr. A. E. V. Richardson.

The return of Dr. Richardson to South Australia in order to fill the position of Director and Professor of Agriculture in the Waite Research Institute is welcomed by all who have known Dr. Richardson, and who have followed his career both in this State and in Victoria. That he is one of us, having received his agricultural training here, at the College, is an additional cause of our rejoicing that the University Council have had the good sense to appoint a man of such outstanding ability and experience to take charge of the Institute.

Dr. Richardson began his career at Roseworthy College, where he obtained the Diploma in Agriculture.

Passing to the Adelaide University, he studied arts and science and graduated as a Bachelor of Science (with Agriculture) and as Master of Arts.

Assistant for a short while in the University Training College, he was subsequently appointed Assistant Director of Agriculture in South Australia, which position he filled for two years. During this period he did much valuable work for the Department.

South Australia, however, was not destined to retain the services of Dr. Richardson for long. So many young men of ability gravitate to other States, finding there better opportunities. South Australia is proverbially chary of offering sufficient inducements for her graduates to remain in her service. Perhaps in many cases it is better for men to gain their footing elsewhere, as it widens their scope of experience and knowledge. Seldom, however, are the inducements sufficient to cause a return, but in this case Dr. Richardson comes back with the added experience of fresh fields.

In 1909 Dr. Richardson was offered and accepted the post of Superintendent of Agriculture in Victoria, where he immediately initiated field experiments at Werribee, Rutherglen, and Longerenong College, to illustrate the various phases of cereal cultivation. Farmers' field-days were organized to view results, and of late years large gatherings have attended, much information has been gained throughout the State, and the practical value of the work fully appreciated.

Dr. Richardson particularly interested himself in the growing of wheat, and constantly sought for improved methods of production, on the one hand by the use of improved seed, and on the other by experimenting with crop rotation, time and extent of fallowing and working the land, and the use of fertilizers of different class and quantity.

There is no doubt that the increase of wheat yield in Victoria of late years from $10\frac{1}{2}$ to nearly 14 bushels per acre has been due to improved methods of cultivation, and in this improvement Dr. Richardson has played no little part. In the Wimmera districts the average yields have been nearly doubled, and last season a yield of more than 48 bushels per acre was obtained from one experimental plot.

Dr. Richardson bred a number of new wheats, of which "Gallipoli" is probably the most valuable and widely known.

With regard to improvements in pasture, Dr. Richardson has been a most enthusiastic advocate of better treatment of the

land. Marked advance has been made of late years in the quantity of native and other pasture crops obtained by top-dressing with artificial manures. The stock-carrying capacity of the land, particularly in view of the high price of wool at present obtaining, is a question of prime interest, and one which, has received a full share of Dr. Richardson's attention.

In 1918 Dr. Richardson visited the United States as representative of the Victorian Department and issued a report. This visit was of considerable importance to the State, in view of the passing of the Agricultural Education Act of 1920. The Doctor was then appointed Director of the School of Agriculture at the Melbourne University. The number of students now taking the course in agriculture is thirty-five.

The degree of Doctor of Science has lately been conferred on Dr. Richardson for his work and theses on Agriculture. The latter were highly commended by Sir Samuel Hall (Chief Scientific Adviser to the British Board of Agriculture). The distinction is one of great merit, and unique inasmuch as it is the first to be given in Victoria for purely agricultural work.

The agricultural community of South Australia welcome the appointment of Dr. Richardson to the Directorship of the Research Institute, and in particular, we, of Roseworthy College, both present and past students. His friends and contemporaries who know him personally, and have followed his achievements, are fully convinced that no better man could have been found either in this country or elsewhere to fill the position at Urrbrae, and we confidently look forward to very valuable work being done at the Institute, the establishment of which, owing to the generosity of the late Mr. Peter Waite, marks an epoch in agricultural research in the Commonwealth.

With respect to the Waite Institute and its aims, no better exponent can be found than Dr. Richardson himself. We reprint therefore an interview gained with him on his arrival in Adelaide:—

Dr. A. E. V. Richardson, M.A., who was recently appointed Director and Professor of Agriculture at the Waite Research Institute, Urrbrae, has arrived in Adelaide. He said he was delighted to return to his native State and the University in which he had received his early training. He will take up residence at Urrbrae within a week, and will start immediately to organize his staff, upon which Professor Prescott (Agricultural Chemistry) and Mr. Geoffrey Samuel, B.Sc. (Plant Pathology) have already been appointed.

In an interview shortly after his arrival, the Doctor said that the magnificent and generous gift of the late Mr. Peter

Waite has rendered possible the establishment in South Australia of a new type of institution for Australia—an Agricultural Research Institute, under the control of the University, at which investigational and research work in agriculture and allied subjects will be conducted in the interests of agricultural science and the agricultural community. It was now generally recognized that the modern development of agricultural education had been so closely connected with the progress of scientific discovery that systematic research into agricultural problems are regarded as indispensable for the progressive development of the agricultural resources of the country. Agriculture was the basis of the country's wealth, and liberal expenditure on agricultural research was now regarded as a wise investment, which would ultimately be returned to the State many times over in the form of increased primary production. The importance of agricultural research had been fully recognized in other countries, and was liberally endowed both from public and private funds. Agricultural research was justified from two points of view—the ultimate influence it had on increasing primary production, upon which the prosperity of an agricultural State was almost wholly based, and the necessity of every University and State to make contributions to the general knowledge of agricultural problems. An increase of a bushel per acre in the yield of wheat meant an increased income of £2,000,000 a year for Australia and £500,000 for South Australia. Insect and fungoid diseases levied heavy toll on our cereal and fruit crops. Every disease we learnt to control saved an enormous amount of wealth to the country; and every contribution to our knowledge of soil and crop and live-stock management was of great public interest, and must ultimately be reflected in a lowered cost of production.

The primary purpose of the Waite Research Institute, Dr. Richardson went on to say, was to conduct investigations and researches in various branches of agriculture. The scope for investigational work in a new country like Australia was vast, and was limited only by the personnel and funds available for the work. The objective of an Agricultural Research Institute was to advance knowledge and discover new facts by experimental inquiry, and its ultimate aim was the improvement of agricultural practice. The acquisition of knowledge must precede its application. The work of the Institute would be progressive, building upon what had gone before, and finding out the principles underlying our agricultural problems so that they might be solved. Agricultural education had three aspects—teaching, extension work, and investigation. Teaching and extension work rested ultimately on investigational work, for

the latter was the source of knowledge. Its method was experimental inquiry, and it went outside the range of human experience and tradition. The building up of a body of systematic knowledge by careful investigation and experiment was essential for the sound development of agriculture in any country. There was no doubt that the output of primary products of the State could be greatly increased, but to do this required greater efficiency on the part of the man on the land, more complete knowledge of the principles of agriculture, and greater perfection in the technical processes underlying agriculture. The most effective method of securing a genuine and permanent increase in the output from the land was to improve farming methods of the country, and apply the teaching of science to agricultural production. This had been the experience of all great countries of the world. Twenty years ago the value of primary production was one-third of what it was to-day. Investigational and educational work had contributed materially to the rapidity of our progress. Notwithstanding the fact that every decade the wheat belt was being pushed further back into drier and poorer country, the average wheat yields were steadily increasing. Owing to the discoveries of the scientists, the practical farmer, and the inventive genius of the implement-makers and their intelligent co-operation, wheatgrowing methods had been gradually improved. In Victoria the average wheat yield had increased during the past 20 years from $8\frac{1}{2}$ bushels to the acre to nearly 14 bushels, and in one wheatgrowing province (Wimmera), where extensive propaganda and experimental work had been in operation, the wheat yields had been trebled in two decades.

“We cannot say definitely at this stage the precise character of the work which will be undertaken at Urrbrae,” the new Director added, “but it is probable that the initial investigations will relate to fundamental investigations of soil and crop problems affecting agriculture, a study of the best methods of producing farm crops and the influence of fertilizers, rotation cropping, and various cultural methods on the yield of the principal farm crops, the production of new and improved varieties of farm crops, and the study of native and introduced grasses and fodder plants. The life history of various fungoid pests affecting our staple crops will be undertaken with a view to more effectively control these pests. The staff of the Institute desires to co-operate as closely as possible with the University Laboratories, the State Agricultural Department, the Roseworthy Agricultural College, and the Advisory Board of Agriculture. It would be well to emphasize the fact that research work involves the patient and

painstaking examination of problems, that its processes are necessarily slow, and that some considerable time must elapse before the full effect of what is done to-day in agricultural research is reflected in increased production. The staff of the Institute earnestly hopes that the ultimate result of its work will justify the great generosity and noble gift of the late Mr. Waite."

* * * *

The Late Mr. T. H. Williams.

Just as the "Student" goes to press we learn with the deepest regret that Mr. Williams, formerly Chief Inspector of Stock, has passed away. He always took the kindest interest in the College, putting aside his own convenience to come and give illuminating lessons in the art of branding, or to lend an added grace and sympathy at prize day, while at the Abattoirs he was always anxious to give students the best opportunities of seeing ante and post mortem symptoms of disease in stock and explaining the situation to them in that friendly informal way that made them feel they had found a friend.

The late Chief Inspector was fully aware of the importance of Solomon's advice, "Take me the little foxes that spoil the grapes," and whether it was microbe or mange mite, he was quickly on the trail. South Australia owes much to his untiring energy, skill, and tact.

The photographs of lousy sheep which he was personally demonstrating on, that he so thoughtfully presented to the College, have now a sad interest, but will help to keep his memory green.

We offer our sincerest sympathy to his family, which in more ways than one is closely associated with the College.

* * * *

Current Topics.

Since our last issue, the College has been visited by the Agricultural Section of the Australasian Association for the Advancement of Science. The members of the party were doubtless duly impressed by all they saw, and many have said so, but there appears to be no record of the fact.

The members of the Australasian Veterinary Association also paid the College a visit, and one member enthused to such an extent over the unique vehicle that carries His Majesty's mails and is known locally as "Black Maria" that he expended a whole film snapping it from different points of view, declaring that such a precious antiquity should not be lost to posterity.

Major Le Soeuf, of Western Australia, paid a visit to learn somewhat of the methods of live-stock instruction, with a view to mapping out the course for the College to be in W.A. He very kindly expressed his appreciation of what he saw and heard, and was much impressed by the fodder crops.

Mr. A. M. Dawkins kindly invited the Third-year students to his orangery at Euro, and we learn that at the end of a perfect day the visitors were too full for words—a very severe test, that proves the fertility of the garden and generosity of the host and hostess.

A very enjoyable day was also spent at the Tweedvale Woollen Mills, where the expert batting to the demon bowling of the shuttle attracted much attention.

Mr. John Hocking is to be congratulated on escaping more serious injury when a moving truck caused him to slip on to the rails while unloading stock—a narrow escape from a possible very serious accident.

“Buck” Warren, the second of that ilk, has left the dairy to his successor, “Skeeter” Gregory, and, like Lycidas, has departed for pastures new amid his ancestral hayfields.

Fels has come back, and emulates the starlings in his industry of selecting ripe ears.

Ducks have invaded the poultry division in hundreds, and there are visions of succulent ducklings and green peas dancing before the mental eyes of the coming Third-year.

R. Hill, the agricultural mentor of the West Coast, has been appointed agricultural instructor in the Department and will have a larger and we hope more responsive field for his energy.

We thank Mr. Hall, of Teatree Gully, for his appreciation both in warm words and hard cash, a combination that the “Student” welcomes most heartily.

J. Ryan, of Mundalla, writes amusingly and with instruction on Cabbages and Kings, otherwise subterranean clover, wool, dogs, and rabbits. He is a good missionary for R.A.C. in the upper S.E., and we are very pleased to learn that the removal of his appendix has not seriously interfered with either his sport or work.

“Sara” Thomas gave us a look in and very interesting information as to conditions on the Darling.

A poll tax on starlings who use the pavilion as a club and otherwise should bring in revenue.

* * * *

Animal psychology is not taught at R.A.C. Physics and biology are. Result:

Geometry teaches us to bisex angels.

A Botanical Note—No Mistake.

Ex Gardening Notes in a contemporary:
Diascea Barbarae, the flowers commonly known as Dutch-
 man's Britches . . . are profuse bloomers.
 Naturally.

* * * *

Exchanges.

The Dookie Agricultural College Magazine.
 The Adelaide High School Magazine.
 The Longerenong Agricultural College Magazine.
 The St. Peter's College Magazine.
 The P.A.C. Chronicle.

* * * *

An Appreciation.

We thank many of our correspondents for their kind expressions of appreciation of the last number of "The Student," and as we are not endowed with the modesty of the "violet in the dells" we publish an encouragement from an old Roseworthian, C. P. Haselgrove, who writes:—

"Just a word of appreciation of the 'Student.' It has certainly made wonderful improvement since our year left—perhaps because of that event. However, be that as it may, congratulations are due to the producers of a most interesting and instructive little magazine. I say 'little' advisedly, and my one regret is that it is not longer. Don't forget to send me next issue of the 'Student.'"

* * * *

Third-year Notes.

The monotony of the second term has been relieved by many interesting happenings, the chief of which were the Annual Sports Day and Dance. We take this opportunity of formally extending hearty congratulations to R. J. Wilson, the winner of the Cup (all previous congratulations from his fellow-students have been decidedly informal, though none the less sincere).

At the Royal Show great interest was displayed by the members of the Third Year in all exhibits of an educational nature; the cattle came in for an exceptionally thorough scrutiny, as was demonstrated at our last dairying examination. If

all our examination-papers are to be believed, the champion Milking Shorthorn bull was red, white, and roan in colour; large, medium, and small in size; his horns were long and short, fine and thick; his tail was long and short, and had a fine red switch of white hair—and so on. Truly, an animal of many parts!

Considerable interest is being displayed by aviculture students in the idea of cracking balls of dirt on chickens' toes with a hammer. Certain "bed-hogs" amongst us are wondering whether the method would be equally applicable to the impediments to distinct vision with which they are usually troubled in the mornings.

We were pleased to have the opportunity of inspecting the Peterbro' tractor sent up here for demonstration purposes, as a tractor of any description is a great novelty in this neighbourhood. Some of our amateur mechanics appeared to have rather overestimated the strength of the operator. They seemed to expect him to start the engine whilst it was in gear, so as to save time in getting going. In strong contrast to such new-fangled devices, the ploughing examination followed soon after, in connection with which we present this little tableau:—

Scene, field No. 7a; student with s.f. plough, ready to start; the Examiner stands unnoticed, just behind. Attached to the plough are Togo and Blossom, an aged and venerable pair, to whom the student speaks, as follows:—

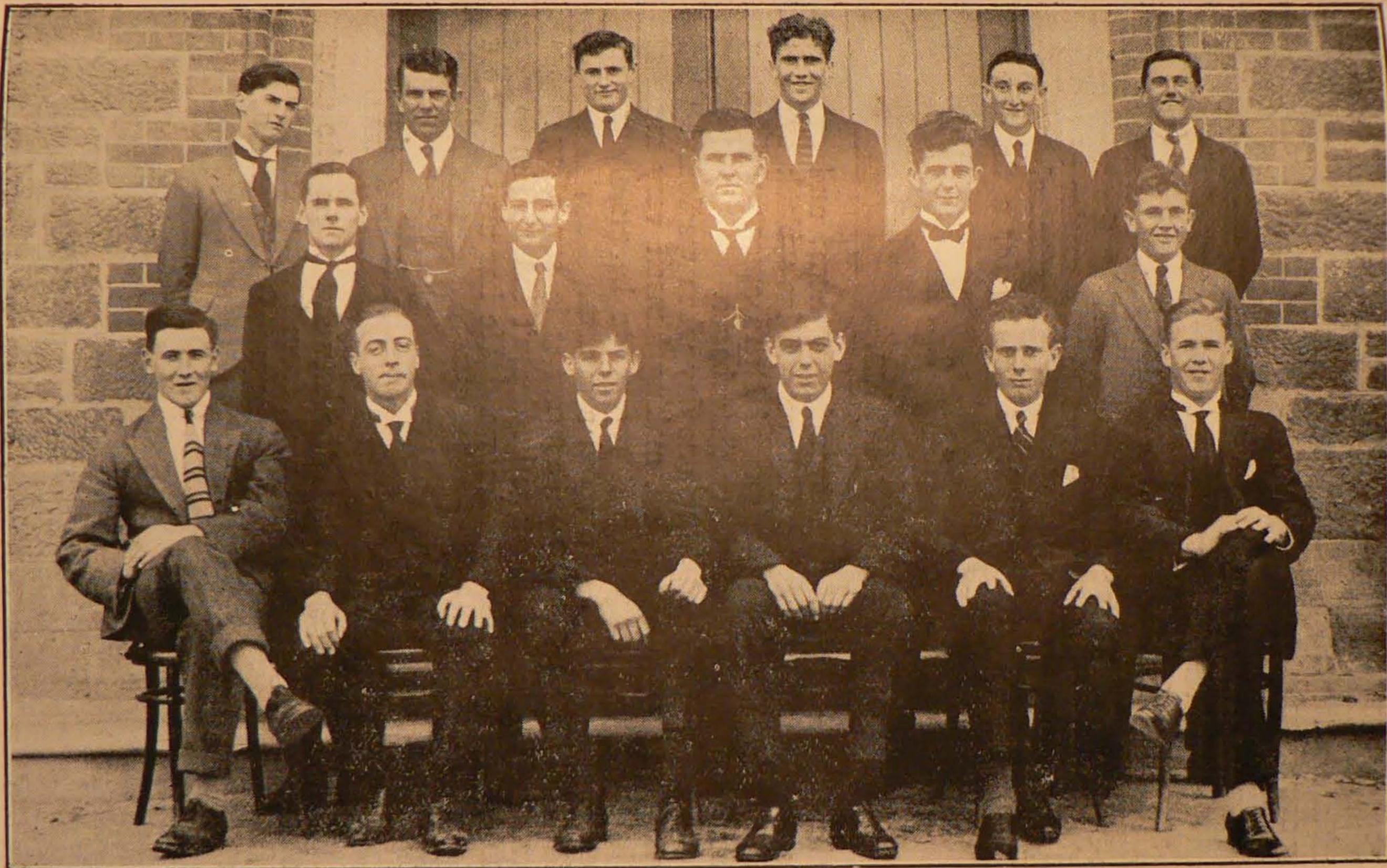
(Encouragingly) "Right-o; gee-up!" (A short interval, no movement apparent). "Get up, Togie!" (Togo wiggles his right ear slightly.) "Gee, Blossom!" (Blossom's eyes remain downcast, with maidenly reserve, though she flicks her tail with a touch of hauteur). The student becomes somewhat peeved. "GEE-up!" he urges, and shakes the reins impatiently. Togo, with remarkable sagacity, puts his tail over them, and holds them still—like the rest of the outfit. The student throws discretion to the winds. He frees the reins with a savage jerk, takes a deep breath, and roars "GIT UP, YOU PAIR OF—" (catching sight of the Examiner)—"er-horses!"

[The Examiner had not the same control of language in his day.—Ed.]

* * * *

Second-year Notes.

An actress would undoubtedly have been delighted with Bo's gift of a melting chocolate, but she had unfortunately left the stage about five minutes before; the untimely present nearly fell on the leader of the orchestra, so the management were perhaps a little justified in their harsh attitude.



ROSEWORTHY AGRICULTURAL COLLEGE SECOND-YEAR STUDENTS, 1924-5.

Top Row (left to right)—D. C. Hague, A. W. Paxton, F. H. Clifton, J. B. Curlewis, G. R. Rogers, R. L. Panse.
Middle Row—R. S. Thomas, K. A. Pike, A. R. Ninnes, H. W. Bauer, H. G. Eaton.
Sitting—N. L. Jude, W. K. Sinclair, R. C. H. Stott, J. S. Phillips, A. T. Hooper, A. W. Scott.

The celebrated survivor of the hiccough disease has found that total repression is impossible; if one exit is closed the pressure becomes so great that the other is perforce opened. He showed remarkable stamina in holding out a whole fortnight without showing any signs, but he almost succumbed when he had finally to let go.

The animal-tamer, fox-hunter, Terryite, etc., was discovered one day demonstrating the most popular hangout of the nobs, but his audience was decidedly unsympathetic.

Stoutness of stature and mental lassitude do not always go hand-in-hand. This was clearly demonstrated by the astuteness which the Honorary Secretary displayed in the matter of facing and oiling the new bats. He was, however, unsuccessful in trying to escape from the dread task of writing for a tin of bat oil.

* * * *

First-year Notes.

This term has found us thoroughly at home and entering with zest into the life of the College. Mac's black eye and Billy's mouth were the only signs of strife among us, but by all accounts that was only a petty disturbance.

A surprise was visited on us one day when we found a lad, apparently of Chinese extraction, making himself very much at home, but on closer inspection it proved to be merely one of our bee experts who had discovered a swarm.

Killarney is now operating on a larger scale, regarding rabbits as beneath his notice. We hope he doesn't induce Jim to give fox a trial, although one never knows. He has also developed a passion for onions.

First-year cricket is perhaps not quite what might be desired, although we may congratulate ourselves on having the best tennis player and perhaps the best cricketer amongst the students. Nevertheless, this should not deter those twelve of us who never touch a bat, nor play tennis at all well, from having more than a casual interest in the game, and thus improve the status of our year in that department. In other respects, especially as regards tennis, we have nothing to be ashamed of.

* * * *

Football.

The College Team won fifth position on the premiership table, having won seven games and lost four games. Curlewis (Captain), with the help of Robinson (Vice-Captain), must be



ROSEWORTHY AGRICULTURAL COLLEGE STUDENTS' FIRST FOOTBALL TEAM.

Back Row—E. L. McBain, F. K. Salter, F. H. Clifton, M. O. Bested, J. A. Close.

Middle Row—H. G. Eaton, A. H. Drew, J. C. Fornachon, C. R. Clarke, A. W. Paxton, H. W. Bauer, F. B. Pearson.

Sitting—A. W. Scott, R. J. Wilson, J. B. Curlewis (Captain), H. W. Robinson (Vice-Captain), U. D. Tate, W. K. Sinclair.

congratulated on his efforts in leading the team. Curlewis also kicked 46 goals, and McBain was second with 14 goals for the season.

June 21.—We scored an easy win, but the play was more even than the scores indicate.

Scores.—R.A.C., 26 goals, 21 behinds; Scotch College, 4 goals 1 behind.

Goalkickers.—Curlewis (11), McBain (5), Close, Salter, Sinclair (2 each), Paxton, Wilson, Eaton, and Tate (1 each).

Best Players.—Curlewis, Sinclair, Wilson, Tate, Robinson, and Bested.

June 28.—After an exciting and strenuous game S.P.S.C. won by 4 goals in the last quarter.

Scores.—R.A.C., 8 goals 14 behinds; S.P.S.C., 12 goals 13 behinds.

Goalkickers.—Curlewis (6), Salter and Sinclair (1 each).

Best Players.—Robinson, Sinclair, Curlewis, Bested, and Wilson.

July 5.—We defeated A.H.S. on their home grounds after an exciting game.

Scores.—R.A.C., 12 goals 6 behinds; A.H.S., 7 goals 12 behinds.

Goalkickers.—Curlewis (6), Drew (3), Wilson, Bauer, and Eaton (1 each).

Best Players.—Curlewis, Bauer, Tate, Wilson, Scott, and Pearson.

July 12.—The match with Teachers' Training College resulted in another win for us.

Scores.—R.A.C., 14 goals 9 behinds; T.T.C., 3 goals 4 behinds.

Goalkickers.—Curlewis (9), Eaton, Bauer, Paxton, McBain, and Drew (1 each).

Best Players.—Curlewis, Scott, Sinclair, and Wilson.

August 9.—After a strenuous game we beat S.O.M.

Scores.—R.A.C., 5 goals 7 behinds; S.O.M., 3 goals 12 behinds.

Goalkickers.—Panse (2), Salter, Scott, and Bested (1 each).

Best Players.—Scott, Bauer, Tate, Pearson, Robinson, and McBain.

August 16.—This was our last Association match of the year, and we defeated C.B.C. on their home grounds after an exciting game.

Scores.—R.A.C., 17 goals 10 behinds; C.B.C., 12 goals 5 behinds.

Goalkickers.—Curlewis (4), Sinclair, Close, Drew (3 each), Bested (2), Bauer and Paxton (1 each).

Best Players.—Tate, Bauer, Sinclair, Pearson, and Clifton.

September 1.—We appreciated a visit from the Melbourne Grammar School Team, and although they were the better team the match was exciting.

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R.A.C. Old Students versus Present.

This match was played on the Adelaide Oval on September 11, and proved to be very enjoyable and exceedingly humorous. The rain, however, had put the ground in a bad condition, and it was only the practised skater who could maintain his equilibrium. Play started with the Old Students kicking with the wind, but at the first change over "Present" had an advantage. In the second quarter the latter still further widened the margin, but a splendid rally by the "Old-timers" equalized matters. At Half-time "Present" had a decided lead. In the third term the play was very even and the "Old Boys" drew near the "Present's" score, but the latter, with superior handball and good judgment in kicking, managed to retain the upper hand. Excitement ranged high in the last quarter, for the Old Scholars were now outclassing the younger lads and brought the scores level. "Present" rallied well and whipped the leather to the forward line, and three goals in quick succession gave them a substantial lead, which they kept to the end.

Final Scores.—Roseworthy Present, 7 goals 7 behinds; Old Scholars, 4 goals 7 behinds.

For the Old Scholars, Baker and Sobels dominated in the ruck, while Shepley was conspicuous on the wing, and "Eb" Thomas proved a clever rover.

The "Present" forwards were too pacy for the opposing backs, this being demonstrated by the clever work of Curlewis, Sinclair, and Bested. Scott at centre was very solid, while Wilson and Paxton in the back lines played wonderful games.

CRITIQUE OF FIRST EIGHTEEN.

ROBINSON, H. (Right Wing).—Fast and clever with the ball. Improvement in high marking and quick passing, and he would develop into the ideal wingman. Leads well and opens many an offensive. Is very enthusiastic, and has been of great assistance in captaining the team.

SCOTT, A. W. (Centre).—A solid player of the "come-through" variety. Has played wonderful football at centre, invariably passing to a man and feeding the forwards well. A fair high mark and excellent kick.

SINCLAIR, W. K. (Rover and Full-forward).—Roves with judgment and great dash. A good kick, but only a mediocre mark. Has been of great service to the team.

WILSON, R. J. (Ruck and Full-back).—A wonderfully improved player, using his weight and reach well. A fine mark, but only a fair kick.

TATE, U. D. (Centre Half-back).—Only showed glimpses of his true form towards the end of the season. Fast, an excellent mark, but an inconsistent kick. When in form, plays with dash and weight, but should practice more seriously.

BESTED, M. O. (Rover and Half-forward).—A clever player, possessing a good turn of speed, a fair mark, and a good pass. Turns well when in danger, but should get rid of the ball sooner.

PAXTON, A. W. (Ruck and Half-back).—A solid player both on the ground and in the air. A good kick, and knocks out well in the ruck.

PEARSON, F. B. (Half-back).—A much-improved player. Comes through with dash and judgment. A fair mark and kick and a most reliable defender.

SALTER, F. K. (Half-forward).—A fine high mark and a fair kick. Picks his man out well, but should endeavour to improve his ground play.

EATON, H. G. (Half-forward).—Fast, and leads exceedingly well. A good mark for his size, but often flies too soon. A good stab kick, and plays with dash and pluck.

CLOSE, J. A. (Full-forward).—Clever, a good mark and kick, but should get rid of the ball sooner. Has been useful as an extra rover.

BAUER, H. W. (Ruck and Half-back).—A solid player, very useful in the ruck. A good mark, fair kick, but is developing a tendency to hang on to the ball far too long.

McBAIN, M. E. (Wing).—Fast, and passes well at top speed. Should endeavour to turn quicker and use his weight more.

FORNACHON, J. C. (Full-back).—Has improved well in his play as goalkeeper. Marks well and kicks off finely. Should come out more from the posts.

CLIFTON, F. H. (Full-back).—A fine mark, but ground work needs improvement. A good kick, and watches his man well.

DREW, C. (Full-forward).—A very useful player when in form. An excellent mark, good kick, but rather slow in his ground play.

CLARKE, C. R. (Ruck and Full-back).—An unorthodox but solid player, using his weight well. Kicking has improved, but should use better judgment in marking.

CURLEWIS, J. B. (Goalsneak), Captain (by the Vice-Captain).—A superb stab kick and a brilliant mark, but has his off days. Is cool, clever, uses great judgment, and is an excellent snapshot. Is a shrewd, tactful, and very popular captain, to which in the role of player and skipper is due much of the success of the team in its debut into the Adelaide Students' Association.

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The Annual Sports Day.

On Thursday, 4th September, 1924, the annual Sports were held on the College Oval. A characteristic scene was presented by the green turf bedecked with waving pennants and white lines. The events were commenced early in the morning under glorious sunshine, which continued throughout the day, save for a few moments before the luncheon adjournment.

The events were keenly followed by the students and their guests throughout the day. The visitors commenced to arrive shortly after 1.30 p.m. At 3 p.m. afternoon tea was partaken of in the Dining Hall.

Amongst the visitors were many Old Scholars. Amongst these was Mr. W. R. Birks, B.Sc., Principal of Dookie Agricultural College, who extended an invitation to Roseworthy to send interstate teams to Dookie.

At the close of the sports events, the friends and students gathered at the new pavilion for the presentation of the prizes, which had been so generously donated by numerous business houses and College supporters. Mr. Colebatch thanked the visitors for their presence, and, as Principal, he was pleased to know there was so much interest taken in the College. Mrs. Colebatch then presented the prizes to the respective winners.

The Cup, being the thoughtful donation of Mr. Alick J. Murray, the well-known pastoralist, was won by R. J. Wilson. On the presentation of this prize cheers were called for the recipient, who had worked so hard as Joint Secretary. Mr. Scott thanked the donors of the prizes and the friends of the students, on behalf of the Sports Committee, for their gifts and interest shown in the sports.

The points for the Cup competitors were—R. J. Wilson, 13; H. H. Winnall, 9; J. B. Curlewis, 7; H. W. Robinson and U. D. Tate, 6; and W. L. Jude, 5.

The officials for the day were:—Committeemen—W. D. McNeil, R. J. Wilson, A. W. Scott, W. K. Sinclair, E. McBain.

and C. Drew. Judges—Messrs. A. J. Adams, M.A., D. G. Quinn, R. C. Scott, and F. W. Gilbert. Stewards—Messrs. E. L. Orchard, J. Egan, V. M. Fairbrother, J. L. Williams, J. H. Warren, A. W. Woodroffe, W. V. Ludbrook, and J. C. Fornachon. Starter—Mr. R. Baker. Handicappers—W. D. McNeil, R. J. Wilson, and A. W. Scott. Timekeepers—Messrs. A. T. Jefferis, B.Sc. (Agric.), and E. L. Orchard. Joint Hon. Secretaries—R. J. Wilson and W. K. Sinclair.

The results of the events were as follows:—

Cup Events.—Long Jump—Wilson, Salter, Winnall—19 ft. $\frac{1}{2}$ in. 120 Yards Hurdles—Wilson, Curlewis, Winnall. Putting the Weight—Tate, Jude, Fornachon—28 ft. 8 in. 440 Yards—Wilson, Winnall, Magarey. High Jump—Curlewis, Wilson, Winnall—5 ft. 1 in. 100 Yards—Robinson, Wilson, Tate—10 4-5 secs. One Mile—Jude, Paxton, Curlewis.

Handicap and Other Events.—Sheaf-tossing—Ninnes Wilson, Tate—22 ft. 9 in. Kicking for Goal—Scott, Sinclair, Magarey. Kicking for Distance—Scott, Sinclair, Fornachon. 100 Yards First-year—Winnall, Salter, Robinson. Throwing Cricket Ball—Martin, Paxton, Magarey. 135 Yards Handicap—Robinson, Salter, Thomas. 100 Yards Second-year—Thomas, Sinclair, Jude. 220 Yards Handicap—Bested, Robinson, Thomas. Sack Race—Stott, Yelland, Fry. 120 Yards Hurdles Handicap—Salter, Eaton, McBain. 100 Yards Third-year—Robinson, Tate, Bested. Half-mile Handicap—Bested, Panse, Jude. Old Students—Messrs. Fairbrother and Baker. Tug of War—No. 1 Team. Greasy Pig—Bauer.

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Dances.

During the past term, the social side of our life has been very well provided for. We have to thank the Gawler residents for a most enjoyable evening on 28th August, when the Return Dance was held in St. George's Hall, Gawler. The College staff and students attended *en masse*, and unanimously voted the dance a great success. The hall was effectively decorated with Iceland poppies, gum-leaves, and streamers, and a quaintly designed frieze of art-paper adorned the walls. A delicious home-made supper was served. Many thanks to the Committee, Mesdames Rice, Rudall, and Tobin, Misses E. Alexander, M. Connor, D. Cox, E. Fergusson, and A. May, Messrs. J. and R. Alexander, E. Martin, Barbor, Rice, Richardson, and B. Taylor. On the following Thursday, 4th September, the event of the College year took place, namely, the Annual Sports, followed by the "Big Dance" in the evening. Much time, thought, and

exertion had been expended in preparing for both parts of the day's entertainment, and it is difficult if not impossible to see how either sports or dance could have been more successful. Ideal weather prevailed during the day, adding much to the enjoyment of students and visitors, who gathered during the afternoon to witness the Sports events, which are described elsewhere. The serious business of the day over, and the rewards of merit distributed, all adjourned to prepare for the ball. The Principal and Mrs. Colebatch received the guests at 8 p.m., and the hall was soon filled with the guests of the staff and students.

The Committee departed for once from the time-honoured colour scheme of pink and black (the College colours) in the decorations, which were carried out in streamers of blue and tangerine, the finishing touches being supplied by balloons and paper rosettes hanging along the middle of the room. Another innovation was the engagement of a jazz-drummer, Mr. Ninnis, to assist our old friends Miss Ormsby and Mr. Mackenzie. The music, the decorations, and the floor were all subjected to favourable comment by the visitors, the general opinion being that the floor was better than it had been for some years past. The crowding which is usually the only drawback in the ballroom was relieved by clearing the Reading-room for dancing. Supper was served in the Museum, transformed for the occasion by draping the walls with flags and ornamenting the tables with Iceland poppies. The programme was a long one, but it seemed all too short, to the students at any rate. The musicians were very good in playing innumerable encores; Miss Nancy Robinson and Mr. L. Yelland kindly supplied the music for the supper extra dances.

The students realize that they are fortunate in having chosen such efficient representatives on the Dance Committee. As usual, Mr. Pritchard took pleasure in doing his best to help the student members of the Committee, Messrs. H. W. Robinson and Curlewis (Secretaries), Bested, Jude, Winnall, and Salter, who should feel amply rewarded for their efforts by the success of the long-looked-for evening. We thank also Mrs. Colebatch and Mrs. Orchard, who assisted the Committee in various ways. It was pleasing to see the large number of Old Scholars present, renewing old friendships as well as making new ones.

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Cricket Notes.

With the opening of the cricket season and the advent of fresh teams into the Gawler Association, many were the speculations as to the ultimate success of the College First Eleven.

Practice was early indulged in, with the idea of noting new blood to fill the vacancies left by the departure of so many of our best last season's players. We were fortunate in securing a match with Scotch College early in the term, and although we defeated our visitors, a most enjoyable day was spent. The Scotch College took the advantage of bringing their junior agricultural Forms to visit the College, and we hope they derived some benefit from what they saw at Roseworthy.

Up to date we have played two matches, and being successful in both of them, we look forward to a triumphal run-through our opponents. We certainly have the means to do this if only serious practice is taken up. With two ovals at our disposal, there is no reason why all who are interested in the "grand old game" should not be able to have their "knock" any night of the week.

A very acceptable donation to the Cricket Club has been made by C. E. (Nip) Pellew, in the form of a bat for the best fieldsman of the First Eleven. This is all the more appreciated, inasmuch as it comes from an international cricketer who was named the best fieldsman in the Australian Eleven visiting England in 1921.

For last season the bat was awarded to J. B. Curlewis, whose prowess in this respect was outstanding.

Mr. Pellew, who considers quick and reliable fielding amongst the most important assets of a team, has very generously offered to stimulate the fielding activities of the College Team by presenting a bat annually.

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Farmers' Day.

VISIT TO ROSEWORTHY COLLEGE.

With a revival of Farmers' Day at Roseworthy Agricultural College, producers are showing a growing interest in the annual visit, and about 150 availed themselves of the opportunity to inspect the various successful activities of the College on 16th September. A special morning train conveyed a large contingent to Roseworthy, where a dozen horse-drawn conveyances picked the passengers up, and took them on a tour around the Government farm. There were present among the visitors the Minister of Agriculture (Hon. T. Butterfield), the Director of Agriculture (Professor A. J. Perkins), and Messrs. W. L. Summers (Secretary to the Minister), W. J. Spafford (Superintendent of Experimental Work), and S. B. Opie (Field Officer). Upon their arrival at the College the party were met by the

Principal (Mr. W. J. Colebatch, B.Sc., M.R.C.V.S.), who piloted them around. The long procession of vehicles and motor-cars traversed the four boundaries of the College property, which is a picture at present, and saw on each side many valuable illustrations of good practical farming—rich top-dressed pastures, manurial plots, clean fallows, cereal hand plots, crops of peas, wheat, oats, and barley varieties, and depth of ploughing plots. Dismounting, the crowd were taken through the permanent experimental field by Mr. Colebatch. This was initiated by Professor Perkins a score of years ago, and is the most important permanent experimental field in Australia. Formerly the alternate crop and fallow system was in operation, but now the crops are together, and the fallows separately distinct.

A Difficult Season.

So far as the season at Roseworthy is concerned, the fallow fields of 1923 were broken up later than usual, owing to the excessive winter rains in the first instance, and later on the work had to be postponed again and again through the land becoming too dry and hard. It was a difficult season from the point of view of tillage, and in consequence a large amount of team work was required between harvest and seeding. The soil reserves of moisture, however, were amply replenished by frequent summer showers, and at drilling time the land was in good seeding order. An early start was made with the drills, and the work progressed without serious interruption. Wheat seeding was completed by 6th June, the barley field a week later, and the peas by 28th June. The crops germinated evenly in the case of the dry-sown April crops, but winter growth was slow. During July a succession of very low temperatures and several heavy frosts were experienced. The rainfall in that month (0.41 in.) was the lowest on record except in 1889, when only 0.21 in. was registered. In August more normal conditions ensued, and both crops and pastures responded, but the check given in July has left its mark, and the effects will hardly be overcome in the brief period between now and harvest. The coming grain harvest will probably be above normal, but hay cuts will be light, although the quality of the fodder will be much better than that harvested in 1923.

Best Experimental Field.

For permanent experiments 274 acres are utilized—130 under crop, 124 on fallow, and 20 grazed. Visitors walked through the experimental field on their way to lunch as guests of the College. The manurial plots were studied with keen interest, and a bare fallow-wheat rotation is adopted. It was plainly noticeable what a beneficial effect the use of super or farmyard manure

has on the growth as against no manure, and also the varying response to increased manuring from $\frac{1}{2}$ to 2 cwt. A field has been set apart to ascertain to what extent water soluble and citrate soluble phosphate revert to less soluble forms through the interactions that occur in the soil. The area is fallowed the first and second years, but super is not added until autumn in the second. Wheat (90 lb. King's White) was sown in subplots in the third, and the plot that received 2 cwt. super gave the biggest yield— $22\frac{1}{2}$ bushels, as against $17\frac{1}{2}$ with no super. A series of 12 plots set apart for the purpose of testing the effect of the depth of ploughing on the wheat crop indicated that shallow treatment has equal results with deep ploughing. A 2-in. and 4-in. treatment yielded nearly two tons of hay to the acre and $16\frac{1}{2}$ to $17\frac{1}{2}$ bushels. Other interesting crops are seen in the irrigation plots. Healthy-looking berseem has been giving a cut of nine to six tons odd to the acre during the winter, and indicates what a useful greed fodder this is.

Field Crops.

Much useful work is being done at the College with other field crops, under the direction of Messrs. E. L. Orchard and R. C. Scott. Following cereals for silage on a plot of 11 acres, which was ploughed on 16th and 17th June. Early Dun peas were sown through a combine drill on June 20 at the rate of 2 bushels with 164 lb. of 45 per cent. super to the acre. The field was then harrowed. A field of 8 $\frac{3}{4}$ acres has been alternately on fallow and under wheat for hay since 1919. Last year the area was fallowed, heavily rolled in January and February last, and cultivated four times prior to seeding with oats this year on 23rd to 28th April. Super at the rate of 2 cwt. to the acre was used. Early Dun field peas have been sown on a 30-acre field, which has been utilized each successive season since 1919 as follows:—Fallow, wheat plots, pasture, barley, and wheat. The ground, was ploughed up in June last, harrowed down, drilled with 2 cwt. super to the acre, and sown with 2 cwt. peas. The sown surface was harrowed immediately after on 27th June. Another 79-acre field was ploughed up during the first fortnight in September, 1923, rolled with a clod-crusher in January, cultivated three times and harrowed twice before seeding. A large number of varieties of wheat were sown between 29th May and 6th June. Included in the field is a trial with different quantities of seed (Felix variety), also tests with special drills, varying the spacing of seed in the rows in one case, and the distance between the rows in another. Super was used at the rate of 164 lb. (45 per cent.) to the acre. Barley is being experimented with on 48 acres after a rotation of pasture, fallow, and wheat. The ground was ploughed in February and March, and different

barleys sown with a combine drill between 10th and 13th June at the rate of 50 lb., with 164 lb. 45 per cent. super to the acre. Following fallowing, 38 acres was broken up at the end of September, 1923, heavily rolled in January last, and cultivated three times before seeding. Plots of wheat and oats intended for hay were drilled in by 1st May. The seeding was—Wheat and oats in mixture, 1 bushel to the acre; wheat, 120 lb.; super, 2 cwt. 36/38 grade to the acre. Early Crossbred 53 wheat was used with Lachlan, Early Burt, and Algerian oats respectively at the ratio of six acres of wheat to one of oats. The same wheat with Kherson at six to two, and with Scotch Grey oats at six to eight.

Among the Live Stock.

After luncheon visitors were at liberty to inspect the stock, farm buildings, and other adjuncts at the College. The collection of wheats and seeds in the Museum had a special appeal, as also had the magnificent Tassie Memorial Library, the Laboratory, and the neat little Winery, which turns out some nice vintages under the guidance of Mr. D. G. Quinn. One is a Doradilla wine—a palatable and light dry wine. Roseworthy is the only institution of its kind in Australia which has both theoretical and practical viticulture on its curriculum. The stock, in charge of Mr. R. C. Scott, was another attraction, particularly the exhibition pens of crossbred fat lambs, while Mr. R. Baker (officer in charge) was busy giving farmers information about the dairy cattle and swine. A good many additions—bull and heifer calves—were noted in the Lincoln Red Shorthorn herd, presented by the breed society in England through the instrumentality of Sir Archibald Weigall. The milk records of some of these dual-purpose animals were creditable—several having produced from 5,000 to 9,000 lb. milk in terms ranging from 187 to 365 days, while one cow (Donnington Violet V.) yielded 10,058 lb. in 350 days. The highbred Jerseys from the best studs were in grand condition, and there is a lot of promising young stock coming on. The swine section is evidently profitable, and the Berkshire strain is equal to the best. Two large new silos recently erected caused many present to realize the value of these on a farm.

Worthy of More Support.

The Commissioner, addressing the gathering before leaving the College, said the opportunity to visit Roseworthy was an education which might be availed of more fully by students of agriculture, and particularly by farmers from other districts who were in the city during Show time. The Department of Agriculture arranged for this visit annually at considerable expense in order to give agriculturists a chance to see what was being

done by the professors of the science. There was no question that a good deal might be learnt in regard to various experiments in manuring and all varieties of cereals, including wheat, barley, and oats; rare crops, such as berseem, growing so successfully; and lamb-raising experiments—which were probably unique in Australia—with so many different breeds and crosses on one farm. He hoped next year delegates who came to the city to the annual Agricultural Bureau Congress would make Roseworthy one of the features of their Congress. He did not know why city people, who lived largely by the man on the land, and received immense advantages from production, did not take more interest in the trip. Two-thirds of the College students were from the city and the remainder from the country. He would have been pleased to see more farmers present also. The experiments carried out by the most competent men the country could get must be of great benefit to the agricultural community. He asked those present to give three cheers for Mr. Colebatch.

FARMERS WELCOME ALWAYS.

In returning thanks, Mr. Colebatch said that he was glad to see a revival of Farmers' Day, and he hoped there would be no more breaks in the annual visits. They gladly welcomed farmers to the College in order to show them what was being done there. Mr. Colebatch referred in appreciative terms to the work done by the members of his staff—young men who were doing their utmost to make their particular branch a success. They were pleased always to have practical men examine these exhibits and pass opinions on them. The College must not be confused with what was known as a model farm. They tried to run it under a Government system on lines almost identical with an ordinary farm.

Professor Perkins congratulated the Principal on the excellent prospects of the season, and on his fine exhibits. He trusted that the work Mr. Colebatch was doing would be reflected in future in increased production throughout the State.

The "special" left Roseworthy at 5 p.m., and an hour later the party were safely landed in the city, after having spent an edifying day.

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Farmers' Day.

By a Student.

Monday, 15th September, was Farmers' Day at the College. Last year this institution was unfortunately allowed to lapse, but this year it was well attended, and was a great success.

The visitors were brought out from Roseworthy in a miscellaneous array of vehicles belonging to the College and to neighbouring farmers, and these wound their way around the paddocks like a huge snake; ending their journey at the farm buildings they dismounted and found their way to College and luncheon.

After lunch a Peterbro' tractor at work was the object of interest. The tractor was pulling two four-furrow disc ploughs ploughing 3-4 inches deep, and was making a good job of it. Leaving the tractor the visitors looked over various pens of College sheep, showing the different breeds and crosses used by the College in their fat-lamb raising experiments.

The crowd now scattered over the farm looking at the buildings, implements, stock, etc., but all made their way to the cow byres when the cows were seen coming in. The milking-machine and hand-milking methods of the students were variously criticized, but as it was a familiar scene to most they soon left to saunter around the farm.

Everyone collected at four o'clock to board their various conveyances and depart for Roseworthy Station, after having spent a pleasant day learning the how and why of various College experiments, admiring the stock, and criticizing the College methods and perhaps realizing the value of the College to the farming community of South Australia.

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Our Examination System.

By "L."

However much we may dislike "swotting" for examinations, we must admit that they are a very important part of our College life. Rightly or wrongly, examination results are the standards by which most outsiders, at least, judge of the success or otherwise of our College careers. That is what examinations are held for.

Preparing for competitive examinations has been one of my hobbies, just about continuously, for the last ten years or so. In the course of this experience, I have been led to certain conclusions, which I think may interest many readers of this magazine.

What does the present examination system amount to? Take any subject, any class of students. Several students are earnest and brainy workers, who thoroughly understand the subject; they all deserve and get first-class passes, but just because one happens to have crammed up a few more minor details, or it may be pure chance, he gets 1 or 2 per cent. more marks than the next three or four men, but at least 50 per cent. more of the credit and all

the prize-money. Is this system sound for practical purposes? Is it fair and efficient? In my humble opinion, it is not.

So much for destructive criticism. But this, without its proper complement, constructive criticism, is like a bucket without a bottom—it won't hold water (with all due respect to certain sections of the Australian press). I have no intention to pose as an authority on any subject, least of all educational methods, but I merely submit the following as my own ideas of possible improvements.

I shall dismiss from further consideration those of my readers who disagree with the premise I have made above, as they are not likely to agree with anything further I have to say. Agreed, then, that it is wrong to say A is first in order of merit because he has 96 per cent., while B is second with 95, C third with $94\frac{1}{2}$, and so on *ad nauseam*. But we must make some distinction. How?

I think a better system would be to classify successful students into first, second, and third class passes only, the names in each class being in alphabetical order on the list of results. This system is in operation in many other educational institutions; in this College written work is less important than practical work, and one would think that the system would be especially suitable for our conditions. As it is, the diplomas given are classified into first, second, and third class divisions—why any further distinction? What is the use? It only encourages the practice of cramming to beat the other man, instead of working simply with the intention of getting a first-class diploma. It is true that the element of chance would still figure largely in the differentiation of those whose marks entitle them to a first-class pass, from those whose average falls just below the appointed percentage. Still, I think there would be one great advantage: the competitive spirit fostered by the present system would be replaced by a desire to work purely for the sake of acquiring useful knowledge—and a first-class diploma.

How could the prize-money be distributed under this system? I don't admit that this question is sufficiently important to affect the issue, but various plans could be adopted which would be as equitable as the one now in force without making the examinations wholly competitive.

[We do not necessarily endorse the views expressed by our correspondents.—Editor "The Student."]

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Old Collegians' Association.

Foremost amongst items of interest is the success of Dr. A. E. V. Richardson, who has been appointed Director of the Waite

Agricultural Institute in South Australia. A paragraph concerning him appears in another portion of this issue, and it remains for us to extend the heartiest congratulations and cordially welcome his return to this State.

The Annual Dinner was held at Covent Garden, Adelaide, on Thursday of Show Week, when about 70 Old Collegians attended and spent a thoroughly enjoyable evening. The President (Mr. L. N. Salter) was at the head of the table, and supporting him were the Hon. W. G. Duncan (President Royal Agricultural Society), Professor A. J. Perkins (Director of Agriculture), Messrs. W. J. Colebatch (Principal), W. S. Kelly (Chairman Advisory Board), A. W. Robinson (new President), and Geo. Jeffrey.

Mrs. J. A. Haslam again kindly arranged the musical items, the excellence of which, combined with short speeches, materially assisted towards the success of the function.

Unless unforeseen circumstances arise, members can look upon the Thursday evening of Show week as the time fixed for future functions, with the probability of them being held in the same hall. It is hoped that by means of this early announcement additional numbers will be able to arrange for attendance and make future dinners even a greater success than in the past.

Immediately prior to the dinner the Annual Meeting of the Association was held, when the question of the establishment of a Scholarship at the College and the erection of a headstone over the grave of the late Professor Custance were two subjects which were open for discussion. The matter of a Scholarship tenable at Roseworthy for sons of Old Students or such other person as may be chosen is a subject which came before the Committee a short time ago, and was referred to a Sub-committee for report. This Sub-committee had decided that whilst in sympathy with the proposal they had found that the present revenue of the Association was not sufficient to defray the cost of a Scholarship, and in order to place the same on a sound footing it would be necessary to substantially increase the annual and life membership fees. Should these be raised to 10s. and £5 5s. respectively, then the establishment of a Scholarship would be possible. After discussion it was resolved that this question be deferred until the next Annual Meeting, by which time members will be more conversant with the proposal, will understand the financial position, and be in a better position to come to some decision on the matter.

All who have had an opportunity of perusing the earlier reports of the College must have been impressed with the vast amount of work performed by the late Professor Custance. His foresight in laying the foundations of the College has been of very great benefit, not only to students who were immediately

under his care, but also to succeeding generations of students, and the Committee felt that some action should be taken in order to perpetuate the memory of the man who was the means of establishing the College on such sound principles and contributing in no small measure to its future success. It was agreed that a tombstone be placed over his grave; that Old Students be circularized, giving them an opportunity of contributing towards the necessary cost; and that any additional funds be supplied by the Association. Details were left in the hands of a Subcommittee consisting of the President, Mr. A. M. Dawkins, and the Secretary.

At the Annual Meeting permission was sought for the appropriation of funds to make up the difference between the donations received and the cost of stone, kerbing, etc., a request which was unanimously agreed. It is with regret that we have to state that subscriptions toward this most worthy cause have not come in quite as freely as was expected. From several most generous donations have been received, but no doubt many more wish to associate themselves in the movement, the circular having been overlooked, and this reminder will ensure a contribution.

The officers of the Association elected for the next year are as follows:—

Patron—His Excellency the Governor (Lieutenant-General Sir Tom Bridges, K.C.M.G., C.B., D.S.O.).

Vice-Patrons—Hon. T. Butterfield, M.P., Sir Langdon Bonython, Hon. R. T. Melrose, M.L.C., Professors Perkins and Rennie, and Messrs. A. J. Murray, W. S. Kelly, W. Hawker, and W. G. Auld.

President—Mr. A. W. Robinson.

Vice-Presidents—Messrs. G. F. Jenkins and J. W. Sandford.

Committee—Messrs. A. W. Robinson (President), H. Robson, W. J. Colebatch, W. J. Spafford, A. T. Jefferis, F. H. Snook, H. A. Follett, and H. K. Lewcock.

Auditors—Messrs. H. C. Pritchard and W. J. Dawkins.

Hon. Secretary—Mr. R. C. Scott.

We are indeed fortunate to have secured the nomination of a gentleman of the standing of Mr. Robinson for the office of President. He has for many years taken an enthusiastic and keen interest in all Association affairs, and we are pleased that he has accepted the highest honour we can confer upon him.

The retiring President has been in office during the last two years, during which time he has rendered considerable service to the Association, and we take this opportunity of recording our thanks and appreciation.

Amongst the prize-winners at the Adelaide Show were several old Roseworthy men, who, although comparatively few in number,

were successful in gaining numerous awards. The College and Old Students combined carried off 7 championships, 8 reserve championships, 48 first, 37 second, and 17 third prizes. This is slightly more than the number won last year, and is a record of which we may well be proud, but we hope to see more men enter the field in succeeding years. The College prize-list is set out in detail elsewhere, whilst the successful exhibitors amongst Old Students is as follows:—

Exhibitor and Section.	Reserve				
	Champ.	Champ.	1st.	2nd.	3rd.
W. J. Dawkins—Dorset Horn	1	1	4	3	1
W. J. Dawkins—Fat Lambs	—	—	1	—	—
J. H. & W. J. Dawkins—Clydesdale	—	—	1	2	—
E. S. Davidson—Romney Marsh	2	2	8	6	4
L. T. Cowan—Jersey	1	1	4	8	4
K. S. Wilcox—Illawarra	—	1	2	2	3
H. C. Ey—Ayrshire	—	—	1	—	1
G. G. Hall—Friesian	1	—	1	—	—
Exp. Farm, Kybybolyte (L. J. Cook)—Ayrshire	—	—	1	—	—
H. B. Robson — Dried Fruits, etc.	—	—	8	6	—
Dept. of Agric. (C. G. Savage) —Dried Fruits, etc.	—	—	6	1	—

Mr. W. J. Dawkins has built up an exceedingly fine stud of Dorset Horn sheep, and not only did he gain many prizes at the Adelaide Show, but also at both Melbourne and Perth. Further, at Perth for one of his prizewinners he secured the enormous price of 101 guineas when put up for auction. This is easily a record figure for a Dorset Horn ram in Australia. Early in the new year Mr. Dawkins intends to make a trip to England, and no doubt will select additional sheep for his flock. One begins to wonder where prices will soar to after that.

In September last an effort was made to establish an annual football match between past and present students of the College, and the first match was played in Adelaide on the afternoon of Thursday, 11th September.

Unfortunately it was a wet day, and we were not able to raise a representative team, with the result that the College defeated us rather easily. However, it seems quite possible that this game can be made a successful annual fixture if properly organized. The match could be played on an oval in Adelaide on the Thursday of Show Week, as at that time both the students and many of our members are in town for the Show. In the above game played this year an Old Student, Mr. F. H. Snook,

umpired, and we sincerely thank him for officiating (even then, we didn't win).

Roseworthy has three representatives in the Doradillo Enquiry Committee which is at present investigating this question. Messrs. T. N. Salter and D. G. Quinn are South Australia's representatives, and Mr. H. L. Manuel represents New South Wales.

At the meeting of the Association for the Advancement of Science in Australasia, held in Adelaide during last August, the traditions of the College were worthily upheld. The photographic group reproduced in this issue shows those who took part in the proceedings, and with these should be included the names of Messrs. A. T. Jefferis and R. H. Macindoe, who unfortunately were not present when the photo was taken. It is but very rarely that the Old Students engaged in agricultural studies throughout the Commonwealth come together and enable such a photo to be taken, and we are fortunate to be able to secure such a permanent record.

Old Collegians hold many high offices, and we have still to add another to the list of achievements. I refer to the election of Mr. G. F. Jenkins to the position of President of the Liberal Federation. We heartily congratulate Mr. Jenkins, who is a Vice-President of our Association and was at one time Ministerial Head of the College. Also Mr. R. Hill has been appointed to the recently created position of Agricultural Instructor in the Department of Agriculture, and to him also we extend sincere congratulations, knowing that he will fill the position with credit to himself, the Department, and the College. For the last four years he has successfully managed the Experimental Farm at Minnipa, a position which is now rendered vacant, and which we are reasonably sure will be filled by an Old Collegian.

It is with deep regret that we have to record the passing of yet another Old Student, as Mr. E. R. Morgan, who was here in the earliest days of the institution (1888-9), died in Adelaide a few weeks ago.

In submitting the following notes dealing with the doings of Old Students, I wish to acknowledge with thanks the information that has been forwarded here, and if others would occasionally drop a short note concerning themselves or others whom they may meet it would ease things for me, add interest to the column, and perhaps cause less delay and annoyance to the Editor.

WORNUM, A. C. (1885).—For many years in Western Australia, but later returned to this State, and is farming in partnership with his brother at Kimba.

- DAVIES, THOS. (1885).—Manager for Elder, Smith, & Co. at their Port Augusta branch.
- HILL, R. J. (1886).—Director of the firm James Hill & Sons, merchants and importers, Pirie Street.
- CLARKE, W. H. (1886).—Sharebroker, with offices at 362 Collins Street, Melbourne.
- PLAYFORD, J. (1887).—Market gardening at Norton's Summit.
- LONGBOTTOM, A. (1887).—Was for a long period farming at Willunga, but has now removed to town, and resides at the Grange.
- MOODY, H. H. (1888).—Farming in Western Australia at a place called Light Brook, near Moora.
- GOLDSACK, J. G. (1888).—Possesses the "Bell Vue" property at Beaumont, Burnside.
- BIRKS, C. E. (1889).—Has a fairly large and valuable grazing area at Wistow, and has attained considerable success by the top-dressing of his pastures.
- SANDERS, J. B. (1890).—Farming near Murray Bridge.
- ASSHETON, A. J. C. (1891).—Proprietor of the Woseley Hotel, Wolseley.
- JUELLE, J. V. (1892).—A public accountant with offices at Port Adelaide, and residing at Henry Street, Croydon Park.
- WHEATON, W. (1892).—Wheatgrowing at Balladoran, N.S.W. Was in South Australia during September, and attended the Annual Dinner.
- GRAHAM, W. L. (1893).—Farming at Narrigin, in Western Australia.
- WILCOX, A. M. (1894).—Combines grazing and hay-growing on his farm at Lower Light, Two Wells.
- MCDONALD, A. D. (1895).—During the time of the Wheat Scheme represented the producers on the Board of Management. Is now back on his farm at Leighton, Burra.
- RANKINE, M. G. (1895).—Possesses a good grazing property at Strathalbyn.
- DAWKINS, L. H. (1896).—Has contributed very largely to the success of the Two Wells Show, of which he is Secretary. Holds several positions, including District Clerk and Secretary for the Institute.
- GORDON, W. M. (1896).—Farming at Kondinin, W.A.
- CHAPMAN, F. E. (1897).—Doesn't get thinner through the management of his farm at Woodside.
- RICHARDSON, H. B. (1897).—Orchardist at Coonawarra, in the South-East.
- ROWE, T. M. (1898).—Sergeant in the Police Force. Stationed at Morgan.

- WARNES, G. (1898).—For some years at White River, Port Lincoln, but now at Woolgangi Station, near Burra.
- PEARSE, N. H. (1899).—One of the owners of the well-known "Gums" Station, Florieton. Although only recently become a racehorse-owner he has already attained considerable success.
- RICHARDSON, W. R. (1899).—Doing very well with a fairly large tract of land at Koppio, West Coast, and combines both cropping and grazing.
- SPAFFORD, W. J. (1900).—Chief Agricultural Instructor in the Agricultural Department, South Australia.
- GWYNNE, E. C. (1900).—Owns a profitable garden and orangery at Payneham Road, Glynde.
- WILCOX, P. M. (1901).—Has land at Clare, the greater part of which is given over to grazing.
- MARTIN, A. S. (1901).—Manager for Elder, Smith, & Co., Burra.
- WIESE, R. (1901).—Farming at Mundalla, Bordertown. One of the judges in the crop competition this year.
- FULTON, D. (1902).—Returned from Palestine a couple of years ago and secured a vineyard at Marion. Was at the College last July, when he gave a very interesting illustrated address to the Farmers' School, dealing with agriculture in Palestine.
- MAGAREY, A. W. (1903).—Upon his return from active service acquired a fruit block at Berri.
- NEVILLE, L. G. (1903).—Wheatgrowing at Pinnaroo.
- YEATMAN, E. P. (1904).—For some time with the Farmers' Union at Saddleworth, but is now manager for Bagot, Shakes, & Lewis at Victor Harbour.
- MOTTERAM, W. (1904).—In the firm of Motteram & Sons, biscuit manufacturers, Adelaide.
- WILLIAMS, G. R. B. (1905).—Farming at Wynarka.
- STEPHEN, A. V. (1905).—Our records show him to be at Bundaleer, Jamestown, although it is some time since word of his doings has reached here.
- TRELOAR, F. J. (1906).—At Olary, where he has a fairly large area of grazing country.
- BROWN, E. O. (1906).—Spent some time on the "Bluff" Station, Hallett, after which he took up land at Meadows and had the misfortune to be burnt out last summer.
- RUMBALL, P. S. (1907).—Has received the appointment of Poultry Expert for Queensland. He has been in that State for some years connected with the Poultry Department.
- BRISTOWE, E. A. (1907).—Manager of the Booborowie Experimental Farm, Hallett. Judge of the crop competition in the Yacka district this year.

- HUNTER, M. (1908).—Successfully farming at Tammin, W.A. Paid a visit to the College last September. Has altered very little in appearance.
- WHEATON, F. A. (1908).—Has a very good farm at Redhill.
- MAGAREY, B. J. (1909).—Secured the record price for wool in the Adelaide sales last year. His station is at Glenroy, in the South-East.
- SNOW, H. (1909).—Of recent years has harvested extremely heavy crops from his farm at Rochester.
- NEVILLE, K. E. (1910).—Has the home farm at Balaklava, where he combines grazing and wheatgrowing. Of late years has leant somewhat toward the former.
- GRANT, J. E. (1910).—Constable in the Police Force, stationed in Adelaide. Prior to that was on the land at Myponga.
- FOLLETT, H. A. (1911).—Upon his return from the War, started an orchard and orangery at Langhorne's Creek. Has worked very hard, but with bad luck. Last winter the floods were the cause of destroying upwards of 400 trees, mainly four-year-olds just in bearing.
- JARMAN, L. D. T. (1911).—Also in the horticulture and viticultural branches of farming with his father at White Hut, Clare.
- RUSSELL, C. A. W. (1912).—Was for a time with his brother farming at Halidon, but about three years ago went on the land at Gibberding, W.A.
- MARTIN, F. O. H. (1912).—Dairy-farming at Woodside.
- ORCHARD, H. H. (1913).—Inspector in the Horticultural Department. Stationed at Mount Gambier.
- TILLY, A. M. (1913).—Farming at Moncourup, W.A.
- CATT, K. C. (1914).—After finishing his course was for a year or so with his brother at Mallala, and then secured a farm of his own at Bowmans.
- RIGGS, F. (1914).—Has not yet completed his course at the Methodist Training College, Brighton, although he has taken the Church at Penneshaw, Kangaroo Island, during the Christmas vacation.
- KOCH, F. H. (1915).—Has generously donated a cup, valued at 25 guineas, for the crop competition in Pinnaroo district. He is farming at Wilkawatt, and from all accounts he is well in the running for winning his own cup.
- ROBINSON, J. O. (1915).—Was for some time tester for the Murray Bridge Association, but has now taken up land at Meadows.
- ROSS, C. C. (1916).—Has remained on his father's grazing property at Williamstown.
- FAIRBROTHER, V. M. (1916).—Assistant Experimentalist at the College.

LEGG, J. H. (1917).—Holds the position of buttermaker in Taylor Bros.' factory at Auburn. Was one of our best men in the Old Scholars' football match.

DAVIS, B. O. (1917).—Working on the land at Taplan.

WOOD, F. B. (1918).—Having sold his farm at Wyal, Katchem, contemplated taking up law, but the following interesting letter to Mr. Colebatch will explain his doings, as well as those of several other Old Students:—"I have started again on a very nice property six miles out of Northam, all heavy red soil and well watered. Improvements very few, so I can lay it out to my own ideas. Area, 1,280 acres. For years past it has been held in conjunction with other country by a Nor'-West station-owner, who has consistently for many years lambed on the 1,280 acres, with only a boundary-fence as improvements, 800 ewes and reared their lambs. This speaks well for the country. I am going to raise fat lambs for market, and hope when well improved to carry 1,600 to 2,000 ewes. I will be cropping about 400 acres each year solely for feed purposes, and hope to conserve some in the form of ensilage. Strangely enough, since purchasing this place the W.A. Government have purchased the adjoining property ('Muresk,' 2,200 acres) for an Agricultural College. I was in Perth for a day a few weeks ago and ran right into 'Sarah' Thomas, who had just landed that morning. We had a long yarn, and I am hoping he will be coming up to stay awhile. I've had a lot of old Roseworthians to stay with me the last few years. Cole and Carr are in some fine country, and should do well. A few weeks ago I had a letter from Hutton asking if I could find him a job. This I was not able to do at the time, but told him he could put up with me until he was fixed. I expect he will be over shortly. I saw Malcolm at the Show. I believe he is doing fairly well at Pinjelly. Johnston continues on down at Kulin, and is working as hard as ever. Harry Eves is farming with his brother out from York, and I see him at the local sales fairly often. Rudduck is helping share the responsibilities at Koobabbie. It is a fine estate—probably some of the best country—and splendidly run."

MATTNER, L. C. (1918).—Has quite recovered from the knee injury which was the cause of him leaving Roseworthy, and is one of the leading footballers in the Hills Association. Has a garden at Oakbank and doing well.

BOWERS, A. G. (1919).—Purchased land in the Saddleworth district upon leaving Roseworthy. Sold out a few months ago, and has been appointed to the position of Organizer for the Adelaide Children's Hospital.

SCRYMGOUR, B. B. (1919).—Farming at Warooka on Yorke Peninsula.

GREGORY, A. A. (1920).—Assisted in his father's orchard at Renmark until a few weeks ago, when he returned to the College as assistant to Mr. Baker in the Dairy.

MUDGE, W. (1920).—Upon the completion of his course returned home to Streaky Bay to help work the farm.

STOTT, G. C. H. (1921).—Until recently engaged in the Railway Department at Terowie, but has now joined the Police Force, and called in at the College a few days ago on his way to Port Darwin to take up his new duties in the Northern Territory.

WALD, C. D. (1921).—In the office of Bennett & Fisher at Burra. Was selected to play cricket in the Colts team first match this season, but on account of having to leave for Burra was unable to play.

ROSEWORTHY OLD COLLEGIANS' ANNUAL REUNION DINNER.

Members of Roseworthy Old Collegians' Association held their Annual Reunion Dinner at Covent Garden, King William Street, on 11th September. The President (Mr. L. N. Salter) was at the head of the table, and around him sat the Hon. W. G. Duncan, M.L.C. (President of the Royal Agricultural Society), Professor A. J. Perkins (Director of Agriculture), Messrs. W. S. Kelly (Chairman of the Advisory Board of Agriculture), W. J. Colebatch, B.Sc., M.R.C.V.S. (Principal, Roseworthy Agricultural College), Geo. Jeffrey, and A. W. Robinson (Vice-President).

The loyal toast having been enthusiastically honoured, Mr. Jeffrey submitted the toast of the "Agriculture College." He expressed his admiration for and sympathy with the institution, with which he had been associated for many years. It had done glorious work and needed no advertising. But for the College, and the work done there, and the teaching that had been done there, South Australia would not be in the proud position which it occupied to-day. It had been the beacon light of agriculture. The College had produced most eminent men. He could not understand why the Principal was not called Professor Colebatch. He did not know what academic qualifications were necessary, but he hoped the day would come when that would be so. (Applause).

In acknowledgment Mr. Colebatch said that during recent years the Government had not treated the College badly. They had felt at times, however, that they might have had more money

to keep pace with modern developments, but they had made progress nevertheless. He referred to the appointment of Dr. A. E. V. Richardson, M.A., to one of the highest distinctions in agriculture. At this announcement the company rose and gave three cheers for this brilliant Old Scholar. Continuing, Mr. Colebatch touched upon the success of the College at the Royal Show, at which they had taken out no fewer than 104 awards. He was sure they were supported by the goodwill of every old student of the College, whether he had left it voluntarily—or otherwise. (Laughter). He was glad to see Old Scholars sending their sons to the College, notwithstanding the fact that they were making discoveries that their parents did not anticipate, and that their sons were doing even better than their fathers. (Laughter).

The Chairman expressed regret at the absence, through illness, of Mr. Alick J. Murray, who was an ardent supporter of the College and the Association.

The toast of the "State Department of Agriculture" was presented by Mr. Duncan. The Department, he said, controlled, directly or indirectly, four-fifths of the production of the State, and the officers were to be congratulated upon the results. The whole of the officials were a credit to any department, and the good repute of Professor Perkins and Mr. Colebatch was known wide and far.

Professor Perkins responded, and observed that the Department welcomed criticism, so long as it was based on facts and a knowledge of what was being done. They were staffed largely at the present moment from Old Students, and it was satisfactory to know that they were able to carry on the work so successfully. (Applause.)

"The Old Collegians' Association," coupled with the name of Mr. Leslie Salter, was offered by Mr. Kelly, who said the membership of 230 was a good omen. The College represented a good deal more of the public school spirit than other institutions, in so far as it was purely residential. Students there learnt how to get on with men. If they lived up to their responsibilities they must play an important part in the progress of the State—leaders of one of the greatest industries we possessed. The speaker referred to Mr. Salter's vigorous activities in the interests of South Australia, and incidentally the Association.

Mr. Salter replied, congratulated the new President (Mr. Robinson) upon his election, and referred to the great pioneering work done by the first Principal of the College (the late Professor J. D. Custance). The Association intended to have erected over his grave a monument in recognition of his services to the State.

During the evening items were given by Messrs. Lindsay, Jessop and R. Wood (vocal) and Harry Lyons (ventriloquial). Mr. J. A. Haslam, B.Sc., was the accompanist.

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A Studmaster Abroad.

Mr. L. T. Cowan, B.Sc., recently entertained the members of the Mount Barker Agricultural Bureau with a very interesting resume of his tour round the world, "takin' notes," and we trust he will not consider us discourteous in suggesting that he has contracted a Yankee hustle rather out of keeping with his role of student of ruminants. In fact, we would have liked him to "cut out the cackle," and come to the 'osses, i.e., the cows.

At a port like Suva one would not expect more than he saw in the way of cattle, but a few days in Levuka would have rewarded him for the delay as well as have enabled him to learn most interesting details of the victory over insect pests which now enables owners to breed really high-class cattle.

We feel, too, that one day he will have more to say on the advantages of the methods of the C.P.R. in opening up new country like Centralia.

The very heavy feeding of some of the American studmasters for milk is a lesson that South Australia may well take to heart, and Mr. Cowan is the man to teach it.

His remarks on English dairy cattle suggest a subtle tinge of *suppressio veri*. A more leisurely tour of the country would not have been devoid of value in arriving at a judgment.

We do appreciate his remarks about Swiss goats; there is a niche they can fill in Australia.

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Impressions of South Africa.

On two occasions I have received from the Secretary of your Association very nice letters, which, I believe, I have never had the grace to acknowledge. Not that they were unappreciated, for they were. One from Mr. Worseley Johnston and one from Mr. R. C. Scott, dated November, 1921, and January, 1924, respectively. The former, I fear, has long left the College; the latter, I note, with pleasure, is still your able Hon. Secretary. So, though somewhat tardy, I offer my best thanks for your kind letters. I have recently received a copy of "The Student" and account for subscription, which I also thank you, and have pleasure in enclosing money orders in settlement of account

The advent of "The Student" is a pleasant reminder to me of the days spent at the College, the photo of which on page 10 is just as I remember it. In previous photos the building is the same, but the grounds have been laid out differently and greatly improved; also, the trees, which were small, have greatly altered the general appearance. I see from your notes concerning Old Students that Mr. W. Johnson has a farm at Kulin, and that you are holding over a contribution from him to a later edition. So, should you happen to write him, you might mention that I really appreciated his kind letter and apologize for not having acknowledged it.

Now, as you both seemed to think that I might be able to send some news which might be of interest, I will give you a few impressions of this country. It is a big subject, and must necessarily be lightly touched upon.

It is now 35 years since I landed to make this country my home, and in that time many vast changes have occurred. The great Kimberley mine was only in its young manhood, Johannesburg, the now large city, only a small town not very far removed from a mining camp. No railways joined Johannesburg to the coasts, the termini being Kroonstad in Orange Free State and Charlestown on the Natal border. The Cape Railway extended as far as Vryburg (and possibly beyond, I don't remember). I travelled by the first coach from Vryburg to Krugersdorp, and that was an experience in itself, for one night the mules left the body of the coach in a danga and cleared out with the front wheels; they were only collected the following morning. From Krugersdorp to Springs there was a small train which was called the road train. All the material, permanent way, and rolling stock was carted up by wagon, a truly colossal undertaking. To-day, what a difference! A glance at a railway map will show how well the city is served, no less than four main trunk lines, besides two others, connecting with the Rhodesian Railway. Then another running right north through the Transvaal to the Rhodesian border at Messina. Vast irrigation schemes have been completed. The two last, the Vaal River barrage and Heartebestepoort, are both of gigantic importance. There are many others smaller, but converting large tracts of practically useless ground into flourishing townships.

The one thing in all these years which does not appreciably alter is the climate. This, to my mind, is the charm of this country. Natal particularly is most fortunate in this respect. Abundant rainfall; no extremes of heat and cold. Of course, seasons differ, and are good or bad. But, as compared with Australia, it is paradise. No protracted droughts, as you know

them; no hot winds and Black Mondays, such as I have experienced in South Australia, when the heat simply killed people.

We have our complaints, of course, and there are many drawbacks, some pertaining to the country, many of our own making. Considering the early history of this country, with its large population of Kaffirs, the permission of the insidious influx of the Indian, then the antagonism between the Boers and British, is it surprising that it is not further advanced than it is? I think not. I consider it is very remarkable that it has attained the position that it holds to-day. As the friendship between the white races strengthens, so will many of the difficulties disappear. The country has passed through many troublous times of man's own making, apart from its own disabilities of recent years—the Jamieson Raid, Boer War, the Rebellion, industrial strife and commotion, diseases, Rinderpest, East Coast fever, not to mention numerous though vital smaller afflictions, all these have retarded the progress of the country, costing huge sums of money, entailing public debt, high cost of living, etc., etc., *ad lib.* Then the recent change of political power from the Progressive South African Party to the Nationalist-cum-Labour—a mixture of oil and water—has affected confidence in the country, scared capital, and restricted development, many predicting disaster, which may yet occur, but fortunately, so far, there seems no foundation for; largely, I think, owing to the wisdom and strength of the Opposition and their able leader. Like all young countries, what we require is white population. Particularly does this apply to South Africa, with its overwhelming and virile black population, with a proportion of 10 to 1 of the whites. Here, again, the stupidity of the white people allowing the natives to be educated to combine and organize its big majority to become a power of menace. Many foolish white people, and now imported agitators (natives) from America, are allowed to address the natives, instilling into their half-formed minds all sorts of outrageous stuff, which cannot but have a very detrimental effect, and spells real trouble in the future. Then there is the Indian question. They are becoming a very big menace to the prosperity of South Africa. Australia knows the danger of the advent of the black races, and has very wisely barred them, and I trust for her own sake will continue to keep one spot on earth clean from them.

Still, I note, Australia is (to my mind) very foolishly allowing those beautiful islands which belong to her to be gradually overrun with Asiatics. It is a great pity. The world is gradually becoming overpopulated, and outlets must be

found for the surplus. South Africa will yet become the home of a powerful virile race, and in my opinion greatly merits it.

As I said, it is a vast subject, and without writing a "book" on the matter, it is very difficult to impart one's ideas without being tedious. However, if this serves in any way to be of interest to yourself and the present students of the College, I shall be pleased and feel that in some small way I have atoned for my past remissness. I wish the College and its inmates the success they desire, and you, Mr. Secretary, in your endeavours with "The Student." I can always recall with the utmost pleasure my College days at Roseworthy, and the many charming young fellows who were then my friends, and of whom I still think as such.

F. E. TARLTON.

Hatting Spruit, Natal, 2nd November, 1924.

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Lamb-raising for Export.

Since 1920 experiments have been carried out at the Roseworthy Agricultural College in connection with the raising of lambs for export, a search being made for the best brands of crossing giving the greatest return. The Minister for Agriculture (Hon. T. Butterfield), accompanied by Professor A. J. Perkins (Director of Agriculture) and Messrs. Price, Condon, and Cooke, M.P.'s, and G. Pope (Manager Produce Department), visited the Port Adelaide Produce Depot to inspect over 100 carcasses of lambs experimentally bred at the College for export. Mr. W. J. Colebatch (Principal of the College) received the visitors and directed the inspection. The party were also given the opportunity of witnessing the slaughtermen at work and the methods of grading.

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Scientific Sheep-raising.

EXPERIMENTS AT ROSEWORTHY COLLEGE.

"The world's undertakings of to-day are all carried out under scientific rules with the object of making every proposition a sound commercial and profitable one," said Mr. Colebatch. In view of this, he added there were many things to consider in sheep-raising, which was now studied from a scientific standpoint. The ideal sheep were those with fleece which would

bring a good price in the market, with a high percentage of prolificacy, and capable of throwing lambs whose carcasses were covered with fat, and for export would receive the highest grading. With the object of finding a breed embodying all these qualities, the flock of 330 odd merinoes and 370 cross-bred breeding ewes at Roseworthy Agricultural College were being closely studied and considered as an experimental flock. In setting out to raise fat lambs the first question to decide was the best cross to adopt in order to secure early maturity and the aptitude to fatten at a given weight. The test was begun about four years ago under the supervision of Mr. W. J. Colebatch, B.Sc., M.R.C.V.S. (Principal of Roseworthy College). At the outset the test was confined to half-bred longwool ewes, and later extended to embrace the merino. The choice of half-bred ewe lay between the half-bred longwool and the half-bred shortwool, and as the fleece of the latter is short, light, and less valuable, the former cross was adopted. Four strains were secured by mating the merino ewe with the longwool sires common in South Australia—Lincoln, English, Leicester, Border Leicester, and Romney Marsh. The Lincoln and the Romney Marsh merino ewes have been bred on the farm from large-framed strong-constituted merino ewes by good flock rams obtained from the Lincoln stud of Mr. Walter Grundy, Hindmarsh Island, and the Romney Marsh studs of Messrs. Feuerhardt Brothers and Davidson Brothers, Mount Barker. Until a few seasons ago the English Leicester and Border Leicester merino ewes were secured in annual drafts from Mr. W. S. Kelly and Mr. O. S. Roberts respectively, but all the half-bred mothers are now bred on the farm. Under the plan of mating, 19 breeds of lambs are being subjected to trial under conditions as near equal as possible. The crossbred ewe was undoubtedly the best mother, but the choice of the merino ewe was more or less obligatory owing to farm conditions.

Of the sires that are available there are two classes—longwools and shortwools. In this State the former are represented by Lincoln, English Leicester, Border Leicester, and Romney Marsh, and the latter by Dorset Horn, Shropshire, and South Down. The shortwools are all known as Downs, and to that section may be added the Suffolk and Hampshire Downs, which, although not common here, were very popular in some other parts, and no doubt would eventually be tested in the Commonwealth. The Lincoln is probably the most popular of the English breeds of sheep. It is the largest sheep of its class and cuts the heaviest fleece. The Lincoln ram on the

merino ewe gives a large sheep, even in outline, bluish face, carrying a small topknot of wool. The English Leicester-merino is rather smaller than the others, being shorter-bodied, but having square, well-rounded quarters. The face is bluish, and the wool finer than the Lincoln. The Border Leicester-merino carries the finest type of fleece, is a large sheep with a long, broad back, deep, well-sprung ribs, and a good loin. Perhaps the most typical characteristic is the tendency towards a long Roman nose, whitish in colour. The Romney Marsh-merino is a comparatively loosely built sheep, being wide on the loins, with high, rather narrow forequarters. The bone is coarse, the face short and broad, and the fleece approaching that of the Border Leicester in quality.

The 1923 lambing season at Roseworthy College was a good one, and the average daily increase in weight of lambs obtained from merino ewes by longwool rams sired by shortwool rams from merino ewes was 46 lb.; whereas in the case of lambs the mean increase was 55 lb. Little difficulty was experienced even in merino lambs by strong-boned English rams. The highest recorded this season in lambing percentages from half-bred longwool merino ewes by Down rams was 115.6 in the case of Border Leicester-merino flock lambing to Dorset Horn rams. The whole of the Border Leicester-merino flock yielded well over 100 per cent. of lambs. Taking the full period of the test in 1921-4, the mean percentages for the four types of longwool merino ewe ranged from 82.14 per cent. in the case of English Leicester-merino to 95.79 in the Border Leicester-merino. Of the rams the highest fertility was of the South Downs, which averaged 92.01, as against 89.4 for Dorset Horns, and 73.77 for the Shropshire rams over the same period, 1921-4. Lambs from Border Leicester crosses averaged about 1 lb. heavier than those of other breeds. The English and Border Leicester were slightly in advance of the Lincoln. Three-quarter-bred lambs from half-bred ewes by Dorset Horns averaged $\frac{1}{2}$ lb. more at tailing than those by South Downs, which again averaged 21 lb. a head more than those by Shropshire. Of the pure merinos, the English Leicester averaged 36.8 lb. a head, and the Border Leicester and Romney Marsh 35.2 lb. The Lincoln half-breds were $\frac{1}{2}$ lb. lighter on the average, but still a good weight. The shortwool half-bred lambs averaged 1 lb. a head more than longwool half-bred. The Dorset Horn merino lambs (cold meat) weighed on average 37.8 lb., being closely followed by South Downs, 36.17 lb., the corresponding weight of Shropshire half-bred being 35.33 lb. From the experiments and

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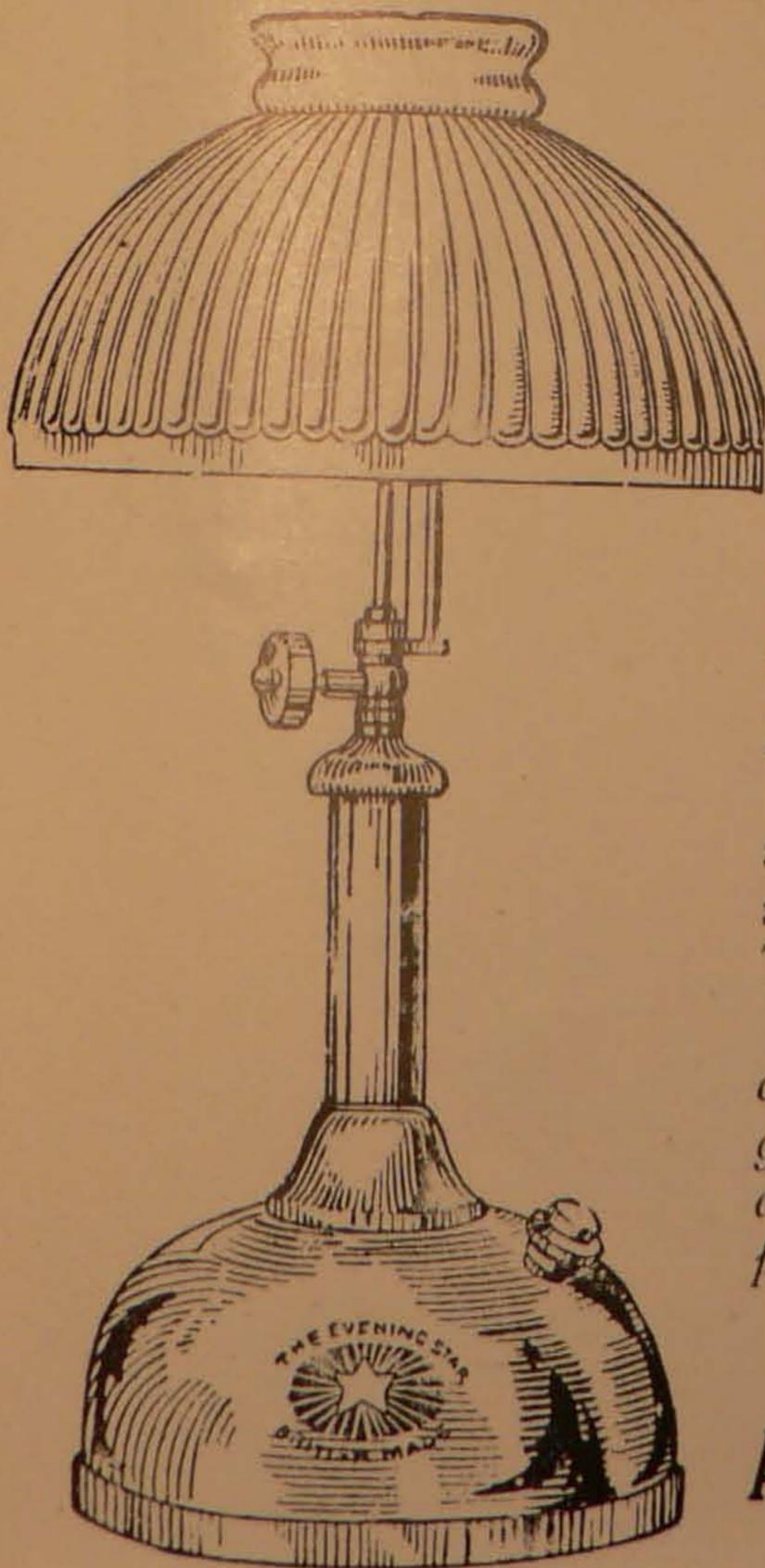


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