

ROSEWORTHY AGRICULTURAL COLLEGE.

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

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ROSEWORTHY,
SOUTH AUSTRALIA.

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NOVEMBER,
1915-16.



THIRD YEAR.

T. S. O. Dealy
S. G. King
E. S. West
A. J. Whiting
D. G. Quinn
A. M. Tilly

G. E. Bagot
B. Conway
W. D. Haggard
H. S. Bradshaw
E. G. Padman

SECOND YEAR.

F. Riggs
V. T. O'Grady
K. C. Catt
W. H. Lewcock
E. J. LeMessurier

F. Cobham
F. R. Koch
G. Sweeney
C. M. Thomas

FIRST YEAR.

O. Bowden
W. N. Hannaford
C. J. R. North

J. O. Robinson
A. L. Warren

INDEX

Current Events	...	...	...	7, 8
Obituary	...	...	...	9
Exchanges	..	...	...	9
Southdown Sheep	...	...	9, 10, 11, 12, 13, 14	
The Belgian Army before the War			...	14, 15
An Australian Girl	...	...	...	15
Black Fellows can Eat		...	...	15, 16
A Short Description of Some of our Best Known Types of Wheat		...	...	16, 17
Special Diploma Examination Class (Photo)			...	18
Weeds	...	...	...	19, 20
Farm Notes	21, 22
Football Notes	23, 24, 25, 26, 27, 28	
Old Collegians' Association		28, 29, 30

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EDITED BY THE STUDENTS.

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NOVEMBER, 1915.

CURRENT EVENTS.

November, 1915.

At the commencement of the second session the outside working arrangements were again altered. The first and third year students being placed together left the second year students to work by themselves.

The sales at the Abattoirs were attended by third year students on two occasions during the month of September. The morning was devoted to close attention at the various sales, comprising sheep, cattle, and pigs, and in the afternoon the party was shown all over the Abattoirs. On Monday, September 7th, the third year inspected the respective mills of Messrs. Thomas and Harrison at Port Adelaide. At the time of visiting the mills were crushing and blending Argentine wheat with Australian wheat, and the various operations and stages of the production of the blended flours were interestingly followed by all present. The party was entertained to lunch on board the sailing ship in which the wheat was transported. Special thanks are due to Mr. Stevens, of Turretfield, who most kindly explained the various processes of milling to as many of those present as circumstances permitted.

The annual trip to Mr. Murray's shearing shed was spoilt owing to unfavourable weather conditions.

B. C. Hamilton left in the middle of September with the intention of sailing for England to enlist in Kitchener's army. Although not brilliant on the field of sport, he was

characterized throughout his stay here as an eager promoter of every branch of outdoor amusement that was indulged in. When elected "sports secretary" in his second year his various laborious duties were carried out in a manner worthy of praise.

A. F. McIntosh, on his eighteenth birthday last month, again presented himself to the military authorities at Keswick, and within a week went into camp, where he is now training. We offer him our sincerest congratulations.

H. R. Brock left the College on October 8th for his father's farm at Loxton. With the season's prospects so favourable, no doubt the work to be got through will be heavy.

On the 14th of October, F. C. Andrews (1915) paid us a short visit, having returned from Egypt as a member of the guard on a hospital ship. As yet he has not seen the actual firing line. On the eve of his departure from Alexandria G. A. Todd was leaving there for the Dardanelles.

The final diploma examinations are being held in November instead of in March for the following:—A. M. Tilly, D. G. Quinn, E. S. West, W. D. Haggard, B. Conway. Their photo appears elsewhere. These special arrangements were permitted by the Minister for Agriculture, in order that the above mentioned students might enlist as soon as possible, and yet have in their possession the R.A.C. diploma. The names of diploma holders for the years 1913, 1914, and 1915 are now being printed on the diploma board in the dining room.

On October 7th a meeting was called to elect members for the cricket committee. Bagot was elected captain, Dealy vice-captain, Riggs secretary, and North was voted on to the committee. Mr. H. C. Pritchard kindly officiated. At the subsequent committee's meeting it was decided to buy as small a stock as possible of bats and balls, firstly because finances were low, and secondly because the only probable certain fixtures would be those played during the town trip in March, 1916, against the colleges in town.

The Governor-General and the State Governor, accompanied by the Minister for Agriculture and Director of Agriculture, paid a visit to the College on Saturday, September 18th. The viceregal party motored up from Adelaide, and returned the same afternoon.

OBITUARY.

It is with deep regret that we have to announce the death of Pte. Andrew McIntosh. Under the current events his admission into camp is mentioned, and the news of his death from meningitis has just reached us before going to press. After enlisting he was sent to the Jubilee Oval Camp, later to Morphettville, and finally to Mitcham. On Wednesday, November 3, he was taken ill in camp, and was immediately removed to the isolation hospital, where he died on Friday night at 8 o'clock. This sudden and sad death has undoubtedly produced a profound feeling of sympathy among the present students for his parents and relatives.



EXCHANGES.

P.A.C. Chronicle, S.P.S.C. Magazine, Adelaide High School Magazine, The Yellow Dragon, Hawkesbury Agricultural Magazine, The Kyrian, Agricultural Students' Gazette, The Corian, The Scotch College Reporter.



THE GENERAL CHARACTERISTICS OF THE
SOUTHDOWN SHEEP.

(By W. J. COLEBATCH.)

The first essential to the successful management of a pure-bred flock is an intimate knowledge of the strong and weak points of the breed. Every flockmaster will aim at moulding his flock in accordance with his own personal judgment of the general characteristics of a typical specimen of the breed. Having fixed in his mind a definite type or model, he will endeavour to work his sheep steadily towards this ideal, and his success or otherwise as a stud manager will depend upon his appreciation of the "points" of the breed and his skill in culling, classing, and mating the flock.

The general characters of the Southdown breed in its present form differ from those of Ellman's period mainly in the colour of the face, legs, and ears, which were formerly speckled or grey. This broken colouring has been bred out,

but even to-day the retention of the ideal shade of greyish brown or mouse colour is one of the chief anxieties of breeders. On these crusty soils resembling those light chalky downs in the original habitat of the breed, this tendency towards a deepening of the colour is much less marked, but on richer and heavier land it is virtually impossible to prevent the light grey brown giving place to the light brown markings. The influence of the character of the land on this important feature is a matter to be borne prominently in mind when introducing fresh blood to the flock. In the south of England the colour may become even too light. The silvery grey markings are not popular, as they are thought to connote a lack of constitution. This view is not universally accepted by breeders, but there is no doubt that a medium tinge of greyish brown is very generally preferred to the weaker fawn shades.

In addition to the colour change effected since Ellman's day, the density, quality, and staple length of the fleece have been much improved, and the general conformation has been developed on the lines laid down by the founder of the modern breed.

In considering the subject of "Breed Characters," we naturally turn to the official schedule of "points" and the relative values assigned to them by the controlling societies.

DESCRIPTION AND SCALE OF POINTS.

	OFFICIAL BRITISH STANDARD.	OFFICIAL AMERICAN STANDARD.
General appearance—	General character and appearance - 10	Spirited and attractive, with determined look and proud and firm step, indicating constitutional vigor and thorough breeding - 8
		FORM—Throughout smooth and symmetrical with no coarseness in any part - 9
Head—	Wide, level between the eyes, with no sign of slug or dark poll - 8	Medium size, hornless, fine, carried well up, forehead or face well covered with wool, especially between ears and on cheeks, and, in the ewe, slightly dished - 5
Face—	Full, not too long from eyes to nose and of one even mouse colour, not approaching black or speckled; under-jaw light - 4	Uniform tint of brown or gray or mouse color - 3
		LIPS AND UNDER-JAW fine and thin - 1

Eyes—	Large, bright, prominent - - - 2	Full and bright - - - 3
Ears—	Medium size and covered with short wool 2	Rather small, tolerably wide apart, covered with fine hair, and carried with a lively back and forth movement - - - 2
Neck—	Wide at base, strong and well set on to shoulders, throat clean - - - 5	Short, fine at head, but nicely tapering, and broad and straight on to top of shoulders - - - 4
Shoulders—	Well set, top level with back - - - 7	Broad and full, smoothly joining neck with back - - - 5
Chest—	Wide and deep - - - 5	Wide, deep, projecting well forward, legs wide apart - - - 5
Back—	Level, with wide, flat loin - - - 10	Broad and straight from shoulder to rump - - - 7
Ribs—	Well sprung, well ribbed up, thick through the heart, fore and hind flanks fully developed - - - 7	Well arched, extending well back, and the last projecting more than the others 6 BELLY—Straight, and covered with wool, the flank extending to form a line parallel with back or top line - - - 5
Rump—	Wide and long, well turned - - - 4	Broad, square, full, with tail well set up - - - 6
	TAIL—Large, and set on almost level with chin - - - 4	HIPS—Wide, with little space between them and last ribs - - - 6
Thighs—	Full, well let down, with deep, wide twist 10	Full, well let down in twist, the legs standing well apart 6
Limbs—	Corky carriage, legs short, straight, and of even mouse colour, and set on outside the body - - - 7	Short and fine in bone and in colour to agree with face - 3 FORELEGS—Well woolled, and carrying mutton to knees, but free from meat below 2 HINDLEGS—Well filled with mutton and woolled to hocks, neat and clean below 2
Wool—	Fine texture, great density and of sufficient length of staple covering whole of body down to hocks and knees and right up to cheeks, with a full foretop, but not round eyes or across bridge of nose - 10 SKIN—Delicate bright pink - - - 5	Compact, whole body well covered with moderately long and close wool, white in colour, carrying some yolk - - - 12
Total	- - - 100	- - - 100

Whilst the two standards differ slightly in minor details, they are both based on Ellman's description of the breed, and on analysis it will be observed that they agree in emphasizing the importance of carcase development and constitution. In the British schedule 47% of the award is given for the body, and in the American scale 46% is allotted to the same region. In both cases 18% of the score are given for the rump and legs of mutton, and the disparity in regard to the special breed characters and signs of constitution amounts to no more than 2 or 3 per cent. of the total award.

It is noticeable that the British breeders lay stress on the importance of the skin being of a healthy pink colour, whereas in the American list of "points" no particular reference to the skin is included. In England the Southdown Sheep Society even goes the length of advising judges at breeding stock shows to disqualify animals with blue skins. The reason for this is a thoroughly sound one, as dark or bluish skins are indicative of low blood pressure, a condition often associated with inferior fattening propensities and poor quality wool.

Other grounds for disqualification are evidence of horns or horn scurs, a dark poll, speckled markings, and an inferior fleece. The wool should be free from dark fibres, and should be as dense and compact as possible, in order to afford protection from the weather in winter, and also to reduce the risk of infestation with the blowfly larvae. The fleece should extend from the poll round the ears, and a little wool should also creep up on to the back of the ears. A good covering on the jaw is taken to indicate that the belly will be found well woolled. Uniformity in length of fibre over shoulder, thigh, and belly is an important characteristic of the best strains. The fibre is fine, the staple short, and the wool carries relatively little yolk. It follows, therefore, that the average clip is light. Robert Wallace places it as low as 3 to 4 lb. per ewe, but most flocks to-day will yield a pound or two better than that. The results of this year's shearing at the College are as follows:—

		No. shorn	Average weight of wool.
Southdown	ewes	38	5.38 lb.
"	ewe hoggets	15	4.26 "
"	rams	13	7.42 "
"	ram hoggets	9	6.66 "
Total		75	5.66 "

In connection with these figures it must be remembered that the fields were very bare indeed during the spring and summer months.

However, it is as a meat producer, not as a wool grower, that the Southdown is esteemed so highly. The short, thick, well-packed leg of mutton, the square quarters, strong wide loin, broad level back, and good dock combine to make up the ideal symmetry of a butcher's sheep. Good judges emphasize the importance of a wide deep chest, which projects well forward between the forelegs. This type of conformation usually indicates that the sheep is a good doer, has a vigorous constitution, and will scale well. The shoulders should not be too wide at the withers, as extra width at this point is rarely carried back well, and in consequence there is a depression behind the blades which mars the general appearance, and reduces the girth measurement.

The Southdown is classed as a small sheep, yet they are so compact and nuggety that they weigh out very heavy for their size, and, moreover, they suffer relatively small loss by "shrinkage." The dead weight has been known to exceed 65% of the live weight, and with fat lambs the loss is usually about 45% of the live weight. Aged rams range from 170 to 200 lb., ewes from 120 to 180 lb., and shearling wethers from 150 lb. upwards. Two cast ewes killed at the College recently dressed 92 and 102 lb. respectively. Even with young sheep it is possible with good strains and proper management to secure very satisfactory weights. At the Smithfield show in 1907 the Breed Cup was won by a pen that averaged 140 lb. at 10 months old. The usual weight for Southdown lambs in England is from 50 to 70 lb.

In a mutton sheep, however, we have to consider quality of meat as well as the weight of dressed carcase and offal. It is in this that the Southdown stands out prominently above its rivals. The flesh is of the highest quality, and is much sought after by butchers, on account of the fineness of the grain, the absence of superfluous fat, and the delicious flavour. There is a larger proportion of lean to fat than in the heavier breeds, the lean meat is a richer and darker colour, the bone is not so coarse, and the joints are smaller and more compact.

No other breed has been anything like so successful as the Southdown at the Smithfield Shows. For 40 years in succession—1832 to 1872—it carried off the prize for the best pen of short-woolled sheep. From 1869 to 1889 the champion

prize for the best pen of sheep in the show was gained 11 times by Southdowns, and not more than three times by any other breed. During the period 1890 to 1908 the prize for the best pen of shortwools was secured on nine occasions by Southdown sheep.

There could be no weightier testimony to the merits of the breed than this incomparable record of achievements at the most important show of fat stock in the country so renowned for meat production as Great Britain.



THE BELGIAN ARMY BEFORE THE WAR.

The Belgian Army consisted of the regular army, the gendarmerie, and the Garde Civique (or Civil Guard). These military forces are commanded by the King of the Belgians, under whose prerogative officers are appointed. At the age of nineteen years, all Belgians have to draw lots for service, and thus a number of recruits are annually secured. Services acquired by lottery may be cancelled by the payment of a sum never exceeding 1,800 francs, or £72. The Belgian recruit serves eight years in the active army and five years in the reserve, being sent on illimitable leave, however, after a service of 20 months in the infantry, or 36 months in the cavalry and field artillery. The Belgian army on a peace footing totals 460,707, comprising 3,427 officers and 43,043 men.

The infantry was divided into four divisions, and contained 19 regiments. The cavalry consisted of two regiments of horse guards, two regiments of guides, and four regiments of lancers. The field artillery comprised four regiments, each containing about 1,000 men. The field artillery at Brussels and Ghent comprised 30 active and 18 other batteries. The fortress artillery at Antwerp, Liege, and Namur required 1,771 men at Antwerp, 940 men at Liege, and 74 men at Namur.

In time of war, the entire Belgian army consists of 183,500 men, excluding a corps of gendarmerie, hospital, and veterinary departments. Besides the fortresses of Antwerp, Liege, and Namur, Termonde on the Scheldt, and Diest on the Dender, are heavily garrisoned. The infantry soldiers are armed with magazine rifles, and the artillery is provided with the Nordenfeldt-Cockerill gun.

The pay of Belgian officers is rather low:—

Rank.	Salary.	
	Francs.	Pounds sterling.
Captain	4,000	£160
Captain-Commandant	5,100	£204
Major	6,300	£252
Lieut.-Colonel	7,100	£284
Colonel	9,500	£380
Major-General on the Staff	12,700	£508
Lieut.-General	18,500	£740



AN AUSTRALIAN GIRL.

She has a beauty of her own,
 A beauty of a paler tone
 Than English belles.
 Yet Southern sun and Southern air
 Have kissed her cheeks until they wear
 The dainty tints that oft appear
 On rosy shells.

Her frank, clear eyes bespeak a mind
 Old-world traditions fail to blind.
 She is not shy
 Or bold, but simply self-possessed ;
 Her independence adds a zest
 Unto her speech, her piquant jest,
 Her quaint reply.

O'er classic volumes she will pore
 With joy ; and true scholastic lore
 Will often gain.

In sports she bears away the bell,
 Nor under music's siren spell,
 To dance divinely, flirt as well,
 Does she disdain.

(In praise of Australia—Florence Gay).



BLACK FELLOWS CAN EAT.

(Extract from "History of the Discovery and Exploration of
 Australia.")

On the 18th they arrived at a nice green grassy spot, on which they were fortunate enough to kill a young kangaroo. Wylie, the black tracker, was delighted at this. "Massa, you see me pta (eat) all night," was what he used to say to Eyre whenever any butchering left offal for him to masticate. He

generally kept his word. On this occasion his supper is worth recording. He commenced by eating a pound and a half of horseflesh, with a little bread. He then disposed of the entrails, paunch, liver, lights, tail, and two hind legs of the kangaroo. . . . Next a penguin which he had found dead upon the beach, and upon this he forced down the hide of the kangaroo, after singeing the hair off. He wound up the meal by swallowing the tough skin of the penguin.



A SHORT DESCRIPTION OF SOME OF OUR BEST-KNOWN VARIETIES OF WHEAT.

(By R. C. SCOTT.)

King's White.—A selection from King's Early. A tall-growing early variety, with semi-solid straw; bearded, but in spite of beard is prized as a hay wheat on account of the sweetness of the hay. Weighs well, and retains its colour well. Also a good grain yielder. Grain white.

King's Red.—Another selection from King's Early. Similar to King's White, but grain is red.

Gluyas.—Believed to be a selection from Ward's Prolific. A very popular variety on account of its early maturity, vigorous growth, rust and drought resistance. Ears beardless, and hang over when ripe. Chaff dark brown. Grain white. Straw fine and clean. Grown principally for grain, but also yields hay of first quality.

Bearded Gluyas.—A bearded selection from Gluyas. Appears to suit dry districts.

Late Gluyas.—A selection from Gluyas. Similar to Gluyas, but slightly later in maturing.

College Eclipse.—A selection from Carmichael's Eclipse, with smooth chaff. Has done well as a grain yielder. Early maturing, with ears reddish brown in colour. Grains white.

Carmichael's Eclipse.—A widely grown variety in South Australia. It is supposed to be a self-cross between Ward's Prolific and Velvet Pearl. A good grain yielder. Ears compact, beardless, with reddish brown woolly chaff. Grains white.

Federation.—A crossbred wheat produced by Farrer, of New South Wales, by crossing Yandilla and Purple Straw. Rather late maturing, and is one of the most prolific and popular varieties grown. Grown exclusively for grain, with rather short erect straw. Ears beardless, bronze coloured, and well compacted. Grain white.

Yandilla King.—Another crossbred produced by Farrer by crossing Improved Fife with Etawah. A rather late variety, good stooler, and one of the best grain yielders for late districts. Ears beardless, white chaff and grain. This variety holds the grain well, and is a rather tough thresher.

Le Huguenot.—A variety produced by Correll, of Western Australia. It belongs to the Durum or Macaroni class of wheats. Poor stooler, and therefore needs to be sown fairly thick. Essentially a tall growing hay wheat, and has given some very heavy yields. Straw is solid, sweet, and palatable. Ears beardless, bluish black in colour, with dense crowded spikelets.

Marshall's No. 3B.—A selection from Marshall's No. 3. A popular late variety well suited for hay or grain. Ears beardless, with white chaff and grain.

Jonathan.—One of Farrer's crossbred wheats. A mid-season variety which holds its grain well. Grain is of high milling quality. Ears beardless, tapering, with white chaff and grain.

Bobs.—A supposed cross between Early Lambrigg and Nepaul Barley, introduced by Farrer. A mid-season variety of excellent milling quality. Large beardless heads, with small, hard, shotty grain. This variety has commanded a higher price per bushel than others on account of its high milling quality.

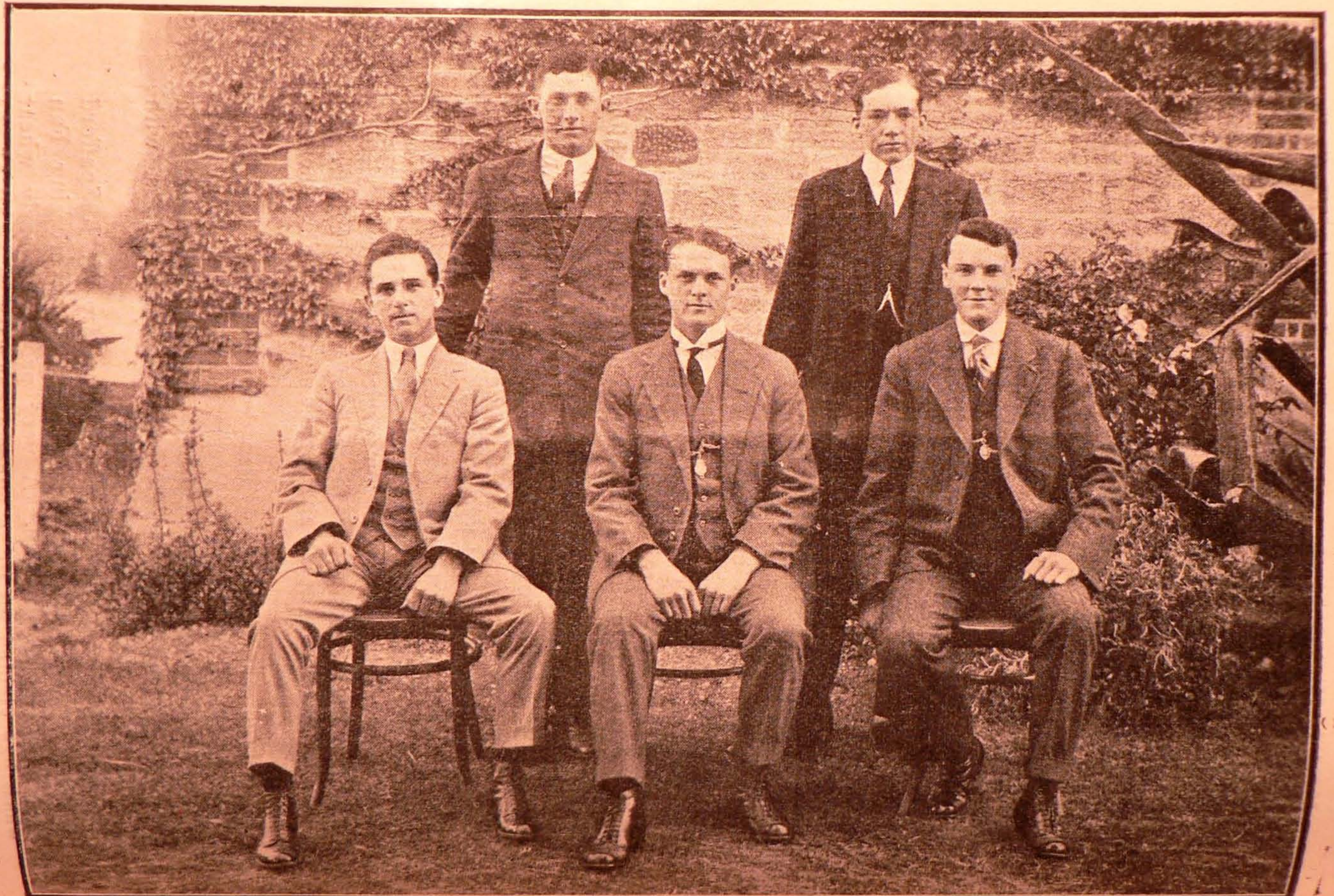
College Comeback.—A selection from Comeback, which variety is a hybrid produced by Farrer. A mid-season variety with good quality grain. Ears beardless, compact and white, with medium-sized hard, heavy grains. It is less resistant to flag smut than many varieties.

Beardless King.—A supposed self-cross between Comeback and King's Early. Mid-season variety, fair grain yielder, and good hay wheat. Ears beardless, white in colour, and grain white. Straw stout and stands up well. Flag inclined to "black rust."

Crossbred 53.—A variety also known as Zealand Blue. Produced by Berthoud, of Western Australia, from Tardent's Blue and a selection from Zealand White. It is a late variety, suitable for hay. Ears long, beardless, with white woolly chaff. Grain white.

Queen Fan.—A variety produced by Mr. W. J. Spafford (Superintendent of Experimental Work), by crossing Fan with Carmichael's Eclipse. A very promising early wheat which has yielded up to 34 bushels per acre in small blocks at the College. The ears are beardless, square, and compact, with white chaff and grain.

NOVEMBER, 1915.
SPECIAL DIPLOMA EXAMINATION CLASS TAKEN IMMEDIATELY PRIOR TO ENLISTMENT.



D. G. QUINN.

W. HAGGARD.

J. M. TILLY.

E. S. WEST.

B. CONWAY.

WEEDS.

(By A. J. ADAMS.)

Vegetables out of place, plants useless or troublesome, growing where they are not wanted, injurious to crops, and of no use to man—such are some of the usual definitions of weeds, and yet very few plants conform to these definitions under all conditions.

Hence plants may be only weeds relatively, and a very few can be branded absolutely with that term of reproach. Many plants may be poisonous to stock, but valuable as providing drugs of great use in pharmacy, and even thistles may be used as food for stock in time of drought and stress.

The majority of weeds have seeds which are wind-carried—the order Compositae providing many such—or have seeds which are capable of waiting dormant for some time, till circumstances favour their germination and growth, or are plants obnoxious to all stock, and which therefore have no obstacle in the way of a steady, uninterrupted increase—as witness the beautiful nuisance familiarly known as Paterson's Curse, or Salvation Jane.

Weed seeds may be imported from other countries, or may be transmitted from one locality to another as impurities in agricultural seeds.

Plants that ultimately become a nuisance may be introduced in ignorance of their uselessness and harmful proclivities, originally ornamental flowers, and now declared weeds—such as Cape Dandelions, Cape Tulips, and Sour-sobs—the latter having its powers of multiplication increased by bulbils as well as by seeds.

When we consider the enormous seed production of plants, we realise how charged the soil must be with seeds of all varieties, and the fierce warfare that is continually being waged among the myriad competitors for root-space, sunlight, moisture, and food-material generally, and during and after a time of drought comes a time of triumph for the hardier seeds, this present season providing an excellent example.

Burning off stubble, scrub, or grass tends to destroy the humus, and to decrease the power of the soil to retain many valuable soluble food substances, and in many instances to cause an excessive alkalinity.

Farm stock, and animals that have a vegetable diet, such as rabbits and kangaroos, eat off all the useful fodder plants, generally before the seeding stage, and leave such as are useless and noxious, actively destroying what is good, passively aiding what is bad, and even acting as carriers for burry, prickly seed vessels.

Alongside the railway lines, the ordinary roads, more especially the great stock roads, by the fences, round cultivated land—these are refuges and breeding grounds for many of the farmer's foes.

And when the unwelcome visitor has gained a hold, space is taken up, heat, light and moisture are stolen from the crop, slow-growing plants are choked by the more rapidly expanding invader, and while some of the foe succumb to a rapidly growing crop, yet there are enemies in reserve that make a parasitic use of the stems of the crop in their endeavour to gain access to light and air.

Then, too, the invaders rob the plants of many valuable constituents of the soil, as can be easily seen by analysis, and evidenced by their rank and rapid growth. We noted that many wind-borne seeds, and seeds of long endurance, belong to the weed family. But appeal is largely made to insects for the carriage of the pollen. Many weeds have brilliant yellow flowers—a colour that seems to appear most attractive to the insect eye. This year is prolific in weeds, one following another as quickly as opportunity is made by the ending of a generation of the predecessor.

We at Roseworthy have many varieties to contend against, though some are absent, or nearly so, that infest other parts of the country—such as Salvation Jane—but there are signs of that fair lady gradually making her way here.

Recently the Director of Agriculture, speaking of weed pests generally, conferred the pride of place for perfection as a nuisance, as regards speed of multiplication and difficulty of eradication, to *Oxalis ceruina*, the beautiful South African Wood Sorrel, familiarly known to us as Sour-sob.



FARM NOTES, SECOND SESSION, 1915.

On returning from our vacation our energies were concentrated on fallowing, and the first field to demand attention was Ebsary's C.

Field No. 3 and No. 6B were fallowed previous to the holidays, and are now in good order, especially 6B, which has received good working over. This field is intended for experimental work next year.

Following Ebsary's C, Dahlitz, 5B, 6A, 7A, and 7B were broken up as bare fallows.

Difficulties have been experienced in fallowing this year. The three-furrow set ploughs could not be worked in several of the paddocks, owing to super-abundance of feed, and the disc had to be substituted.

Wet conditions prevailed at the commencement of fallowing, and the teams had to be stopped on several occasions, hence the finishing of fallowing will be late.

At the conclusion of last term the crops sown in Field No. 1 and Pig Paddock B were cut for ensilage, and good yields resulted, the former yielding approximately 6 tons to the acre, and the latter $7\frac{1}{2}$ tons to the acre. A portion of the crop sown in Flett's, which had been sown early, was also cut for ensilage.

A trial was also given to the making of berseem into ensilage, and nearly a whole plot of this very succulent fodder was cut down for ensilage. The berseem was thrown in whole, and, being such a succulent fodder, naturally there would be a great deal of drainage. Owing to the pit not draining well, the berseem was found to be sour, hence the experiment was not too satisfactory. It was also put down in wet weather. Being such a good season, the berseem sown in the irrigation plots gave high yields, and several cuts have been made. The berseem was also fed to the horses in the stables, as well as being fed to the cows.

On the whole, the crops are splendid, and give promise of excellent results in both grain and hay.

The Grainger's Depth of Ploughing and Manure Plots have both been cut for hay this year. These plots are usually cut for grain, but, being blighted badly this season, it made it necessary to cut them for hay.

Island A is now being cut for hay, and owing to the crop being badly blown down by a recent storm, difficulties are being experienced here.

Flett's and a small portion of Island B are intended for hay, while the rest of Island B is to be harvested.

Ebsary's B and No. 16 are also intended for grain, and both fields will give high yields.

All the pasture paddocks are now carrying an abundance of feed, and all stock are in splendid condition.

Shearing this year was drawn out, owing to delays through rain. Beside the College flock, two outside flocks were also shorn.

We were unlucky in losing Ruby's foal this year, also Leader's foal was lost, dying soon after birth. The mares Tot, Blossom, and Bess have also foaled; these foals are now getting along splendidly.

We regret to record the death of one of our farm horses, Romeo, who died late in the season, due to inflammation of the bowels.

The pigstyes have undergone repairs, new floors being put down in 12 of the top styes, also railings have been constructed around the inside of these styes to prevent the sows lying on any of their litters. Also other minor improvements have been effected round the farm.

—F. RIGGS.





A. M. Tilly	Mr. H. C. Pritchard (Housemaster)	R. C. Scott	W. D. Haggard	S. G. King	F. R. Kock	T. S. Dealy	Mr. W. J. Colebatch (Principal)	J. O. Robinson
C. J. North	A. J. Whiting	G. E. Bagot (Vice-Captain)	H. L. Manuel (Captain)	F. Riggs (Hon. Sec.)	E. J. LeMessurier	S. H. Haslam		
C. Muller (Emergency)	J. Daly	E. G. Padman	D. G. Quinn	W. N. Hannaford				

THE STUDENT. FOOTBALL.

The season 1915 ended for us on September 11th, on which date we were badly beaten by South Gawler, on the Gawler Oval.

Willastons eventually headed the premiership list by beating Centrals in the play-off of the finals. We congratulate them.

Our final position (bottom) was rendered more conspicuous by the fact that we possessed even a larger tail than the College team did in the previous season.

Our team, as the results show, was very much below the average standard of college teams. Our downfall was due, however, to lack of cohesion and method.

We always tried hard to win, but were always playing teams which were better in every respect than our own.

We have, however, been bottom before, and have worked our way to the top. We can and will do it again!

Throughout the season several members of the team were always conspicuous, and played hard games. Of these we might mention Mr. Manuel (captain), Mr. Scott, Whiting, Riggs, Le Messurier and Haslam.

The question of satisfactory umpires has evidently been solved by the Association, for throughout the whole of the season the umpiring has been carried out by Morris, Hicky and Coleman, who on all occasions have umpired very satisfactorily.

COLLEGE v. CENTRALS.

Played on August 14th, on the College Oval.

Day was fine, but windy. College lost toss, and kicked northwards.

Our forwards again proved to be weak, and chances of scoring were again and again lost through bad combination.

As the scores show, our opponents were much the better team.

Hicky umpired very satisfactorily.

College Team.—Mr. Baker, Mr. Scott, Bagot, King, Whiting, Quinn, Tilly, Padman, Haggard, Riggs, Le Messurier, Haslam, Koch, Hannaford, North, Robinson, Daly and Mueller.

Best Players.—Le Messurier, Hannaford, Scott and Riggs.

Final scores—

Centrals	..	..	7	6
College	..	..	0	6

COLLEGE v. SALISBURY.

Played on Gawler Oval on August 21st.

Our opponents proved to be much faster, and had much better combination, than us.

Our kicking was very poor, and during the later part of the match the game became very rough and uninteresting.

College Team.—Mr. Manuel, Mr. Scott, Whiting, Bagot, King, Padman, Haggard, Quinn, Riggs, Le Messurier, Haslam, Koch, Hannaford, North, Robinson, Mueller, Daly and Stephens.

Best players were Mr. Scott, Robinson and Whiting.

Final scores—

Salisbury	..	..	9	10
College	..	..	2	7

Goal-kickers for College were North and Whiting, one each.

COLLEGE v. CENTRALS.

Played at Gawler on August 28th.

Day was fine, with a slight south-easterly wind. College kicked eastwards.

The College team, at the beginning of the match, appeared to be in very poor form, but during the later half of the play we had the satisfaction of "running all over" our opponents, and kicked the four goals during the last quarter.

Umpiring was very satisfactory.

College Team.—Mr. Manuel (captain), Mr. Scott, Stephens, Bagot, King, Whiting, Haggard, Padman, Dealy, Riggs, O'Grady, Le Messurier, Haslam, Koch, Hannaford, North, Mueller and Daly.

The best players for the College were Whiting, Bagot, Riggs and Haslam.

Final scores—

Centrals	..	..	10	12
College	..	..	4	5

Goal-kickers were Whiting (2), Bagot and Padman (1 each).

COLLEGE v. WILLASTON.

Played on Gawler Oval, on September 4th.

This match proved a big beating for us. Our downfall was due to lack of cohesion and method. Our opponents showed their superiority to us in everything.

Portion of the oval was under water during the match.

College Team.—Mr. Manuel, Mr. Scott, Whiting, Bagot, King, Tilly, Quinn, Padman, Haggard, Riggs, Le Messurier, Haslam, North, Robinson, Daly, Hannaford, Koch and Dealy.

Best Players.—Riggs, Scott and Robinson.

Final scores—

Willaston	15	17
College	3	7

Goal-kickers.—Padman (2), Quinn (1).

COLLEGE v. SOUTHS.

Played at Gawler on September 11th.

Day was fine, with a slight breeze blowing from the east. College lost toss, and kicked westwards.

On this occasion we were again outclassed by our opponents. College team showed poor form and lack of combination throughout the whole match.

College Team.—Mr. Manuel, Mr. Scott, Mr. Baker, Dealy, King, Whiting, Bagot, Padman, Haggard, Tilly, Quinn, Riggs, Le Messurier, Haslam, Koch, North, Robinson and Daly.

Best players for College were Mr. Scott, Bagot and Whiting.

Final scores—

Souths	16	15
College	2	5

Goal-kickers were Riggs and North (1 each).

COLLEGE v. TWO WELLS ASSOCIATION.

On September 18th the College team journeyed to Two Wells. The day was hot and dusty, but later in the afternoon it began to rain. This made our journey back very miserable.

At the outset a good day was anticipated, but on arrival at Two Wells we were told that no team was there to play us, and in consequence, at 4 o'clock the match started. We started with an argument with the umpire, and ended up with playing in semi-darkness, as well as rain. The trip back was a miserable one, everyone being dissatisfied with the day's proceedings.

As the results show, this match proved to be our one and only draw of the season.

The College was represented by Mr. Manuel, Bagot, King, Whiting, Tilly, Quinn, Padman, Haggard, Riggs, LeMessurier, Haslam, Koch, North, Dealy, Robinson, Daly, Mueller and O'Grady.

Best Players.—Mr. Manuel, North and LeMessurier.

Final scores—

College	..	..	2	4
Two Wells..	..	..	1	10

Goal-kickers.—Riggs and Robinson (1 each).

—E.G.P.

CRITIQUE OF THE FOOTBALL TEAM.

(By the CAPTAIN.)

Bagot (Vice-captain, ruck and half-back).—Has shown big improvement on last season's form; good kick and mark, rather slow on the ground.

Le Messurier (rover and half-forward).—The best all-round man in team, good mark and kick.

Whiting (ruck and half-back).—One of the most improved men in the team, fair mark and kick, and a real battler; has played very consistently throughout the season.

North (rover and half-forward).—Fair mark and kick, very cool and clever on ground; went off slightly towards end of season.

Haslam (half-forward).—Good mark and kick plays a very cool game, picking out a man well.

Riggs (half-forward centre).—Good mark and long kick, being rather erratic at times; plays a good game back.

Scott (ruck and right back).—Good mark, but erratic kick, should learn to kick more on instep than on point of toe; a hard battler.

Robinson (right back).—Showed very marked improvement during latter half of season; fair kick and mark; inclined to play the man too much, and a little clumsy.

King (ruck and right back).—Fair kick and high mark; has put up some good games when playing back; a little slow when on the ball.

Hannaford (centre wing).—Fast and dodges well, fair kick and mark; was unable to play throughout all of season owing to knee trouble.

Padman (goal sneak).—Fair mark, has a peculiar way of kicking; not very fast, but generally manages to work his way around and secure his kick.

Haggard (goalkeeper).—Was a disappointment forward, but an improvement in goal, being a good mark and a very sure kick; hesitates too much in not knowing whether to run out of goal or not when opportunity arises.

Koch (centre).—Poor mark and kick; should watch the ball when he goes up for a mark; could use his weight with more advantage; showed improvement towards end of season.

Daly (centre wing).—Battles hard, and although only a lightweight, can take a bump; poor kick and fair mark.

Dealy (half back).—Has to learn the game yet. Battles very hard, and has put up some very good games. Fair kick and poor mark.

Tilly (right forward).—Poor kick and fair mark; should try to get into it more; has a lot to learn yet.

Quinn (right forward).—Has improved since beginning of season; poor kick and mark; has much to learn.

Muller (forward).—Good kick, but poor mark; plays well at practice, but does not get into it enough in a match; hangs off too much.

O'Grady (forward).—Fair kick and mark, very slow on ground, and has a lot to learn.

Mr. Manuel, captain (by the Vice-captain).—Good mark and kick, and was a great help to the team; plays his best game back, always battles well; has captained the team very well during the season.



OLD COLLEGIANS' ASSOCIATION.

Consequent upon the lapse of the Spring Show, there was no occasion to prepare for our usual annual reunion, and, apart from this aspect of the matter, we should have met under a cloud, since so many of our members are fighting at Gallipoli. Six at least have paid the extreme price—D. A. Byard, J. A. B. Stevenson, E. M. Judell, M. Hains, W. B. Blue, and P. D. Killicoat. Several others have suffered more or less severe wounds, but are in most cases well on the way to recovery.

In this issue of "The Student" a further list of those who are serving is published, but as it is quite likely that there are others whose names have not been mentioned, I shall be glad to have a notification from any old students. It is our intention to ultimately create some permanent record, and therefore we wish that the list shall be as complete as possible,

I am publishing copies of two letters received from the front which will be of interest. The one is from P. D. Killicoat, the sad news of whose death from wounds was received some few days ago.

With reference to this letter, I sent a parcel of "Students," also a long letter on topics which would interest the "old boys," but poor Killicoat will not be the recipient. I took the precaution of making a joint address to several besides himself, so it is possible that the parcel may yet be delivered to some of them. The second letter speaks for itself. Interesting letters have also been received from Egypt, from Lieut. J. S. Malpas (commanding B Coy., 27th Battalion) and Pte. J. L. Thomson, both of whom will now be in the fighting line. Killicoat's letter, dated 1/8/15, Gallipoli, and written on a scrap of paper, says:—"Several of our old scholars here, amongst whom are A. Stevenson, Treloar, Wells, and myself (sergeants), D. H. Killicoat (Lance-Corporal), S. Vohr, Bagot, Hamilton, and W. B. Blue, would be pleased if you could send a few copies of the latest 'Students' printed while we have been away. We often get together and have a yarn over old times, and it is marvellous the spirit of good-fellowship it causes. We were all very sorry when Mjr. Fulton (second in command of 3rd Light Horse) was wounded. We hear he is in Scotland, and hope he will soon be back to join us. Also Doug. Byard is reported missing. All the rest of our fellows are well, and we are all hoping for an early return to Australia, but not before Peace is declared, where we will be able to make use of the knowledge we gained in such a good old school as R.A.C."

The second letter is from Capt. Thomas, who was at one time on the office staff of the College. He says: "It is with feelings of deepest regret that I have cause to bring under your notice the death of one of your old diploma men. I refer to Sgt. J. A. B. Stevenson. He joined my command in Sydney during the early stages of the war, and his manly bearing and demeanour have made him a living example to be followed by his fellow-comrades. At the time of his death he was serving in a detached detail under Lieut. Bosanquet, and only the other day my brother, who came to see me, and who was in the same vicinity as Stevenson, informed me with emphasis that 'Sgt. Stevenson was a man.' His lamented demise can be ill-afforded by our troops and our country, but at the same time adds lustre to his memory, and in adding his name to the 'Roll of Honour' I hope the Agricultural College students will realize that lustre has been added also to their institution, and that Stevenson's life and

work, and unfortunately his death, have raised a high moral standard for which the world would be the richer to follow." Such an appreciation, I am sure, will be a cause of gratification to all of us who knew Stevenson, and none the less, we can rest assured, would it apply to the other five who have given their lives for their country. "Dulce et decorum est pro patria mori."

The following is an additional list of old students who have enlisted in the A.I.F.:—

Gilbert Lewis (Capt.)	J. Bagot
C. A. Russel	F. H. Snook
I. S. Young	G. R. Harrison
J. L. Thomson	W. H. Shadforth
L. G. Morrison	W. J. Aldridge
G. M. Buchanan	A. C. Simpson
J. G. Sandland	A. F. McIntosh
J. H. Room	S. H. Haslam
M. Hains	W. F. Driscoll
L. M. Hodge	H. H. Orchard
B. C. Hamilton	

I shall be pleased to hear from old students as to names which have not been published in this or the preceding list.

H. E. LAFFER, Hon. Sec.

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