

The Student.

Published by the Old Collegians' Association, under the joint direction of Past and Present Students.

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Vol. VII.—No. 3.

MARCH, 1908.

EDITORIAL.

THIS number is the last of this College year, which has seen many changes take place here. Many improvements have been made which have come too late for the present third year students, who will finish this March, and so make way for others to take their places. To those who are leaving the *Student* wishes them all good luck and prosperity, and to those who remain a better year than that which has just passed.

PRESENTATION TO PROFESSOR ANGUS.

When Professor Angus retired from lecturing here the students all agreed that they had lost a most valuable lecturer, and express sincere regret that he is not still with us. Although he is not present amongst us, he still shows us that he has a kindly feeling towards us by the interest he still takes in our sports. The students are making a presentation to him as a token of the high esteem in which they hold him on speech day.

TENNIS.

This year the singles and doubles handicaps were held, the singles was won by G. R. Williams, who played from the owe 30·4 mark in a most creditable manner; in some cases winning his rubber by sheer determination, a performance which we heartily congratulate him upon. The doubles handicap was won by G. E. Wells and M. O. Weste, who owed 30·3; they also played well right through and are to be congratulated on their win. The championship was won by J. A. Horrocks, our Cap-

tain, after a very hard and long tussle with G. Wells, who, although beaten, played well and put up many a lively rally, the scores being 3·6, 6·1, 6·2, 6·1. Both players are to be congratulated on the way they played.

CHANGE IN STUDENT COMMITTEE.

The first year Committeeman, M. O. Weste, resigned his position through not being able to take a little friendly advice from some fellow students. His position was not filled by another first year. I hope they will buck up a little more next year in this matter.

CHANGES IN THE STAFF.

Since our last issue there has been a change in the staff. Mr. J. Desmond, V.S., who was lecturer in Veterinary Science, has now to confine his work to research work, and his place has been taken by Mr. C. A. Loxton, of Victoria, whose lectures have been greatly appreciated. Mr. Webb has also left us and his place has been filled by Mr. McEwen. The students and others wish both a hearty greeting through these columns.

CRICKET.

The team this year has given a good account of itself, making some very respectable scores. Details of the season will be found further on.

OBITUARY.

We regret to record the death of one of the young foals on the farm, which had its leg broken through being kicked by its mother, which necessitated its being killed.

ENGAGEMENTS.

Old students will be surprised, as well as pleased, to hear of the engagement of Mr. Roy Honey.

Mr. Cyril J. Thomas has been offered another clerkship in Adelaide, and so will be leaving us after a sojourn amongst us of nearly two years. The students of 1906 will most probably have lively recollections of his first appearance. The students, through these columns, wish him every good luck and happiness in the gay City of Adelaide.

RIFLE CLUB.

The Rifle Club have had a good season, breaking all previous scores put up, of which an account will be found further on.

THE *Student* wishes all departing students good luck, and hopes that they will not forsake its columns.

Before the Mast to South Africa in a Wind Jammer.

(By J.K.E.)

TO the ordinary individual the word sea spells romance, but in real earnest it means work all the week, Sundays included, uncomfortable quarters, scanty sleep, and a minimum allowance of grub. (Please do not misunderstand the word "grub," it does not mean the sea serpent.)

However, although it is a hard life, seafaring men are usually in good spirits, but it is safe to say that while at sea the good spirits are seldom in them. By putting an abundance of spirits down in port they manage to keep them up while at sea. Practical jokes are the order of the day, and it goes hard on Jack if he cannot stand a joke, although some of them are bitter pills.

A sort of fellowship exists among the sailors, and it is only by these little diversions (pills) that they keep each other from the effects of such semi-solitude, as arises out of being practically alone on the vast and stormy deep. As soon as the ship is fairly out of port it is seldom that another vessel is sighted. Leaving Port is quite an undertaking, as it is difficult to find enough men capable of working the ship at the time, the majority being prostrated with the effects of too good a time ashore. When well at sea the men settle down to the quiet life characteristic of a sailing ship, not to the first voyager or green-horn, in nautical terms. He does *not* settle down. His thoughts are well expressed by these lines :—

" This peculiar up and down motion,
Which I feel on the treacherous ocean,
Inspires me, alas ! with the notion,
That I never was meant for the sea."

At first he is afraid he will die ; next he is afraid he will not die. Death would be welcome. He gets little sympathy from his messmates, especially the apprentices who have been through the " mill." A day's grace is allowed, and after that the victim of mal-de-mer has to tumble up and do his share of the work. All his romantic ideas of the sea are scattered to the winds.

Before leaving port he sees bright visions of a far land, with hospitable inhabitants enviously admiring his smart uniform, and regarding him as quite a dashing fellow. With all this, after an enjoyable passage, gliding swiftly over the foam-capped billows, he is brought face to face with the stern reality.

The ship in question was engaged in carrying wheat and flour from Port Pirie to South African Ports. She was a barque-rigged vessel of 1,000 tons reg., commanded by a close-fisted

Scot. The voyage was made from Fort Pirie to Durban and Lourenco Marques, situated on a rugged promontory jutting out into the placid waters of Delagoa Bay.

All was hurry and bustle on the eve of departure, loading late cargo, shipping stores, and collecting half-conscious seamen from various well-known cool drink shops, and generally preparing for sea. At 4 a.m. next morning the bo'sun's whistle summoned the capable portion of the crew to assist in sheering off from the wharf. The tow-boat's lines were made fast and shore lines cast adrift. Then the old familiar scenes (tarts, etc.) began to fade in the dim distance astern, and we were swiftly being towed downstream towards the Gulf. Once outside the hawser was cast off and sail set, and so commenced an adventurous voyage. A fair wind carried us, in a few hours, down the Gulf, out into the open sea. "Was it rough?" "Did she roll?" ask the green-horn, whom we will call "Pimple." By now the crew were of necessity total abstainers, and drank nothing stronger than black coffee. As a consequence all, except "Pimple," could work when required. He was required but could scarcely be said to work. He did not know enough to go to the lee side, when his feelings overcame him, but went to the weather side. The wind was strong and blew the expressions of his emotions back in his face, as well as in the face of another standing some distance behind him. The next time he felt queer he knew which was the wrong side to go.

The only event worth recording while crossing the Bight was one night when "Pimple" was on the look-out on the foc'sle head. Soon after the watch commenced, he naturally fell asleep against the capstan. He was rudely awakened from the land of nod by the frantic yells of the second mate, who came rushing for'ard, and by relighting the starboard side light, which had gone out during "Pimple's" peaceful period, thus averted a catastrophe which may have ended disastrously, but for the second mate's presence of mind. "Pimple," on rubbing his eyes, discerned a huge M.M. Liner looming above us on our starboard beam, but on seeing our green light she promptly ported her helm, and her brightly-lighted port holes passed by our stern at some sixteen knots. Soon we rounded the Llewwin and entered the Indian Ocean. The weather became warmer and finer, winds were less violent, and indeed it was often dead calm.

Frequently whales came quite close to the ship, while albatrosses, Cape hens, and many other varieties of sea birds flew continuously about around the ship on the look-out for some scraps thrown overboard by the cook. When it was calm the men baited hooks and trailed them behind the vessel. The albatrosses dived at the bait, and the hook, catching their beaks, they were quickly hauled aboard. One strange thing about these birds is

that they cannot fly off a hard surface, but can only run about the deck. They are either vicious or hungry, or both, for when let loose on deck they attack anyone in reach, and peck at the bare feet of the sailors, causing great amusement, except to those who are pecked. Their wing bones furnish excellent pipe stems when clea ned, and the hard yellow skin enclosing the foot makes a good tobacco pouch. In fine weather some members of the crew nearly always slept on deck. This opened an endless avenue for practical jokes. Given a fair opportunity, a rope would be tied to the leg of a sleeping seaman, and then another would call him, saying he was wanted. He would get up and walk off, only to be brought up with a round turn, and perhaps upset. Another favorite dodge was to blacken a man's face while asleep, and laugh at him till he was consumed with indignation at not knowing the cause of the merriment, little dreaming what he looked like. All this may sound rather childish, but it is astonishing how little it takes to amuse a few men, when cast on their own resources for the time occupied by a voyage.

Calm weather lasted only a few days, however, and one evening a green bank of clouds appeared over the Southern horizon, which is a sure sign of dirty weather. All that could be done was to take in all light sail, and reef both fore and main topsails. Gradually the sea grew rougher, and by midnight it was blowing "brass guns." The watch on deck got into their oilskins and donned their sou'-westers, and the watch below were cautioned to be ready to turn out at any moment. As daylight approached the seas increased in size, and the decks were continually under water, and it was difficult to avoid slipping down. A ducking was always met with a laugh by the men who were more experienced, and were consequently better on their sea-legs. By midday the gale was at its height, and showed no signs of abating. It was no easy matter to get a meal (not the only place where this difficulty confronts a person). The galley was continually swamped and the cook displayed a choice vocabulary, decorating the vicinity of the galley with exclamatory quotations from every language. The man whose turn it was to get the "grub," had to be very careful how he proceeded or he would spill the "burgoo," (or whatever was on the programme) all over the deck. If he was fortunate enough to reach the foc'sle with his charge, trouble was not ended, for it was difficult to manœuvre the spoon from the plate to the mouth. On one occasion, when a heavy sea was running, one chap had several marks on his face where he had dabbed himself with food in trying to find his mouth. The food was not of an appetising quality, and consisted principally of burgoo, currie and rice, pea soup, and biscuits (not boiled eggs). Besides being unpleasant at meals it was a common occurrence for

those in the half-deck, to get their bunks half full of icy cold sea water.

As to working the ship great care has to be exercised, especially in handling the sails. To furl a sail in a strong gale is a task requiring strength, nerve, and agility. There is nothing to support the men away aloft, taking in sail, but the foot rope. They lean across the yard and gather the flapping canvas under their bellies. An extra strong flap is sufficient to jerk a man off the yard and hurl him far into the sea, with perhaps a remote chance of being saved. Sometimes, too, the sail is literally torn from their grasp by the force of the wind, and with a report like a gun is torn from the yard, and is carried away like paper in a whirlwind. A new sail has to be bent at once, and this is not an easy task, after occupying both watches for many hours. All were thoroughly tired out before the storm ceased, and were heartily glad when signs of abatement were seen. As the wind decreased the seas went down. Sail after sail was set until, twenty-four hours later, we were bowling along under a full press of canvas before a steady breeze. The normal condition of things was resumed, and all the discomforts of the gale were soon forgotten. A few signs of the violence of the storm remained. The half-deck steps were washed clean away, and an apprentice who was on them at the moment, had his foot injured. One member of the crew was confined to his bunk with a dislocated shoulder. He had been at the wheel when the gale was at its height. A huge sea struck the rudder, which made the wheel spin violently round, flinging him with great force clean over the spanker boom on to the deck. Of course another man sprang to the helm.

By the time all traces of the gale were removed, the ship was in the vicinity of Mauritius. A few steamers were seen bound to and from that island. Being within a few days' sail of our destination the mate set us at smartening up the ship, cleaning and painting the deck work, and aloft, and generally setting things ship-shape for harbor. At sea a ship has little of the appearance she possesses in port. While at sea little trouble is taken about appearances. So long as the journey is completed in the shortest possible time, no other trouble as to appearance is taken. But when in port, and visitors are expected, the natural pride that a skipper and his men take in their floating home promotes them to try and outclass other vessels in smartness and appearance generally.

As we neared South Africa betting became fast and furious as to the time we would take to get in. These thoughts were mingled with others as to whom we would meet there? What would we do? How long would we stay? And where would be our next port of call?

In a few days we sighted the mountain peaks of Natal. Gradually we approached the shore, and houses could be seen. "Pimple's" excitement was intense. He talked of bananas, pine-apples, and lemonade galore, to say nothing of little black girls. As we approached the shore, sail was gradually shortened, and by the time we reached the anchorage we were running under only our fore and main lower tops'ls, and fore top mast skys'l. With a rattle of the cable the anchor was "let go," and our ship was motionless, save for the gentle roll. Up went the red ensign, followed by our number, and from the signalling station ashore we learned that we would be towed in first thing in the morning. On tumbling out in the morning and looking about we saw the welcome tow-boat steaming out towards us. The mate's orders were to hurry over our morning meal. The meal over we all rallied round the capstan, and with the slow click-click of the cable, accompanied by stentorious voices singing the old familiar "chanty"—

"I'll go no more a-roving with you, fair maid," the old rusty mudhook gradually rose from the bottom. The tug's line was made fast and we were eventually berthed inside the quiet harbor of Port Natal. The fine buildings of Durban could be seen at the far end of the harbor. Preparations for the discharging of the cargo were at once got under way, and it was not long before we had a swarm of laughing and chattering Kaffirs handling wheat and flour as if it were mere play.

After being in port two days, our agents received cable advice from our owners in Australia, informing the skipper to proceed up the coast to Delagoa Bay after discharging half the cargo.

It was a great relief for us to don our shore togs, and step ashore in the Portuguese town of Lourenco Marques, and to feel the long desired *terra firma* once more under our feet.



Trip to Concordia.

(By G. R. WILLIAMS).

MR. ALICK MURRAY'S kind invitation to the third year students to visit his stud farm on the 18th October, was gratefully accepted for us by Professor Perkins, and very gratefully availed of. On that date we were in Gawler at 9 o'clock, and arrived in one of Mortimer's drags at Concordia about 10.35 a.m., where we were met by the Manager, Mr. Hamilton, and ushered into the shearing shed, there Mr. Murray received us very genially, at once making us feel at home by shaking hands all round.

On entering the shed one is at once struck by the splendid collection of prize tickets nailed on the beams which surround the walls, representing Mr. Murray's successes in the show ring. There were about thirty-five Champion and Special Certificates, one hundred First Prize tickets, with numbers of other tickets of lower class.

The shed itself is about thirty feet by forty-five. A light counter about equally divides the room; the space under which is utilised for storing bales. This counter separates the shearing board from the wool bale stands and sorting table. The stands are along the wall, and made of Jarrah wood. They are constructed in such a manner that when a bale is full all that is necessary to extract it is to lift two sides up and away and the bale is free. The sorting table is under the window opposite the door, and is covered with linoleum cloth. The shearing floor has room for six shearers and is well fitted up, having tally clock, shear rack and water tin for each shearer. The door from the board leads to the sheep pen, which is divided into two compartments, the one on the right leading from a yard where the woolly sheep come in, the left hand pen receiving the sheep as they are shorn.

The first rams we saw shorn, four in number, included the champion of last year's show, Lion II., and a ram that came third. Lion II. is a fine-framed son of Lion I., and it was wonderful to note the length of staple, density, and fineness, with strength of wool, combined with a nicety of condition embodied in the twenty-five pound fleece that he yielded, and which, though not the heaviest fleece, would probably scour as well as any shorn. The heaviest fleece came from Wellington, weighing twenty-six and a half pounds. This fleece showed somewhat more condition than the champion's. Running him rather closely was a fine ram, Tetarka, who, when shorn, became twenty-six pounds lighter. Lion I., the sire of the present champion, and who has previously taken the championship four times, cut a very attractive fleece

weighing twenty-two pounds two ounces, and although this ram is getting aged the wool appeared robust and of fine quality with good length of staple, bearing out Mr. Murray's observation that in some of the best strains the wool improved as the sheep grew older, as for instance in the Monarch strain. Starlight was another ram of exceptional excellence, his beautiful fleece being only one of many too numerous to mention.

Soon after we arrived four shearers started work, shearing carefully, expeditiously, and pink, keeping the belly wool on the fleece, which, when off, is gathered up and placed on a sheet. After examination it is selected for the March Show, then carried to the sorting table; it is there carefully spread out, and points being taken off, another sheet is then laid over it, so that now the fleece is between two sheets which are held together and inverted on to the floor so that the tip is uppermost. The sides are rolled over with the aid of the sheet and pressed down, then the britch and neck are rolled towards each other, the sheet being drawn tight is sown up and placed in a box till March.

The stud lambs were not the least interesting animals we saw. They had exceptionally robust and well-developed frames, the wool being of such surprising length of staple for lambs that they appeared even heavier than they were. One that was weighed turned the scale at eighty pounds, which is very good, when it is considered that, though in good condition, they were not rolling fat.

At one o'clock Mr. Murray suggested dinner, and under the spreading peppermint tree we enjoyed a regal feast with College appetites. Dinner over, we watched some of the older rams being shorn, and noticed that after their feet had been trimmed, if needed, they were dipped, a process in which we were very interested. The dip is of an oval shape, the sheep being slid in with no chance of stopping the others, and are pushed under by means of a pole having a prong with the ends curved up and outwards to prevent injuring the sheep. After their ducking they swim across and clamber out on to the draining rack.

About three o'clock Mr. Murray asked us into afternoon tea, which we thoroughly appreciated as the day was of a warm and thirsty order. After our refreshment Mr. Matthews asked Mr. Murray a few leading questions on our behalf, which he kindly answered.

Evidently Mr. Murray's ideal ram is one yielding a fleece of twenty-five pounds, of splendid quality and condition, without losing constitution in the sheep. His experience being that a ram

cutting such a fleece would produce an equal or greater yield of wool on a clean scoured basis than a fleece of greater weight. Sheep carrying too much yoke lose in size and constitution.

The Concordia rams are plain-bodied sheep with a maximum development of thigh, consistent with a good percentage of naturally-reared lambs. Too great development in this direction prevents the ewe from suckling its lamb properly. No more than two folds are to be found on the neck, the first fold may extend on to the lower portion of the shoulder for a few inches, the whole forming a good apron, tied well up on to a muscular and broad neck. The nose and eyes are clear of wool, but the cheeks are full and horns wide.

Mr. Murray told us that much depended on the nature of the soil the sheep are run on in regard to the wool's quality. A lime soil containing magnesium salts will give a wool yielding a greater percentage of noil, as the salt affects the yoke to a certain extent, neutralising its preservative qualities.

We then adjourned to the sheds once more to ascertain the latest weights, and incidentally the fate of a hat. Then, after saying goodbye, we gave three cheers, and "For He's a Jolly Good Fellow," as we rolled away after having spent one of the most interesting, enjoyable, and instructive days we ever will have.

"Advance Australia!"

(By "MICROCOCCUS.")

WHAT could be better calculated to stir the utmost depths of the young gumsucker's soul! Whether he be trudging behind the plough, or briskly wading through the red-hot sand of an out-back track, or even in the dust-laden atmosphere of the dingy office, our noble war-cry invariably pulls him up with a jerk and straightens him to his talk. Glorious visions of the happy, prosperous, and powerful nation of the future crowd his imagination, and ambition is again aroused and strengthened to be in the van of that noble throng, amongst the leaders of that great phantom "Advance." They are the true patriots, and surely this is a worthy ambition. But how to get there? That is the question that throws a damper upon high spirits, and taxes the liveliest of intellects for a solution. It soon becomes plain to the more enterprising that the only sure, if somewhat laborious way, to lasting fame is to devise and develop some new industry that will at once help to promote the longed-for advancement, and also stand for a lasting memorial to its originator. The way is cer-

tainly difficult, but, nothing daunted, certain members of the rising generation of our mutual acquaintance are already propounding promising schemes.

Inspirations naturally came from our great undeveloped natural resources, and although the existence of these resources has always been proudly referred to, this is apparently the first practical effort that has been put forward to define what they really are and how they are to be developed.

For instance, tiger snakes are known to abound and prosper in all parts of the country, and have hitherto been ruthlessly destroyed. But in future these animals are to be systematically bred and reared for their venom, which now commands a high price, and is said to be extensively used in the cure of inebriates. Carefully-fenced paddocks of small area are advised for grazing purposes, and rational feeding with cocky chaff and molasses is of course essential to success. The harvesting operations will be somewhat hazardous, and will require at least a little nerve and skill. The animal is allowed to suck the little finger. This action is said to induce a copious flow of the precious fluid which collects in the palm of the hand, and is thence transferred to a bucket.

Again, the well-known hardiness of quadrupeds of the goat and camel tribe has suggested to one particularly tough-brained individual the successful utilization of our vast interior. Numerous weird creatures, such as the Alpaca and Angora have been mentioned as being particularly well-suited to our desert country, being able to thrive on a diet of pebbles and dry sticks. These animals appear to possess no other recommendation of any importance, except perhaps the fact that they possess horse hair of a high quality, and also give good milk. Daily milking will, of course, be rather inconvenient, as the land will only bear grazing at the rate of one to the square mile, but this difficulty will doubtless be soon overcome. Indeed, a flying machine milk cart has already been hinted at by the promoter of this venture.

The ordinary mixed farm of the future will also bear a picturesque appearance, bee hives, silkworm sheds and poultry yards are to take the place of the old-fashioned cereal crops in the paddocks, while the headlands, so often a source of loss, are to be thoroughly utilised by planting them with the carob bean, the indiarubber, and other useful or ornamental trees; and to complete the scheme of perfect economy ostriches are to be employed to pick up any grains which may be lost during harvesting.

Further, until recently, agricultural motors were considered to be the most up-to-date means of heavy traction, and the idea of their introduction was seriously, but not dangerously, entertained. Now, however, thanks to the very active inventive genius

amongst budding agriculturists, these engines have been definitely abandoned in favor of the more up-to-date elephant, an animal well adapted to the purpose, and possessing this further advantage that no special skill or experience is required by the driver.

At this point in the evolution of original schemes they received a serious check by reason of the more absorbing matter for reflection provided by the near approach of the academic year. It is to be hoped, however, that at some future date the promoters of each will be able to take them up again, carry them into actualities, notwithstanding minor obstacles and difficulties, and eventually reap the well-deserved reward of bold originality.

The Honey Bee.

(By "DRONE.")

(Contd.)

IN the previous issues I dealt with the life history and functions of the queen and drone respectively. I now come to the last of the inhabitants of the hive, namely, the worker bee, with which I shall deal in a like manner.

The workers are the smallest inhabitants of the bee hive, and compose the bulk of the population. A good swarm ought to contain at least 20,000, and in large hives strong colonies which are not reduced by swarming frequently number four or five times that number during the height of breeding season. Their functions are varied. The young bees work inside the hive, prepare and distribute the food to the larvæ, take care of the queen by brushing her with their tongues, nurse her, maintain the heat of the hive, or renew the air and evaporate the newly-gathered honey by ventilating. They clean the hive of dirt, etc., close up all cracks, and secrete the greater part of the wax which is produced in the hive. The old bees, if necessary, do a part of the same work, but, as we have seen, old age renders some unfit to prepare the food of the larvæ. More alert than the young bees, they do the outside work, gather honey, pollen, and water for the use of the family, and propolis to cement the cracks.

The eggs of bees are of a lengthened, oval shape, with a slight curvature, and of a bluish white color, being covered, at the time of laying, with a glutinous substance, they adhere to the basis of the cells, and remain unchanged in figure or situation for three or four days. They are then hatched, the bottom of the cell presenting to view a small white worm. For the first three days after their hatching these worms are fed with a jelly, said to be secreted by the upper pair of glands of the worker bees, which are very

large in the nurses. After four or five days the larva is too large for the bottom of the cell where it was coiled up, and stretches itself until it occupies the whole length of the cell, lying on its back. Its food at this stage is changed for a semi-digested mixture of honey and pollen. The larva, or grub, grows apace, but not without experiencing a difficulty to which the human family is, in some sort, subject in the period of youth. Its coat is inelastic and does not grow with the wearer, so that it soon, fitting badly, has to be thrown off. But, happily, in the case of the larva, a new and larger one has already been formed beneath it, and the discarded garment, more delicate than gossamer, is pushed to the bottom of the cell. The nursing bees now seal over the cell with a light brown cover, externally more or less convex.

The cap of the broodcell is made not of pure wax, but a mixture of bee-bread and wax, and appears under microscope to be full of fine holes to give air to the enclosed insect. The bees sometimes neglect to cap the cells of some of the brood, and some persons have thought that this brood was diseased, but it hatches all the same. The larva is no sooner perfectly enclosed than it begins to spin a cocoon after the manner of a silkworm.

When it has undergone this change it is given the name of pupa. It has now attained its full size, and the large amount of nutriment which it has taken serves as a store for developing the perfect insect.

It passes about three days in this state of preparation for a new existence. It gradually undergoes so great a change as not to wear a vestige of its previous form. About 21 days are usually required for the transformations from the worker-egg to the perfect insect.

A newly-hatched worker is easily recognised by her small size, her pale-gray color and her weak appearance. After a few days she has grown considerably larger. She is then in the bloom of health—her color is bright, she has not yet lost a single hair of the down which covers her body. These hairs fall gradually from age and work, and sometimes disappear almost entirely.

The first excursion of the young bee out of the hive takes place when she is about eight days old. The disturbing of the colony, or the lack of old bees, may cause her to go earlier.

Although the workers are of the same sex as the queens, their sexual organs are undeveloped, owing to the coarser food which they receive during the latter part of their growth in the cell. Yet they have rudimentary ovaries, containing a few undeveloped eggs. They are incapable of fecundation. Occasionally some of them appear to be sufficiently developed to be capable of laying the eggs; but these eggs, like those of queens, whose impregnation has been retarded, always produce drones.

Their life is short, but their age depends very much upon their greater or less exposure to injurious influences, and severe labors. Those reared in the spring and earliest part of summer, upon whom the heaviest labors of the hive devolve, appear to live not more than 35 days on an average; whilst those bred at the close of summer and early in autumn, being able to spend a large part of their time in repose, attain a much greater age. Notched, dragged wings and shining bodies, instead of gray hairs and wrinkled faces, are the signs of old age in the bee, indicating that its season of toil will soon be over. They appear to die rather suddenly, and often spend their last days or hours in useful labors. Place yourself before a hive and see the indefatigable energy of these industrious veterans, toiling along side by side with their more youthful compeers, and then judge if, while qualified for useful work, you ought ever to surrender yourself to slothful indulgence. Let the cheerful hum of their busy old age inspire you with better resolutions, and teach you how much nobler it is to die with harness on in the active discharge of the duties of life.

Forests in Australia.

"Jock, if ye hae naething else to do, ye may be aye sticking in a tree; it will be growing, Jock, when ye're sleeping."—*The Heart of Midlothian.*

Australia suffers greatly as an agricultural community from the disastrous effects of droughts, hot winds and, in places, floods. The advance made in a good season is lessened by the poorer progress made in another season. Obtain as many good seasons as possible, and all tillers of the land will be benefited. To destroy our disadvantages will be to increase the yields off land now in use, and, what is more to the point, it will enable larger areas to be opened up.

May I be permitted to digress a little. Where, in our street plantations, do we see the eucalyptus? If we ask why they are not present we get the answer that they are too ugly. Ugh! Australia is the home of the eucalyptus. This tree abounds in the streets of Californian cities. Around Rome, it is planted for its healthy influences. In many cities around the Mediterranean it is grown. Australians cast it out for its ugliness.

In undertaking a system of tree planting, there are two main results to be held in mind; firstly, the effects on climate, and secondly, the production of valuable crops of timber.

Do forests have an effect on the climatic conditions of a country? Historical evidence provides a certain amount of proof in favor of this. In Greece, Macedonia, and other places where forests have been depleted, the climate has become drier, the soil more barren, and wealth and population have decreased. I think

that forests have a certain amount of influence on rainfall and evaporation. It is beyond question that they have the effect of preventing hot winds. In districts liable to heavy floods forests certainly tend to lessen their devastations. On the whole, forests tend to make the climate of a country more equable and humid, whilst at the same time lessening liability to floods.

Forests have another value. They produce large crops of timber, an important consideration in these days. Our own native trees are suited to many kinds of work. Some timbers, however, we import for special uses. Over the wide expanse of the Australian Commonwealth, surely districts suited for many of these could be found. It would be the means of providing work for our own lumbermen instead of relying on the efforts of foreigners. A wealth-producing article such as this should not be neglected for want of trying.

Trees are grown in large masses as forests, or small strips as timber belts.

The raising of forests could not be accomplished by private enterprise, because benefits do not appear for a great number of years. It is a matter for the Government. In drier areas, by aid of irrigation, suitable trees should be planted and looked after. Gradually the areas could be extended more and more. Trees in forests, to have an effect on climate, must be dense, and this circumstance favors the production of good, useful timber. When timber is ready for cutting a certain area could be let at a rental to a private company to cut down systematically. I believe in interfering with private enterprise as little as possible.

Timber belts can be grown on all farms with advantage. It should be encouraged by the Government either by bonus or some other means. The farmer would provide shelter for his stock, improve the appearance of his farm and form windbreaks, useful both in summer and in winter.

The benefits accruing from tree planting would be felt by every section of the community. The farmer would benefit by being enabled to produce bigger yields of crops. A large lumbering industry would be established to provide work. And in every way the climate would tend to improve to the benefit of all classes.

These benefits would take many years to be realised. Certainly no harm could be done in commencing tree planting on a large scale. A little enterprise is needed. It is being done in America. Why not in Australia? And it is not too high an ambition to hope to modify the climate of Australia and clothe the latter in forests. Certainly it is one worthy of consideration. It may be objected that "Rome was not built in a day"—but it was commenced in a day.

The Wool Trip, 1907.

(By J. A. H.)

THE annual Wool Trip of the third year students this year was late in coming round, but at last we received the long looked for invitation, after a hard hour's work of viticulture, which made us speedily forget about our late lecture.

On the morning of November 8th we started off with light and joyous hearts. Boarding the train soon took place, and we kept the carriage to ourselves by making rather a hideous din at all stations through which we passed.

Arriving at Dry Creek we had no time to view the beautiful landscape as our train was waiting at the station for once. We were soon aboard, and crossing what seemed to many of us a vast swamp, which seemed to be inhabited by numerous witches by the vapors and sweet-smelling odors that drifted into our carriage.

At Port Adelaide we were met by (some said a pair of bags of bones drawing an antiquated cab) a spruce cab, which carried us swiftly to Bagot, Shakes, and Lewis's Wool Store. Here we were met by Mr. Jeffries, who was as jovial as ever, his first words being to tell us breakfast was waiting. Needless to say we were unable to do justice to the good things after our "College luxuries." Mr. Jeffries then took us over the wool floor, showing us the different clips of note, the best being the Hill River Clip and the Pewsey Vale wool. These two clips being beautifully classed provided a splendid object lesson to us in the way of classing wools.

The importance of looking after the lambs' wool was very clearly shown by comparing two different clips. One had been classed efficiently, the other being purely and simply the lambs' wool put into bales. The difference due to classing was then fully realized.

We were due at Elder, Smith & Co.'s Wool Floors at one o'clock, where we met Mr. Mathews, who had just arrived from Victoria, and as usual the train was late. Here we were received very cordially, and given a splendid luncheon, after which we went through all classes of clips, representing practically every wool-growing district in the State of South Australia. Here we saw a splendid collection of Northern clips, which, when compared with clips from the middle North and South-East, showed us very clearly the effect of soil and climatic conditions upon the growth of wool and the methods adopted in each instance of classing these different conditioned fleeces.

We then adjourned for afternoon *tea*, and then watched the way the bales of wool were pressed for shipment to other lands, and took a look round the wharves.

After this we journeyed round (some of us thought) to town, where we caught the express back to Roseworthy, thus ending up a most instructive and joyous outing.

We wish to tender our sincere thanks to the two firms we visited, and to Messrs. Mathews and Jeffries for their kindness in showing us what was going to be one of the largest sales of wool here. Our only regret being that a wool trip did not come every week.

Fourth South Australian Egg-Laying Competition.

(By W. R. DAY).

THE present contest between the occupants of 75 pens has been in progress during the ten months dating from April 1, 1907, with a fair amount of success as a source of revenue to the promoters, and advertisement to the competitors, and compares very favorably with competitions in the other States in regard to number of eggs laid or averages obtained. At present we cannot claim to having obtained the highest individual total, but we can claim the highest pen average of five competitions in progress at the present time, and their having started on the same date as our own we are able to make fair comparisons. The pen averages for nine months for the five competitions referred to above are as follows:—South Australia, 852; Queensland, 850; Ryde, N.S.W., 848; Berowra, N.S.W., 843; Hawkesbury, N.S.W., 818. The foregoing figures prove the progress which has been made by the breeders of layers during the last year or two in this State, and had we the conditions available in some other parts, such as sand upon which to locate the pens, and good permanent shade, and abundance of green feed which we read and hear so much of, there should not be any reason why South Australia could not claim a record in egg-production, but, after all, it is not the high total put up by any one pen which has proved of interest to poultrymen so much as a good all-round or pen average, which is the true test whichever way it is viewed from. If for eggs it shows what can be obtained from a flock of from four to five hundred birds, supplied from all parts of the Commonwealth by some 60 or 70 different breeders, which birds have all had to become used to a totally strange locality and fresh conditions to that which they had been accustomed.

Again, it shows to much better advantage from a feeder's point of view, as it enables him to form an estimate as to upkeep and revenue to be derived from a large flock, and, if a profit can be obtained from a mixed lot, then there should be no question about keeping a large flock when worked up from some reliable egg-laying strain, and as the cost per head of the best stock available is no more for food than the cost per head of the mongrel type, the advantage is all with the breeder. As is usually the case the lead in the Competition has been taken by White Leghorns, as will be noted by the first three positions at the end of the tenth month. And, as these birds are able to win what is called the winter test, the Asiatic, or heavy breeds, have lost what prestige they had as, until quite recent years, such birds as the Black Orpington were looked upon as a source of revenue in the egg business during the winter months.

The Utility Poultry Club appear to have made a move in the right direction by starting the Competition on April 1st, instead of the middle of May, as was the case during previous years, thus avoiding the moving of the birds into fresh quarters during the cold, and probably wet weather. Still, a great deal remains to be done, which is in the hands of the breeder or competitor to carry out, as it is to his advantage to have his birds in a fit state to enter upon what must necessarily prove to be a period of great strain if they are to come up to expectations, and he can best do that by breeding his birds at the right time, so as to get them in laying strain by April; have them well-developed and strong, without being forced in any way; have them hardy; let their housing and yards be somewhat on the same lines as in a public test, if possible, as it is the strong and vigorous constitution which will tell in the end, especially if it happens to be a heavy laying strain. One of the greatest mistakes to be made is in pampering the young pullets that are to be entered in a laying contest, as they are unable to withstand the usual rough, trying conditions with which they meet, and instead of starting right away in egg-production, as required, they go right back until they become used to their surroundings, and then gradually get up to starting point again, which will probably mean from eight to ten weeks loss of time, and also a loss of revenue, as it is at this period eggs are a good price.

This is invariably the trouble with birds which are soft and nervous owing to misplaced attention on the part of the breeder. Another mistake which is often made is that of entering pullets which are too young. An egg-laying competition is not the place for chickens, but for birds which, in my opinion, should not be less than seven months old. This should be the minimum age for light breeds, and nine months for the heavy class. Of course, it is rather a difficult matter to tell a chicken's age (the teeth test

does not apply), and I have yet to learn of any definite method, but there are indications which will enable even the amateur to distinguish the chicken from the laying pullet, and it is upon those signs we must decide, and use our own discretion, when not the breeder himself, or in the event of undue advantage being taken.

We now come to what we may call mistake No. 3, and one which is made by a good many competitors, and evidently applies to all competitions, viz., that of entering birds, the abilities of which the competitor is in total ignorance, as experience has shown that there are always some birds in, which do not lay a sufficient number of eggs to pay for their feed, even when such is at average prices, thus showing the competitor cannot know anything about either the birds he has entered nor parents of same, or he surely would not pay, say £2 2s., to be represented in a competition in which he knew he would not be able to claim a prize.

The start in the laying in this test was very unsatisfactory, as no less than 24 pens failed to start on time, thus losing periods of from one to seven weeks, which failure is apt to cause a bad impression at the time, and it certainly is a time when eggs are required, as the price then obtainable is a good return for cost of food consumed. I attribute this failure to lay to a number of causes, as follows:—Too young, moult, poor development, misplaced attention during chicken period, or being allowed to lay a number of eggs before arrival. No less than eight pens of birds appeared to be too young upon arrival, which is a serious drawback to a competition, where it is a question of eggs, and eggs all the time. This *should* be a good object lesson to future competitors. April is a rather critical month in regard to the moult, if it can be got through by then well and good, but when it comes along just after that time it is another cause of failure in the egg supply, and should be avoided as much as possible. It has occurred to me the chief trouble in the moulting is the uneven way in which a pen go through, as instead of the six moulting at one and the same time, as one would naturally expect them to do, they moult one or two at a time in most of the pens, thus prolonging the period, and by so doing make it impossible for one to get them through quickly as a pen, and on with the laying again. This break in the moult appears to be brought about by perhaps a mixed strain, or mixed ages of chicks of which the pen is to be composed later on, and if such is the case it is to be regretted that more care is not taken when selecting a pen of birds, as any other method than that of the best from an egg-laying point of view is most undesirable.

While it is worthy of note the progress the White Leghorn has made during recent years as an egg-producer, it is regrettable

that it should be at the expense of the heavier breeds during the winter, a period we looked upon at one time as the harvest for the Asiatics when one could obtain up to 1s. 6d. per dozen for their eggs, while the lighter breeds were idle. But the chief advantage to be gained by keeping them now is their usefulness as broodies, and for table purposes. Either as pure bred or used for crossing, and when the crossing is done on the right lines, a beautiful bird is obtained, but, as the Leghorn is now looked upon as an egg machine, of course it is out of the question to refer to it when speaking of table birds, but as egg-producers they are unbeaten, as the best of them can put up an average of close upon 250 for a pen of six, and to do that they have to enable us to gather eggs every day for the greater part of the year, and are able to win any season test, also yearly one, but the boom business of the present time in the matter of selection for layers seems to be among the Leghorn breeders. I think it is only a question of time when the Black Orpington breeders will be very much nearer the front in egg-laying competitions than they are at present.

During the months July, August, September, and October, a male bird was admitted to each pen, so that eggs would be available at prices within reach of purchasers who might be desirous of obtaining settlings direct from the Competitions, and, as the majority of the birds were young and vigorous, no doubt good returns have been obtained from the liberal number of eggs supplied, viz., 15 to the setting, and no replacements.

Feeding operations have been conducted upon the usual lines, viz., mash, green feed, and grain, with three meals daily. A change has been made in the method of mixing since the warmer weather came along, as the hot mash of the winter mornings has given place to cold mash with a liberal supply of greenfeed chaff added. The birds are all healthy and in good condition. During the period under review the loss in deaths has been 15, several of which died from the effects of the heat during the early part of January. Although everything possible was done for the birds in the way of shade and water it was impossible to save them all. Each yard contains a shade house, and each roosting house has been thatched with straw, and a curtain of grass mats hung in front so the temperature should be considerably reduced, and the yards and houses receive a good spraying with water on such days as the heat becomes excessive. Cleanliness is observed at all times, and a liberal supply of shell grit is always within reach of the birds. This, with clean water daily, is looked upon as one of the necessaries in the poultry business.

The following totals will shew the positions of the pens, both for the month and 10 months :

Roseworthy Egg-Laying Competition.

SCORE FOR TEN MONTHS (APRIL 1ST TO JANUARY 31ST.)

	Six Hens in a Pen.		For Jan.	Total
Mrs. A. E. Kinnear	White Leghorn	...	122	1,274
A. H. Padman	White Leghorn	...	106	1,264
Sunnyhurst Farm	White Leghorn	...	117	1,233
Ontario Farm	White Leghorn	...	102	1,231
Craig Bros.	White Leghorn	...	100	1,173
A. Veitch	White Leghorn	...	86	1,151
G. Von Bertouch	White Leghorn (pen 34)	...	91	1,143
C. B. Bertelsmeier	White Leghorn	...	83	1,109
J. E. Padman	Black Orpington	...	75	1,080
Mitchison & Greaves	White Leghorn	...	73	1,080
C. A. Dunn	White Leghorn	...	105	1,065
H. L. Austin	Black Orpington	...	100	1,065
A. H. Padman	Silver Wyandotte	...	104	1,063
Mrs. D. Mildren	White Leghorn	...	96	1,061
G. von Bertouch	White Leghorn (pen 24)	...	81	1,044
Craig Bros.	Black Orpington (p. 66)	...	82	1,043
A. W. F. Ey	White Leghorn	...	100	1,028
T. E. Crompton	White Leghorn	...	87	1,025
W. Palmer	White Leghorn	...	85	1,023
Piralilla Farm	White Leghorn	...	75	1,019
P. C. Potter	White Leghorn	...	74	1,013
F. E. Hannaford	Silver Wyandotte	...	89	1,013
C. Wright	White Wyandotte	...	101	1,011
Alfalfa Yards	Silver Wyandotte	...	88	1,007
H. Usher	White Leghorn	...	70	1,006
J. George	White Leghorn	...	81	1,005
Craig Bros.	Black Orpington (p. 59)	...	84	992
T. L. Wright	White Leghorn	...	79	991
F. Ayling	White Leghorn	...	89	988
A. Ferguson	Black Leghorn	...	96	984
J. J. Harrington	White Leghorn	...	90	976
Sargentri Yards	Black Orpington	...	84	976
A. E. McDonald	White Leghorn	...	82	975
Copper City Yards	White Leghorn	...	79	970
J. J. Smith	White Leghorn	...	94	967
Thistle Stud Farm	White Leghorn	...	75	966
F. Purvis	White Leghorn	...	58	956
A. H. Tyler	Black Orpington	...	77	954
Highlands Plant	Silver Wyandotte	...	72	941
H. L. Austin	Black Orpington	...	89	939
N. U. Goyder	R.C. Brown Leghorn	...	84	934
H. C. Bennett	Brown Leghorn	...	71	932
Sunnyhurst Farm	Black Orpington	...	68	916
W. Biggs	White Leghorn	...	38	914
Velterfrenden Yards	Black Orpington	...	73	913
Sargentri Yards	R C. Brown Leghorn	...	61	897
T. E. Yelland	Black Leghorn	...	86	882
D. W. Bartlett	Silver Wyandotte	...	67	881
G. G. Legoe	White Leghorn	...	77	872
F. J. Wimble	Black Orpington	...	78	870
Willow Farm	White Leghorn	...	60	870
Sargentri Yards	White Leghorn	...	81	866
Thistle Stud Farm	Silver Wyandotte	...	82	855

		Six Hens in a Pen.	For Jan.	Total.
Alfalfa Yards	...	Black Leghorn	104	844
W. C. Bennett	...	White Leghorn	69	835
Alfalfa Yards	...	White Leghorn	83	832
L. C. Dobbie	...	Silver Wyandotte	86	832
C. Wright	...	Silver Wyandotte	67	802
Rudloff Bros.	...	Silver Wyandotte	66	798
Willow Farm	...	Black Orpington	83	797
J. C. Herriot	...	Golden Wyandotte	69	775
F. Gibson	...	White Wyandotte	50	766
Mrs. E. C. Tubbs	...	Black Orpington	68	755
Copper City Yards	...	Black Orpington	44	741
J. Labrovich	...	Golden Wyandotte	77	740
G. G. Legoe	...	Black Orpington	84	739
A. Ferguson	...	Buff Orpington	53	736
Bice Brothers	...	White Leghorn	57	727
C. B. Bertelsmier	...	Black Orpington	67	711
W. J. Fulwood	...	Black Orpington	67	705
T. Penglase	...	Black Orpington	53	679
Mrs. H. C. Scotcher	...	Brown Leghorn	31	658
Mrs. J. Godfrey	...	Buff Orpington	55	656
G. Woodward	...	White Wyandotte	50	632
C. H. Fulwood	...	Buff Leghorn	15	623
			5,838	69,789

The Poultry Experimental Station at Agricultural College.

(By W. R. DAY.)

DURING the past year a great deal has been done towards placing the College Poultry Yards upon more modern lines, the whole plant having been renewed and considerably increased, and although all spare time has been used in constructing new yards and houses, there is still a lot which remains to be done. We now have 28 stock pens, measuring 40 x 24 feet, with house in the centre, thus making a double yard system, and while one half is occupied by the birds the other half is under cultivation. What is known to old students as the pinery is now fenced in and divided into three large runs, in which are kept a good number of turkeys of a very fine bronzewing type. We now have under construction 42 houses and runs in which to rear chickens from the brooder to the fattening pens; also a number of cockerel pens and single mating pens which, when completed, will all help to make this plant second to none in Australia. The incubator house contains nine machines, varying in capacity from 50 to 360 eggs, which, although not working at present, have done fair service during the season just ended. We now have 1,000 head of young stock on hand, in addition to 516 which have been sold and a goodly number of settings of eggs, and henceforward these returns should be considerably increased, thus returning a sub-

stantial revenue to the College for the expenditure incurred. A feature of success this year has been the results obtained by the use of the Cramming Machine, as a number of young fowls have been well topped up and forwarded to the Produce Depôt for export to England. This has been done by way of demonstration, not in any way depriving the College of fowls for consumption, as the students of to-day get poultry and eggs *gaiore*, thus minimising the fear of growing wool, and lessening the shame to look a sheep in the face. The fact that the College purchases, at market rates, all the eggs laid by the competition birds, in addition to those laid by their own fowls, will go to prove there is no scarcity in that article of food. The College flock comprises birds of the very best type of the following breeds: Black Orpingtons, Faverolle's, Indian Game, Buff Orpingtons, White Leghorn, Silver Wyandotte, Silver-grey Dorking, White Orpington, Old English Game, White Wyandottes, Houdans, and Minorcas, and in season eggs can be obtained from any of the above breeds at 10s. per setting, or chickens 21s. per dozen at one month old, for which orders may be booked from now on; also Bronzewing Turkey eggs at 10s. per setting. In a previous issue of the *Student* reference was made to the need of a brooder house. I am pleased to be able to say now that one will probably be completed in time for our next batch of chicks, which should be not later than the end of May. All old students are welcome to inspect this plant at any time, which I trust will be one of interest and pleasure.

Extracts from Students' Farm Diary.

April 1st.—This field has been having, what we call in farmers' terms, of expression, A spell so as to enable the field to force away, so as, as it, will be possible to young lambs, when they leave their parents in to fatten ready for the "fat lamb market"; and, mature at an early age for the above-mentioned desire.

To all events to the naked I, this field, has not rushed to a rank state, but has grown steady and is now of long length, and of good feeding value. As a result it is fairly long and well furnished. For the purpose of fattening lambs the sheep have now been turned in.

April 2nd.—187 sheep fattening well in this field being of good texture and are liable to be; for some time to come other climatic changes being favourable.

May 3rd.—Started ploughing in this field. Two three furrow plows striking down the centre of which, ensures working round the piece.

Werk done being good.

July 7th.—This sown mixture is to all appearance giving satisfaction, as to its feeding qualities the sheep seem to take a particular liking to ; this particular mixture naturally pasture, rather backward in comparison with the sowed mixture.

July 20th.—Cultivating, harrowing, and broadcasting on patches ; parts of this field having been destroyed by caterpillars.

August 1st.—This field is at present carrying no stock whatever, and the pasture is forcing it away very strongly ; though I saw a springing cow in there last week.

September 25th.—Field advancing wonderfully fast ; tillaging well and a favourable result may be expected.

December 11th.—Good crop ! almost finished stripping and cleaning.

January 21st.—Owing to not having sufficient data, on the subject I have not been able to fill in all ; that were sown in this field,

Hope to fill in this field on the course of time ; and this being done my work is completed.

As it is thought by the Extractor that readers might think some of the above events somewhat wonderful, I would like to remind them of the old saying. " Truth is stranger than Fiction."

Third Years Who are Leaving.

F. K. WATSON.—Gained entrance scholarship 1905 ; silver medalist 1906-7.

MORTON DUNLOP.—Takes a lively interest in politics. A good forward in the football field, and fair cricketer.

S. C. BILINGSHURST.—Gained entrance scholarship 1905 ; has taken an interest in most sports ; an enthusiastic rifle shot and tennis player.

J. A. HORROCKS.—Captain tennis team 1906-7 and 1907-8 ; won 100 yards championship 1907 ; takes a great interest in sports generally ; splendid goal keeper in football, who will be missed next year.

G. R. WILLIAMS.—Good football, cricket, and tennis player and best boxer in the College 1907-8.

E. J. CLARKE.—Gained entrance scholarship 1905 ; plays a good game of football and fair at cricket ; has made a most energetic sports secretary for the year 1907-8, whose place will be hard to fill.

J. C. BUTTFIELD.—Gained entrance scholarship 1905 ; a member of the football team 1905-7.

A. A. MAGAREY.—An enthusiastic cricketer who plays a good game ; makes a pretty fair half forward at football ; "Crack-a-jack" will be missed very much by the cricket team.

Rifle Club Notes.

(By SMALLBORE).

THERE should be more enthusiasm thrown into rifle shooting by some of the members than there has been, while a few, a very few, have taken a good interest in the shooting, and are to be often seen at the range, needless to say these few are headed by our energetic captain.

You will find those who go out to practice more often, near the head of the averages for the month, whilst those who can't find time to go to the range, may find their averages quickest by looking from the bottom of the list, not from the top.

Timely notice has only to be given to a member of the staff if you wish to go out and shoot; is this too much trouble, or is it that it is too long a walk to the range?

No man can put on a good score by going to the range once a month, or even less by some, picking up a rifle, blazing at a target, throwing down his rifle, and off again, as if the rifle range was a bad place to spend an hour or so at. If he hasn't made a good score at this range he blames the rifle or the wind, which cannot be mastered without plenty of practice, or he may even blame the marker for marking his misses or outers.

We have fired six matches this session, of which we have lost three, came second in one triangular, and the scores of two are not yet to hand.

It will be noticed that, if the whole team put up scores somewhere near to those which the first three or four put on, we would have made some very respectable scores, but our tail wags viciously and long.

Matches fired are as follows:—

October 11th, 1907—College v. Clare.—This was a bright day with a dazzling light, and a nasty fish tail wind blowing. Scores: Mr. Laffer, 83; Mr. Day, 81; Carter, 80; Howard, 80; Baker, 79; Magarey, 77; Cooper, 76; total, 556; Clare, 586.

October 23rd.—Mr. Hill kindly arranged to bring his team from Adelaide to our range, also the Reeves Plains and the Para Para Clubs, but the latter did not put in an appearance. On account of the time we were only able to fire at the hundred yds. range. The result was a close finish, we being beaten by a 'B' grade team by only thirteen, and beating the Reeves Plains by four. Scores: Dunlop, 45; Baker, 44; Kuhne, 44; Mr. Day, 43; Cooper, 43; Carter, 43; Billingham, 37; total, 299; East Torrens, 312; Reeves Plains, 295.

December 14th.—College v. Reeves Plains. A good light, with a strong ten to two o'clock wind. Scores: Cooper, 90; Kuhne, 87; Baker, 83; Mr. Day, 82; Magarey, 81; Birks, 81; Sheckelton, 76; total, 580; Reeves Plains, 623.

January 11th. 1908—College v. Norton Summit. Here we start the new year with our record score, beating our previous record by three. A bright day with light 12 o'clock wind. Scores: Mr. Day, 96; Cooper, 96; Baker, 90; Kuhne, 86; Dunlop, 83; Magarey, 81; Watson, 75; total, 607. Norton Summit score not yet to hand.

January 25th.—We journeyed to Reeves Plains to fire on their range against them and Two Wells, who came across. Before starting we were told by some that the range was about three miles, and another person said six miles: as we knew what country miles were, we were prepared to journey anything from four to ten miles, so we took the advice of one to follow the road straight on. After having gone between five and six miles, and turning a corner, our noble Arab landed up against the targets just off the road. After each team had fired at the fifty yards range we were treated to a little refreshment by the Reeves Plains, which was thoroughly enjoyed, and I think every one did justice to. Then the hundred yards was fired. Scores: Cooper, 92; Mr. Spafford, 87; Mr. Day, 85; Birks, 74; Baker, 72; Hall, A. S., 68; Fowles, 67; total, 545. Two Wells, 585. Reeves Plains, 573.

February 15th—College v. Watervale. A good shooting day. Scores: Cooper, 94; Mr. Laffer, 90; Baker, 88; Dunlop, 85; Mr. Day, 82; Mr. Spafford, 82; Kuhne, 93; total, 614. Here we beat our previous record of 607 by 7. Watervale scores not to hand.

Prizes of a hundred cartridges each are presented at the end of each month to those gaining first place in the 2nd division between 65 and 80 %, and the third division under 65 %. These were won by—2nd division: For December, Birks; for January, Kuhne. 3rd Division: For December, Weste; for January, Clutterbuck.

Prof. Angus has again kindly presented us with a Gold Medal, this had to be shot for in Association matches in the last round and was won by R. Baker.

I may here give the averages of all those in the first division, *i.e.*, all over 80 %. Averages out of fifty, and numbers in brackets representing the number of ranges fired at. Cooper, 45.2 (35); Baker, 43 (11); Mr. Spafford, 42.2 (4); Mr. Day, 42.1 (33); Kuhne, 40.3 (11); Mr. Laffer, 40 (8).

We are looking forward to the time when we have a hedge or row of trees planted along the range, especially on the Westward side to protect us from the heavy winds which blow right across the range. Also to the completion (?) of our little shelter shed,

which, judging by the time each part is exposed to the weather, as it is gradually put together, and the time it will have taken to put the whole thing together, should be well-seasoned and of an elaborate character, that is if the first parts do not commence to fall down before the final touches given by some kind and energetic person shall be finished.

They say that in the contract this shelter has to keep out sun (excepting in the winter), rain, wind, cattle, sheep, and any other beings that may happen to fancy shelter from cold or rain at night time, if this exclusion can't be managed, it is said a lock will have to be affixed.

I think I am right in saying that our worthy Captain (Mr. Day) first took a hand in this shelter by laying the foundation, but the contractors refuse to build on for some unknown reason, perhaps they think the foundation is unsafe being put down by day, and would be safer if done by night. At any rate we hope that some agreement will soon be arrived at, so that we may have shelter before long.

Harvest Notes.

(By G. R. W.).

ALTHOUGH the year started brilliantly, there being ideal seeding weather, it did not finish up so well, and but for a timely rain in September results would have been considerably lower.

FIELD NO. 1—Sown April 15 to 18. Drilled with 70 lbs. King's Early Wheat, with 3 cwt. of super. to the acre. This field was sown for hay but cut for ensilage rather late. Yielded 4 tons 17 cwts. 2 qrs. to the acre.

20 ACRES END OF NO. 4—Sown June 8 to 14 with Gluyas. 70 lbs. seed with 2 cwt. of superphosphate to the acre. Went 9 bus. 22 lbs. per acre.

NO. 5B.—Wheat varieties, large plots, sown April 23 to May 4.

Variety.	Seed per Acre.	Area.	Yield per acre.
Petanielle Blanche	65 lbs. seed per acre	9½ acres	8 bus. 6 lbs.
Belotourka ...	80 "	9½ acres	18 " 41 "
Jonathon ...	70 "	21.135 a.	20 " 32 "
Federation ...	70 "	17.516 a.	17 " 30 "
Carmichael's Eclipse	70 "	5.177 a.	15 " 25 "
Yandellah King	66 "	3.33 a.	10 " 50 "
Cameback, No. 6	70 "	2.134 a.	10 " 1 "
Fan (selected)	70 "	3.361 a.	13 " 56 "
Gluyas (selected)	70 "	6.434 a.	18 " 24 "

The above were drilled in with 240 lbs of superphosphate to the acre.

FIELD NO. 6D., small plots. The following are the results of the small plots sown from May 6th to 9th.

Variety	Area	Yield per acre.
Red Fife	·435	4 bus. 26 lbs.
Black Petanielle of Nice	·108	1 " 12 "
Beardless Odessa ...	1·051	25 " 12 "
Spanish Bearded Red ...	1·083	19 " 37 "
Square-Headed Barley ...	6·344	26 " 2 "
Fan	·190	3 " 13 "
Farrier's Unnamed ...	·243	2 " 24 "
Indian Runner ...	·081	1 " 47 "
Carmichael's Eclipse ...	·122	2 " 34 "
Farrier's No. 10 ...	1·161	14 " 48 "
John Brown	2·076	40 " 54 "
Purple Straw	·112	2 " 48 "
Aronautka	·061	1 " 0 "
Combination	·985	25 " 6 "
Bearded Gluyas ...	·185	5 " 22 "
King's Mixed	·102	3 " 22 "
King's White	·483	16 " 1 "
Gluyas	·690	17 " 0 "
King's Red	1·384	44 " 26 "

The above being drilled at the rate of 72 lbs. per acre, drilled in with 2 cwts. superphosphate to the acre.

FIELD NO. 6C.—Sown May 25th to 29th.

	Area.	Yield per Acre
Short-Headed Erect Barley 78 lbs. seed per ac.	5	39 bus. 9 lb.
Guymaleye Barley ... 95 "	5	18 " 35 "
Cape Barley 75 "	13	30 " 16 "

REMAINDER OF NO. 6D (Wheat). Sown May 29th, King's and Gluyas, 70 lbs. to the acre, with 2 cwts. of super. Average, 9 bus. 7 lb.

PIG PADDOCK A. (Ensilage Crop).—Sown April 10th. Consisting of special mixture—50 lbs. Calcutta Oats, 70 lbs. King's Early Wheat, and 10 lbs. of Vetches, drilled in with $1\frac{1}{2}$ cwt. of super to the acre. Yielded 22 tons 2 cwt. 2 qrs. 2 lbs.

EBSARY'S A. (55 acres).—Was sown May 10 to 18th. Selected Square-head Barley, 54 lbs. of seed. 53 acres averaged 29 bushels 40 lbs., 1·624 acres were sown on May 25th with selected Cape Barley, average 32 bus. 2 lbs.

EBSARY'S B. (Hay Crop and Oats).—Sown April 25 to May 6, 51 acres. Hay crop, consisting of 9 acres—Belotourka, 70 lbs. per acre; Calcutta Oats, 50 lbs. per acre; Vetches, 10 lbs. per acre : 42

acres—King's Early, 70 lbs. per acre; Calcutta Oats, 50 lb. per acre; Vetches, 10 lbs. per acre. Whole field drilled in with 240 lbs. super. to acre. Average yield 1 ton 15 cwt. 2 qrs.

Sown May 6th to 9th.—Liggowe Oats, 80 lbs. seed per acre, $5\frac{1}{6}$ acres, 22 bushels 14 lbs.; Calcutta Oats, 80 lbs. seed per acre, $14\frac{1}{2}$ acres, 2 bus. per acre.

EBSARY S. C. (Wheat)—Sown June 4 to 11. King's Early, 80 lbs. seed per acre, drilled in with 240 lbs. superphosphate to the acre. Yield averaged 4 bushels 13 lbs.

Wanted to Know?

What has become of "Dad's" energy?

Who is secretary of the rifle club?

Who upset the beds?

Where was "Moses" when the fire went out?

Who can't go wrong?

Who ripens "pears" best?

Where the "pairs" went to?

Who will get the gold medal?

When "Dad" drew his last map?

Whose room's a rubbish box?

Who can stew in the new building?

Who was very pathetic?

Whether a handful of lucerne would affect the yield of four acres?

Who fell off the pugnell?

Who practises "David's" art?

Who threw olives in the dining room?

Who practices the "crawl" stroke?

Who is in the secret service?

Why the cricket team has not done better?

Why old students will not let us know their doings; so that they could correspond with one another through the columns of the *Student*?

Whiffs.

Dad.

Dam full.

Hot weather.

Fo-oine carbuncle.

Go-o-ood day chaps.

Ow about a little h-ile.

What a splendid flag wagger.

They stand to win five shillings.

Excellent turn out of the fire brigade.

Cricket.

COLLEGE v. MALLALA.

This match was played on our ground, and resulted in a win for us. Mallala batted first, and put up 77, and the College responded with 184. The principal scorers for the College were—Gardiner 27, Cooper 42, Clutterbuck 39 not out, and Clarke 23 not out.

COLLEGE v. UNION C.C.

This match was played at Gawler, and resulted in a win for the Unions by 326 to 142. For the winning team J. Robertson 157, Rudall 76, and L. Humphris 26, were the principal scorers; while for the College J. P. Richardson 39, S. E. Hall 19, H. Cherry 16, and D. Bayard 34 not out, were the principal scorers. S. E. Hall bowled best, taking 5 wickets for 87.

COLLEGE v. LYRIC C.C.

Played at the College, and resulted in a win for the Lyrics. The College batted first, and put up 163, to which the Lyrics replied with 261 for 5 wickets. For the College the principal scorers were—F. Cooper 30, J. P. Richardson 30, A. A. Magarey 23, and D. Byard 40; while for the Lyrics H. Limb 60, B. Cheek not out 56, C. Berriman 33, and P. Berriman 56, did best. For the College Hall did best with the ball, taking 3 wickets for 60.

COLLEGE v. MR. QUIST'S TEAM.

We batted first and put up 90. Hall batted very well for 43, Cooper 15, and Cherry 10, being the only others to get double figures. Mr. Quist's team were dismissed for 89 in the first innings, but in their second innings they put up 81 for 1 wicket. The College second innings resulted in a score of 78, Cooper and Hall batting well for 27 and 22 respectively. For our opponents Quist 18 not out and 36, Short 35 and 37, were the principal scorers. For the College Richardson 4 for 40, and Cooper 3 for 30, did best with the ball.

COLLEGE v. GAWLER RAMBLERS.

Played at Gawler, resulting in a win for the Ramblers, the scores being—Ramblers 256, and College 225. For the winners McCarthy 63, and Wasleys 46 were the best scorers; while for the College Hall batted very well for 99, and Magarey and Cooper also batted well for 56 and 27 respectively. Bristowe 3 for 26, Cooper 3 for 98, and Hall 3 for 94, did best with the ball for the College.

COLLEGE v. FREELING.

Played on our ground, and resulted in a win for Freeling. The College put up 157, Bristowe batting very well for 34, and Stephen 26, Hall 20, Cooke not out 20, Magarey 15, and Clutterbuck 14, also batted well. For Freeling Barnfield 51, and Eckersley 44, were the principal scorers. The best bowling for the College was done by Magarey 3 for 48, Bristowe 3 for 32, Clarke 2 for 19, and S. A. Brown 2 for 19.

COLLEGE v. UNIONS.

The scoring sheet in this match has been lost.

COLLEGE v. LYRICS.

The Lyrics batted first and made 298, C. Berriman 132, and H. Limb 89, being the principal scorers. The College replied with 181, the principal scorers being Magarey 45, Bristowe 27 not out, and Byard 47. The best bowling for the College was done by Stone 2 for 4, and Bristowe 3 for 105.

COLLEGE v. ST. MARKS.

This match was played at Gawler, and resulted in a win for St. Marks. Stidston 63 retired, and Murphy 40, doing best with the bat. The College put up 187, Cooper 36, Magarey 37, and Hall retired 54, batting very well against time. Hall bowled well, taking 5 wickets for 82.

REVIEW OF TEAM.

F. COOPER is a good all-round man. Bowls with his head, and is very sound batsman.

MAGAREY is a good, forcing bat, putting plenty of power into his strokes. Is inclined to play with rather a cross bat. Good change bowler.

HALL is a good all-round man. Uses his head well when bowling, fields very well, and is a very safe bat.

CLARKE is a very energetic and sure fieldsman. Bats well, but should play with more confidence.

CLUTTERBUCK fields well, and bowls a fair ball. Would do better in batting if he played himself in more before going at the bowling. Has a nice free style.

BRISTOWE is a good change bowler. Fields well, and bats well. Has shown great improvement, especially in batting.

CHERRY bats well, but lacks confidence in himself. Has a good defence.

MR. RICHARDSON is a good all-round man. Bowls and fields well, and is a very safe and forcing bat.

S. A. BROWN has a very good defence. Should go at the bowling more. Bowls a fair ball, and fields well.

K. WILCOX bats well, and hits very hard. Bowls a good ball, and fields well.

FAIRWEATHER keeps wickets fairly well. Bats fairly well.

BAKER keeps wickets fairly well. Bats well, hitting very hard.

COOKE has a good defence, but should put more power into his strokes. Fields well.

DUNLOP has a good defence, but is inclined to be weak on the leg side.

STONE bats fairly well, and bowls a fair ball. Is rather slow in the field.

BYARD (Captain) manages his team well, a good bat and fieldsman.

Tennis Notes.

By "DEUCE."

GREAT interest has been taken in tennis this session, due to the tournaments being played, and partly to the beautiful tennis weather which we enjoyed, except, I am sorry to say, on Saturdays which, when we had matches on, were invariably wet and windy, the intervening days being grand.

It was decided to hold, as well as the Championship Singles, a Single Handicap and a Doubles Handicap, the prize for the former being generously donated by Professor Angus, the entrance fees of the two events forming the prize for the Doubles. Taking the handicap events first, it will be seen below entries for both events were good, and the handicapping proved very satisfactory. The finals were very well fought out, and in the Singles the last two sets of the final were very much closer than the scores indicate.

The following is the result of the Double Handicap :—

First Round—Fairweather and Cooper owe 15·3 v. Jendel and Clutterbuck scr., won by Jendel and Clutterbuck, 1-6, 6-5, 6-4 ; Wells and Weste owe 30·3 v. Magarey and Billinghamst owe 15·3, won by Wells and Weste 6-3, 3-6, 0-6 ; Davie and Richardson owe 15·3 v. Sangster and Bristow rec. 15, won by Davie and Richardson 6-0, 6-0 ; Orchard and Kuhne owe 15 v. Entwistle and Connor rec. 15·3, won by Orchard and Kuhne 6-5, 6-4 ; Sobels and Cherry owe 15·3 v. Horrocks and Williams owe 40, won by Horrocks and Williams 6-4, 6-2. Second Round—Jendel and Clutterbuck v. Wells and Weste, won by Wells and Weste ; Davie and Richardson v. Orchard and Kuhne, won by Davie and

Richardson 6-2, 6-4; Horrocks and Williams a bye. Third Round—Davie and Richardson v. Horrocks and Williams, won by Horrocks and Williams 6-4, 6-4; Wells and Weste a bye. Final—Wells and West v. Horrocks and Williams, won by Wells and Weste 3-6 and 6-3, 6-4.

G. E. Wells and M. O. Weste made a fine recovery after the first set, their fine length helping them considerably.

There was a good entry for the Singles Handicap, and competition for first place, the prize for which was given by Professor Angus, who has always evinced great interest in all our sports, and has encouraged them ever since he has been in South Australia with many generous prizes.

Handicap Singles Tournament:—First Round—Kuhne owe $\frac{5}{8}$ 15 v. Bristow rec. 15, Kuhne forfeit; Richardson owe 15·1 v. Cooper owe 15·1, won by Richardson 6-5, 6-2; Magarey owe $\frac{5}{8}$ 15 v. Billingham scr., won by Billingham 5-6, 6-5, 6-4; Davie owe 15·3 v. Cherry owe 15·1, won by Davie 6-2, 6-1; Wells owe 40 v. Clarke owe $\frac{5}{8}$ 15, won by Wells 6-0, 6-2; Orchard owe 15 v. Weste owe 30, won by Weste 6-0, 6-2; Horrocks owe 40 v. Williams owe 30·4, won by Williams 5-6, 6-5, 6-4; Sobels owe 15·4 v. Dunlop scr., won by Sobels 6-2, 6-1; Clutterbuck $\frac{4}{8}$ 15 v. Birks rec. 15, won by Birks 6-4, 6-3; Connor rec. $\frac{3}{8}$ 15 bye. Second Round—Bristowe v. Richardson, won by Richardson 6-2, 6-1; Billingham v. Davie, won by Davie 6-5, 6-4; Wells v. Weste, won by Weste 6-4, 6-3; Williams v. Sobels, won by Williams 5-6, 6-5, 6-4; Birks v. Connor, won by Birks 6-4, 6-3. Third Round—Richardson v. Davie, won by Davie 6-4, 6-3; Weste v. Williams, won by Williams 6-0, 4-6, 6-0; Birks a bye. Fourth Round—Davie a bye; Williams v. Birks, won by Williams 6-2, 6-3. Final—Davie v. Williams, won by G. R. Williams 4-6, 6-1, 6-0.

The Championship Singles was started when the handicap tournaments were finished, and resulted in a splendid and popular win for J. A. Horrocks. Scores were as follows:—

Championship Singles—First Round—G. E. Wells v. T. W. Sobels, won by G. E. Wells 6-2, 7-5, 6-1; L. S. Davie v. J. A. Horrocks, won by J. A. Horrocks 6-4, 6-4, 10-8; Williams a bye. Second Round—G. E. Wells a bye; J. A. Horrocks v. G. R. Williams, won by J. A. Horrocks 8-6, 7-5, 2-6, 8-6. Final—G. E. Wells v. J. A. Horrocks, won by J. A. Horrocks 3-6, 6-1, 6-2, 6-1.

Perhaps here a few criticisms on the team would be of interest.

J. A. HORROCKS, our popular captain and champion. He is very sure, and plays a splendid single, his knowledge of the game being of great help to him. He is also good in a double, but more inclined to try difficult strokes.

G. R. WILLIAMS has improved very much since last season. He has a particularly firm service. He drives well, but is rather inclined to try and make a winning stroke off unsuitable ball. He plays a good double game, and is never beaten till the last stroke is played.

G. E. WELLS is perhaps the most brilliant player in the team, his hoic stroke being particularly fine and he follows up well, being very good over head. He is inclined to hit unsuitable balls for his stroke, but with experience he will learn to know the court better.

L. S. DAVIE is a very neat player, and when in form is very solid, playing a very good, all-round game. He neglects to follow up his chances at net considerably, but when he gets there he is very quick, and places with judgment.

T. W. SOBELS is a great man to win his single in matches, which is a good scheme to adopt if possible. He is a good battler, and plays an attacking game. His first serve is very good, but the second one needs improving.

M. O. WESTE has improved very much since he came here, but latterly has gone to pieces through neglecting to practise. I would advise him under all circumstances, to hang on to his racket when playing.

F. J. KUHNE is practically a beginner this year, and should, if he perseveres, become a very good player. Is inclined to get a short length, and should change his grip on the back hand.

S. C. BILLINGHURST. A very steady plodder; should try and get a bit of quicksilver into his play, as he starts for the ball rather too slowly. Is inclined to be erratic, but when in form puts up a tip-top game.

E. L. ORCHARD is a steady player, but his backhand is weak. He chops everything, and is in fact a second "Dogger." He plays a very good game in a double, should try to improve his service more.

In matches this year we have been extremely unfortunate in striking bad weather, and only one match—that played against St. George's on January 10th—has been finished. On that day we had splendid weather, and thoroughly enjoyed the luxury. We were without the services of M. O. Weste, who had taken up cricket, but his place was ably filled by F. Kuhne, who played a splendid game in his first match. The scores are as follows:—

Doubles—Horrocks and Williams v. Rebbeck and Coxell, 8-9 ; Sobels and Davie v. Filsell and Dyer, 9-4 ; Wells and Kuhne v. Fead and Dyer, 9-7. Singles—Williams v. Rebbeck, 4-7 ; Wells v. Coxell, 4-7 ; Horrocks v. Fead, 5-7 ; Davie v. Dyer, 7-5 ; Sobels v. Filsell, 7-4 ; Kuhne v. Filsell, 4-7. St. George's winning by 1 set. St. George's, 5 sets 57 games ; R.A.C.T.C., 4 sets 57 games.

The Doubles Championship Tournament, promoted in Gawler by Mr. F. Barrif, of Yattalunga, was played off before Christmas, and created great interest out here as well as in Gawler. The College entered three doubles, of which Sobels and Davie did best, being defeated in the end by the runners-up, Messrs. Coombe and Thomas. Horrocks and Williams got put out after a hard fight of three sets with Coombe and Thomas, 6-5, 3-6, 2-6. Wells and Weste were defeated by Cullen and Coxell.

Sobels and Davie v. Heuzenrhoder and Cundy, 6-4, 6-1 ; Sobels and Davie v. Crasely and Sheard, 6-1, 6-1 ; Sobels and Davie v. Coombe and Thomas ; lost after a very plucky fight, 4-6, 6-2, 6-1.

On the holiday, January 27th, we went into Gawler and played the Methodist Tennis Club on their courts, and although we were defeated we had some splendid tennis, the day being all that could be desired. G. E. Wells being in town, his place was taken by S. C. Billinghurst. The scores are as follows:—Doubles Horrocks and Williams lost to Thomas and Coombe, 6-3, 6-5, 6-3 ; Davie and Sobels lost to Ayling and Shultz, 6-3, 6-4, 6-5 ; Kuhne and Billinghurst beat H. Limb and Ross, 6-1, 6-0, 6-4. Singles—Horrocks lost to Thomas, 7-9 ; Williams lost to Coombe, 8-9 ; Davie lost to Ayling, 7-9 ; Sobels beat Shultz, 9-5 ; Kuhne lost to Wilkinson, 4-9 ; Billinghurst lost to Ross, 5-9. Final scores—Methodist, 11 sets 91 games ; R.A.C.T.C., 4 sets 80 games.

R.A.C. v. METHODISTS.

On February 15th the Methodist Tennis Club came out to the College, and an enjoyable afternoon was spent, perfect weather prevailing. The following are the scores:—Doubles—Horrocks and Williams v. Ayling and Coombe, 3-9 ; Wells and Weste v. Thomas and Wilkinson, 3-9 ; Sobels and Orchard v. Caldwell and Lenz, 9-3. Singles Horrocks v. Coombe, 2-7 ; Williams v. Ayling, 6-7 ; Wells v. Thomas, 3-7 ; Weste v. Lenz, 7-3 ; Sobels v. Wilkinson, 6-7 ; Orchard v. Caldwell, 7-0. Methodists, 6 sets 52 games ; R.A.C.T.C., 3 sets 46 games.

Trip to the Freezing Works.

ON November 30th, 1907, the third year students paid a visit of inspection to the Port Adelaide Freezing Works, which had been arranged by Mr. Apps, our dairy instructor, who wished us to see the making and packing of butter for the export trade.

At the works we were met by Mr. P. H. Suter, who soon had us amongst the cream, cans, and churns in the butter factory. Here work was proceeding to the full capacity of the plant installed, and Mr. Suter stated he was going to have a large place put up on some land that was then being reclaimed near by. Mr. Suter then showed us the classing of butter for export, explaining to us how he allotted the different points to the samples before us. We then, under the charge of Mr. MacKenzie, inspected the freezing chambers, where we saw lambs frozen as hard as boards, awaiting shipment, also various other products of the land, chiefly eggs and poultry. Some of the students remarked that it was cold enough to freeze your "nose" off, which was not remarkable, considering that the temperature was below zero. We were then shown through the engine room by Mr. Crocker, the chief engineer. Here we saw some splendid machinery, which drove the refrigerating plant. We had a most satisfactory and instructive visit, and Mr. Apps thoroughly deserves the thanks of the third year students, as it was through his interest that he takes in us, which he has shown in more ways than one, that we were permitted to take the trip.

A Student Criticised.

HOW he came by the cognomen of "Dad" has been a source of wonderment to many, for he made no pretensions towards exerting a fatherly influence over any of us, unless it was when anybody disturbed him when he was "stewing" for an examination; then by dint of divers alarming threats as to what he would do to the fellow who was responsible for the row, if he didn't keep quiet, he sometimes obtained quietude; but only sometimes, more often the fellow concerned retaliated in the same way that he was spoken to. This, however, was not the fault of "Dad's" threat, for it was enough to turn a Queensland bullock-driver green with envy.

In this respect too "Dad's" pet abomination was the fellow who was insane enough (in "Dad's" opinion) to set an alarm clock for 3 o'clock on the morning of an examination so as to get up and make a final preparation for the forthcoming exam., more particularly if the "insane one" called another fellow to do likewise.

With the two of them working together, of course the result is almost one continual murmuring from the time of rising until breakfast time. "Dad," who cannot sleep with a light burning, having never been brought up to it, wakes up, hears the talking, and without a thought about the rest of us who are all sound asleep, starts straight away to express his opinion as to the state of the workers' minds, which, being done in such excellent Australian, generally succeeds in arousing everybody else within hearing.

Perhaps the subject of this brief sketch came by his nickname on account of the resemblance he bears to the hero of "On Our Selection," or "The Wayback Series," but nobody seems to know for certain. Anyway, he would, without a doubt, make an excellent character, if not hero, for such a yarn. He is a typical Australian "cocky," to his fingertips.

"Dad" sometimes played football, but not often, his own side couldn't stand him, it's perhaps all in the game to receive a few hard knocks, but when a member of your own side takes you for the ball time after time, with the inevitable result, it is time to cry enough.

In Memoriam.

PAST and presents students deeply regret the sudden death of Mr. P. H. Reynolds, who died suddenly at his home. He was liked by all the present students. He took a great interest in the Rifle Club and other sports at the College. The sympathy of the College goes out to all who were near and dear to him.

DURING December, 1907, a fatal accident happened to one of Mr. John Daly's little boys, who was killed by the horse that they were driving bolting and overturning the cart, which crushed the little fellow. Our deepest sympathy went out to John, who in the space of a few moments was bereaved of one of his brightest little boys.

The Ridley Memorial.

I WOULD remind old students that the time for returning the subscription cards has come, and all money collected should be forwarded to the Treasurer of the fund as early as possible.

It is necessary that we should know at an early date, approximately, what amount we can depend upon, in order that some idea can be arrived at as to the scale on which the work can be carried out. The Committee trust that all old students will do their utmost to make the fund a success.

So far only a small number of cards have been returned, totalling a little over twenty pounds. This money has been paid into a Savings Bank Account in order that it may accumulate interest until such time as the account is closed.

Correspondence.

"Pe-im-pil"—"Tanoline" is not usually used as a lip salve, but may possibly be advised in your case.

"Pot-B."—We have not yet heard of the discovery of "Botanic Acid" in rhubarb, but congratulate you upon what you consider to be a clever discovery.

"Chuck."—Your brain must be severely muddled by over-study, as we can make nothing of your query *re* "Black Petanielle Bianchi," as a variety of vine grown in this district.

"Shady."—Yes, you ruled them alright.

"Saw Bawls."—Thanks for your revised edition of the history of England. It appears quite refreshing to see the "Battle of Agincourt," dated 1815 A.D.

"Penguin."—*Re* your enquiries about growth of hair. We strongly advise you not to feed down your crop so bare, and as a restorative apply a heavy dressing of super or else any of the well known liquid fertilizers.

"Too Rich."—You seem to have too large a stock of blubber on hand. Would advise trying to sell the same to any of the large soap making firms. It should realise about 1d. for every three lbs.

"Dad."—As a remedy for your malady, would strongly advise resting during the day time and quiet nights' sleep instead of playing cricket. Upon enquiry we find that the price of "Mutton" has risen on account of shortage of supplies in the local market.

Advertisements.

LOST AND FOUND.

LOST—One temper at all hours; sulky, and at times violent. Reward 1/2d, detainer prosecuted.

FOUND—Situation for one-legged man: Requirements—Has to have a rusty tongue and tawny fierce moustache. Apply Crack-a-jack.

Professional Engagements.

TATTOOING—A speciality, all designs neatly executed, colored 6d. extra, other colors gratis for poison experiments. Also hair-dressing in every fanciful design known. Apply Professor Ikey-Onkey & Co.

LAUNDRY WORK—Ironing and starching a speciality. Best washing soap used. All articles dried over night and delivered next morning. The Compressed Energy Coy., Rottenham Row.

MUSIC—All deep-toned instruments on hand, Foghorns a speciality. Blue Beard, Mus. Bac., Rottenham Row.