CENTAUR

Centenary Edition

1951

Number Thirteen

THE EFFECTIVE DRENCH . . .

The Efficient Drenching GUN

BLU-NIK

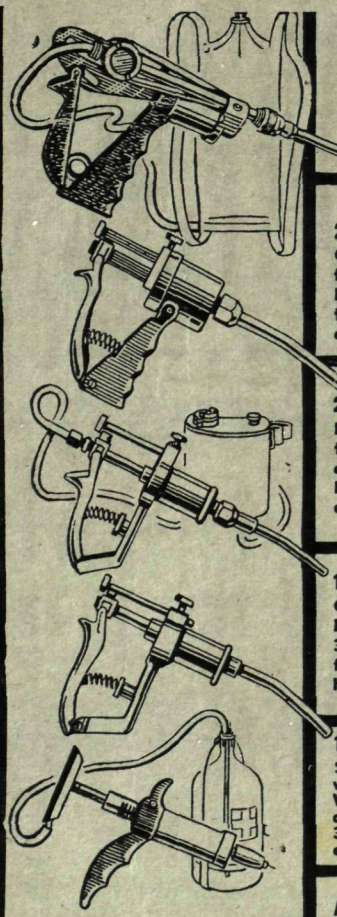
Concentrated drench of Bluestone and Nicotine in accurate proportions. Dissolves easily in water; no boiling or straining necessary. Very effective for large stomach worms, black scour worms, hair worms. 16 oz. bottle, when diluted, provides dosage for 176 fully-grown sheep.

GREEN-SEAL

Carbon Tetrachloride in SINGLE or DOUBLE strength. Scientifically compounded for simple, effective administration. Ready to use straight out of container. Dual purpose drench for worms and fluke.

PHEN-MIX

The most effective Phenothiazine drench for nodule or hair worms and other stomach and intestinal worms. Phen-mix Powder is supplied in convenient sized packets ready to mix with 1 gallon water. No awkward weighing or measuring. Phen-mix Liquid is prepared ready for use. Both products rigidly standardised to ensure safe, effective and economical drenching.



Sayers

DRENCHING GUNS

2 OZ. AUTOMATIC GUN
Outstanding in design and performance. Specially designed for Phenothiazine. Non-splash container, non-drip nozzle; operates easily and smoothly.

2 OZ. DRENCHALL PISTOLET
For quick, accurate administration of all water and oil-mixed drenches, including Phenothiazine. Piston tension adjustable without dismantling.

1 OZ. AUTOMATIC DRENCH GUN
Compact, easy to handle, sturdy. Dose adjustable from 5 c.c. to 30 c.c. Complete with light, comfortable tank, rubber hose and harness.

1 OZ. NON-AUTOMATIC PISTOLET
Small, compact instrument for water or oil-mixed drenches. NO VALVES—only four moving parts; dose adjustable from 5 c.c. to 30 c.c. Sturdy, light weight, easy to handle.

AUTOMATIC VACCINATOR
Injects absolutely accurate doses—automatic refilling from bottle carried in convenient harness. Dose is easily adjusted, and with practice seven or eight hundred sheep an hour can be vaccinated with ease.

21/62.13

SAYERS ALLPORT PTY. LTD.

PARK ROAD — ENFIELD — SYDNEY

The Journal
of the
Sydney University Veterinary Society

CENTAUR

1951

Editor:
P. H. MALONE

Assistant Editors:
Miss J. C. KATER — W. J. ARNOTT

NUMBER THIRTEEN

Acknowledgements

Our sincere thanks are due to all those who have aided us in the production of "Centaur," 1951.

In particular, our thanks go to the Dean and to the President of the S.U.V.S. for their active interest and ready help; to Messrs. Biggers, Blood, Geddes and Whitehouse for their articles; to students for their contributions; and to the Society for entrusting their Journal to us.

To A. Gibson, we extend our gratitude for providing us with photos of 5th year.

Many thanks also to the help given so willingly and unsparingly by the girls of the Secretarial Staff who, in their spare time, attributed much to the success of this Journal.

Finally, we wish to acknowledge receipt of "The Veteran" from the Editors at Glasgow University.

CONTENTS

CONTENTS

ON glancing back over previous year's issues, we, the Editors, have carefully studied their Editorials, hoping for a spark of inspiration or just a hint of subject matter on which to base this year's Editorial. As inexperienced Editors, and unaccustomed to public writing, as we are, we feel that we may be forgiven if, perhaps, we use, or modify just a little, the material found therein.

Those readers who, perchance, do read Editorials, will appreciate that this page is set aside to give the Editor "his say"; after all he has done all the work and is entitled to some space to "air his views". However, they may not realise that the Editor sometimes may not have anything to write about, but, through force of custom only, has to spend many hours thinking of, writing and re-writing "his Editorial", which is usually of not much interest to, and seldom read by the average reader anyway.

Editors of previous issues have usually used their Editorial space to berate students for their poor response to the call for contributions to their Journal—to tell them a little of the aims of the Journal—and to urge their co-operation in the events and affairs of their Society.

That each year should see a call made for co-operation within the Faculty shows that little has yet been done by the average Faculty member towards such co-operation.

We realise that with the economic situation as it is, the average individual must be basically selfish in his outlook. In an unsettled world, this is only natural and is shown by those veterinary students who regard their Faculty as only a means toward making a career, and money for themselves, as soon as possible.

This involves passing examinations each year, and, unfortunately, this is all that interests them at the Faculty.

Not for them an active co-operation in the affairs of their Society or participation in faculty sport—they haven't time—they are too busy—they are not interested!

Everybody wants to pass examinations, but always remember that the Society, as the undergraduate forerunner of the Australian Veterinary Association, has its part to play in your Veterinary education.

No Association can function efficiently without co-operation of its individual members. This, of course, applies to both the Society and the Australian Veterinary Association.

Such bodies are the profession's public mouthpiece, but they are judged by their individual members before the public.

Your strength is in their strength, and their strength depends *entirely* on *YOUR* co-operation.

While you are in the Faculty, you should be prepared to back your Society's functions. Imbibing merrily at the social functions is very nice, but how many of you attend the lectures arranged in your interest by the Society? How many of you actually participate in faculty sport? How many of you contribute freely to "Centaur"?

This Editorial does not intend to "rub it in", but we do urge every veterinary student to take stock of himself and ask himself whether he could be doing more, individually, to help his Society, at the same time enlightening the load carried by the hard worked few, who attempt to keep the Society and its affairs and functions running smoothly.

We hope that you like this, the 1951 issue of "Centaur".

We think you will be interested in the articles by our staff contributors, whilst contributions by students are of a high standard and are well worth reading.

However, "Centaur", 1951, is far from perfect. The Editors know only too well their own limitations. An improved "Centaur" would require more efficient editors and a much greater undergraduate co-operation. That the former exist, we have no doubt. If the latter can be rallied, then the outlook will indeed be bright.

OFFICE BEARERS

Sydney University Society

Patrons: Minister for Agriculture; Professor H. R. Carne; Professor R. M. C. Gunn; Professor C. W. Emmens; Emeritus Professor J. D. Stewart; Dr. I. Clunies Ross; Mr. M. Henry

President: Mr. B. G. Johnston

Vice Presidents: Messrs P. Knight and A. Brook

Hon. Secretary: Mr. J. H. Arundel

Hon. Treasurer: Miss M. E. Wilson

Assistant Hon. Secretary: Mr. B. Setchell

Hon. Graduate Secretary: Miss V. E. Osborne

Executive Committee: Miss H. E. Joyce, Mr. Rose, Mr. J. Neasey

Dinner Committee: Messrs. J. Hurst, M. Spittle

Debates Committee: Messrs. G. Dandy, T. Gordon and R. Shapcott

Dance Committee: Misses M. A. McKinney and J. Kater, Messrs. J. Hayes, D. E. Johnston

Float Committee: Miss I. E. R. Gant, Messrs. J. M. Wilson, R. Dun, W. N. Wignall, K. Curtin and B. M. Dunkley

Film Committee: K. B. Gardiner and J. Frogley

War Memorial Committee: Messrs. R. M. Webb and H. McL. Gordon

EXECUTIVE

Back: J. T. Neasey, R. G. Cumming, P. R. Knight, A. D. Rose.

Middle: J. M. McBride, A. H. Brook, P. E. Mattner, D. E. Johnston.

Front: Miss J. B. Wootton, B. G. Johnston, Miss M. E. Wilson, J. H. Arundel, Miss H. E. Joyce.

OPEN LETTER TO MEMBERS

SINCE our last publication of this Journal there have been wars and threats of wars. Although the active conflict has taken place in other countries it has had an effect on this country, an effect which each and everyone of us must certainly have experienced. However, at this time of writing, the star of peace shines brighter and there is a hopeful atmosphere of world peace and goodwill. This country, itself, has not been without its own internal strife and troubles, and one cannot help but feel that there is a big job to be done right here at our own doors and that each one of us should be considering ways and means whereby we may play a part in bringing about internal peace and prosperity. Beginning with our own daily and family lives, we could readily bring about happier relationships, one with another, and develop such an outlook that would be an example and an encouragement to others to do the same. Let us examine ourselves to see whether or not we may be the cause of any existing troubles in our lives, and those of our daily contacts, and then do all in our power to remedy the position.

I really think that there are a number of important major factors which are likely to contribute to peace, now and in the future, and that they all lie within the power of the individual to advance them and so ease world tension. Some, particularly, are in the hands of the veterinarians of the present and future. I would list these factors as:

1. One's attitude to one's fellow men.

2. The provision of ample and varied foodstuffs for the nations of the world.

3. The opportunity to carry out interesting purposeful and satisfying work in which one has a strong interest.

4. The opportunity of using one's leisure hours in an intelligent, thoughtful, and satisfying way which will bring pleasure not only to oneself but to others.

The first factor stated should be our first concern and this attitude could readily be moulded on the Golden Rule.

The role of the veterinary profession, in dealing with the second factor—increasing food production—is clear. If we could but reduce the losses due to disease, this would be a sound contribution. But we have more to do than that. We must give of our knowledge of economic nutrition, especially in this country of uncertain rainfall, and give guidance to all those engaged in the production of food animals. Again, the protection of these animals from damage, before and after killing and the keeping and transport of their special products in a clean and wholesome condition, is very much part of the work we must do to contribute to satisfactory food supplies.. To assist us in this way we have the benefit of scientific investigations which have taken the tradition, intuition, and mystery from the world of animal husbandry and given it a real and important place in the development of the primary industries of agricultural and farming countries.

In this country, more and more importance must be placed on the development of training and investigating facilities in animal husbandry. Limits of settlement, which a few years ago were thought to have been reached, are not yet fixed and every year brings about changes which need the assistance of the scientific investigator. With the air freighting of beef from the Kimberleys, country, which is being opened up and needs development, new and urgent problems are being brought to the fore and must be met by the veterinarian.

As veterinarians of the future, these considerations are our individual responsibility. We must put first things first. Therefore, I say, we must clear our minds of the financial gains which may accrue to one of such a profession and place before ourselves the ideal which men who have brought the profession to its present status must surely have had fixed in their minds—an ideal of service to the community at all times and under all circumstances. This must be the ideal of the profession if it is to play its part in straightening out this troubled world. The opportunity is with us now and we must not let it slip from us.

Right from our student days must these principles be put into practice. Even as I write, I recall that there are so many of our number who are quite content to leave undone many duties which they should share with fellow students. Because of this, the many various undertakings of the Society are falling upon the shoulders of the few. Many of us—and I refer mainly to the younger students among us—have had no business training or organizing experience and will be sadly handicapped when, on graduation, such duties fall to our lot. How we will then realise

what an excellent opportunity we had and failed to grasp and use to our advantage—but this realisation will come too late. Every time an address is given to the Society, I have to face a host of refusals to move a vote of thanks to our visiting speaker; these refusals are always on the ground that one would not know what to say or that one is not a good speaker. For this reason I would point out to one and all the advisability of taking an active part in student affairs and Society affairs in particular. Our numbers are falling year by year, so that it is becoming increasingly urgent for every member to play a part in keeping the Society—our Society—strong and active.

To illustrate the poor Faculty spirit which exists at the present time, I would draw your attention to the fact that from 193 students (266 less 73 from 5th year) we find it difficult to field two sporting teams at one time. To be represented in Rugby, Soccer and Hockey requires a minimum of thirty-seven players, yet we can furnish only thirty-one active players. We should be aiming at healthy minds in healthy bodies. The various sports catered for by our Sports Club give each one of us an opportunity of bringing this aim to fruition. The old adage, "all work and no play makes Jack a dull boy," is proving to be only too true.

In the event of our winning the Penfold Shield for inter-faculty sport, much of the credit must go to an enthusiastic Sports Club secretary, but also to that minority band of sporting enthusiasts who have been willing to give of their time and best, to show that the Vet. Faculty can take its place worthily in all sections of University sporting life. The only pity is that its individual representatives are so few.

In recent years we have had strong, active committees who worked with a will and with purpose. The torch has been thrown to us and we must carry it worthily and do as much as lies within our power to keep it burning brightly and, if opportunity permits, add to its brilliance.

A change has been made to our constitution which, we hope, will be a big step forward in strengthening our elected officers and in helping to avoid changes in the personnel of committees during the year. I refer to the fact that our annual elections will take place before the end of March each year—a time by which we will know who's who in the various years. This, too, will allow committees to act, without interruption, for the whole year.

I believe the changes made in the conditions under which our Annual Dinner is held are for the best and I sincerely hope that we may progress, even though slowly, in all our social activities and that, in the future, members will give these functions their wholehearted support so that they will become landmarks in their University life.

In closing, I would thank all those members of the Staff who have helped the Society during the year. Guidance, advice and assistance has readily been given, thus lightening the work of the Executive and committees.

My best wishes are extended to you all in the forthcoming examinations and my hope is that you will all advance one step further toward your goal—that of becoming a qualified veterinarian, and that you will be prepared to do all in your power to help the Society and play an active part in its affairs in the New Year.

On Looking Back on an Exam

The moving finger writes, and having writ
Moves on; nor all thy Piety nor Wit
Shall lure it back to cancel half a line,
Nor all thy tears wash out a word of it.
—Omar Khayyam

"The heights by great men reached and kept
Were not attained by sudden flight,
But they, while their companions slept,
Were toiling upward in the night."
—H. W. Longfellow

Suggestion from Vet. Anatomy II. Student

The dentition of a camel should reside much further along the digestive tract.

THIRTY-NINTH ANNUAL REPORT

Ladies and Gentlemen,

IT is with much pleasure that I present the 39th Annual Report of the Sydney University Veterinary Society.

The decline in students, which was noticed in 1950, has become even more noticeable during 1951. The number of students in the faculty has fallen from 330 to a mere 258 this year, but this has been compensated for by a remarkable percentage of the students joining the society.

Financially, the society is in a sound position, and although costs are rising and the amount of money coming in has fallen considerably, the membership subscription of the society has been kept at the same figure as other years.

During the year, there have been eleven General Meetings, and addresses have been given by Miss J. Kimble, Drs. H. R. Carne, G. L. McClymont, Messrs. A. L. Rose, H. J. Geddes, C. R. Austin, F. O'Loghlen, F. Johnstone, D. F. Stewart and R. N. Lyons.

Last year's executive made representations to the Students' Representative Council and to the Senate, for funds to complete the tennis court at the University Farm. We have continued this work and have secured £25 from each body. Mr. Geddes has generously agreed to supply the labour needed to build and fence the court.

The social functions held so far have been extremely good.

The Veterinary Informal, held at the Union Refectory, was a huge success, no fewer than 330 attending, a record number. We were fortunate in still having final year with us for this dance. The Formal, held at the State Ballroom, although having a smaller attendance, was another very good night. Drs. Carne and Gunn both attended, and we wish to thank them for their support.

The Annual Dinner has not yet been held, but the organisers already have the matter well in hand, and another good night seems assured. This year the dinner is to be formal, a swing away from the combined dinner and smoke night of previous years. As the fifth year were to be scattered after the first term, they held their own dinner, which was socially a great success, being enjoyed by all who attended.

The Sporting activities of the faculty will be written elsewhere, but I would like to take the opportunity of congratulating all the players for their great efforts during the season. The rowing eight won the Interfaculty rowing, the swimming team came second, and at the time of writing, the union, soccer and hockey teams are undefeated. Great hopes are entertained that this year we may gain the Penfold Shield, which would be a remarkable performance for so small a faculty.

On behalf of the Society and the Executive, I would like to thank Dr. Carne and his staff for their assistance throughout the year. Also Mr. Max Henry for his advice, Miss Osborne for acting as Graduate Secretary, and all members of committees for their work during the year.

In conclusion, I would like to extend to the Society and its members my good wishes for every success in the coming year.

J. H. ARUNDEL,
Hon Sec., S.U.V.S.

Odds & Ends

When we were a soft amoeba
In ages past and gone,
Ere you were Queen of Sheba,
And I King Solomon.
Alone and undivided
We lived a life of sloth,
Whatever you did I did,
One dinner served us both.
Anon came separation
By fission and divorce,
A lonely pseudo-podium
I wandered on my course.

POVERTY: A miserable state of existence which deprives one of many things he is better off without.

The superintendent of a zoo was mailing an order. He began the note "Kindly send two mongooses." Somehow that didn't seem right to him, so he started again with, "Kindly send two mongeese." Still he wasn't satisfied. Finally he settled his problem by writing, "Kindly send me a mongoose." Then he signed his name and added a P.S.: "Send another one with it."

—Life Digest

THIRTY-NINTH ANNUAL REPORT

Ladies and Gentlemen,

IT is with much pleasure that I present the 39th Annual Report of the Sydney University Veterinary Society.

The decline in students, which was noticed in 1950, has become even more noticeable during 1951. The number of students in the faculty has fallen from 330 to a mere 258 this year, but this has been compensated for by a remarkable percentage of the students joining the society.

Financially, the society is in a sound position, and although costs are rising and the amount of money coming in has fallen considerably, the membership subscription of the society has been kept at the same figure as other years.

During the year, there have been eleven General Meetings, and addresses have been given by Miss J. Kimble, Drs. H. R. Carne, G. L. McClymont, Messrs. A. L. Rose, H. J. Geddes, C. R. Austin, F. O'Loghlen, F. Johnstone, D. F. Stewart and R. N. Lyons.

Last year's executive made representations to the Students' Representative Council and to the Senate, for funds to complete the tennis court at the University Farm. We have continued this work and have secured £25 from each body. Mr. Geddes has generously agreed to supply the labour needed to build and fence the court.

The social functions held so far have been extremely good.

The Veterinary Informal, held at the Union Refectory, was a huge success, no fewer than 330 attending, a record number. We were fortunate in still having final year with us for this dance. The Formal, held at the State Ballroom, although having a smaller attendance, was another very good night. Drs. Carne and Gunn both attended, and we wish to thank them for their support.

The Annual Dinner has not yet been held, but the organisers already have the matter well in hand, and another good night seems assured. This year the dinner is to be formal, a swing away from the combined dinner and smoke night of previous years. As the fifth year were to be scattered after the first term, they held their own dinner, which was socially a great success, being enjoyed by all who attended.

The Sporting activities of the faculty will be written elsewhere, but I would like to take the opportunity of congratulating all the players for their great efforts during the season. The rowing eight won the Interfaculty rowing, the swimming team came second, and at the time of writing, the union, soccer and hockey teams are undefeated. Great hopes are entertained that this year we may gain the Penfold Shield, which would be a remarkable performance for so small a faculty.

On behalf of the Society and the Executive, I would like to thank Dr. Carne and his staff for their assistance throughout the year. Also Mr. Max Henry for his advice, Miss Osborne for acting as Graduate Secretary, and all members of committees for their work during the year.

In conclusion, I would like to extend to the Society and its members my good wishes for every success in the coming year.

J. H. ARUNDEL,
Hon Sec., S.U.V.S.

Odds & Ends

When we were a soft amoeba
  In ages past and gone,
Ere you were Queen of Sheba,
  And I King Solomon.
Alone and undivided
  We lived a life of sloth,
Whatever you did I did,
  One dinner served us both.
Anon came separation
  By fission and divorce,
A lonely pseudo-podium
  I wandered on my course.

POVERTY: A miserable state of existence which deprives one of many things he is better off without.

The superintendent of a zoo was mailing an order. He began the note "Kindly send two mongooses." Somehow that didn't seem right to him, so he started again with, "Kindly send two mongeese." Still he wasn't satisfied. Finally he settled his problem by writing, "Kindly send me a mongoose." Then he signed his name and added a P.S.: "Send another one with it."

—Life Digest

SENIOR LECTURER LEAVES FOR AMERICA

Mr. R. V. S. Bain, B.V.Sc., Senior Lecturer in Veterinary Bacteriology, is leaving in August for Yale University, U.S.A., where he is to continue his investigations on the immunology of the *Pasteurella* group of bacteria, and to undertake post-graduate studies in immunochemistry with Professor Treffers. Mr. Bain expects to be away for a year.

Mr. Bain's research has been proceeding for the past two years on the biological characteristics of strains of *Pasteurella multocida* isolated from Australian animals. Although the animal pasteurellas are "classical" organisms, there is still much to be learned about them. Present studies have shown that the dissociation phases are of the conventional type and not unique, as some texts infer. The capsular substance and its development has been studied by methods evolved here and some evidence obtained that there may be more than one type of capsule. There are undoubtedly a number of serotypes, which give no cross protection in passive immunity tests. It may be that the protective antigens are located in the capsule. There are also several somatic antigens in the species and strains may have various combinations.

To extend this work and make it more precise, it is necessary to use the techniques of immunochemistry. These have been highly developed in the U.S.A. and it is hoped that Mr. Bain will get practice at Yale with the more refined methods on which further advances in bacteriology depend.

SOME VETERINARY PROBLEMS IN CEYLON

By ABEY BANDARANAYAKE

(Of the Veterinary Laboratory, Peradeniya, Ceylon)

(Mr. Bandaranayake is the holder of a Post-graduate Fellowship in Veterinary Pathology under the Commonwealth Technical Co-operation Scheme. He is spending this year in the Department of Veterinary Pathology).

WHEN I arrived in this country four months ago, I was surprised to find that the average Australian knew very little about conditions in the Asiatic countries. It hurt my pride to find that, except for a few ex-Servicemen who had been there during the war, hardly anyone knew anything about Ceylon.

I was amused when a man I met during my first week here told me he had a vague notion that Ceylon was an island somewhere east of Suez, which grew spices and good tea and where a ruby or a moonstone could be bought for a song! Before I recount the island's veterinary problems, I shall, therefore, take this opportunity to give a brief pen-picture of my country, which I hope will not be out of place here.

Ceylon (or Lanka, as the Ceylonese like to call it) is a pear-shaped island in the Indian Ocean entirely cut off from the Indian Peninsula by some thirty miles of sea. It is the youngest Dominion in the British Commonwealth, and with an area of 25,000 square miles is approximately

the size of Tasmania. Nearly 70% of its population of six and a half millions are Buddhists. The chief exports of the island are tea, rubber, cocoanut products and spices. The staple diet of the people is rice, most of which is imported. There is no coal, nor oil, and there are no heavy industries; the main occupation of the people is agriculture.

There is an element of mystery about everything in Ceylon—in the ever-green, mist-clad hills and in the smiling paddy fields, in the tropical palms along its coast and even in its multi-coloured sunsets. Out there the sun really shines and the rain is a welcome relief rather than an inconvenience. On the west coast is Colombo, the modern capital, and up in the hills is the dream city of Kandy with its famous lake and the sacred Temple of the Tooth, the holy of holies for Buddhists the world over.

The Ceylon farmer uses water-buffaloes to plough his fields and oxen to drive his carts. His methods are primitive. All he wants is to grow enough food for himself and his family and once this is done he is content to sit back and sing or bask in the sun. When you think of him and his Australian counterpart you are struck by their diversity. Whereas "progress" is the watchword of the Australian, the Ceylon farmer is content to use the methods employed by his father and his father's father before him. A friend of mine once illustrated this point very well when he said that the 1950 model of a Ceylon farmer's bullock cart is the same as the 1940 model and he was sure it is much the same as the 1490 model! The same is true of the plough he uses to turn the soil of his fields and a hundred other things he uses in his daily life.

Horses are never used for agricultural purposes in Ceylon, and, except for a few thousand head in the north of the island, there are no sheep. There has, however, been a gradual increase in the number of goats. The commoner diseases are piroplasmosis and anaplasmosis in cattle, and piroplasmosis and rabies in dogs.

Helminthiasis, in both these species, is also a serious problem. Ceylon is free from rinderpest and haemorrhagic septicaemia, but there were minor outbreaks of anthrax and blackquarter last year. As is to be expected in a comparatively undeveloped country like Ceylon, feeding of stock is not given the same importance as in more advanced countries and deficiency diseases are common. The water-buffalo rarely suffers from any disease. It is a sleepy looking, but hardy, animal, which works ungrudgingly, provided it is given a few hours off every day to wallow in the mud.

The per capita consumption of milk in Ceylon is very low. There isn't enough milk to go round and this situation has been brought about by two factors. Firstly, the local breed of cattle are poor milkers. Secondly, the average Ceylon farmer is illiterate and is hardly versed, even in the rudiments, of the science of animal nutrition. In spite of the efforts of the Government to grade up the local cattle by using imported sires from good milch breeds, much headway has not yet been made in substantially increasing the milk production, because of faulty management of stock by the peasants.

Every village has its quack and if a farmer wanted veterinary aid he would rather call in the quack than get a qualified veterinarian. Due to his illiteracy, he is suspicious of modern methods. I have met many of these quacks, some of whom, I must admit, have effected some remarkable and dramatic cures. I well remember one who claimed to be able to cure tympanitis in cattle by the simple process of rubbing a mysterious ointment into the poor animal's eyes and blowing pepper up its nose! Popularisation of modern methods presents an important problem to the local veterinarians, who have to show the farmer by example—for that is the only way he understands — that these modern methods are infinitely superior to those of the quack.

The incidence of rabies among dogs in Ceylon reached such serious proportions during the last few years that top priority was given for the control of this dreaded disease. Mass innoculations of dogs are being undertaken all over the country, the innoculations being done free of charge, using a locally prepared vaccine. The problems that face the veterinarians in fighting this one disease, give a fair idea of the complexity and magnitude of their task of disease control. Rabies cannot be effectively controlled in Ceylon until the stray dog and the wild jackall are exterminated. Stray dogs are found by the hundreds in Ceylon villages, but the mere thought of killing them is repellant to the villager, who is invariably a Buddhist—the follower of a faith which teaches him that killing is a sin. It is not a question of illiteracy in this case, rather the more educated the man is, the more convinced will he be that he has no right to take the life of another animal, even though it be in the interests of his own safety. Under such conditions,

disease control becomes a difficult, if not impossible, task.

Piroplasmosis in cattle has been another headache. Although much attention has been given to the eradication of ticks, much remains to be done. Together with anaplasmosis, this takes a heavy toll. Helminth infestation is also serious and periodic drenching of stock with Phenothiazine has been adopted as a routine measure.

In Ceylon, a dog free from worm infestation is the exception rather than the rule. Piroplasmosis in dogs, due to B. *canis* and B. *gibsoni*, is common, and there is, of course, distemper. A problem which has baffled Ceylon veterinarians during the past decade is a peculiar form of posterior paralysis in a particular breed of local goats. The aetiology of this condition is still obscure and all we know is that the disease is not transmissable and that it is not caused by a mineral deficiency. Till a few years ago, Newcastle disease — or Ranithet disease, as it is known in India and Ceylon—was the nightmare of Ceylon poultry breeders. Thanks to the vaccine made locally and the mass vaccination campaigns organised by the Veterinary Department, the mortality due to this disease has decreased phenomenally during the past few years.

Like most Asiatic countries, Ceylon suffers from a dearth of trained men in all fields of work. There are, in all, about thirty-five veterinarians in the Veterinary Division of the Department of Agriculture and all of them are busy with disease control and routine work, such as the organisation of mass innoculation campaigns against rabies and Newcastle disease.

With a view to overcoming this dearth of qualified men, a Faculty of Veterinary Science was opened a couple of years ago at the University of Ceylon. Heretofore, all Ceylon veterinarians graduated from English or Indian veterinary institutions. In the only well equipped Veterinary Laboratory we have in Ceylon, the time of the veterinarians is taken up by routine diagnostic work and in the preparation of vaccines and sera for use in the field. There is, therefore, an urgent need for a few trained men to devote all their time to research in order to solve the veterinary problems peculiar to the island. A start has been made in this direction and, under the Technical Co-operation Scheme of the Colombo Plan, Australia is lending a helping hand to Ceylon and the other undeveloped countries of Asia, by placing her facilities for post-graduate work at the disposal of students from these countries.

Hence, the problems that face the Ceylon veterinarian are manifold. Although disease control is his most urgent task, he has to educate the illiterate farmer to appreciate and take advantage of modern methods and teach him the science of animal husbandry so that he can get the most out of his stock. Professional skill alone is not enough and, because of the religious susceptibilities of the farmer, the veterinarian has to be equipped with the additional qualities of patience, understanding and tact.

AMERICAN HONOUR FOR LINCOLN PROFESSOR

AT present engaged in research work at the University of California under a veterinary research scholarship, Professor J. W. McLean, of Canterbury Agricultural College, has been paid a high honour. He has been granted the Gilmore Trophy, awarded for the year's outstanding foreign student.

In a letter to the Director of Canterbury Agricultural College (Professor E. R. Hudson), Professor J. F. Wilson, of the University of California, wrote recently: "Your man, McLean, is so retiring that you may not have heard of his selection as the foreign student on our campus who, during the past year, has done most to promote friendliness between his country and ours, has assumed a position of leadership on the campus, and maintained a high scholastic standing. The honour carries with it the Gilmore Trophy, a bronze plaque on which the name of the recipient is engraved and preserved here for future generations.

"As chairman of the committee on foreign students, I might add that Mr. McLean was the unanimous choice of the committee."

INHERITANCE OF COAT COLOUR IN DACHSHUNDS

This contribution has been awarded the War Memorial Prize for the best article submitted by a veterinary student for publication in "Centaur."

The judges—The Dean, the President of the Society and the Editor of "Centaur," consider that Mr. Geschmay has presented an illuminating and original study in a very capable manner, and that his article will be of considerable interest to all veterinarians, especially the geneticists, as this subject is always open to further investigation and discussion by the enterprising.

AS I am a breeder of Dachshunds, it is probably not surprising that I became interested in the problem of coat colour in dogs and its mode of inheritance. Further stimulated by necessity and encouraged by our lecturer, Dr. Finlay, I soon found that it was a most interesting subject. However, I discovered that existing theories relating to this subject, to which I have had access, did not completely explain the facts which I have observed in Dachshunds. As a result, I decided to make an analysis of the Dachshund register of the R.A.S. Kennel Club of N.S.W. and of certain personal observations, which led me on to formulate a theory of the mode of inheritance of coat colour in Dachshunds. This theory, which is explained below, is so far in accord with observed facts.

But first:

WHERE AND HOW COAT COLOUR IS PRODUCED

Coat colour is due to the condition of the pigments in the individual hairs, which arise each from a group of cells invaginated from the epidermis. The pigments are formed in these epidermal cells and are carried out into the hair as this grows through the skin from its follicle. The black and brown pigments occur as microscopic granules, which in different colour types have characteristic shapes, sizes and location in the hair.

The chemical nature of these pigments has been extensively investigated, but it is too lengthy a subject to discuss here.

Wright states that the most highly pigmented condition is found in the black colour, where the pigment granules are not really black, but a very dark sepia brown. White is the absence of all pigments. Black may be reduced to white in two distinct series, i.e. dilution of black to brown (this reveals the sepia colour of the pigment); the second dilution is blue, e.g., blue mice, rabbits, maltese cats, etc. The effect is similar to that in blue roans among horses and cattle and seems to be due to similar causes on a finer scale. Blue roans have intermingled black and white hairs, whilst maltese mammals have dense black pigment masses alternating with colourless spaces within the hair.

Another pigment is one with a distinct orange tinge, as in red human hair, red and yellow cattle, bay-chestnut and dun horses, tan dogs, etc. The most highly pigmented colours of this type are the so called reds. This red undergoes different modes of dilution, similar to those described for black, i.e. reduction to yellow or cream. Intergrades of various sorts between the different sepia and yellow series also occur.

FACTORS AFFECTING DISTRIBUTION, INTENSITY AND COLOUR OF COAT

Wright classified the following colour factors which also apply to the Dachshund.

1. Factors which affect the distribution and intensity of colour, largely irrespective of the kind of colour.
   (a) Factors which affect the distribution of colour in contrast with white (i.e. pattern of white areas), which cannot be changed by any other factor.
   (b) Factors which affect the intensity of colour in all coloured areas of the skin, fur and eyes.
2. Factors which affect the distribution and intensity of differentiation from yellow to black, of course visible only in the coloured areas.
   (a) Factors which affect the distribution of a dark colour (black, sepia, brown, etc.) in contrast with the yellow. These are factors by which bi-colour and red dogs differ from black dogs.
   (b) Factors which affect the intensity of only the dark colours, with effects visible wherever such colours develop in the skin, fur and eyes. (Eye colour is usually determined by factors 1(b) and 2(b), but occasionally extreme white patterns of 1(a) invade the eye.)

It is interesting to note here that most red Dachshund puppies clearly exhibit the tan pattern of the black and tan Dachshund, which later in life becomes so diffuse as to be un-

recognisable as a pattern; also that the chocolate or liver Dachshund has tan present in the same areas as the black and tan Dachshund.

Little based his investigations of Pointer Dogs on the Stud Book of the American Kennel Club. I was fortunate in being able to analyse the Dachshund Register of the R.A.S. Kennel Club of N.S.W. So that our respective observations should have an equal basis, I also used, for statistical purposes, only matings of which at least two or more offsprings were registered. Our common shortcoming is that, unfortunately, Stud Books and similar registers represent, at best, only part of the truth and not the whole truth, as litters may not be recorded completely.

Little investigated a total of 186 matings to arrive at his conclusions. I have 76 recorded matings, but my results in Dachshunds differed fundamentally from those of Little, who worked on the same colours in Pointers. For comparison, I tabulate Little's and my result (vide Tables 1 and 2).

TABLE 1. Results of Pointer matings (C. C. Little):

Nature of Mating	Number of Matings	Color of Offspring		
		Black	Yellow	Liver
Black x Black ..	8	23	0	5
Black x Yellow	9	6	10	2
Yellow x Yellow	1	0	4	0
Liver x Liver ..	97	0	21	305
Black x Liver ..	56	77	9	95
Yellow x Liver	15	8	10	46
Total	186	114	54	453

TABLE 2. Results of Dachshund matings:

Nature of Mating	Number of Matings	Color of Offspring		
		Black	Yellow	Liver
Black x Black ..	21	63	2	1
Black x Yellow	41	71	82	8
Yellow x Yellow	11	5	36	—
Black x Liver ..	2	5	—	5
Black x Brindle	1	4	—	1
Total	76	148	120	15

From an examination of his table, Little concluded that Liver was hypostatic to black, and that yellow, in turn, was hypostatic to Liver, but with the reservation that there were two visibly different types of yellow. This suggested the hypothesis that he was dealing with two pairs of Mendelian factors. These he designated as:

B—, the factor for black pigment, which is absent from brown, i.e., liver animals, and

E—, the factor for extension of brown and black pigment in the hair.

The absence of E restricts black and brown pigment to the eyes and to the skin of the extremities only, while the yellow remains extended and visible (Walters).

Little's table (1) shows that black crossed with black produces occasionally brown (liver) young, but no red, in contrast to my observations on Dachshunds, which are shown on table 2. I have no records, as yet, of any brown (liver) Dachshunds crossed inter se, but, for reasons which will be stated below, I believe that in this respect, results in Dachshunds should agree with those of Table 1, i.e., no black offspring in a total of 300 young, although some yellow young were produced, as well as the brown ones. Little, from this, drew conclusions as to the relative position of the various factors involved.

Another important difference between Little's results with Pointers and results with Dachshunds, is in the observations that yellow Dachshunds, when crossed inter se in 11 matings, produced 5 black and 36 yellow offspring. Little found no black offspring from such matings, of which he, however, recorded only one.

Returning to Pointers, Little, therefore, found the four following visibly different zygotic types:

1. BE = Black
2. bE = Brown (Liver)
3. Be = Yellow (Black nose and claws)
4. be = Yellow (Flesh coloured nose and claws)

This quite clearly cannot hold when Dachshunds are considered. I therefore refer to a statement by Hagedoorn that, in the case of Dachshunds, yellow is epistatic to black, that is to say that restriction of brown and black pigment is dominant over the extension of these pigments. Unfortunately, this does not agree with my own observations, nor with the Dachshund Register of the R.A.S.K.C., as it is evident that there could be only two types of blacks, viz. BBEE and BbEE. Neither of these, when crossed inter se, could produce a yellow (red) puppy, yet I have recorded 2 red puppies and 63 black ones from twenty-one matings of black to black. From

this, I found that neither Little's nor Hagedoorn's conclusions can be successfully applied to Dachshunds in their entirety.

Conclusions:

I therefore concluded that in Dachshunds, BBee and Bbee are both yellow, whilst BBEE and BbEE are black. These four types are in agreement with Hagedoorn's and Little's theory.

However, on analysis of the results obtained from the R.A.S.K.C. Dachshund Register, I further concluded that type BBEe is black, which does not agree with Hagedoorn's theory on Dachshunds and that type BbEe is yellow, which does not agree with Little's theory on Pointers.

JUSTIFICATION OF NEW THEORY

Hagedoorn also states that "dominance is the effect of different quantities of a gene upon the development of the organism carrying it in its nuclei." As a general rule, the more there is of a certain gene, the more effect it has, but the rest of the nuclear content, or as Fischer calls it, the residual genotype, has an enormous influence. Hence the gene is in no way an autonomous determinant.

Further justification of the new theory is on the basis of theories advanced by Shull, Goldschmidt and Fisher, that in dominance we are dealing with a developmental process, in which we are often concerned with a "threshold" effect, or the *relative* absence of a gene.

Summary:

To arrive at a theory of the mode of inheritance of coal colour in Dachshunds, which would fit existing facts which were observed, 9 different genotypes were classified, which occur in four phenotypic groups:

Group 1. Black
1. BBEE
2. BbEE
3. BBEe

Group 2. Yellow (with black nose and claws)
4. BbEe
5. BBee
6. Bbee

Group 3. Brown (Liver)
7. bbEE
8. bbEe

Group 4. Yellow (with flesh coloured nose and claws)
9. bbee

From this, a table can be drawn showing the results of mating the above 9 types inter se, which, however, owing to technical difficulties, is not reproduced here.

For comparison, Table 3 shows data obtained from the Dachshund Register of the R.A.S.K.C. compared with theoretical results obtained by Little's, Hagedoorn's and the author's theory. Crosses (x) indicate where Little's and Hagedoorn's theories do not agree with observed facts.

TABLE 3.
Comparison between Dachshund Register and:—
Theoretical results of Little on Pointers,
Theoretical results of Hagedoorn on Dachshunds, and
Theoretical results of Author on Dachshunds.

Parents	BLACK x BLACK				BLACK x YELLOW (Bl. Nose)				BLACK x LIVER				YELLOW (Bl. Nose) x YELLOW (Bl. Nose)			
Offspring	Black	Yellow (Blk. Nose)	Liver	Yellow (Brn. Nose)	Black	Yellow (Blk. Nose)	Liver	Yellow (Brn. Nose)	Black	Yellow (Blk. Nose)	Liver	Yellow (Brn. Nose)	Black	Yellow (Blk. Nose)	Liver	Yellow (Brn. Nose)
R.A.S.K.C. Register (Dachshunds)	(21 MATINGS)				(41 MATINGS)				(2 MATINGS)				(11 MATINGS)			
	95%	3%	2%	—	44%	51%	5%	—	50%	—	50%	—	12%	88%	—	—
Little's Theory (Pointers)	85%	7%	7%	1%	70%	23%	5%	2%	70%	5%	23%	2%	(X) —	92%	—	8%
Hagedoorn's Theory (Dachshunds)	92%	(X) —	8%	—	24%	70%	1%	5%	75%	—	25%	—	9%	83%	1%	7%
Author's Theory (Dachshunds)	88%	8%	4%	—	53%	41%	6%	—	50%	33%	17%	—	12%	76%	5%	7%

References:

Barrows & Phillips, J. of Her., 6, 387.

Castle, W. E., Am. Naturalist, 46, 440.

Dachshund Register of the R.A.S. Kennel Club of N.S.W., Aust.

Hagedoorn, A. L., Animal Breeding, p. 331.

Hutchinson's Dog Encyclopaedia.

Little, C. C., Coat Colour in Pointer Dogs, J. of Her., 5, 245.

Rice, V. A., Breeding and Improvement of Farm Animals.

Walters, Genetics.

Wright, S., Production of Coat Colour in Mammals. J. of Her., 8, 230.

J. G. GESCHMAY, VET. IV.

"CENTAUR"

ONCE upon a time, when the S.U.V.S. decided to put out a journal, the most difficult problem was to find a name for it. It had to be something concise and, at the same time, something of a distinct veterinary flavour; something that represented and showed up the true character of the students. After "Witchdoctor's Yearly" and "Destroyer's Dairy" had been rejected as not quite suitable, the name of "Centaur" was unanimously approved. So it came to pass that the rearing half-bred appears once a year on its cover, and there shall he rear until Vet. students have changed so much that he shall have to be cast and replaced by a more suitable emblem.

Why was "Centaur" deemed such an apt title? This will be made clear in the following lines, which are the result of intensive research into the origin, breeding, character and exploits of the creature.

Centaurs, which mean "bullkillers," were the inhabitants of the wild mountains of ancient Thessaly where, not unexpectedly, they passed their time by hunting bulls; sometimes the bulls hunted them. Originally they were savage, gigantic creatures covered with hair, whose main characteristic was intemperance. Later—and this is the first authentic recorded mutation—they assumed their now famous structure, half horse, half man.

Their pedigree is most interesting and shows a knowledge of genetics which makes Dunn and Sinnott appear as mere amateurs in comparison. Ixion mingled with a cloud and produced Centaurus; Centaurus mated with handpicked Magnesian mares and these, in due course, foaled our true-breeding cover.

Though, on closer inspection, one may discover a difference in outward appearance between Centaur and Vet. students, there is more than a passing resemblance in outlook and character. Centaurs represent unbridled animal passions and they got themselves into innumerable brawls which record the strife between civilisation and barbarism. For example, Eurytion, a Centaur, was invited to the marriage feast of one Peirithous. What did he do? He quickly got himself into the third stage of alcoholic intoxication (drunk and disorderly) and then made off with the bride, Hippodamia. This was frowned upon by the groom and a fight ensued between the Lapithae and Centaurs, from which Thessaly has not yet recovered.

Another worthy Centaur, Nessus by name, had the monopoly of carrying travellers across the river Evenus for a small consideration. (How times have not changed!) One day Hercules, newly wed and on his honeymoon, came with his bride, Deianira, to the river and he entrusted (oh! trusting Hercules!) . . . as I said, he entrusted his own fair wife—oh, horror and shame—and yet it must be said, he entrusted her to him, that is Deianira to Nessus the Centaur. Nessus plunged into the stream with his precious burden and in mid river he tried to . . . he attempted . . . yes he did . . . in mid river! As you know Nessus like I know Nessus, the rest is silence. Her plaintive protests were heard by Hercules. He drew his envenomed arrow, placed it in his bow and aimed at the heart of Nessus. The flight of the projectile was true, dead true, and Nessus was interrupted in mid-river.

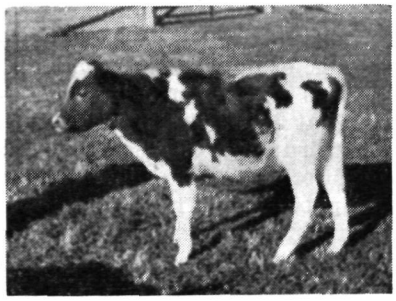
I did go on to tell more tales of their lascivious deeds, but the editors thought this enough to show why Centaur, and no other, proudly prances on this journal's cover.

A.H.B. IV.

FARM ACQUIRES DWARF CATTLE

THE McGarvie Smith Animal Husbandry Farm has recently acquired two dwarf cows and a calf which appears as if it will also be a dwarf. They represent three generations of direct descendants, being mother, daughter, and granddaughter, respectively. The oldest is Jill, reputed to be twenty-eight years. Her daughter, Young Jill, is eight or nine. Young Jill's daughter, Baby Jill, is six months.

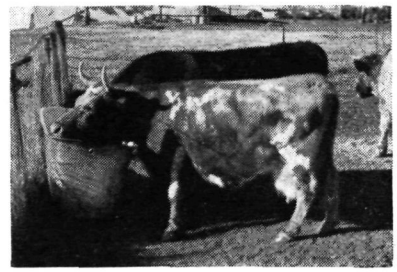
The previous owner was Mr. W. Gibb, a next-door neighbour, who made us a present of the old cow and sold us the other two at a nominal figure. We have been trying to buy them for several years; they are of considerable genetic interest.



Baby Jill

The story of this dwarf strain is that Jill was bought, *in utero,* in a truck-lot of cattle in the St. Mary's sale yards. The cattle came from the Bega district. Jill's mother was a normal Shorthorn. Jill herself is a roan with a trace of brindling around the neck. She has a disproportionately large head and a somewhat deformed body—she looks for all the world as if she had walked out of a Walt Disney film. According to Mr. Gibb, Jill has had a calf every year until last year, when he purposely kept her empty. He says all her calves have been dwarfs. Despite her great age, which she carries nobly, Jill still comes in season regularly. We are hopeful she can be persuaded to produce another calf. Of placid temperament, she can still show a clean pair of heels to any final year student when stirred up. Ask the group who drove her to the Farm!

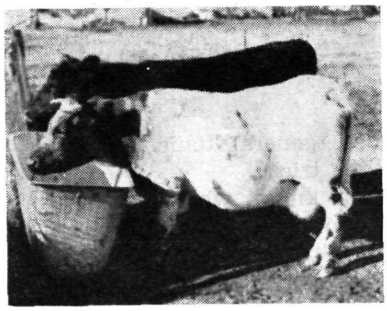
Young Jill is no taller than her mother, but of more normal, if diminutive, proportions. The shape of her horns and conformation, both point to an Ayrshire father. Young Jill has inherited her mother's rather than her father's temperament; she is the most friendly of the three—or the most voracious. We are informed that Young Jill is an excellent milker, but extracting the milk from these cows is a problem. When in full milk, they have such little road clearance that one cannot use a bucket. There's only room for a dish. Calves have a lean time—until they learn to kneel. If we want to milk these cows we shall probably need to build elevated milking platforms or construct a special claw for the milking machines. Young Jill is also empty, at present, but we shall breed her at the first opportunity.



Young Jill

Both cows are being put to a young Aberdeen-Angus bull, the only bull we have at present that is small enough. Any normally-sized bull would serve our immediate purpose equally well—to obtain a bull to mate back them. In this way, we may get a clue to the genetic basis of the dwarf condition. The chances are that these animals are genotypically of the Dexter-Kerry type. In the Kerry, which is derived from the Dexter, a mutation arose which inhibits the length growth of the bones and produces bulldog calves when the gene is in the homozygous state. Bulldog calves are not viable and are usually aborted in the seventh month. In the heterozygous state, the mutant gene merely causes a shortening of the legs. Because such animals were of good beef conformation, breeders selected them and tried to breed them pure, but the attempt failed. When bred together, the short-legged cattle produced offspring in the proportions of one long-legged, two short-legged and one bulldog. Bulldog calves can be prevented readily enough by mating the short-legged

females to long-legged bulls; the offspring will then consist of equal proportions of short and long-legged animals. The bulldog gene is prevented from occurring in the homozygous state.



Jill

The claim that Jill has produced nothing but dwarfs—and she has produced enough to give a fair sample of her genotype—is not in accord with Dexter-Kerry hypothesis. In fact, it suggests that she is homozygous for a dominant mutant gene or that the laws of chance have taken a holiday. If our luck holds and we are able to multiply the strain sufficiently, we may find the answer.

Lush has described a dwarf condition in Hereford cattle in Texas. He calls them "duck-legged" and puts it down to a single dominant gene inherited in simple Mendelian fashion. Physical examination pointed to an under functioning of the pituitary as the immediate cause. He suggests it might be a more extreme form of the Dexter-Kerry condition. In some Texas herds, a continued system of outcrossing to purebred Hereford bulls, accompanied by selection of the short-legged females and the occasional use of a grade short-legged bull to replenish the numbers of short-legged females in the herds, led to the production of animals which could not be distinguished from pure Herefords, except in this short-leggedness.

Apart from their genetic interest, the Jills can meantime furnish some interesting figures on the relationship between body-weight and feed consumption. We may also be able to obtain a few figures on relative efficiency of feed conversion of the dwarf strain; they might even have a practical value. They might be a better proposition than goats for backyard dairymen.

—H.J.G.

Children, yes, and grown-ups too,
Orange juice is good for you.

—S. Hopcroft

A Yank went into the bar of a Sydney hotel and asked for two whiskeys and two eggs in separate glasses. And the landlord on returning with the order enquired the reason for this strange concoction; whereupon the Yank replied: "Waal, firstly, I like it. Secondly, I can pay for it, and thirdly, it puts lead in my pencil."

A drunk standing at the other end of the bar, on hearing this, shouted, "Landlord, two whiskeys and two eggs in separate glasses." When the landlord placed these glasses on the bar in front of the drunk, the later immediately threw them on the floor. The irate landlord, asking the reason for this action, received the following reply: "Firstly, I don't like it; secondly, I can't pay for it, and thirdly, I've got no one to write to."

"SOCIAL SATIRE"

At the Vet. Annual Ball, a young shy student sat in his corner minding the ginger ale for his dancing cobbers. All evening his bright blue eyes had feasted upon the glorious fresh beauty of a tall dazzling blonde. "If only I had the courage of my thoughts—I'd get right up on my own two feet, walk across that dance floor, and ask her for the next dance!" Just then the band struck up a familiar tune. Jumping to his feet and taking his courage in both hands, he strode manfully across the floor and stood before the heart-throbbing hunk of sensuous oomph. The fact that she headed him by a goodly six inches in height worried him not. He was a man, not a mouse. Bowing his stomach at her with gentlemanly decorum, he asked politely: "Pray, will you dance with me?" There was a tense silence as the tall blonde creature surveyed him through the eyes of a keen critic, then in lofty tones, said, I'm not in the habit of dancing with—a child!" Bitter words——but our hero was once a boy scout. Quickly rallying his wits to his aid, he replied with unruffled calm, "I am so frightfully sorry—*please* forgive me. You see, I didn't notice your condition!!!"

STUDENT CLINICIANS!

Full of hope, and bright of eye
Four able-bodied students fly.
Down the gravel path they tread,
Feeling bold and wisely read.

What have we first — a tiny Peke?
(Good God, its orbs are on its cheek!)
"This way Madam—now no tears,
The little one need have no fears."

"Do we love animals? Why, of course!"
(Just take the thing and use brute force.)
"Prognosis guarded. I'm afraid
We'll have to resort to surgical aid."
"You feel quite faint? That's ten and six."
(She's lost her purse, let her have it for nix.)

A stranger approaches with cunning lear
Bearing a jar bristling "faecal smear."
"The dog don't run too good—you say?"
(Its plumbing's probably gone astray.)

From post to post, and tree to tree,
Four students hover expectantly,
But the greyhound can't even raise a try,
And the sterile beaker remains quite dry.

"Some general tonic should do the trick."
(God knows why! Get rid of him quick!)

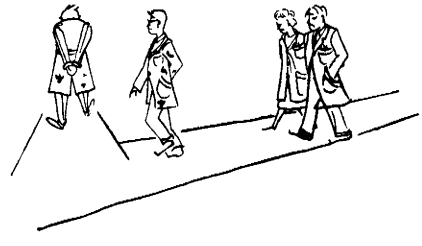
The hour is fast approaching one,
Here's a Siamese tom—his day is done!
"You wish us, Madam, to "fix" your cat?
About ten minutes should do for that."

Ten minutes later, covered in blood,
They discover the cat is a valuable stud!
Who's to know that a client could mix
A term like "cure" with that tried word "fix"!

"Yes, Madam, treatment certainly pays,
You'll note a big difference in pussy's ways."

Dull of eye and sad of mien,
Four students on each other lean.
The gravel path once more they tread,
Their hopes of the morning dashed—quite dead.

"A Clinician" IV



LETTERS TO THE EDITOR

The Editor,
"Centaur",
Veterinary School,
University of Sydney,
SYDNEY, N.S.W.

Dear Sir,

In the issue of the Australian Veterinary Journal for January, 1951, there was published a review of "Centaur" 1950. In this, H.R.S., the reviewer particularly noted an article by a student, entitled "Quarantine of Imported Cattle," because it indicated how to apply professional knowledge and the quarantine regulations, the reviewer commends this article and suggests that more, dealing with the "know how" of performing other veterinary jobs, however trivial they may seem, might well be sought. This would be particularly appropriate for "Centaur," which is the periodical published by the Veterinary Students at the University of Sydney. The use of the phrase "however trivial they may seem" gives the keynote to much departmental work. In a way, it links up with a phrase used in the official Veterinary Report on the war of 1914-1918. In that publication, criticism was levelled against certain categories of Veterinary Officers inclined to depend too much on vaccines, sera and other biological products and to forget the "homely tasks of preventive medicine." These homely tasks may appear trivial, but, on examination, they bulk largely in many men's experience and, if widely and wisely used, react with immense value on the well being of the livestock industries. Just as there are homely tasks in treatment and preventive medicine, so there are ways of carrying out apparently trivial tasks which might well be so described.

Take, as an example, the inspection of pigs in a sale yard. There is nothing very stimulating in such work, but there is a proper method which yields the fuller results. The most important point is to do the work quietly. A new Inspector will almost certainly find a zealous helper who wants to "stir them up." His zeal requires curbing until the Inspector is ready for such action. The reaction of animals to "stirring up" is such that symptoms are masked, although the animal may be deemed ill. Particularly will irregularities in breathing be interfered with and yet it is those very thoracic symptoms which are so revealing. It is too often taken for granted that in Australia there are no diseases of the pig which require care in this matter. Yet although not so devastating as the diseases of the pig prevalent in Europe and U.S.A., our country is by no means free of disease, which may be revealed in sty and yard inspection.

As another instance, let us consider riding through cattle in the paddock. A very different matter to saleyard inspections. Unfortunately for this work, most men travel by car, but the drover or farmer will possess horses. Take the case of a herd on a fair sized dairy farm. The Inspector must see both sides of every beast. At first he may have difficulty in picking up the diseased cows, but after a while it almost seems to him that the clinical cases present themselves for detection. Actually, of course, the change is in the Inspector, whose eyes rapidly pick out the animals with enlarged lymphatic glands, actinomycotic lesion and so on. His ear will also get a training in detecting the "snorer" and in differentiating one type of cough from another. He will find that an early morning inspection has particular advantages and that a cow forced to rise at that time will, by coughing, indicate that all is not well.

Instance after instance of these "trivial" points could be listed, leading to diagnosis and action in the field.

I am,
Yours faithfully,
(Max Henry)

WOMEN'S NOTES, 1951

WOMEN

Back: Miss J. Clout, Miss J. M. Haneman, Miss M. A. McKinney, Miss P. Williams, Miss J. MacCallum, Miss J. C. Kater.

Middle: Miss H. E. Joyce, Miss P. Wilkinson, Miss D. Edmonstone, Miss I. Gant, Miss E. Edmonstone, Miss L. N. Leedham, Miss M. E. Wilson.

Front: Miss J. B. Wootton, Miss J. G. Cahn, Miss J. Caterson, Miss B. L. Wilhelm, Miss D. R. Ferguson, Miss S. E. Potter.

THIS year the Faculty finds itself with 24 women, including two new faces from Melbourne, whom we are very glad to see in 2nd year.

We feel very honoured in being represented on the Executive Committee by Margaret Wilson, treasurer, who has created a precedent in being the first women to hold office on the Committee.

We miss seeing Gabrielle Williams around the Vet. School this year, but hear she has been most successful with her Siamese cats.

During the Easter Vacation, Val Archer found time to get married and we believe that Heather Galloway, our only 5th year, hopes to do the same next January.

Despite continual reminders to the Women's Union, our common room "carpet" has still not been laid, and this winter the cement floor seemed colder than usual. New shelves and chairs have been promised but are not yet forthcoming.

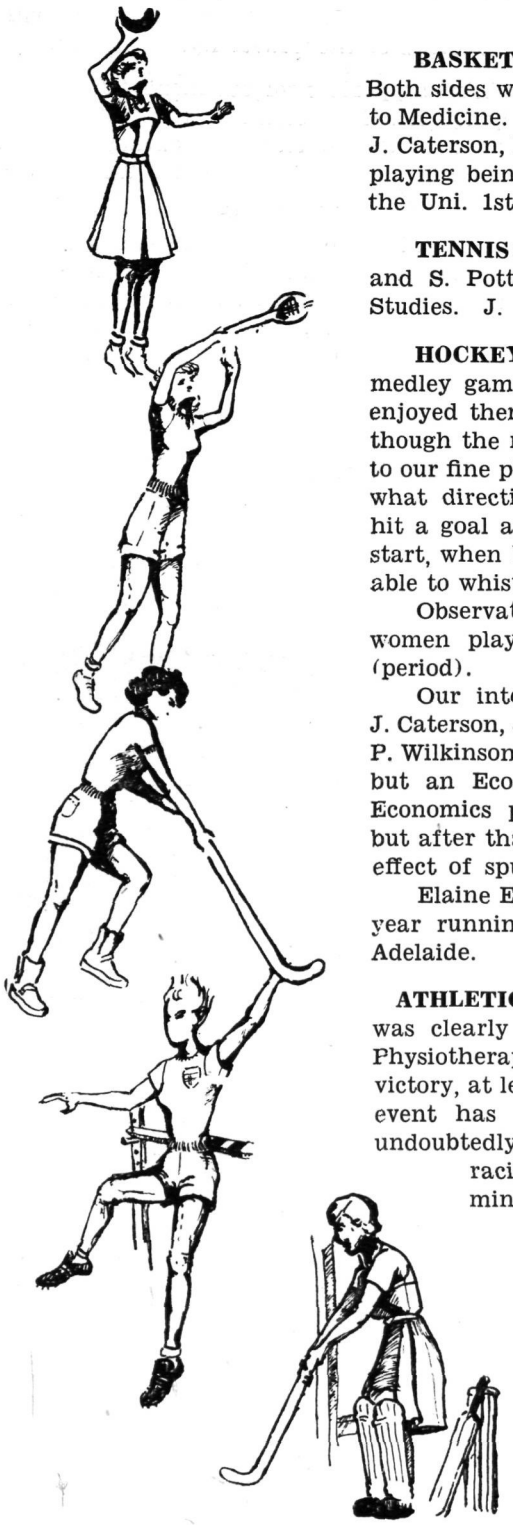
We have been particularly social-minded this year and the Informal and Ball, which Margot and Joan ran so successfully, saw most of us present. Peg Goodwin really put everything she had into her efforts to win the Guinea Pig Derby. However, it is doubtful just how many of us will brave the Annual Dinner as we understand some of the men don't like the idea of facing the women next day (and vice-versa.—Ed.).

Most of our winter lunch times were spent cheering our usually victorious men on in one sport or another, and we are sorry that our small numbers prevent us from being more successful in Women's Sport.

Finally, I would like to wish all the women the best of luck in their approaching exams.

Jean Wootton

WOMEN'S SPORTS NOTES



BASKET BALL: D.V.W.P. the Vet. Med. match was finally held. Both sides were evenly matched, to give a close final score of 11-10 to Medicine. Our team consisted of: Jean Wootton, Barbara Wilhelm, J. Caterson, P. Williams, D. Ferguson and L. Leedham, the attacking playing being the strongest. Janet McCallum has been playing in the Uni. 1st Reserves.

TENNIS: Our team of J. McCallum, P. Williams, D. Ferguson and S. Potter were successful in the first round against Social Studies. J. McCallum played with Uni. 2nds this year.

HOCKEY: In preparation for our interfaculty match(es?), a medley game with the men was arranged in first term. Everyone enjoyed themselves thoroughly and voted it "A Good Thing," even though the referee was completely baffled from first to last. Owing to our fine play, he had great difficulty in telling who was playing in what direction, his perplexity increasing when the men actually hit a goal against themselves! There was no hope for him at the start, when both sides consisted of men and women, so that he was able to whistle at anyone he liked.

Observations (unbiassed): The difference between men and women playing hockey—women TRY to hit the Ball; men hit (period).

Our interfaculty team consisted of: B. Wilhelm, J. Wootton, J. Caterson, J. Cahn, E. Edmonstone, J. Kater, J. Haneman, S. Potter, P. Wilkinson and I. Gant. We presumed we were playing Economics, but an Eco-Arts team was created for their benefit with four Economics players only. No goals were scored before half-time, but after that our horde of enthusiastic barrackers had the curious effect of spurring the opposing team to 4-0 victory.

Elaine Edmonstone has been the Uni. 1st's goalie for the second year running, and took part in the intervarsity hockey held in Adelaide.

ATHLETICS: The apathy of interfaculty spirit in this direction was clearly shown in 2nd term. Vet. Science, Architecture and Physiotherapy even bothered to come. Vet. Science had a moral victory, at least, 50% of their faculty putting in an appearance. This event has been postponed till 3rd term, when the Vets. will undoubtedly show their prowess at picking up oranges (see Stan), racing in corn sacks and being generally broad (jump) minded. Here's hoping!

Cricket & Football Barracking

CRICKET: Two of our number have become enthusiasts this year, namely J. Clout and D. Edmonstone, whom we hope will make the grade into one of the Uni. teams when they are chosen. Vet. Science hopes to launch into the Interfaculty matches in 3rd term.

WOMEN'S SPORT

Sports Rep. Report: Within a small faculty such as ours, the spirit of having a go for the fun of it develops of necessity. What matter if one has only vaguely heard of a basket ball, or if one's only encounter with hockey has been a whopping bruise accidentally incurred on walking past hockey square?

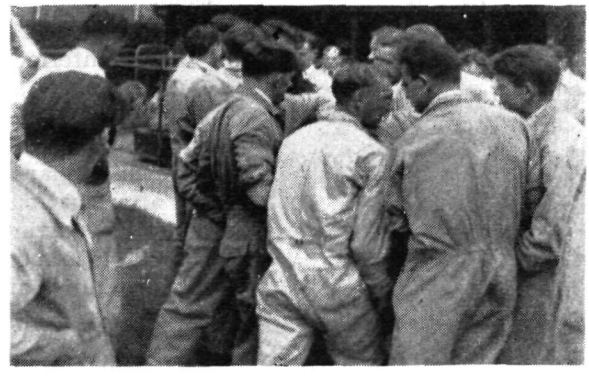
However, the disadvantage of being in such a small faculty results, as a rule, in our playing just once every year, because of the present knockout system of Women's Interfaculty Sport. We are hoping, in the future, to remedy this method, so that all faculties play a minimum 3 matches, giving us all a chance of mixing with other faculties of the University.

Feminine supporters for our men's teams have usually taken a firm stand at the football and hockey sidelines, barracking enthusiastically, even when rugby turned to soccer tactics (See Newton's 1st Law of Motion).

Swimming: Note—Representatives in this sport have been acclimatised to Melbourne weather. In the Interfaculty Carnival, B. Wilhelm was 2nd in the Fresher's freestyle, and Judy Cahn 1st in the Fresher's and 2nd in the Open breast-stroke.

FOURTH YEAR STUDENTS REVIVING A HORSE

Question (a) Where is the horse?
(b) *Which* is the horse?



(a)

(b)

SOME THOUGHTS ON ZOOTECHNY WHILE MEDITATING ON THE ASIATIC PROBLEM

Though East is East and West is West,
And this may sound irrelevant,
Any old fool can milk a cow,
But you can't muck about with an elephant.

—"Thermal" III.

TEACHING OLD TRICKS TO THE NEW DOG

WHEN I first came to this country I visited a friend who had a "trained" dog, an alert "foxy" pup, which bit my trousers, obviously to say, "Hello."

I smiled and shook my leg while my friend ordered Spot to "get down," but Spot bit the cloth more vigorously.

"Maybe he doesn't understand," I ventured.

"Spot understands everything," was the rejoinder.

I made no reply, but dragged my leg and Spot into the house.

If you have tried to make your four-legged pet obey, only to have him look at you in that bewildered "what-in-the-world-are-you-trying-to-say?" expression, then you are not the master in your home. If you have pleaded with your pooch to "come here!" until you discovered that you had to go to him, then you have suffered embarrassment long enough. No longer need your dog be the boss. You can master the mutt. Maybe your pooch will not become a movie star like "Lassie," but you can teach him enough tricks to make your guests exclaim, "My, he's wonderful!" — meaning you as well as the dog.

Don't believe the old adage, "you can't teach an old dog new tricks." You can, no matter what his age, provided he is healthy. It is best not to start training any pup, however, until he is eight months old. The only equipment one needs is a training leash—which can be sash cord or rope about 10 feet long—which is tied to the dog's collar. The other item is a pocket filled with tasty morsels, which can be pieces of dog biscuit or a plain wine biscuit.

Here are, first of all, some dos and donts (by which you must abide) before and during training:

1. Be prepared to spend 15 minutes every day at the job. The secret is regularity. If you are too tired or become too lazy or careless to bother some day after starting, you'll probably have to start from scratch again when next you begin.

2. Evening is probably best. Quiet surroundings are very necessary. Don't rush the pupil into a quick session just because you are in a hurry or dinner is ready.

3. Don't smoke while training, as, generally speaking, dogs do not appreciate tobacco.

4. After he has accomplished each trick, always reward him with a titbit and praise. Dogs are like children at heart and love lavish attention.

5. If the pooch is a bit off colour and out of sorts, don't work him, but give him a spell as he will not be at all enthusiastic.

6. Only one person at a time should train him. If you have taught Fido a trick and you wish him to advance, then don't let your rich aunt try it out too, even at the risk of being cut out of that valuable will. Diplomatically, point out that the training is not complete and that she will need to wait until its completion. To allow anyone else to do such a thing, as I have suggested, would only confuse the little fellow.

With these things in mind you are now ready to begin:

First, your dog must be taught the essentials of obedience. I would list these as the five following: To come when called, to heel, to sit down, to stay down and to lie down. After he has mastered these orders you can teach him any variety of "tricks."

For all these lessons, voice is important, *very* important. Your dog does not immediately understand the actual words you use; what he does assimilate quickly is your tone. It is necessary, therefore, for your voice to have an inflexion that is firm, so that he may follow your orders.

If you want him to sit, don't suggest that he be seated in the manner you would a house guest, but command him to "sit!" using authority in your tone. In the same way, when you praise him, do so with a milk-and-honey voice.

Don't worry how to hold the leash—any way is the correct way, and either hand will do. After the pup has mastered all your orders on the leash, AND ONLY THEN, remove the leash and have him repeat his feats without it.

TO COME WHEN CALLED: Put on his collar and tie the training leash to it. Let your pooch wander around, then suddenly call him by name and say, "Come!" At the same time tugging the leash. The slight jerk will not hurt him. If the tug doesn't bring him toward you, keep shortening the leash, all the time repeating, "come!" so that he will understand the association. When he gets to your side, pet him and give a titbit. Try this again and again and each time reward him when he reaches your side. Even if you have difficulty getting him over, don't abuse him when he gets to your side or he will associate punishment with coming to you.

TO HEEL: Every dog should be taught to walk

or remain at his master's side, never strolling ahead or falling behind. In canine language, this is known as "heel!" Shorten your leash and walk with your dog in the forced position of being at your side. If he walks ahead pull him back, with the command, "heel!" If he falls back pull him forward, with the same order. Each time he seems to understand, feed him a titbit.

TO SIT DOWN: The dog should be facing you. Hold the leash in one hand just a couple of inches above his collar. With your free hand push down his hindquarters and command "Sit!" Keep his head slightly tilted up by lifting the leash. When you renove your hand, he will probably be inclined to get up. Push him back to his original sitting position each time, always commanding "Sit!" When he stays, remember his reward.

TO STAY: With each lesson the dog must be taught to remain in the position you command. Now is the chance to teach him the meaning of "stay!" Back away a few feet and if he tries to get up, be firm in repeating "stay!" and if he does get up always push him back with the command "sit!" As you back away, order him to "stay!" and he'll get the meaning of both.

TO LIE DOWN: Fix the leash so that it is UNDER his neck. Order your dog to "lie down!" from the sitting position. As you command, pull the leash forward and downward toward the floor with one hand, at the same time pulling both front legs forward with your other hand. This will force him down.

When you do this for the first time, your dog will be frightened—afraid that something will happen to him. Once you get him down, hold him down with the leash, always reassuring him that life is still wonderful, even in that position. After a short while, he will get over his fear. It is important that you pet him and reward him each time he goes down. This will have to be practiced until he goes down on command.

Once your dog understands these obedience fundamentals, he can do almost anything you have the patience to teach him. He is now ready for "show-off" tricks.

If you have had the patience to go this far, you are entitled to consider yourself a competent dog trainer. "Bow Wow" III

THE VETERINARY UNDER-GRADUATE IN THE UNITED STATES

D. C. BLOOD, B.V.Sc.

IF by some chance you were absorbing the fundamentals of a veterinary education in the American manner, you would be aware of considerable differences from our own system.

In the first place, there is much greater difficulty associated with becoming a veterinary under-graduate. All American schools limit the entry of students to about fifty each year and competition is very keen. Usually one of every five or six applicants gains selection, and some students apply for three or four years before being allowed to enrol. The criteria used by the selecting boards included (a) academic record, (b) farm background and (c) personality as determined by an interview. Characteristic of Americans is the emphasis they place on a farming background as a suitable precursor to veterinary medicine. One comes across this attachment to the rural life in many phases of the American scene, where the demarcation line between town and country, or, as they are more often styled, "folksy" or "homey" people is very distinct. Some large stores educate their assistants to talk in a slangy, slurvian dialect to attract country shoppers. In the veterinary world, one is prone to encounter, as a parenthetical addition to a man's list of educational accomplishments, a species of self-conferred degree which might read "Born and raised on a dairy farm in Tompkins County, N.Y." Undoubtedly, some farm experience is desirable in a veterinarian, but to be a farm boy is not a necessary prerequisite.

The academic qualifications considered are those obtained in the two years of pre-veterinary education at a University or college. Instead of enrolling as veterinary students immediately upon entering the University, intending applicants spend two years in a general science course comparable to our first year, choosing subjects particularly applicable to veterinary science, but which could serve as a basis for entrance into another faculty. The importance of this two years is not to be over-estimated. American High School education is of a much lower standard than our own, and students entering the

Veterinary Faculty have had a much less extensive general education than in this country.

Once having gained admission, the biggest hurdle has been overcome, for although the teaching is very intensive, the failure rate is very low, usually about one per cent in each year. Again, this has no great significance relative to the quality of the teaching. The demand for veterinarians and the desire to use all available student accommodation are so great that only gross negligence warrants failure. Unfortunately, the admission screening is not sufficient to protect against the entry of unsuitable students and the "tail" of the class is not pruned as it would be under our own system.

To amplify the statement that the teaching is intensive, I recall the scurrying through the snow to the eight o'clock lecture which began each day and the congestion at the telephone at six at night, with students calling their wives to come and pick them up in the car. In the normal 8 a.m. to 6 p.m. days and half day Saturdays, there were no free periods. The students come to learn veterinary medicine and they certainly had it stuffed into them with great gusto.

In their lectures and practical work, the instruction provided was excellent, but from one point of view only. Because eighty-five per cent of graduates are engaged in private practice and the alumni have a great deal to say about how the school shall be conducted, the emphasis is particularly upon veterinary medicine rather than veterinary science and a good deal more time is spent on practising the arts, rather than imparting the sciences. The result is that their pre-clinical subjects tend to be tailored to fit the requirements of a practitioner, rather than to provide a fundamental course of instruction for people who will do research work. This emphasis is illustrated by the average curriculum layout. The first two years are spent on preclinical subjects, the third year on the theoretical aspects of clinical work and the fourth year is an entirely practical year with the working day spent in the respective clinics. Another illustration of the emphasis placed on clinical subjects is the high staff student ratio of one to four. The necessity of having small student groups, if adequate clinical training is to be imparted, is appreciated and this was one of the most obvious advantages that veterinary schools had. A professor with four students only to look after makes a reasonably effective study group.

Again, extensive clinical instruction requires extensive clinics with good facilities and continuous service to clients. Most schools had very good clinics and could accommodate a hundred to two hundred small animals and thirty to fifty large animals as in-patients. Five thousand to seven thousand accessions per year were common figures for the small animal clinics, three to five thousand for ambulatory large animal clinics and two thousand for large animal surgical clinics. As a result, students saw many cases in their final year and benefited considerably from the variety of disease conditions presented.

Location was an important factor in determining the amount of clinical material available. Most American schools are situated on an agricultural and mechanical campus, distinct from the general university campus and usually in a country town in a good agricultural area. These schools were much better situated from the point of view of clinical material available than the few schools situated in large cities.

Another effect of the location of the schools is the development of university towns where the town exists solely to provide for the needs of the University. All students were in residence either in private homes, apartment houses or fraternity houses, and, in many cases, outnumbered the townspeople. One might expect that under such circumstances, staff student relationships might by less formal and provide more opportunity for particular students to develop their interests in particular subjects. This did not seem to occur and, on the whole, staff student relationships were as formal as they are here. The general impression one gets of the friendliness and hospitality of the American people is not borne out when one lives amongst them. In practice, they are as reserved as the English and much more so than the Australians. Opportunities for students to meet staff members at formal and informal functions are almost non-existent and I, for one, am more appreciative of the value of student veterinary society dinners, dances, balls and parties at the Farm as media for allowing students and staff to get to know each other better. After all, our knowledge of and respect for each other depends upon our relationships as persons and not upon the artificial distinction between teacher and student, which lasts for a year or two in the course of several decades of professional association.

Well now! What of the final product of the American educational system? The recent veterinary graduate there is more capable of commencing private practice immediately than are ours. He has been more completely schooled in the arts and techniques of practice and enters a sphere of activity which, by tradition, is an

honoured and highly respected profession and in which he is assured of a warm welcome by his prospective clients. But he is more empirical, less soundly based in his fundamental sciences, and, I think, less capable of adapting himself to unusual situations and making new advances than are our graduates.

This impression is more or less supported by the type of article which appears so commonly in American veterinary literature, where opinions based on clinical observations without adequate controlled trial and without any appreciation of the necessity for statistical appraisement, are accepted as advances to our fund of knowledge.

To give American veterinary schools their due, they have developed techniques for veterinary work which are really worthwhile, their teachers are enthusiastic and no expense is spared in providing an education which is adequate, in their view. They have developed a professional tradition that places them high in public esteem and gained the support of government authorities, so that public finance is readily available for development.

But I still think the Australian graduate is better fitted to battle with the changing front of disease and animal husbandry practice than his American counterpart.

ONE FOR THE THEORISTS

What happens when 60 mls. of hen's blood is injected into a 10 lb bitch suffering from acute blood loss?

During the well-known process of "gaining experience," one of our amateur surgeons, having caused the above condition with quite reckless abandon, attempted to save the day (and the dog), by sacrificing one of the neighbour's hens, that being the only available "blood source" prepared to co-operate.

The result, believe it or not, was very favourable, the recovery being both rapid and uneventful.

The donor we regret to say suffered the further humility of gracing Sunday's table; while as for the bitch—she has certainly lost all attraction for her canine admirers, but they're not trusting any roosters!

THE ELITE

The University's a funny institution,
The meeting ground of intellect they say,
Take a visit to the Quad,
Chances are you'll find it odd
But do not judge too hastily I pray.

Push your way between the velveteen and whiskers,
Give that long haired neuter person a wide berth;
Now hold that cigarette higher,
Or you'll set these beards on fire
And incinerate the greatest brains on earth.

Ah! there's a likely looking group around the corner,
Their conversation should delight the weary heart,
They may debate Silesia—
The pros. and cons. of Indonesia
Or the future of Surrealistic Art.

We listen—"Oh, I really couldn't, Cyril,
You know Palm Beach is dead this time of year.
Snow's fallen at the Chalet—
Got tickets for the ballet?
But the Roosevelt's so boring Cissy dear.

Perhaps this exchange of ideals is just beyond us,
Moulded as we are with common clay,
Is this the crux of student life?
Or juvenilia rife!
So homeward, back down Science Road, we wend our way.

R. B. DUN

THE AUSTRALIAN VETERINARY ASSOCIATION

D. F. STEWART, Liaison Officer of the A.V.A. with the S.U.V.S.

THE Australian Veterinary Association is the corporate body of the veterinary profession, and fulfills a similar function in the life of the graduate, as does the Sydney University Veterinary Society in the life of the under-graduate.

The objects of the A.V.A. are clearly set out in the Memorandum of Association, for it is incorporated and registered as a company not trading for profit. All their objects are designed to promote the advancement of the profession in Australia, and one could not criticise their value for this purpose. To my mind, however, one of the most important objects is that which states "To form a bond of union among the members of the profession and a medium through which their opinions can be easily ascertained or expressed."

The A.V.A. is organised as seven Divisions, one in each State and one in the Northern Territory. Every member of the A.V.A. is elected to a State Division and each State Division has its own activities which are under the control of its own officers. The Association is welded together by a Council. This Council comprises four representatives elected annually by each Division and four additional members elected by ballot at each Annual General Meeting. The office-bearers of Council are elected by the Council itself. Until very recently, the affairs of the Association were run entirely by honorary officers, but, with the growth of the profession, the burden has become too heavy for any individual to carry. Therefore, it has become necessary to appoint a firm of acountants, Messrs. Fitzroy and Rossell, to conduct the routine business. This appointment, however, has not relieved entirely the need for honorary work, and many members still give their services to the A.V.A. voluntarily. Although Council is the controlling body, its function is to co-ordinate and implement the wishes of the Divisions and certainly not to direct them. While the affairs of the Association are under the control of the Council, a Business Committee functions to supervise, and to advise Council on, financial matters. So far, Council has sat either in Sydney or in Melbourne, usually for two year periods. but the Business Committee is permanently located in Sydney because the registered office is there.

One of the important activities of the A.V.A. is the publication of the Australian Veterinary Journal, which is one of the few scientific publications run without financial loss. Its scientific standing is high and it is to be found in the leading scientific libraries of the world. Its continued success, however, cannot be assured without the constant support of the members of the A.V.A.

The A.V.A. has done a great deal to improve the standard and status of the veterinary profession in this country. We should never forget the debt we owe to the pioneers of the profession here, who struggled for many years to lift the profession to the status it now enjoys. No doubt there is still much more to be done. As the profession enlarges, it becomes even more necessary to support the corporate body, which can speak for the profession as a whole. The opinion of the A.V.A. is sought, at times, by those responsible for framing the policy of this country in matters affecting the primary industries and it is becoming a power in the land. It is most important that the reputation of the Association should remain at its present high level. To be effective, it requires the vigorous suport of all members of the profession, together with healthy criticism, which is never lacking, to improve its value to the profession and the value of the profession to the community. The members of the profession are the Association, and, if they are not satisfied with the conduct of its affairs, the remedy is in their own hands.

While the employment of permanent secretarial assistance has meant an increased subscription, it is still one of the lowest for any professional body. Apart from the obvious benefits which are derived from joining the A.V.A. as a student member, no entrance fee is required by the N.S.W. Division, when, on graduation, full membership is sought. The A.V.A. appreciates the support it has received from the student body and looks forward confidently to receiving applications for membership from all graduates in this country.

ANNUAL DINNER

THE 1951 Veterinary Society Annual Dinner was held in the Union on Wednesday July 25th, and although a radical change was made by declaring the function to be formal, a creditable number of students was present and made the occasion a memorable one.

Mr. C. J. King, a former graduate of this faculty and now in charge of the Division of Marketing and Economics in the Department of Agriculture, proposed the toast to the University and reminded the students of the debt they owe their University. Dr. C. G. McDonald, a member of the University Senate and a teacher of the Medical Faculty, in replying, gave a beautifully balanced speech and compared the educations in the so-called "technical" and "pure" faculties, and concluded that we lost nothing in comparison.

Mr. Webb, in proposing the toast to the Society, traced the history of the Society and recalled its highlights. Points of interest this year include the first occupancy of an executive position by one of the fairer sex, Miss Margaret Wilson, and the possibility of the faculty gaining the Penfold Shield for Inter-Faculty Sporting Competition. The President, Mr. B. Johnston, who occupied the chair, ably responded to the toast and listed the activities of the Society over the year.

Mr. A. Brook welcomed the guests, and introduced them to the students. Professor McMahon, of the new University of Technology, thanked the Society for its invitation to the guests.

Other guests present were Emeritus Professor J. D. Stewart, who preserved his record of only having missed one dinner in the forty years since the Society was founded, and Mr. Gamble, who is University Information Officer.

Various items were presented during the evening. Mr. P. Knight played a bracket of numbers on the pipes, Mr. W.Whitlock, accompanied by Miss. H. Joyce, sang four numbers in his extremly competent manner, and Mr. G. McCormack gave a piano solo.

There was quite a good representation of staff present, Professors Carne and Emmens, Mr. H. McL. Gordon and others being present to enjoy the particularly good student-staff relationships of our faculty.

DANCE COMMITTEE REPORT FOR 1951

THE Informal, alias Freshers' Welcome, was held at the Union on Tuesday, 17th May, despite the fact that we had been debarred from the hall as the result of last year's debacle. There was a record attendance of three hundred and eighteen, the numbers being swelled by Final year, who are not usually with us at this time of year.

Probably one of the main draw-cards was the floor show, led by that indefatiguable master of stage and Prima Ballerina—Bedie Moritzky, who, with his corps de ballet, produced, for the first time in Australia, the "Glow-worm Ballet," a very original and somewhat unorthodox work. Mr. Setchell et. al. gave a notable modern "tin pan alley" rendition, and the Boat Race provided much amusement for the spectators, if not for the participants.

We were very grateful to Harry Collins and his band, who, in spite of the regrettable absence of the amplifier, did a marathon and very creditable job.

The somewhat unexpected profit from this function was put to good use in preparation for the Ball, thus enabling the Committee to terminate the financial year without the usual embarrassment.

Contrary to Faculty expectations, the Annual Ball, held at the State Ballroom on 21st June, was a great success; and The Dance Committee can at least feel justified in its choice of location.

Some of our leading stores were again good enough to lend us some of their display animals which made most appropriate and effective decorations. The various floor shows were the high-light of the evening, in spite of the fact that various demi-gods frowned on the sub-Victorian standards; and we have it on good authority that Queen Victoria herself was highly amused.

Joe Bunsen and his five burners incinerated two sensational lyrics, and the clinical examination (pro rata) of the cross-eyed brewery horse will be set down in history for its strict attention to clinical detail—or was it a craving for liquor?

The attendance of so many members of the Staff was particularly pleasing, and we feel that the success of the ball was due largely to the co-operation of many members of the Faculty.

J. K. & M. McK.

FLOAT 1951

ALTHOUGH it has been the usual practice, in the past, to construct the Vet. float impromptu —the committee this year showed great forthought in discussing ideas, and actually "making" some arrangements the day before the procession; the result was astounding.

Our main theme was the bloated woolgrower, with a few accessory items, which included an extensive display of wool types—a heartrending

tableau depicting the impecunious state of our fellow Veterinarians and, of course, "Support for Vet. Women." Throughout the construction of this masterpiece, our band of workers was constantly inspired by Poss Hayes, whose brilliant

ideas and knowledge of design were much appreciated.

In order to draw attention to the success of our immigration policy, the float was heavily populated. Our Vet. girls were much in evidence, with Pat and Joyce providing sophistication combined with a subtle whiff of the boudoir, while Jan and Judy gave us the contrast of untarnished youth—the ingenue—a note which may have been lacking in some of our other members.

At this stage, thanks should be given to the many people who contributed to the float's success. Noel Courtney's drawings were highlights — proof lying in the fact that of six articles censored in the whole procession, two of these were on the Vet. float and both were products of Noel's brush—fame has no more to offer. The McMaster sheep were a great help and many thanks to Mr. Gordon for his co-operation, particularly as it was touch and go as to whether he would see them again. Sugar Cartage again provided the transport, Jack Arundel provided organisation, Mr. Keep and George gave us the "Golden Fleece" and, indeed, help was forthcoming from all sides, even the horses down the back doing their little bit.

The procession itself went off well, only mishap being Stan's sanitary appendage, which was seen to crash at one stage. I did hear that Jim Capell racked "it" in George Street, but you know what rumours are. On the return journey, our float was attacked, without provocation, by what looked like a plague of Anthropology students. Their barrage of wet bread was answered, in true Veterinary style, by a poisonous cloud of American Wool (pure bull)—the horse's contribution. Such a surprised lot of Anthropology students never was seen.

Although we disagreed with the judges as to which was the best float, we were philosophical about it, and, in conclusion, we can say, as Bede would put it—"everything was a source of joy."

Eds.—whoopee!

OPEN DAY AT THE UNIVERSITY

ON Saturday, the 16th June, 1951, the University held an Open Day and invited the public to inspect the various departments.

The Veterinary School arranged exhibits and demonstrations of myxomatosis, caseous lymphadenitis, "scabby mouth," methods of cultivation of viruses in chick embryos, heritable epithelioma of the sheep, urinary calculi, hair balls, cultures of bacteria, including smears showing effects of treatment with penicillin and various procedures in vaccine production. The staff of McMaster Laboratory gave demonstrations of the effects of calcium deficient diet on the teeth of sheep, the life cycle of hydatids, a display of internal parasites of sheep and also ticks, several laboratory procedures showing electromicrophoresis and different impurities in wool. Microphotographs of fertilisation of ovaries were also shown.

The Museum, dissection room and Stewart Theatre were also open for inspection.

In the dissection room, there were demonstrations on the teeth of domestic animals and also general displays of dissections.

The public showed their interest in the work being done at the Veterinary School by the numbers in which they arrived to inspect the School.

FILM COMMITTEE REPORT

THE Vet. Society has endeavoured to present an entertaining and convenient form of education through the Film Committee. To do this, the Committee has presented weekly screenings of films of veterinary interest in the Physiology Lecture Theatre. Students and Committee alike are indebted to Profs. Carne and Emmens, the University, other members of the Staff, to students who have unfailingly presented fair criticism and to the numerous organisations who have kindly lent us films. Since August of last year, over fifty various films have been screened and the average audience has been just under a hundred students. The value of the undertaking may be nil—may not? However, as we proceed, we hope to make this form of education of significant value. To aid this, the Committee has acquired the use of a silver beaded screen for better presentation and is ever on the lookout for new and better films. —Kevin B. Gardner

NOTICE: It pays to advertise:

"Lonely Hearts:"

"I'm fit, fat, forty and forsaken—but I'm still lots of fun."

"Wanted—Board and room, by a man past middle age with a private family, where he can have all home comforts. Can furnish good preferences. Would also like to correspond with a widow past middle age for pleasure, pastime and results."

Work Wanted:

"Receptionist, experienced, attractive blonde (can prove it!), makes excellent first impression; married six times . . ."

Urgent:

"Wanted—cave, pen, paddock—or whatever it is one uses to raise 9 children. We apologise for having them, but got them before houses and apartments were so scarce, and find it illegal to drown them."

For Sale:

Baby carriage. Bought in error. Never used. Reply 10E Bachelors' Club.

Rooms to Rent:

Lady, furnished bed-sitting room, kitchenette; fast as possible, separate entrance.

Home Wanted:

Family of three desiring house or garage. Rowdy, smoke, drink, play the bagpipes 'till 2 a.m., 16 mth. old child breaks everything. Was discharged from the Navy 6 mths. ago, after 3 years' overseas.

Wanted:

Typist, smart enough to be worth £16.0.0 per week, yet dumb enough to start for less.

Letter to Editor:

Sir,

I wish to thank you for advertising for "Girl wanted to work in a Dark Room" for me. The response was most gratifying. Of the four successful applicants—only *one* knows anything about photography.

SO YOU'VE REACHED FIFTH YEAR

"Much study hath made him very lean,
And pale and leaden-eyed."

Centaur 1944-45

THROUGH the years of this course, one has often heard such queries as "I wonder how many will finish?" or "Where did we all come from?" It is hoped that this article will help to answer these and other questions, which often come to the fore. Thanks are due to the 73 members of Fifth Year—Final Year is not necessarily synonymous you know—for supplying the bulk of the information from which the figures have been drawn.

From whence came the people with whom we have been associated through the years?

TABLE 1. Differentiation on a Home Basis

	1st 1947	2nd 1948	3rd 1949	4th 1950	5th 1951
N.S.W.	88	60	45	41	36
Victoria	4	18	16	16	14
N. Zealand	–	17	14	15	15
Sth. Aust.	3	5	3	3	3
Tasmania	–	2	2	2	2
Queensland	1	1	1	2	2
West. Aust.	–	1	–	–	–
Ceylon	–	2	1	–	–
U.S.A.	1	1	–	–	–
New Austns.	–	–	1	1	1
Total	97	107	83	80	73

If we consider the Veterinary Course as a Five Year Course, the base or starting year for the present Fifth Year Student is 1947, and they would represent a total of 73 x 5 = 365 academic years. However, 396 academic years are represented, that is, there are 31 extra or repeat years.

TABLE 2. Length of Time on Course

49*	have no repeats.	i.e. on course 5 years.
17	have repeated one year.	i.e. on course 6 years.
7	have repeated two years.	i.e. on course 7 years.

(Includes four N.Z. Students who did First Year over a two-year period approved by the N.Z. University System.)*

It is possible to tabulate the status, that is, new to a year or repeating a year for each of the five years. The figures appearing in brackets represent the number of female students in each instance.

TABLE 3. Status and Sex Tally

	1st 1947	2nd 1948	3rd 1949	4th 1950	5th 1951
New	75(10)	87(3)	73(3)	71(1)	72(1)
Repeats	22 (2)	20(1)	10(*)	9(–)	1(–)
Total	97(12)	107(4)	83(3)	80(1)	73(1)

Of those that we have left behind from year to year—and there are only 28 in Final Year of the original 97—many have forsaken the Faculty, while others trail us.

TABLE 4. Failed but still in Faculty

Failed	1st	2nd	3rd	4th
	3	16	9	5
Now in	3 in 3rd	2 in 3rd 14 in 4th	1 in 3rd 8 in 4th	5 in 4th

TOTAL 33

Members of the Year have also sat for a total of 137 posts, the highest individual tally being 8. These posts have been taken in every subject of the course. Combined with failures, resulting in repeated years, we have a total of 222. This data on an individual subject basis is represented in Table 6.

As previously mentioned, only 28 of the original 1947 First Year Sydney University Class remains, and of this number only 11 have reached final year without a post or repeat year. All in all, only 23 of the total have no blemish to their record.

On the brighter side of things, however, there have been many honours.

TABLE 5. Honours

Credits	201	2 75 per head
Distinctions	57	0.78 per head
High Distinctions	11	0.15 per head

The distribution of these Honours is indicated in TABLE 6 on an individual subject basis.

TABLE 6. Failures and Honours on a Subject Basis

	Failures	Credits	Distinctions	High Distinctions
Chemistry I	19	7	2	-
Physics	10	4	-	-
Botany	7	8	3	-
Zoology	9	10	1	-
Anatomy I	16	-	-	-
Physiol. I	9	11	2	3
Biochem. I	8	11	1	-
Zootechny	8	12	4	-
Histology	5	20	1	-
Anatomy II	18	8	5	-
Physiol. II	12	18	8	1
Biochem. II	14	11	3	1
Genetics	2	11	5	1
Pharmacology	5	21	10	2
Nutrition	7	12	1	-
Pathology	4	15	6	-
Vet. Surg. I	13	-	-	-
Vet. Med. I	13	-	-	-
Vet. Bact.	13	10	1	3
Vet. Parasit.	14	9	3	-
Mat. Med.	16	3	1	-
Totals	222	201	57	11

If now a point score system be applied to each member of Fifth Year on the following basis:

High Distinction ..	+3
Distinction	+2
Credit	+1
Post	—1
Repeat	—2

it is possible to represent the year as in Table 7.

TABLE 7. Individual Assessment of each Final Year Member

Total	No. in Group	
+26	2	
24	1	
16	1	
13	2	
12	2	
11	4	
9	2	34
6	2	
5	3	
4	5	
3	1	
2	3	
+1	6	
0	5	5
—1	10	
2	3	
3	3	
4	7	
5	3	34
6	5	
7		
—8	2	
	73	

It is of interest to note that although five have a total of 0, not one individual has had no repeats or posts and no honours. If an extended table, under six columns, headed: Repeat, Post, Credit, Distinction, High Distinction, Total, had been used, there would have been 43 combinations, the greatest total for any one combination being 3.

During the survey it was possible to obtain some information as to the desired post-graduate employment.

Six possibilities were listed:

Teaching Staff	0
Govt. Service	16
Primary Producer	6
Research	5
Private Practice	40
Miscellaneous	4
Total	71

The remaining 2 were undecided. Of the four miscellaneous, three indicated for the N.Z. Club Scheme and one for Meat Inspection.

I wish to record my thanks to Dr. Carne for making available the names and status—new or repeat—of each of the four years 1947-50. To Miss Oliver, thanks are due for preparing the questionnaire used for the collection of data, and to Mr. R. E. Moore, my thanks for help in tabulating the data so obtained.

B. C. Eastick, VET. V.

The Way of the Veterinarian

The way of the Veterinarian
Must e'er be a wary 'un.
In first year, in fifth year,
Or in his own practice
His path bears more thorns
Than the prickliest cactus.
For should he be one
Of the forunate few
Who shine all of first year
And second year too,
Then let him beware
Of Anatomy II.
In fourth year, I fear,
He must be on his mettle,
His handwriting, too,
In the finest of fettle.
A system of shorthand
I fear is essential.
Unless with fifth year
He should be influential,
His travels in fifth year
May be so extensive
I reckon that Gulliver's
Would prove less expensive
Then having (we hope)
Obtained a degree,
From worry and strife
He may feel himself free.
From this fond illusion
He'll shortly awaken,
To find that in clients
He's sadly mistaken.
Just one final word,
If this verse was tiring
For a good counter-irritant
Try blistering and firing.

P. F. TAYLOR, VET. IV.

SWABBING

AS the routine testing of racehorses for the presence of "dope" is assuming important proportions in the racing industry to-day, it would not be out of place to briefly describe the procedures usually followed out at metropolitan courses under the control of the major racing body in this State.

To the practitioner, particularly one with a clientele drawn from the racing fraternity, a knowledge of the methods employed might be considered of some value.

Active control of race meetings here, as in most parts of the world, is carried out by stewards appointed by the racing clubs. At present, the winner of each race is tested, but the stewards may also order the swabbing of other starters, viz., second place-getters, beaten favourites, etc.

Procedure:

After the winner has weighed in correctly, it is taken by its attendant, under the supervision of a veterinary steward, to the swabbing stalls, where it can be hosed and dried off.

Preparation of the saliva sample is as follows: 10 oz. of a sterile solution of 1% acetic acid is poured into an enamel saucepan. Three gauze packs are added, one of which, together with one third of the acid, is placed into a sterile bottle. This constitutes the "control". Using long-handled forceps, the remaining two packs are alternately placed between the front molars of the horse, the attendant restraining it by firmly holding the headstall. The acetic acid acts as a mild salivary stimulant, and, as the horse chews, the resultant saliva drops into the saucepan. Swabbing usually takes about five minutes. The horse's mouth is then washed out, and the sample sealed, together with the control, in a numbered canister. This procedure is witnessed by the trainer or his representative, who signs a statement to that effect.

It is found that the majority of horses, particularly once cooled down, are reasonably amenable and require little restraint, apart from the attendant firmly holding the head.

The preparation of the urine sample is similar, except that mehtylated spirits, in lieu of acetic acid, is used, together with gauze strips in the collecting saucepan to minimise the sound of splashing when the horse urinates.

The animal is then led to a quiet stall, with straw underfoot, and either haltered or let loose, according to custom. The time interval before the horse "stretches" varies, mares and geldings usually doing the right thing sooner than entires. Various subterfuges are employed, i.e., melodious whistling and forking of the straw about the horse's feet.

After collection, the sample is sealed, together with the controls, in a numbered canister, as before, and duly witnessed by the attendant.

Statistics over the past 2½ years show that urine has been collected from over 90% of all horses swabbed. This sometimes entails long waits and even, on occasions, necessitates a member of the staff going back to the stable with the horse.

Both saliva and urine canisters are then taken to the stewards' room and conveyed to the laboratory after the last race.

At all times, the horse is under the supervision of the trainer or his representative and a member of the veterinary staff. Connections are also permitted to appoint their own private analyst to be present at the opening of canisters and testing of samples.

R. H. KILLICK, B.V.Sc.

THE UNRESTING CELL

By J. D. BIGGERS

A FEW years ago an American, Professor Gerard, published a new elementary biology book called "Unresting Cells." This book was well received by many, for it presented, in a simple form, one of the most important present day biological concepts. Its title, in a nutshell, summarises the essential physiological features of all living matter.

The functional properties of cells form the basis of general physiology. It is here that physiology exists as a separate discipline and can be considered a pure science in its own right. It is at such a level that animal and plant physiologists, bacteriologists, virologists and geneticists have a common meeting place. The one thing in common to all these groups of biologists is

that they study living cells. Also they depend greatly on an interchange of ideas with the other fundamental sciences.

Recent years have witnessed considerable progress in the study of cytology and general physiology. The cell theory is now over 100 years old. In effect, it states that the basic biological units are structures consisting of discrete masses of protoplasm, which may exist as separate individuals or in close association with other units. For many years the histologists examined these structures in dead material. They described many types of cell and also sub-units within cells, such as the nucleus, chromosomes and the cell membrane. This morphological concept of cells led to their being considered as rather constant unchanging structures, once they had been formed.

It was not until the 1930's that our concepts of the cell began to be revised. It is a well known fact that progress in one branch of science is greatly facilitated by progress in another. In the field of general physiology this has been amply illustrated. The advances in physics and physical chemistry since World War I have led to great strides in our knowledge and ideas of cell function. By way of illustration, three examples will be briefly discussed. These are:—

(1) isotopes
(2) protein chemistry
(3) optics

(1) The discovery of the heavy and the radioactive isotopes has been one of the most far-reaching discoveries of this century. It was in 1940 that Schoenheimer published his book, "The Dynamic State of the Body Constituents," in which he showed how isotopes can be used to track down the fate of substances administered to the body. The most important result of this work is the finding that the cells are in a constant state of activity; within them, substances are continually being broken down and resynthesized. Thus, for example, in a short time a "labelled" amino-acid may enter into a protein molecule without there being any noticeable change in the amount or nature of that molecule over a longer period of time. The earlier analytical techniques had suggested that the protein molecule was constant in nature throughout its existence but the introduction of isotopes has shown that such large molecules are involved in continual change. Similar studies with isotopes have shown that the unequal distribution of ions on either side of cell membrances is due, not so much to peculiarities of the cell membrane, as to their partition involving the expenditure of the energy by the cells themselves. For example, this has been found to be the case in the nerve cell and the red blood cell.

(2) The field of protein chemistry has made notable advances over recent years, although our knowledge of protein molecules is still very superficial. The functions of proteins are manifold—structural, contractile, enzymatic, hormonal and immunological. One notable advance has been in the methods of isolation. This has been well exploited in the fractionation of plasma proteins. Here, two techniques have been of great use; (a) the Tiselius electrophoresis technique, the results from which play an important part in ascertaining the 'purity' of the factions, and (b) the low temperature ethanol fractionation procedures which minimize the possibility of changing the protein molecule (denaturation) during the fractionation. Having obtained 'pure' undenatured proteins, it is then possible to study their structure. It is now realized that the arrangement of the amino-acids is the important property which determines the high biological specificity of many proteins. The molecules of many of these specific proteins are globular with only a few of the amino-acids on the surface. Only now are techniques being evolved to study these surface arrangements. The greatest strides in this field have been made in the realm of immunochemistry. A particularly interesting example to the endocrinologist is in connection with the pituitary hormones since here the same cells may synthesize, under various conditions, more than one highly specific protein molecule.

(3) Advances in optics in recent years have led to the introduction of the techniques of X-ray diffraction and electron microscopy. By means of these techniques, it has been possible to probe into the sub-microscopic domain. The techniques have been of particular use in the study of the structural and contractile elements of the cell and its secretion products. As a result of such studies, we can describe the molecular changes in the proteins of muscles when they contract. Also it is now possible as a result of similar and other studies to ascribe to collagen fibres a dynamic metabolic significance rather than a purely structural role.

In this short article only a few of the powerful techniques being applied to cell physiology have been mentioned. They all, however, lead to this basic concept of continual activity and change with an expenditure of energy. Nowadays the biophysicist describes the structural framework of cells and their physical chemistry; the bio-

chemist describes the chemical changes of which cells are capable, but it is the task of the cellular physiologist to describe how the normal cell works and reproduces and also lives in close harmony with its neighbours.

Up to the present time the activities of these three groups of workers have firmly established the concept of "The Unresting Cell," and it now forms a firm background to future progress. The field is still largely unexplored and to those of us interested in pure physiological research, it is of enormous fascination and interest.

ON LOCATION

ON 20th January, 1951, Mr. P. V. Merewether, BV.Sc., asked me to relieve him as veterinary surgeon to the film company at Port Augusta, South Australia, to enable him to return to his New South Wales practice.

The Twentieth Century Fox Film Company were making a picture called "Kangaroo," or rather, should I say, that super-colossal epic of the Australian Bush—colour by Technicolour, and produced by none other than that mighty tycoon of the film industry, Darryl F. Zanuck—even if he wasn't there.

The veterinary surgeon's job was supervising the management of the animals used in the film, their health and well-being, plus advice when needed on any special effects such as staggering, drought stricken cattle.

Also, the Company is apparently compelled by American law to have a veterinary certificate from the veterinary surgeon, who must be present at all times while animals are being filmed, stating that no cruelty has been inflicted, and that all the animals were well cared for, otherwise the film cannot be shown in America.

Fortunately, Mr. Merewether, B.V.Sc., had done most of the hard work, especially with the drought stricken!! cattle, and I think he would now be a most competent judge of the dose rates of chloral hydrate.

The stock population consisted of approximately 900 head of cattle, thirty horses, and sixty to seventy kangaroos of various sizes and ages.

Other animals used as needed were koala bears, camels, bullock teams, snakes, lizards, all sorts of birds and even ants were photographed.

I was quite happy to leave all these supernumeraries in the hands of the appropriate expert tending them—especially the tiger snakes. The remark of the tiger snake expert is worth printing. This casual gentleman had several tiger snakes, none of which were defanged, and when asked if he took the precaution of carrying anti-venom, replied that it wasn't necessary, as it was only a hobby and not his full-time job, and anyway, the stuff was too expensive.

Up to now, he hasn't been bitten!

With the horses, the stars had their own mounts, chosen especially for looks and quietness, especially the latter, as Maureen O'Hara couldn't ride at all, and Finley Currie, a fine old gentleman, was 73 years old, and had done very little riding.

Like the stars, these horses had their stand-ins, and all the action shots with stampedes, galloping horses, and falls are all done by the stand-ins, and their stand-in horses.

No expense was spared on these principal horses, and economics of treatment didn't have even a mention where they were concerned.

The remaining horses were supposed to be stock horses, used in the film by the "stockmen" —some who were, and others who weren't.

As most of these horses were unaccustomed to stock work, we had our fair share of sprains, cuts and bruises, but very few of them would be out of action for more than a few days at a time.

We had plenty of labour in the horse lines, and I was blessed with the presence of a very keen and hard working third year vet. student, so I didn't have much to do.

A strangles outbreak had been effectively dealt with by my predecessor before my arrival, thus the horses presented no real problem.

The cattle were under the charge of an old and experienced drover who knew his job, and did it well. At first they were a fairly wild mob, but eventually they became so bored with the proceedings that it was hard to raise them above a walk for the stampede scenes.

Where a few yells would start them once, it eventually took a few heavy charges of dynamite planted close by to make them appear even interested.

The only troubles encountered with the cattle were lameness due to stony ground and "pink eye," but not in serious numbers, and any bad cases were cut out and put in a paddock for spelling. The kangaroos presented the big headache, and I very soon found out that the local "experts" knew just as much as I did, which was that some had pouches and they hopped.

At the time of my arrival, the kangaroos were dying as fast as they were being caught, but by providing decent watering facilities and by improving the method of capture, mortalities very gratifyingly dropped to almost nil.

The trouble with the water was that the caretaker had thoughtfully placed small buckets around the compound—about ¾-mile in circumference—but had unfortunately forgotten to clean out the paint for which they had been used as containers.

This seemed to be a reasonable explanation of the enteritis seen at post-mortem, and so it proved to be when the buckets were removed, and proper troughs installed. The chemist substantiated this belief also.

The method of catching was highly exciting, even if not very productive of living kangaroos.

A spotlight-equipped Land Rover, would go out cross country each night, and on sighting a 'roo, the idea was to drive up alongside, grab him by the tail, jam on the brakes and fall over the side on top of him.

When it is realized that the 'roo is hopping flat out and dodging all over the place, often through trees, and the country has numerous dry waterways, up to five feet deep, all over it, it can be seen that its a little more exciting than sitting at home with—a book, shall we say.

Many of the 'roos were being bruised—not to mention the catchers, so dams were netted in, and many were caught in this way without injury.

So much for the animals, so a word about the living conditions and the people you work with.

We were housed in prefabricated fibro houses on the outskirts of Port Augusta, and travelled each day to the various locations. Although it was quite hot most of the time, each hut was equipped with an air-conditioning unit which made things very pleasant.

The huts were serviced daily, this comprising cleaning out, removing the bottles, making the bed (complete change of linen twice weekly), servicing the ice box—they provided the ice only, though, changing towels daily, and providing a cake of soap.

Meals were just like you see in the Saturday Evening Post, only better because you could taste them. We became a little bored with chicken and turkey, and during the last fortnight, when only a few of us remained, even caviare and French mushrooms failed to raise more than an impolite remark about peasants' food. However, I must admit I was quite pleased to get back to some good old Australian mutton.

The stars appeared to have an easy job, but must have been very bored. Autograph hunters, and maintaining a polite front to the public must have been their biggest problem.

Actually, the stand-ins did all the really hard work, and in this film, the actors seldom had to remember more than a few lines at a time—just as well for one lovely young fellow, I'm sure.

On the technical side, each department was run by a specialist who had been in the game a long time, and each had several assistants, also very capable.

If they weren't, they wouldn't have been there, as competition in the film world was apparently very fierce.

Most of the technicians were first-rate fellows, who would go out of their way to help or explain something to you, and it was a pleasure working with them. This could have been the American attitude to the professional man, though, which differs so markedly from the Australian, and even the vet. was regarded with a little awe and much respect.

As I mentioned before, economics of treatment didn't matter. What was wanted were results, and as long as they got them, the cost didn't matter.

I was given absolute freedom to order whatever I thought necessary, something I am just beginning to appreciate now that I am in a Government veterinary officer's position.

Altogether, the job was very interesting, something away from the usual run of things, and to be recommended to anyone with two or three months to spare.

My only advice is to use lots of sweet-smelling antiseptics with fancy names, and never, never forget to mention vitamin pills.

The film itself should be worth seeing, if only for the scenery, and even if the original script did call for flocks of emus flying overhead—CUT.

A. E. HUMBLE, B.V.Sc., R.D.A.

SPORTS CLUB

Despite a roll of only 258 members, the Veterinary Faculty, this year, proved itself to be the foremost sporting faculty in Sydney University. When one considers that effective strength is only 190 (i.e., without Fifth Year) our record in University and in Inter-faculty sport is, in fact, something of which each one of us can be justly proud.

In University Sport we have been well represented in most of its sub-divisions, and those amongst us who have added prestige to our faculty include:

Keith Gudsell, who has achieved the acme of attainment in Rugby Union by representing Australia in all the three tests against the famous "All Blacks". He now ranks with the very few who have represented both Australia and New Zealand at Rugby Union.

Ran Jacobs, a fine sportsman, who has proved himself a capable and energetic captain of our University First XV, also winning the Herald's "Best Player for 1951" Competition in Rugby Union.

Both Ran and Keith received Blues in Rugby Union for the 1950 season. Our congratulations to them both.

In Australian Rules, the University teams—of which are very largely comprised of our Interstate members—Blues were awarded to Doug Fenwick, and Kevin Jubb; and our congratulations are extended to them. The captain of the Firsts in this code is P. McCormack of Third Year, who despite difficulties, has handled his team well.

John Holt and Charlie Thomson both received Blues for Shooting. They have shot consistently well throughout the year and our hopes of victory in the Interfaculty Competition in third term rest on their capable shoulders.

Geoff Gee who received a blue in Athletics, must be congratulated on his fine record in University and Inter-Varsity Athletics. He is now one of the leading broad jumpers in the State and should gain selection in the State team during the coming season.

In the University Championships and Inter-Faculty Competition, he nearly won the Competition on his own, gaining no less than 8 points.

In Hockey, Wally Ramsay, of New Zealand, has distinguished himself as goal-keeper for the First XI. He was selected to represent Sydney Metropolitan in the N.S.W. Country Senior Carnival this winter, and his many fine "saves" played a big part in enabling the team to win the Premiership.

Peter Malone, as centre forward for the Thirds, ended the season as the Hockey Club's leading goal scorer.

However, those mentioned above are only a proportion of our members who have spent spare time on Saturday afternoon representing University in one of the many sports.

It is in Inter-faculty Sport though that we have shown our ability, and despite a strong challenge from Medicine, the many points gained by our sporting teams should gain for us the Penfold Inter-faculty Shield for the first time in many years.

The individual results are set out in the accompanying Committee Reports, but a summary of results is as follows:

Athletics: No Inter-faculty points were gained in Athletics. However, we did win the Tug-'O-War!

Boxing: No representatives.

Cricket: Played in Third Term.

Hockey: 3rd, gaining one point in the Inter-faculty Shield.

Rowing: 1st, gaining three points. At long last!

Rugby: 2nd, gaining two points. Narrowly beaten by Medicine in the Final.

Shooting: Decided in Third Term.

Soccer: 1st, gaining three points. Our team was undefeated.

Swimming: 2nd, gaining two points. Considering the number representing our Faculty, this was an excellent result.

Tennis: No points gained.

At present, we have gained 11 points, with two sports yet to be determined.

Not to be forgotten are the sporting activities of the veterinary women (No, never—Eds.). Although the range of such activities is not as great as in men's sport, over 95% of the fairer members of our Faculty have represented us in one sport or other, as well as being keen sideline supporters in the men's sports (see Women's Notes.) Congratulations, girls. We are very proud of you.

The support offered from the sidelines in most sports, by both staff and student members, was greatly appreciated, and was an expression of the solidarity of our Faculty Spirit, contrasting greatly with that shown by other Faculties.

A noticeable feature this year was the presence, for the first time, of Fifth Year, who were with us all the first term. A superiority complex, quite evident in this year, resulted in challenges which were often fought out to desperate finishes.

After beating the Staff at Cricket, Fifth Year challenged and also beat "The Rest". However, "The Rest" squared by decisively beating them in Rugby.

Before leaving us, though, Fifth Year won the Beer Consumption Contest at the Veterinary Ball and then left happily.

P.S. This result was repeated at the Barbecue later in the year.

In other reports included in this Journal, mention is made of the small percentage of active participants in the Faculty. While this is only too true, in all fairness, I must remind readers that there were many more who were willing to play if they had been selected. However, with the possibility of winning the Penfold Shield, selections were usually restricted to those who had played that particular sport before and who had shown some ability at the game. While there will always be a surfeit of Rugby Union players, our Soccer and Hockey teams, of necessity, must always include some who have not played these games before. Selectors are, therefore, forced to select only those players, who, by their keenness, deserve a run for the Faculty. It is hoped that next year more members will take an interest in these games and make themselves available for selection.

Remember, the importance of physical fitness cannot be too strongly emphasised.

Finally, I wish to thank all those who, by their active participation, represented us in sport during 1951; to express my appreciation for the support given our teams from the sidelines, by both staff and students; and to hope that for many years to come, Vet. maintains the record that it set this year.

P. H. MALONE, HON. SEC.

GOLF DAY 1951

TO a chorus of muttered curses and delighted cries ("Portway's hit one straight!"), 25 devotees of the royal and ancient game teed up on Easter Tuesday last. This year with Pennant Hills in good condition and reasonable weather, the Staff-Students match was fought out in a titanic struggle; the students, aided by a fighting win by "One-up" Maxwell, scraping home 3-2. "Pro." Morris, as well as tying up "The Demon," took out the handicap event, while the McManamny trophy for best off the stick fell to John Holder, who can now leave the School content.

'Twas good to see that quite a few stalwarts will be left behind to keep alive a most enjoyable day—more should join them. Once again our thanks to the organising committee and to Mr. Webb.

ATHLETICS

THIS year the interfaculty athletics were incorporated in the University Championships, and once again we fielded a small team, in fact we had only three competitors.

Our men did quite well to total 9 points, just half that of the winners, Medicine. It is interesting to note that 16 of Medicine's points were scored by three athletes, and this seems to indicate that most of the scoring in these competitions will be done by regular athletes. However, this should not deter any sportsman worthy of the name from "giving it a go," and with adequate representation in this sport we could easily pick up some points for the Interfaculty Shield. Individual performances were:—

G. R. Gee: 1st in Broad Jump and Hop-step-and Jump, and 2nd in the Javelin.

P. Hungerford: 3rd in 440 Hurdles.

J. Arnott: 4th in High Jump with 5ft. 8in.

Vet. Sc. was, however, able to chalk up a great win in the tug-o'-war. The team, securely anchored by Jack Hurst and alternately whip-lashed by Rames jnr. and throat-lashed by Bede Morris, swept our Engineering opponents off their feet, to recapture the title for Vet.

ROWING

FOR the past four years the Vet. Science crew has been placed second to Engineering in the Inter-faculty eights. This year, with seven of last year's crew rowing, stroked by veteran Mal. Spittle, and in the bow seat for the fourth consecutive year—Dick Coward, the eight won the Inter-faculty title from Engineering.

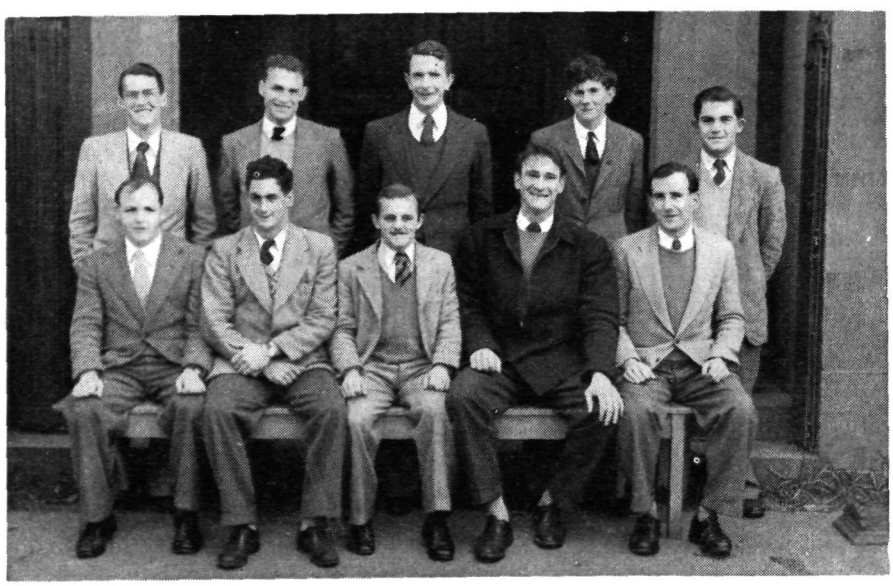
Rowing for the first time, New Zealander Russell Dreadon filled the two seat, and final years Peter Carter and Allan Jackson were seen to bend an oar from three and four seats respectively. Steadying the centre of the boat, John Hurst rowed five, and after coaching the Vets to victory, went on loan to the University Eight to help them break the Inter-Varsity three-mile record in Tasmania. St. Andrews lost a good oar to the Vet. crew in Peter Scales, who rowed six. Phill Knight for the second time rowed in the second seat. Cox Malcolm Shalders completed the crew, and some solid training was done early in Lent Term.

The weather was perfect for the race, and after winning their heat by three easy lengths from Dentistry, the Vets became favourites with the Engineers for the final.

In the Final, the VIII got away to a ragged start, and at the ¼-mile was lying second to Engineering. Stroke Spittle raised the rating, and with powerful leg drive, the VIII overtook the engineers to win by 1/3 length. It was a great day for the Vets, made all the more so by the fact that seven had cracked his oar at the start, and the race had virtually been won with seven men.

Once again our thanks are due to the Leichhardt Rowing Club for the generous way in which they made boats and training facilities available to the Faculty, and also to John Hurst for his organisation of the training.

Next year there will be several vacant seats in the crew, and it is hoped to hold a Fours Race as well. Those who trained and showed interest this year we look forward to as replacements for next year, and with a repetition of this year's spirit, Vets should have no trouble in retaining the title.



ROWING

Front: R. G. Coward, M. A. Spittle, M. J. Shalders, J. C. Hurst, P. J. Scales.

Back: J. M. Armstrong, R. G. Dreadon, P. R. Knight, S. Hopcroft, P. B. Lewis.

HOCKEY

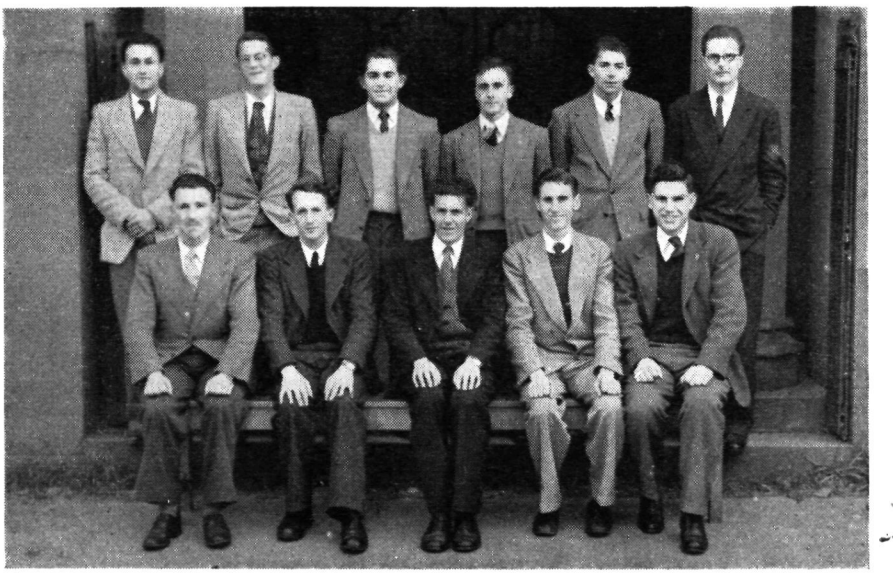
THE hockey season opened well with a win against the girls' team in a trial run. However, final year fielded a team which soon pinned our ears back by defeating us 1 nil.

During the Inter-faculty matches Veterinary Science produced some good team work and was unfortunate not to have turned the draws against Engineering and Medicine into fine wins. Much of the success of the team was due to the spectacular saves by Goalie R. Brooks, who kept some dangerous attacks out.

Veterinary Science finished the season in third position, thereby securing one point towards the Penfold Shield. The closeness of the leading teams is shown by the final point scores: Science, 10; Engineering, 10; Vet. Science, 9.

Game scores were as follows:—

Vet. Science v. Engineering, Nil all, Draw.
" v. Architecture, 2-Nil.
" v. Ag. Science, 2-Nil.
" v. Arts, Forfeit.
" v. Science, Nil all, Draw.
" v. Medicine, 1 all, Draw.



HOCKEY

Back: A. H. Brook, J. M. Armstrong, P. B. Lewis, R. T. Hayes, I. M. Parsonson, M. A. Gemmell.

Front: B. G. Johnston, J. W. Ramsay, A. L. Cook, P. H. Malone, J. B. Hopkins.

TENNIS 1951

Team: J. Collard; R. V. Hickson; A. Lascelles; G. Pulver.

This team, consisting of a majority of fourth year veterans, played with sufficient guile to both avoid the disgrace of outright defeat and to remain on the best of terms with the Bacteriology department, in whose most gracious time the matches were played.

Our defeat, therefore, 6 sets to 4 by Engineering in the first round of the knockout competition was not without its consolation.

Of our players, Alec Lascelles is a left-hander of class, and the remainder are right-handers.

The scores were:—

Lascelles & Hickson v. Middleton & Isaacs, 6-2, 4-6, 3-6; Lascelles & Hickson v. Whitehouse & Seale, 7-5, 6-4; Collard & Pulver v. Middleton & Isaacs, 6-2, 1-6, 3-6; Collard & Pulver v. Whitehouse & Seale, 6-8, 3-6.

SOCCER REPORT

THE feature of the early games of the season was that the Vet. Sc. team were unsettled, and unable to capitalise in the attack, which was in contrast to their good defence. Many of the games were won by a monotonous 1-nil margin. This in itself was no real indication of the standard of the play. This, however, is understandable, considering most of the players were newcomers to the game; but with experience they showed considerable improvement—as was evidenced in the last two games.

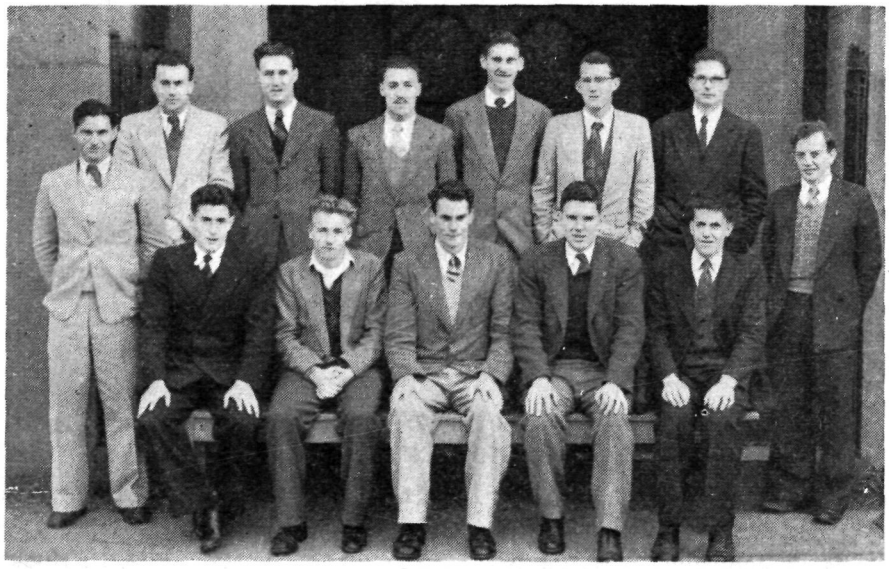
The weather on the whole was very good, only two games being deferred. As the competition progressed it became clear that Medicine and Vet. Sc., together with Engineering, would be in the final running. The engineers were unable to field a full team against us; but they were able to keep the score down to 1-nil by covering up well in defence.

After some adjustments to the team prior to the game against Medicine, the Faculty had a good win, eight to one, in what was expected to be their hardest game.

The season concluded with a rather abortive game against Arts, who fielded an incomplete team.

Scores in the Inter-faculty competition ware as follows: v. Ag. Science, won 1-0; v. Dentistry, won 1-0; v. Engineering, won 1-0; v. Medicine, won 8-0; v. Science, won 1-0; v. Arts, won 9-0.

In conclusion, the retiring committee would like to thank all those who took part in the season's games and helped to make it such a success; and to wish the succeeding committee all the best for next year.



SOCCER

Back: D. Charles, A. H. Brook, J. Thompson, B. G. Johnston, P. H. Malone, J. M. Armstrong, M. A. Gemmell, R. K. Dickens.
Front: G. R. Gee, D. C. Fenwick, K. J. Austen, J. B. Hopkins, A. L. Cook.

AUSTRALIAN RULES

ALTHOUGH not a sport for Inter-faculty competition, Australian Rules warrants a mention by the number and enthusiasm of its supporters in the Faculty.

Awards within the Faculty last year include:—University "Blues," Ken Jubb, Doug Fenwick; Best and Fairest, Pat McCormack; Best at Inter-varsity, Jack Arnott.

Those selected to play at Inter-varsity in Hobart during the August vacation this year include Armstrong, Arnott, Blogg, Clarke, Davidson, Fenwick, McCormack, Neasey, Spittle, Spotswood, Thompson and Tomlinson. We are hoping to repeat our win against Hobart, this time on their home ground, and may even surprise Adelaide and Melbourne.

FOOTBALL

ALTHOUGH the Interfaculty Football Competition of 1951 was well organised, the present type of Competition is not to be recommended, and should be replaced in future.

All games this year were played on No. 1 oval and, with one notable exception, excellent referees were provided. The teams were divided into two divisions, the two leading teams in each division playing off in the semi-finals and finals.

A number of trial games were played within the Faculty, including a game between teams representing the New Zealanders and the Australisns, which was won by the New Zealanders. From these trials, a team was selected and had its first game against Hawkesbury College 2nd XV. After a slow start the team played really entertaining football to win 28-0. After several more practice games the team developed combination and entered the Interfaculty Competition with high hopes.

Results of Competition matches: v. Dentistry, won 8-0; v. Agriculture, won 11-0; v. Architecture, won 23-0; v. Engineering, won 16-13.

Semi-final: v. Ag., won 16-6.

Final: v. Med., lost 3-6.

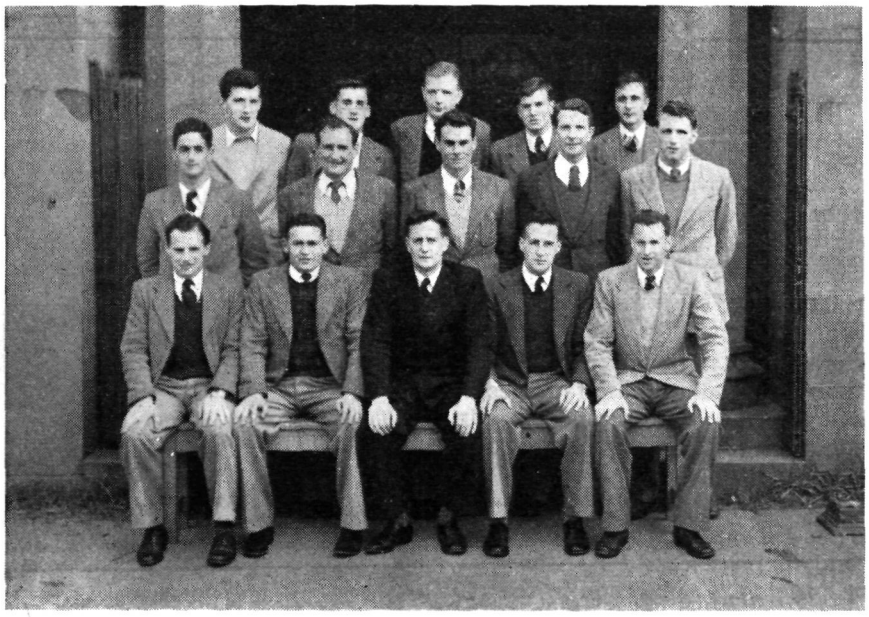
The team won its way into the Final with an unbeaten record and were favourites to beat Medicine, who had previously drawn two games. However, although the team played well, luck was not with them, and they went down 3-6 in a hard-fought match. It was a great disappointment for the team and the rest of the Faculty. Throughout the competition the forwards outplayed their opponents and gave the backs plenty of ball, which they used to advantage. The whole fifteen played with great team spirit, and this was a major factor in our relative success.

The support shown by the staff and members of the Faculty did much to get our team as far as it went in the Competition, and was much appreciated by the team members.

Our congratulations go to Keith Gudsell, who represented Australia this year, and also Ran Jacobs, who captained Australian Universities.

In conclusion, the committee would like to thank the team members for their efforts on behalf of the Faculty and to wish the team best of luck next year.

N.B.—See that you beat Medicine.



FOOTBALL

Back: K. V. Waldron, B. E. Wilson, R. G. Cumming, R. D. Jolly, J. T. Hayes.
Middle: M. A. Spittle, J. T. Neasey, K. J. Austen, P. R. Knight, G. H. McCormick.
Front: J. D. Stewart, C. C. E. Thompson, R. W. Berry, B. H. Bailey, R. G. Dreadon.

RIFLE SHOOTING

SINCE the resumption of shooting Vet. has never been placed lower than second in Inter-Faculty Competitions, and we have strong hopes of maintaining the record in this year's rifle match held in third term.

Last year's Inter-Faculty Match resulted in a great struggle between Vet. and Med., with the other Faculties right out of the picture. The Vet. team put a new record for the Match, but Med. bettered our score and went on to a well earned victory.

At 600 yards Vet. gained a narrow lead, and when Charlie Thomson finished with a 13 bull possible at 900 yards, Vet. seemed certain to retain their title. However, Med., shooting slowly in the improving conditions, made up the leeway and scored narrowly.

This year's match should prove equally interesting, with Medicine favourites on the strength of their many Inter-Varsity representatives to choose from.

In University shooting, Vets. have again been outstanding, but we are numerically weak this year and badly need some new blood.

John Holt was the outstanding Uni. shot in Grade Matches this year, and he was in great form in the Melbourne Kings, where he finished 17th in the Grand Championship (in a field of 800 shooters). John again earned his Blue and is Vice-Captain of the Club.

University Champion, Charlie Thomson, represented the Varsity at Perth, where he was equal top score for the successful Combined Varsities team. Charlie again earned his Blue, as did Geoff Letts, who has now graduated.

Don Tynan, a tyro this year, has shot remarkably well, his best effort being a possible with the Faculty Rifle in the Uni. Championships.

"Poss" Hayes, Peter Hungerford and Andrew's Shooters, Hans Lindner and Dave Irving, have also been shooting well this year, but Dave Roberts has been "trapped" and seldom shoots on the range nowadays.

Phil Knight has not yet been able to find time to practice because of work, S.U.R. activities and other "sports." Likewise Old Blue, Bryen Saunders, has not been seen in action this year—at least not on the range.

Inter-Faculty Scores: Med., 465; Vet., 463; Dent., 443; Eng., 441; Arch., 434; Ag. Sc., 425; Science, 376.

Vet. Team	600 yds.	900 yds.
Thomson	48	50
Stott	47	48
Saunders	46	45
Knight	46	44
Letts	43	46

Emergency: D. Roberts.

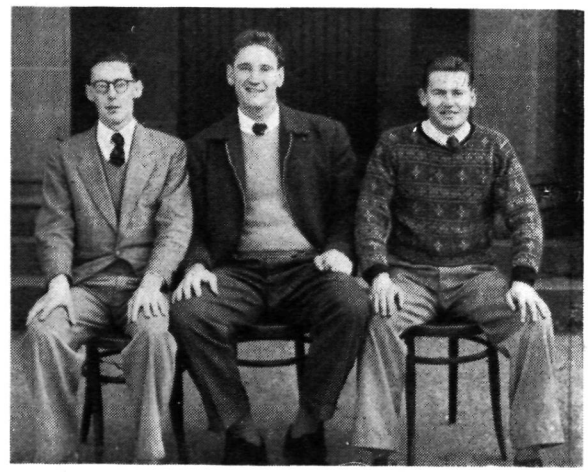
INTER-FACULTY SWIMMING 1951

THE Carnival was held at the North Sydney pool rather late in the season, due to being postponed a number of times.

It is regrettable that, in such a keen sporting faculty, the response to the entreaties of the committee should be so poor.

However, those who did turn up put on a surprisingly good show (including those few spectators who cheered us on) to gain second place in the competition. A vast improvement over previous years' accomplishment!

The faculty team comprised R. F. Larsen, a newcomer, who showed excellent backstroke form, and came second in his event; Col Thompson, who faced some formidable opposition in the 100 metres freestyle; Greg Chesher putting in his usual good sprint times; John Hurst, who despite old age managed to gain second place in the breaststroke, and Bob Jolly, who made his presence felt on the relay events. Most of those present saddled up at least twice during the evening.



L. to R.: G. Chesher, J. C. Hurst, C. C. E. Thompson

We sincerely hope that, even though we have no individual champions, we may win this competition next year by consistent place getting.

MAN TO MAN

TO-DAY—more than ever before, the University student is being subjected to harsh criticism by the sideline public. It is often implied that the average student does not fulfil the obligations he owes to the community in respect to the so-called privileges he is extended. Many would say that education has been made too easy and because of this, is too frequently abused. The more cynical go so far as to proclaim with biased fervour that our policy of democratic education is now producing a mediocrity—people of little social value or importance; who can do their own particular work but nothing more.

These are hard words. But rather than sit in submissive silence smarting 'neath the rebuke, far better for us to rise in one accord, and accept them, *not* as a rebuke—but a challenge!

But first, is it true that the progressive emphasis on specialised education and technical courses is weakening the idealism expressed and hoped for by a passed generation of students? Is it true that we as undergraduates are losing the true perception of education? If we were able (and why not!) would we remould the scheme of things nearer to the ideal of independence, freedom, and initiative? Is the University to be subordinated and subservient to policies imposed upon it from without? To ignore the existence of social change and refuse to adapt would appear as fatal to the University as it was to the mammoth of prehistoric times.

Without wishing to labour the point unduly, it would seem that someone owes someone a debt. With respect to the student, it would not be unreasonable to suggest that he owes the University a debt, however small, and should make a real attempt to appreciate the problems with which it is faced. It is unfortunate that too many regard the University merely as a stepping stone to a higher income and a more secure livelihood—but it is even more unfortunate that such a state has been more or less unwittingly thrust upon him. The thought, that within the University awaits an opportunity of developing insight and an intelligent outlook on a much wider field of social and cultured problems has evaporated, and why? The hackneyed phrase, "food for thought" is yours. Yet it must be obvious that, while the desires and demands of the student remain stereotyped and utilitarian, there can be little vitality in the University as a whole.

While it is easy to expose the fault of the student—it is just as easy to expose the fault of the University. Crowded curricula, shortage of staffs with far too inadequate and impersonal teaching, unsatisfactory correlation of classes, and many other defects, make the life of the student more and more harassed and encumbered as the years go by. And what is worse, they tend to discourage and dispirit, and to lead to the development of a fatalistic resignation and disinterestedness. There can be no future for the University, *as a University,* until *every* member of it is willing to make some effort to nullify disruptive tendencies within the University.

The necessity for intelligent action requires that everyone who is a part of the University and owes some loyalty to it, should sincerely ask himself, either as a graduate or undergraduate, if he has shown the slightest interest in, or made any contribution, however small, towards the welfare of, his University. If he cannot honestly admit this, then it is right and proper, that degree or no degree, such a man has not qualified as a responsible member of the University.

—Head and Neck III.

THE "THING"

[Of special interest to 3rd year.—Eds.]

Alas, one fatal Tuesday morn
  At half-past eight o'clock,
The thing, mistaken, followed him
  Who came to see the Doc.

The thing climbed up two flights of stairs,
  But he was travelling faster,
And so it reached the Theatre door,
  To wait there for its master.

To Doc this log did not behave
  Like any old oedema,
It would not pit on pressure but
  The Doc had hyperaemia.

Should we find the Thing—Beware!
  For while it may not bite us,
We have no doubt that Doctor T.
  Has faecal hepatitis.

ACADEMIC INTEREST ONLY

Blessed is he who has attained scientific knowledge, who seeks neither the troubles of citizenship nor rushes into unjust deeds, but contemplates the ageless order of immortal nature, how it is constituted and when and why.

—*Euripides.*

HOW often one hears the statement—"of academic interest only—no practical importance."

Is this state of mind the typical attitude of University students, and if so, is it derogatory to a professional man?

What is it that causes man to study the pigment in butterflies' wings, the oestrus cycle of a giraffe, or the optical resolution of racemic acid.

To quote the words of Alexis Carrel, "Curiosity is a necessity in our nature, a blind impulse that obeys . . . Curiosity impels us to discover the universe. It inexorably draws us in its train to unknown countries. And unclimable mountains vanish before it like smoke before the wind."

A university course could perhaps be divided into two schools—one of practical use to the technician, the other of interest and use to the discerner and the seeker of truth. It is the latter

Too many people enter in courses such as Vet. Science and Medicine with the mind of a technician. They are there to learn what is of immediate practical use to the clamouring public. They are not there to be burdened with the chemistry of muscle contraction, the new theories of neoplasms, or the movements of the ruminal sac. They are there to blindly learn subjects, and almost as quickly forget, in order to gain a degree and then to go out into the world to dispense and to treat.

Have these people in their blind hurry lost something, rather than gained? Curiosity—has it been dulled by thoughts of, "it is not for us to find out—to seek"—or has it remained dormant to flare up once the shackles of academic learning are shed and is free to practise? Is it for us, the undergraduates, to say, "it is of no practical importance?"

In 1930, when the first atom was split, atomic physics was of "academic interest" only. In 1945 —only 15 years later—it had stepped from this position into one of basic importance to every human being on this earth.

To the incurious, to the technical tradesman, this subject would have been ignored, to the thinkers and also the practical man it presented a challenge, a challenge which when conquered may be of the utmost practical use to humanity.

Vet. Science has not been designed in Sydney University to produce an entirely practical tradesman, nor has it been designed to produce an outright research man. It has attempted to produce an intermediate—a thinker, a practical man, and above all—a curious man. It is constituting its part in building the citadel of science, it is doing its part to reach into the unknown and provide an answer. Its part will be destroyed and removed if the cancerous thought—"of academic interest only"—is not removed from the minds of most of the students.

Our destiny is in our hands. On the new road, we must now go forward. —J. Holt III.

"ONCE UPON A TIME–"

ONCE upon a time there was a beautiful young girl who did an ugly old woman a good deed, in return for which the old woman gave her a black kitten, at the same time enjoining her that, though she might play with it and lavish her affection upon it, never, never must she kiss it on the mouth. The young girl and the kitten became constant companions as the weeks went by until one day, forgetting the old woman's instructions, the girl kissed the black kitten on the mouth and immediately there appeared before her a handsome young prince of striking stature and in every way "easy on the eye." On seeing the young maid's bewilderment the prince explained that he had been turned into a black kitten by an ugly old witch, and that the kiss on the mouth by the young girl had released him from the spell. "And now," he said, taking her by the hand, "you shall be my wife and rule my land with me," whereupon the young maiden burst into floods of tears. Pardonably astonished at this display of emotion, the prince went on consolingly: "But what are you crying for? You will be rich and have many beautiful clothes; we shall have children and visit all the far-off lands you have read about in books!" The girl increased her sobbing and the bewildered young prince, taking her in his arms murmured soothingly, "But what are you crying about?" To which the maiden replied dismally: "Oh, dear! And to think that only yesterday I took you to the vet." . . . .

ZOOTECHNY IN THE NEW CURRICULUM

By F. WHITEHOUSE, B.V.Sc.

GOULD'S MEDICAL DICTIONARY defines Zootechny as "The science of breeding and domesticating animals." Henderson's "Dictionary of Scientific Terms" takes in a wider sweep, and after giving its Greek origin (zoon, animal; techne, craft), defines Zootechny as the "Science applied to the art of breeding, rearing and utilising animals."

In both concepts the subject is biological, intimately concerning domestic animals (and birds) and with specific emphasis on "Science." So it differs from the loosely termed but all-embracing subject, Animal Husbandry, which includes all farming operations except those in which animals do not participate as producers, transporters or consumers.

Although the term "Biological Animal Husbandry" is, in a sense, a redundancy, it emphasizes the centrality of the individual animal and its husbandry, in contradistinction to those studies that revel in stratospheric flights amidst statistical data that all but eclipse the animal or animals inducing them. The individual is all important, the alpha and omega, so to speak, of Zootechny, which could be synonymised as "Fundamental Animal Husbandry," and as such it lies dead centre in the constellation of subjects forming the veterinary curriculum, touching, influencing and shaping their development.

Though fundamental, it is not, when studied at university level, foundational in that it is, itself, a superstructure based on the four science subjects taken in first year and on a university knowledge of veterinary anatomy, physiology (including endocrinology) and biochemistry.

Recognising this, the Faculty has recently made certain far-reaching and logical changes in the curriculum that should be hailed with enthusiasm by students.

In the past, students in their first year have been required to attend a detailed and extensive course of studies for which, by previous education, they were not prepared. This meant that the subject was taught at one level and received at a lower, and this deficiency was not rectified later in the course. Interstate students who joined the veterinary course in March of the second year were in a worse position in that, as the class in Zootechny I Special, they had to attempt the same course in a third of the time.

In second year the course in Zootechny had to be attenuated so that the genetic aspects could be presented as a separate course, Livestock Genetics, in third year. This necessitated the use, in the former year, of a restricted terminology that misled some students and other persons into believing that the course was at a much lower level that it really was.

As from March, 1951, Faculty has lifted Zootechny from first year and thus has made it possible to recast the whole subject on a logical basis so that each section can be preceded by earlier and collateral work necessary for its study and understanding—at University level.

First year students are now free "to bend the bow" with their Science confreres since, for the first time, they face the ordeal in November with but four targets before them, as in Science. Their fellow students look forward with pleasurable anticipation to the scorings of the yearlings.

Their third term is now enriched by a lantern-epidiascope lecture each week on breeds of livestock, a course intended as background knowledge to enable students to make the optimal use of the summer vacation.

The Zootechny I and II we knew and Livestock Genetics, the keystone of the Zootechnic arch, have been cast into the furnace of critical thought, to be drawn and refashioned to form a mosaic carefully dovetailed, and, at the same time, chronologically adjusted. Maybe a few sections could be postponed with academic advantage to fourth and even fifth year, but that nut can be cracked at a later date. The new Zootechny I (second year) and II (third year) include the substance of the erstwhile courses in Zootechny I, II, Special and in Livestock Genetics, and their re-allotment has permitted of their extension and intensification. The readjustments have been particularly acceptable to interstate students in that, not only has Zootechny I Special disappeared, but the practical course in Wool Studies at the Sydney Technical College has been made available (for the first time) to them. Lectures on wool fibre and fleece characters can now be interpolated to dovetail with concurrent practical exercises, and thus students are led into a new world of knowledge, the merino fleece, the very heart of Australian economy.

The new course is a composite one, the sequence being based on a two years' continuity. The examination results at the end of second year are of assessment value to the staff, honours being awarded for the course only on the completion of the third year examination.

The lecture course falls into three main compartments, Animal Management, Farm and Station Management of Livestock, Breeds and Breeding. The first named deals with the welfare of normal domestic animals, their care and management. It is that portion of the work in which the student and the animal "rub noses." The animal is never out of sight or out of touch, as it were, and its all pervading and constant nearness divorces from the student's mind the "octopodian" bricks, mortar and concrete that engulf the city dweller.

In the country "Farm and Station Management" hold the student enmeshed, the meshing being of two kinds, that which has created the country store and is economic in nature, the other a flesh and blood meshing, that of the animal itself. At this stage of the curriculum the former is in part bypassed, the management of livestock remaining within focus. Naturally this deals with farm and station constructions of various kinds, but its amplitude is nation-wide, encompassing such subjects as district differentiation due to geological, climatic and botanical variations, types of grazing and of farming properties, with special reference to their livestock inhabitants, establishment and year-round management of properties from the biological angle.

One does not hesitate to say the greatest advance in the new set-up and of most appeal to students, is the gathering of the threads that link up those sections of Breeds and Breeding that have, in the past, been kept discrete. This enables one to focus attention on all aspects appertaining to a species, or a breed, and genetics is the flux that permits efficient welding of the various ingredients. All breeds of livestock are dealt with on the following lines: ecology, identification, characteristics, adaptations, market types, routine breeding, breed improvement, uses as purebreds and crossbreds. Evolution is linked with modern developments, strains of livestock linked with district differentiations. Genetics is used to interpret livestock data and problems. Breeding routine on stud and commercial properties is built on a detailed knowledge of breeding cycles which is based on physiology including endocrinology.

This brief survey would be culpably incomplete if mention were not made of the scheme to direct students to the gaining of practical experience in all farm operations pertinent to optimal development. After working on each property, the student is required to obtain from the farmer a "pro forma" specifying what he has actually done or observed to the satisfaction of the farmer. These authoritative statements are submitted in book form at the commencement of fourth year, and Faculty regards these experiences as foundational, practice and theory being welded to produce the veterinarian sought by an enlightened community.

TRAINING A TROTTER (OR YOU TOO CAN HAVE A HOBBY LIKE MINE)

As many students in this Faculty have maintained an interest in "Robert" (ulterior motives suspected) and largely to dispel the many rumours often heard of him, I shall endeavour to tell you the reasons why I acquired him, his history, methods involved in training him and, perhaps, something of the trotting industry in New South Wales to-day.

I acquired "Robert" as I hope to breed trotters as a hobby when I eventually settle down into a Club Practice in New Zealand? I have always been interested in trotters and have seen many of the champions and record holders in this gait race in New Zealand. However, I really knew very little about the horses themselves, and the more I learnt in lectures the less I found I knew.

I made enquiries, just after Easter, from various sources and "Robert Don" was the result.

Tom Ludwig, the well-known groundsman for the Sports Union, gave me permission to graze the horse in the small paddocks surrounding the No. I and II Ovals, and Robert was brought to the University on May 8.

But perhaps now would be the best time to tell you a little about the horse himself.

"Robert Don", by "Robert Derby" from "Polly Donis", is a bay gelding, aged 14 years, and stands about 15.2 hands high.

His breeding is interesting and will be appreciated by those who know the main trotting families.

There is no doubt that as a grandson of Globe

Derby on his sire's side and Adonis on his dam's side, Robert is bred on the most fashionable lines.

Globe Derby could be termed the father of the Australian trotter and has a phenomenal record, both as a race-horse and a winning sire. As a race-horse, he won races and made successful attacks on time over many years. As a sire, his name will never be forgotten and over 300 of his progeny were winners. Many of these were record holders and champions in their own right. However, Globe Derby is probably most famous as the sire of siring sons. Of these, Robert Derby, the sire of Robert Don, is easily the best. Although nearly thirty, he is still standing at stud and he has been the leading sire in New South Wales for many years. His name will always be remembered as the sire of the first horse to run the mile in under 2 minutes, outside America. This was Lawn Derby, who, in 1938, at the beautiful Addington Course in New Zealand paced the mile in 1.59 3/5.

Lawn Derby is now a successful sire himself and, in the season just concluded, was runner-up to Robert Derby.

Getting back to Robert Don, in direct sire line, he is of the eighth generation from Hambletonian, whom you will have heard of in Zootechny as the foundation sire of all successful American trotting families.

Hambletonian traces back only two generations to Messenger, the grey thoroughbred imported from Great Britain, who was only six generations in direct sire line from Darley Arabian!

On his dam's side, Robert Don goes back to Harold Dillon, who was a very famous imported sire in New Zealand.

I could go on to tell you much more on the breeding of trotters and the evolution of the breed, however, time and your patience prevent this.

Training Robert has been a problem—theoretically he is unsound and really he shouldn't be able to even work. However, by persevering with his near hind suspensory trouble, it is now reduced as far as possible and is as strong and sound as it will ever be.

His training is along accepted lines and includes three mornings' slow work and three mornings' fast work a week. Slow work consists of an hour jogging round Harold Park—a distance of about 10 miles. Fast work involves 1½-2½ miles warm up, followed by 1½-2 miles at a fast gait.

At the completion of slow work, he is taken up to the stalls and his legs are hosed down for 10 minutes. After fast work, he is completely hosed down, which means he has to be scraped and wiped dry afterwards. After fast work, too, there are usually a few cuts opened or re-opened on his legs and these have to be cleaned after hosing and treated with "Hopple Chafe". This is only Methylene Blue in methylated spirits, but it is quite effective and very popular with trotting trainers (I make my own by mixing 2 or 3 grs. of methylene blue in a ½ pint bottle of methylated spirit).

Jogging at slow work is, for most trainers, a very slow jog, however, Robert sets his own pace and he tends to step it out a little. Fast work is usually divided into Pace and Trial work.

Pace work is the first sort of fast work given to a horse just in from a spell. This is ¾ pace, unhoppled. After three or four weeks of this, the horse is hoppled and sent along a little faster. Many horses are "solid" in their gait and will even race unhoppled, however, most pacers need to be kept in their gait when the pressure is on, and for this reason hopples are used.

As you already will know, the shoeing of trotters and pacers is much more important than shoeing thoroughbreds, as they are much more prone to gait abnormalities, such as speedy cutting, brushing, etc., and correct shoeing will tend to keep a horse in his correct gait. Pacers have light shoes in front. The hind shoes tend to be heavier and the outside quarters are wider and carried out from the hoof. This is said to aid their swinging gait. Trotters, however, have a much heavier shoe in front and the weight in front is increased by "toe weights" screwed into the wall of the toe.

Usually, however, shoeing is insufficient, alone, to protect the legs and further protection is offered by leather pads.

These might include knee boots, Shin-&-Tendon Pads and Bell Boots. Robert has the full issue, except for an off knee boot.

Trotters usually have no fore-limb protection, but the hind legs may have shin and tendon pads and bell boots.

When one sees a horse fully protected and with hopples on, you wonder that it can race at all.

As work proceeds, you can usually tell when the horse is reaching racing condition, and trialing him against time will tell you when you can consider starting him in a race.

Usually, a tried race-horse like Robert comes good very quickly, but, due to his unsound legs, I have taken him very steadily. I first started working on the 23rd May and since then he has travelled many hundreds of times round Harold Park and gone several hundred miles.

It soon became obvious that his legs would stand racing and his first race was at Richmond

on the 11th August, when he started in the main race. There were only seven starters, but starting from 24 yards behind, he ran a very sound 4th and even surprised the critics.

On the 1st September, I took him to Bankstown Show and he started in the main race and ran a solid 6th (12 starters) from 48 yards behind, and after racing two or three wide all the way.

Then on the 8th September, I took him back to Richmond and from 24 yards behind, in the main race, he surprised everybody, except myself, by finishing faster than any other horse in the race, coming 6th (13 starters), only four lengths from the winner, after being 25 lengths back earlier. In these three races I drove myself.

He is now all set to take on a big race at Harold Park and by the time this comes out you will know the results. Here's hoping.

Handicapping in trotting is on a time basis and a horse is assessed one or two seconds faster after each win. His assessment can never be let up. For example, a horse will run in the bush in a 2.35 Beginners' Handicap; if he wins this, he becomes a 2.33 horse, or 24 yards back in another 2.35 race. For each succeeding win he becomes a 2.31-2.29 horse, etc.

After winning two races in the bush, a horse is eligible for the Qualifying Race at Harold Park. If he wins this, he becomes a 2.24 horse and each succeeding win is then an assessment of one second faster. That is, if Robert, who is a 2.24 horse, wins, he becomes a 2.23 horse, or 12 yards back in a 2.24 race (or on scratch in a 2.23 race—each second is considered to be 12 yards handicap).

Although this will surprise many of you, Robert has won many races and in 1948 he won the main race at Harold Park in the last day-time trotting meeting. He was swabbed after this win and thus became THE FIRST TROTTER to be swabbed after a race in Australia. His last start was about 18 months ago at the Night Trots, when he started facourite at 7/2 and finished sixth, behind Greenback, after being left at the start.

A very important part of training a horse for racing is in his feeding. Feed, nowadays, is at fantastic price levels and this had modified his diet somewhat. Even then, however, it costs about £2/15/0 a week to feed him. His diet consists of Shandy and lucerne chaff, oats, bran and, lately, a little corn. I supplement his feed with a heaped dessertspoonful of lime in each feed. He also gets a fair bit of salt. Occasionally, carrots may be added for variety.

Well, that is the story of "Robert Don". You have probably asked yourself how I can have possibly spared the time. Well, I get up at 6 a.m. and have breakfast, leaving home about 7. This gives me sufficient time to exercise and feed the horse and get to the University in plenty of time for the first lecture. The only other time involved is feeding him before leaving the University at night.

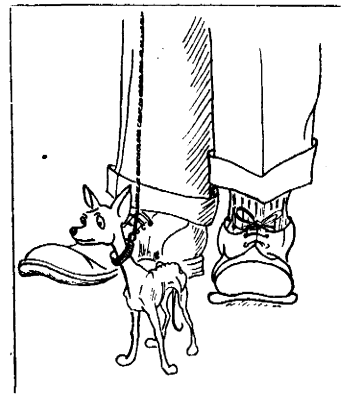
As you will agree, this time would not normally be spent in study.

There are disadvantages, of course, but there have been things that have made this hobby worthwhile.

As far as I was concerned, I was not training the horse, the horse trained me. Too, while jogging round the track on slow mornings, many valuable horse management tips can be gained in conversations with other trainers. You learn a little about shoeing and about harness. You learn a lot about handling horses and you meet a possible section of your future clientele, learning to look at their problems from their point of view.

Finally, I would like to acknowledge the assistance offered so freely by Mr. McMillan of Glebe, without whom I would not have been able to even attempt trotting as a hobby.

P. H. MALONE 1V.

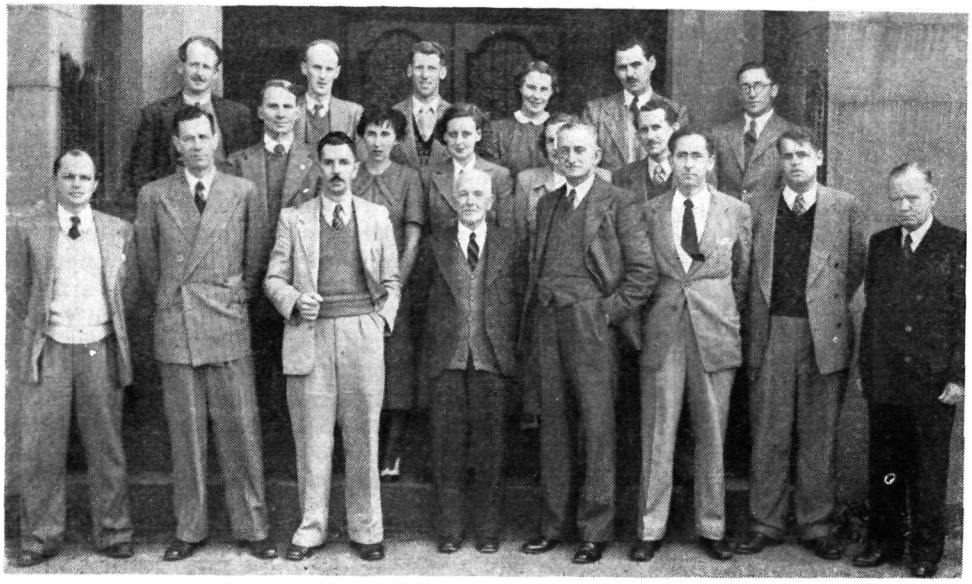


Coccidiosis—Hmm—?

A dog with Coccidiosis or Coccidiosis with a dog—?

Overheard in the Path. Lab.—"Don't be silly! He was alive until he was dead" (Definitely no P.M. Autolysis.)

MEMBERS OF STAFF OF THE VETERINARY SCHOOL, UNIVERSITY OF SYDNEY



Back Row, from left to right: Mr. R. Killick, B.V.Sc.; Mr. J. D. Biggers, B.V.Sc., B.Sc., M.R.C.V.S.; Mr. F. R. Staunton, B.V.Sc.; Miss V. E. Osborne, B.V.Sc.; Mr. R. V. S. Bain, B.V.Sc.; Mr. L. H. Larsen, B.V.Sc.
Second Row, from left to right: Mr. B. R. Thorpe, B.V.Sc.; Miss P. M. McGruer; Miss N. Butler, B.V.Sc.; Miss N. Wickham, B.V.Sc.; Mr. C. S. Sapsford, B.V.Sc.
Front Row, from left to right: Mr. J. M. Keep, B.V.Sc.; Dr. H. R. Carne (Dean); Dr. C. W. Emmens; Mr. F. Whitehouse, B.V.Sc.; Dr. R. M. C. Gunn; Mr. R. M. Webb, B.V.Sc.; Mr. J. D. Steel, B.V.Sc.; Dr. G. F. Finley, B.V.Sc., Ph.D.

1951
DEPARTMENT OF VETERINARY SCIENCE
TEACHING STAFF

Professor R. M. C. Gunn, D.V.SC., B.Sc.Agr., M.R.C.V.S., B.Sc. (Edin.).
Mr. R. M. Webb, B.V.Sc., Senior Lecturer in Veterinary Anatomy.
Mr. F. Whitehouse, B.V.Sc., Senior Lecturer in Zootechny.
Miss V. Osborne, B.V.Sc., Lecturer in Veterinary Anatomy.
Mr. C. S. Sapsford, B.V.Sc., Lecturer in Veterinary Anatomy.
Dr. G. F. Finlay, B.V.Sc., Ph.D. (Cantab.), Teaching Fellow in Genetics.
Mr. L. H. Larsen, B.V.Sc., Lecturer in Veterinary Surgery, Obstetrics and Gynaecology.
Mr. R. H. Killick, B.V.Sc., Lecturer in Veterinary Surgery.
Dr. M. C. Franklin, Part-time Lecturer in Nutrition.
Mr. F. R. Staunton, B.V.Sc., Lecturer in Zootechny.
Mr. V. E. H. Davis, B.V.Sc., Part-time Demonstrator in Clinical Methods.
Mr. E. N. Larkin, B.V.Sc., Part-time Demonstrator in Clinical Methods.
Mr. K. E. W. Robinson, M.A. (N.Z.), Part-time Lecturer in Livestock Geography.
Dr. K. Campbell, B.Sc.Agr., M.A. (Chicago), M.P.A. (Harvard), Ph.D. (Chicago), Part-time Lecturer in Livestock Economics.

SECRETARIAL

Miss R. E. McMahon

TECHNICAL AND ATTENDANT

Mr. C. Rames.
Mr. J. R. Haddon.
Mr. V. Slavin.
Mr. C. W. O'Brien.
Mr. F. Seller.
Mr. S. T. James.
Mr. A. E. Sharpley.
Mrs. C. Hickson.
Mrs. E. Jones.

DEPARTMENT OF VETERINARY PATHOLOGY AND BACTERIOLOGY

TEACHING STAFF

Professor H. R. Carne, D.V.Sc. (Dean of the Faculty)
Mr. R. V. S. Bain, B.V.Sc., Senior Lecturer in Veterinary Pathology and Bacteriology.
Mr. J. H. Whittem, B.V.Sc., Lecturer in Veterinary Pathology and Bacteriology.
Mr. S. J. Gilbert, M.R.C.V.S., Part-time Lecturer in Clinical Veterinary Pathology.
Miss N. Wickham, B.V.Sc., Lecturer in Veterinary Pathology and Bacteriology.
Miss N. M. Butler, B.V.Sc., Lecturer in Veterinary Pathology and Bacteriology.
Mr. H. McL. Gordon, B.V.Sc., Part-time Lecturer in Veterinary Parasitology.
Mr. J. Drabble, B.V.Sc., Part-time Lecturer in Meat Inspection.
Miss M. Scott, B.Sc., Part-time Demonstrator in Veterinary Parasitology.
Miss Helen Turner, B.Arch., Part-time Lecturer in Veterinary Biometry.

SECRETARIAL

Miss R. Wildsmith.
Miss I. A. Oliver.
Miss R. Laing, Librarian.

TECHNICAL AND ATTENDANT

Mr. L. E. Whitlock.
Mr. R. F. Jones.
Mr. A. R. Thorne.
Mr. N. G. H. Calderwood.
Mr. N. F. Jones.
Mr. E. Lepherd.
Mr. A. K. James.
Mr. F. N. Robinson.
Mr. J. Audet.
Mrs. F. Erikson.
Mrs. E. A. McMahon.

DEPARTMENT OF VETERINARY PHYSIOLOGY

TEACHING STAFF

Professor C. W. Emmens, D.Sc., Ph.D.
Mr. J. D. Biggers, B.Sc., B.V.Sc., M.R.C.V.S., Lecturer in Veterinary Physiology.
Mr. I. G. White, B.Sc., Lecturer in Veterinary Physiology.
Mr. C. R. Austin, B.V.Sc., B.Sc., Part-time Lecturer in Veterinary Physiology.
Mr. A. W. Blackshaw, B.V.Sc., Research Assistant in Veterinary Physiology.

SECRETARIAL

Miss H. Hughes.

TECHNICAL AND ATTENDANT

Mr. R. M. Penn.
Mr. R. Marriott.
Mr. W. Minard.
Mrs. Fisher.
Mrs. H. Hong.
Mrs. M. Harris.

SUB-DEPARTMENT OF VETERINARY MEDICINE

TEACHING STAFF

Mr. J. D. Steel, B.V.Sc., Senior Lecturer in Veterinary Medicine.
Mr. D. C. Blood, B.V.Sc., Senior Lecturer in Veterinary Medicine.
Dr. H. G. Belschner, D.V.Sc., Part-time Lecturer in Diseases of Sheep.
Mr. T. G. Hungerford, B.V.Sc., Part-time Lecturer in Diseases of Poultry.
Mr. D. A. Gill, M.R.C.V.S., D.V.H., Part-time Lecturer in Veterinary Jurisprudence.
Mr. W. L. Hindmarsh, B.V.Sc., M.R.C.V.S., Part-time Lecturer in Epidemiology.
Mr. L. A. Monk, B.V.Sc., Part-time Teaching Fellow in Veterinary Materia Medica, Therapeutics and Pharmacy.
Professor R. H. Thorp, B.Sc., Ph.D. (Med.), Part-time Lecturer in Veterinary Pharmacology.

TECHNICAL

Mr. R. Paris.

UNIVERSITY VETERINARY HOSPITAL AND CLINIC

Mr. J. M. Keep, B.V.Sc., Superintendent.
Miss P. McGruer, B.V.Sc., Junior House Surgeon.
Mr. B. Thorpe, B.V.Sc., Junior House Surgeon.

ATTENDANT

Mr. G. M. Hannan. Mr. K. M. Griggs.

McGARVIE SMITH ANIMAL HUSBANDRY FARM

TEACHING STAFF

Mr. H. J. Geddes, M.Sc.Agr.(N.Z.), Senior Lecturer in Animal Husbandry and Officer-in-Charge.
Mr. D. R. Hutchins, B.V.Sc., Clinical Officer.

SECRETARIAL

Miss Preston.

TECHNICAL.

Mr. H. R. Kerr.

FARM

Mr. T. M. Black, Farm Foreman.
Mr. F. Fishwick, Farm Foreman Assistant.
Mr. J. H. Overed, Farm Foreman's Assistant.
Mr. R. Paterson, Dairy Assistant.
Mr. J. Cuthbertson, Dairy Assistant.

CHANGES TO STAFF, 1951

New Appointments.

Mr. R. H. Killick, B.V.Sc.,
Temporary Lecturer in Veterinary Surgery.

Mr. Killick commenced his course in 1946 after war service with the R.A.A.F.

After graduation in 1950, Mr. Killick joined the staff as Temporary Lecturer in Veterinary Surgery.

As a student, he captained the Faculty Cricket XI for two years.

Mr. Killick is a member of the A.J.C. swabbing staff, and is interested in thoroughbreds as a result of a lifelong association with them.

Mr. B. R. Thorpe, B.V.Sc.
Junior House Surgeon.

Mr. Thorpe commenced his course in 1946 and graduated last year. After graduation, he joined the staff as a Junior House Surgeon in the Veterinary Hospital and Clinic.

As a student, Mr. Thorpe represented the Faculty in sport by being a member of the Rifle Teams in 1947 and 1948. He is also a keen skier.

Mr. F. R. Staunton, B.V.Sc.,
Assistant Lecturer in Zootechny.

Mr. Staunton commenced his course in 1945, and on graduation in 1950 was appointed as Assistant Lecturer in Zootechny.

Mr. Staunton was originally from Hurlstone High School.

As a student, Mr. Staunton was a member of the Faculty Rugby Union Team for four seasons. He is an enthusiastic horseman and won the Badgery's Creek Cup in July of this year.

Appointments.

Miss R. Laing has been appointed Librarian.

Miss R. Wildsmith has been appointed Secretary to the Dean.

RESIGNATIONS

Mr. J. E. Barnes, who had been acting as Temporary Lecturer in Zootechny since his graduation in 1949, left the Veterinary School at the end of the year. He took up an appointment as Veterinary Officer in the Division of Animal Industry in the Northern Territory.

Mr. J. A. Springhall, who had been acting as a Temporary Lecturer in Veterinary Surgery since his graduation in 1949, left the Veterinary School to go into private practice. He has been acting as assistant to Mr. E. N. Larkin, of Bondi Junction, for the past year.

Mr. M. J. Edwards, who had been acting as a Junior House Surgeon in the Veterinary Hospital and Clinic, resigned to take up private practice. He has been acting as assistant to Mr. Churchward, of Lismore, for the past year.

Miss R. Broinowski has resigned and accepted a position as Librarian at Ku-Ring-Gai Municipal Library.

Mrs. O. Cathcart has resigned and accepted a position as Secretary to the Director of the Red Cross Blood Transfusion Service.

THE WORM'S CONTRIBUTION TO FERTILITY

No, I am not out of my senses! I think you must have misread the title or else you are jumping to conclusions. This refers to that coelomated metazoan inhabitant of the soil, that annelid, the earthworm.

On a small dairy farm in the Hunter Valley area I came across an area of a few acres which produced like an oasis compared with the surrounding country, and most of the work done towards producing this blooming fairness was the mighty and industrious earthworm.

Envious neighbours began, a few years ago, to suspect the owner of practicing the black art. Actually his secret is simple. He just takes care of his earthworms and they do all the scientific gardening. They do most of the ploughing and all the harrowing, fertilising and cultivating. They supply all the fertiliser — nitrogen, potassium, phosphates, and other vital minerals—needed to turn a rather poor patch of soil into a blooming, productive paradise. They build a drainage system that catches and holds the water around the roots of the plants through midsummer, when drought dries up the surrounding countryside. And they do a lot more.

To most people, earthworms are just slimy, disagreeable creatures that slobber about underfoot after a heavy rain. To them, they seem good for fish bait and nothing else. But that is about as far from the truth as it could possibly be.

Most of us have done enough gardening to know that it is the layer of fertile topsoil on top of the earth that enables things to grow at all. Earthworm fans claim their small champion has a monopoly on its manufacture. For each earthworm is his own miniature chemical factory. He eats the decaying vegetable and animal matter that falls on the surface of the earth. His digestive juices convert this mass into the chemicals that support plant life. Results of tests have differed a great deal under different conditions and on different soils, but they show that what comes out of the earthworm may contain as much as five times more nitrogen, seven times more potash, and eleven times more phosphates than went into him.

So much for the earthworm as a fertiliser factory. In addition to that, he's an indefatigable pick-and-shovel man. As he eats his way along—sometimes going as deep as five or six feet—he grinds up and pulverises the soil, doing the work of plough, disc and harrow. Fill a mason jar with layers of clay, soil and sand, put in a few worms—giving them a few days to work—and you'll see the different layers of earth intermingle until the worms have done a job as thoroughly as an egg beater.

But more than that, the earthworm is a great drainage engineer. Rain water runs off the surface of hard-packed soil and is wasted. But earthworms leave behind them a maze of small-bore tunnels that lets the water get down around the plant roots and then holds it there. Tests have shown that soil filled with earthworms can drink up four inches of rain in 15 minutes, whereas wormless soil will take three hours.

Finally the earthworm gives his own body to the cause he serves. His decaying carcase adds just that much more topsoil to enrich the earth.

Unfortunately, not nearly enough has been done to measure the effect of earthworms on the growth of plant species. The few really scientific tests that have been made, I understand, have been significant.

In the work I have carried out myself there have been encouraging results. Chemicals on my patch are taboo in case they damage my industrious workers. I have proof that some plant eating insects and diseases nibble at the edge of the patch, get discouraged, and go away. Like healthy people and healthy animals, these healthy plants have a natural resistance to attack and need no medicine—they get all they need from the products of the worms. The fertility of the soil is maintained.

The owner of this dairy farm has obtained results on a much larger scale than I have, and they are proof positive that the worm is the farmer's and gardener's best friend. I hope to be able to investigate the results of his importations and, if the expected occurs, encourage others to work hand in hand with nature's wonder workers of the soil.

You may conclude that this is the answer to the gardener's prayer, or you may decide that we are wasting our time. Either way you can probably find some expert to back you up, for even the scientists appear to be divided. So—if you like to gamble (what Aussie doesn't?)—the best thing to do is to try it yourself. I can guarantee that your grass will be greener, the leafage heavier, trees taller and sturdier, and plants healthier. Hats off to the wriggly, squirmy worm!

ANNELID III

MUSIC IN THE UNIVERSITY

The author, with cello, etc., illustrating some of the more worldly advantages gained from music.

As one of the members of our Faculty who takes an active interest in music, it seemed to me that I might tell you a little of the various types of music which are found within the University.

There are keen supporters of both instrumental and vocal music to be found, if one knows where to look.

On the instrumental side there is a string orchestra which has been together during the last two years, and a newly formed Chamber Music group. The string orchestra, consisting of some twenty members, is conducted and directed by the Professor of Music, Prof. Peart, and, during the year, has done music by Bach, Handel, Pergolesi, Purcell, Mozart, Elgar and Grainger. The chamber music group comprises, at the moment, a string quartet of 2 violins, viola and violoncello (the body in the green bag) and two pianists. The aim of this group is to perform well known classical trios, quartets and quintets, and also to give an opportunity to the members of the group of hearing music of their own composition performed. It is hoped that the group will soon be enlarged by the addition of more string players and an oboist.

In the vocal field is the Sydney University Musical Society choir, under the direction of Mr. Faunce Allman. The works which the choir performs are mainly Bach cantatas, though, at the moment, we are singing the "Song of Destiny" by Brahms. The choir spent the May vacation as guests of the Melbourne University Musical Society at a Festival of Music held in Melbourne, at which both choirs performed both singly and together. Within the larger choir, which comprises about 200 voices, there are some smaller groups of singers.

One of these groups is the Madrigal Society, which sings 16th and 17th century compositions, mainly short unaccompanied part songs. The other group, of which I was a member, was the Coreo da Camera (No idea what the title means) which has now disbanded. Last year, this group presented a Mass by Igor Stravinsky, for a mixed choir, 2 oboes, cor anglais, 2 bassoons, 2 trumpets, and 3 trombones, which had never been performed in Australia before (or since?).

For those who are interested in listening to, rather than performing music, there are the Carnegie Recorded recitals conducted by Prof. Peart in the Wallace on Mondays.

From this you may get some idea of the music which goes on around you, and if any of you are interested in either instumental or choral music here, I would be only too glad to introduce you to the marvels and mysteries thereof, so that Vet. Science may take its proper place in a field in which it has not been, to date, as well represented as it might be.

"If music be the food of love,
Play on . . . "

B. P. SETCHELL, IV.

THE DEVELOPMENT OF OUR TEXTBOOKS

The dim light of an oil lamp made me historically minded. Digging and swatting through our lecture notes and textbooks, we have access to one gratifying thought—that our past colleagues had to the same. I do not know if this thought is some relief to you, but anyway, a thousand years ago, it was not much different.

Here are the titles of the first known outstanding textbooks:

1. Claudii Hermeri, mulo medicina Chironis, 370 a.d.
2. Vegeti Renati Digestorum, artis mulo medicinae, 420 a.d.
3. Pelagoni, artis veterinariae, 390 a.d.

The most famous one was the "Mulo medicina Chironis", influencing the development of veterinary science for centuries to come.

Due to some too eager students, and in such times there were, apparently, these rare specimens to be found, the few available volumes of the above script were "mistakenly" taken home, and disappeared. Mr. Vegetius, who had good handwriting, had been the scribe for Chironis. The disappearance of Chisonis' scripts and his untimely death, were made use of by the opportunist Vegetius. As he knew how to turn sentences without losing the meaning of same, he promoted himself to the position of an original author. Due credit was given him and his "original" work till 14 centuries later, when Chironis' original volume reappeared and the similarity was too obvious.

The Imperial Palace in Byzanz was, through the beginning of the medieval age, the place of teaching and science. No wonder the next textbook of Veterinary Science was written there. The Hierakosophion and Kynosophion are the first scripts known, dealing with diseases of small animals. The author was Demetrius Pepagomenos, 1251-1281. The main part of his scripts deals with the studies of the falcon and its diseases. I, for one, prefer, merely for this reason if for no other, to observe the glorious time of the atomic age and to have pigeons on the roof of our Alma Mater instead of falcons.

The Arabs dislike dogs, but admire horses and women. They wrote, therefore, nothing about dogs, but volumes about horses and women. The later volumes, even though I have read them keenly, are not pertaining to the subject and must, therefore, be here omitted. Their outstanding textbooks are:

1. Kitab al Felahah or libro de Agricultura (Book of Agriculture) by Abir-Zacaria of Seville, 12th Century.
2. Veterinary Science by Abu Bekribn Bedr, Chief Veterinarian of the Egyptian Sultan el Hasr, about 1320.

The Spaniards were good scholars of the Arabs. A Spanish veterinary surgeon, Juan Alvares Salamiellas, took great pains to put his rich knowledge into writing. His volume, beautifully written in gothic letters and illustrated in aquarell, is kept in Paris at the Bibliotheque Nationale. His remarkably clear and graphic mode of expression and his grasp of the main ideas of the subject are outstanding for his time. Many of his ideas became routine later on. His manuscript starts "Aqui comensa el libro menesaleia et de albeyteria et fisica de las bestias que compuso Johan Alvares Salamiellas"; (Here starts the book of treating the horse and about the nature of animals, which Johan Alvares Salamiellas has written). In 96 chapters, he deals with Stomatitis, Glossitis, Luxations, Scabies (treated by leeching, sunshine and application of tar), ferocious horses, lame horses, etc. Only one chapter suggests that our friend Salamiellas was not totally ahead of his time. He mentions in Chapter 93: de las palabras que desen en la oreia drecha de la bestia quando onjera algun mal (the words one has to say to the right ear of the animal if it heard something bad). I venture to say, this procedure would take some while, if I should take a horse down Parramatta Road during rush hours.

Centuries passed, science was without new contributions till Michael Harward, 1643-73, in England and Ireland, wrote his book: The Herdsman's Mate or a Guide for Herdsmen, teaching how to cure all diseases of Bulls, Oxen, Cows and Calves, gathered from sundry good authors, and well approved by the author in his 30 years practice. It was the beginning of an era, coupled with the progress of science and printing. Authors of all nations followed.

It is fitting here to mention Philip Etienne Lafosse, 1738-1820, the idealistic Frenchman, who built, out of his own pocket, the second Veterinary University in France, taught anatomy there and published a wonderful book out of his rich experience, called "Cours d'hippiatriques ou Traite complet de la medicine des chevaux."

Since then, each year has brought new knowledge, new books and new ways of treatment, but the profound, always true principles of veterinary science can be traced in their development throughout the centuries in a straight line.

So cheer up, as you sit and the oil burns down. One day, Bradley, Baldwin, Topley and Hutyra will be history, but until then have the pleasure of their daily and nightly companionship, and until then—

GUILLAMUS MARBACHUS
EDIDIT SYDNEYI, ANO 1951. III.

"WANDERING WAYS"

Among one of the lesser known activities in this faculty is bushwalking. Here, among the wilder elements of this section, one finds those who long for the open bush, provided, of course, the company is right. However, they do not always meet with approval when arrayed in their selected garments, or rather armour. This fact may have some bearing on the size of our ranks, which still remain small, and it is with the hope of swelling our numbers that I write this article.

First, let me tell you that the bushwalkers are in no way affiliated to that shady organisation, the — — — — — — club, whose activities as you are probably aware, are limited, owing to the shortage of dark places.

In the Vet. Science Faculty, the bushwalkers aims are slightly unusual, and, therefore, all the more interesting, he wants to walk. Amongst such a noble band we find such oddities as Dave Jones—"See you in hell first, old man," and not forgetting J. A., another typical "gay lovair," and several others, including that unmentionable creature, myself.

For the more sober of my readers, I would point out that during the last year the bushwalkers were quite active. We lurked through the Grose Valley, the Megalong Valley, the Cox River Valley, the Jenolan Valley, the Burragorang Valley and the Shoalhaven River Valley. In short, quite a few valleys (low places). Pardon the use of the term, lurk, the senior lecturer will, no doubt, give full approval. These walks were well organised, and only a couple of times were we misdirected, thus arriving half a day or so late. While we are on the subject of getting lost, I must assure any prospective member that the term is grossly misused. We usually happen to be delayed and sidetracked. Of course, this only occurs when females are present.

Now that I have shown you that bushwalking is the first and last sport of all, I must tell you of the materialistic requirements, apart from an iron constitution and an oxlike digestion. The gear comprises the usual rucksack, a sleeping bag, groundsheet and perhaps a two-man tent (which will hold four). These can all be bought reasonably.

On our walks, a leader is selected and it is his responsibility to see that everything is organised properly. This intellectual sets the pace and direction, no mean task, believe me.

One of the most precious memories retained of a bushwalk is the feeling of triumph on reaching one's destination. Perhaps you have climbed a mountain, still panting and almost exhausted —your eyes explore the panorama of green trees and blue mist softly edged with purple in the setting sun. Something wells within you and seems to say, "this is life." You feel at peace with the world and the long climb becomes insignificant in the final estimate. Or perhaps you enjoy sitting around a camp fire on a still clear night and satisfying your hunger sharpened by a long day's walk.

Of course these things don't appeal to everyone which, in itself, is a good thing. For walking would lose its charm if the whole university were to trek off to the one spot. It is to those who clamour for the unbounded freedom of the bush that I pander. These are not the only advantages that bushwalking has to offer. Getting to know your fellow students becomes easy and an acquaintance with the work and aims of other faculties could do none of us any harm.

Come bushwalking with us and enjoy the unbounded limits of the Terraine Australienne.

S.H. III.

YEAR NOTES

FIRST YEAR

Back Row, Left to Right: D. N. Kennard, G. Calley, W. S. Cotton, A. D. Donald, R. K. Ryan, P. W. J. Whitehead.
Third Row, Left to Right: R. Borland, P. R. Hungerford, A. J. G. Johnson, V. J. Baxter, H. P. Manusu, I. Sutherland.
Second Row, Left to Right: D. C. Anderson, R. C. Williams, R. N. Weaver, P. G. Kiss, B. D. A. Smith, Y. Ismail, R. F. Larsen, M. B. White, G. Barass, B. P. Todhunter.
Front Row, Left to Right: Miss P. E. Williams, Miss J. M. MacCallum, C. J. C. McKellar, Miss L. N. Leedham, J. M. McBride, Miss D. R. Ferguson, Miss B. H. Glanville.

The entry of 28 men and 5 women into 1st Year, at the beginning of Lent Term, meant, for them, the commencement of a tough and arduous life. During Orientation Week, senior Vet. Students introduced all newcomers to the faculty, by arranging demonstrations and talks. This had obviously been done to remind us that the first year course does eventually lead to Veterinary topics, thus providing a more interesting goal as our aim. Members of our year who have joined us from other Faculties are, Peter Wearne and Ian Sutherland from Agriculture, and Rod Ryan from the teaching staff of the Department of Education.

During the Easter break in Lent Term, many of us visited the Show, gleaning any stray information that breeders or animal-husbandry men might provide. We are pleased to see two of our female members, Laurie Leedham and Betty Glanville, working with some of the beef cattle at the Show. Other first year vet. students showed their ability in handling these brutes when they led them in the various parades. Besides the Show, many eager types visited the yearling sales, fat cattle shows, poultry shows, some dog shows and even gymkhanas.

Two fine functions were held by the Faculty this year; the "Freshers Informal" and the Vet. Ball—and although the boys were a little shy about attending, those that went voted them both excellent. At this juncture, we would like to thank Pat Williams, who, on both occasions, brought along a party of her own, and so helped to swell our numbers.

One event that occurred at the "Freshers Informal" still remains a topic for conversation. This was a drinking bout challenge! To see who could drink more quickly two glasses of beer, and was between Col McKellar and a female student from 2nd year. The story goes that Col was unfortunately beaten by half a glass.

In the field of Sport: Del Ferguson, Pat Williams, Laurie Leedham and Jan MacCallum represented the faculty in the basketball team, which played against Medicine, losing 11 goals to 10.

Jan MacCallum succeeded in representing the Faculty in the University II basketball team.

D. A. Bailey and P. Hungerford entered the University Athletic Championships: Dave coming 1st— 120 yd. Hurdle (novice); 4th—Broad Jump (novice) and 4th—Championship 120 yd. Hurdle.

Peter came 3rd in the 440 yds. Championship Hurdle event.

The first year vet. students have formed a football team which has been successful in winning all games so far.

Challengers—please note!

Finally, we would like to give a special welcome to our overseas students: Rick Larsen from Honolulu, Yakya Ishmail from Malaya, Bolu Borland from Scotland, and Alan Donald from Fiji, and hope they will enjoy the life at Sydney University.

N.B. During Trinity Term we were delighted to hear of two student pranks:

1. The last furlong dash at Randwick.
2. The greasy pig episode at the 2nd Union Test.

For further details, we suggest that you contact Peter Kiss, c/- Zoology Practical.

SECOND YEAR

Back Row, Left to Right: R. D. Barry, A. A. M. Edwards, A. M. Falconer, K. Waldron, H. R. Lindner, R. D. Jolly, E. A. D. Jowett, D. A. Tynan, G. H. McCormich, J. M. Grahame.

Third Row, Left to Right: J. D. Dunsmore, W. A. Handle, F. W. Beckett, L. H. Dysart, R. H. S. Hyne, D. I. Telfer, B. M. Dunkley.

Second Row, Left to Right: K. J. P. Cooper, P. B. Rees, Miss J. H. Haneman, R. G. Wales, M. G. Broe, I. C. A. Martin, G. B. Stutchbury, Miss S. E. Potter, Miss J. B. Wootton, J. W. Ramsay, A. D. Rose.

Front Row, Left to Right: Miss J. Caterson, Miss J. G. Cahn, M. J. Shalders, D. E. Johnston, Miss B. L. Wilhelm, Miss H. E. Joyce.

VETERINARY SCIENCE II

We are quite a mixed crowd again this year, with representatives from many parts of Australasia. Among these are fifteen from New Zealand, one from Tasmania, two from West Australia and ten from Victoria. Those of us who weathered the exams at the end of last year welcome most heartily these new members of Vet. II to this University, and wish them the very best in the years to come. To complete our fifty-six members, we have fourteen students who, realising the absence of their pet subject in third year, have remained with us to continue their delight in Biochem.

Our year is very well represented in practically all aspects of sporting life in the faculty. Among the Union players are Kevin Waldron, Grahame McCormick, Jack Gallagher, John Hollywood, Bob Jolly and Brian Wilson. Their team is doing very well this season, and have not yet been defeated. Bob Jolly has also gained fame in the inter-faculty swimming, helping Vet. to come second, and John Hollywood has shone on the cricket field as well as the football field. We also have the two tennis players George Pulver and Ian Bradney, the Aussie Rules stars from Victoria, Dave Leaver, Laurie Hicks, and Geoff Davidson, and our giant Tug-O'-War man, "Tiny" Rose; Wally Ramsay is the year's hockey player and is a member of the 1st Uni. team, and Don Tynan is a worthy representative on the rifle range.

Among the female members, of whom there are seven in the year, there are six hockey players for the faculty, Jean Wootton, Jan Caterson, Barbara Wilhelm, Judy Cahn, Susan Potter and Joyce Haneman; Jean, Barbara and Jan also help secure goals in the basket-ball competition, and Judy and Barbara displayed their talents in the Faculty Women's Pair oars earlier in the year.

Well, away from sporting life.

The usual 2nd year visit to the R.A.S. was a pleasant break from Uni. routine; the animals, of course, proved interesting to vets., but mannequin parades in the A.B.C. studio were also well attended by interested students.

The other function of the year was the Badgery's Creek visit, a fortnight of very hard work. However, everyone is reported to have enjoyed themselves despite this handicap, and to have come back with all the inside knowledge of how a dairy farm works.

Well, you will read again about the members of Vet. II next year, but there will be no mention of any of our present notables, unless you look further under Veterinary Science III.

THIRD YEAR

1951 has seen our members settle down to a determined group of 41, amongst whom we see three newcomers to the faculty. Keen Soccer man Michael Gemmel, comes to us from London, while Bill Marbach and Val Sloss are two genial types who formerly graduated in Vet. Sc. at Vienna and Geissen respectively. To these three we extend a hearty welcome and wish them every success in their studies.

Amongst the tribulations suffered by the members of our year, we hear of the nasty set-back dealt to the Co-op. Fruit Buying Scheme, when some misguided character devoured the display sample. Nevertheless, Stan has carried on; intermittent dumping of oranges at the Vet. School bearing witness to his zeal.

Once again our sportsmen are well to the fore and in particular, top line Union exponent, Keith Gudsell. Keith now has the honor of having represented both his homeland N.Z. and Australia. Big Pat McCormack captains the 'Varsity Australian Rules team, amongst whom Jack Thompson and Doug Fenwick shine. Doug is to be congratulated on being awarded a Blue for his play last season. Russ Dreadon and Phil Knight were in the victorious Vet VIII, while John Holt is as deadly as ever with his rifle. Also, congratulations to Elaine Edmonstone on her selection in the Inter-'Varsity Hockey Team.

In the various Inter-Faculty sports we are well represented:

Rugby: R. Dreadon, J. J. Hayes, P. Knight, C. Thompson, P. Street.

Soccer: M. Gemmel, L. Cook, B. Johnston, J. Armstrong, D. Fenwick, J. Thompson, J. Hopkins and R. Dickens.

Hockey: H. Van Guyen, L. Cook, P. Lewis, M. Gemmel, J. Armstrong, B. Johnston, I. Parsonson.

Then, too, we have the lasses who form the core of the Womens' Hockey team.

All these are well supported by a group of solid barrackers, whose enthusiastic encouragement seems to have a beneficial effect, except on the hockey girls, who appeared quite unnerved by their presence.

Back Row, Left to Right: W. Marback, J. J. Howard, J. B. Hopkins, J. M. Armstrong, J. W. Capell, M. A. Gemmell, J. A. Frogley, I. M. Parsonson, P. F McCormack, J. M. Thompson.
Third Row, Left to Right: D. Roberts, R. W. Blogg, D. N. Brewer, K. B. Keane, R. G. Dreadon, R. T. Hales, P. R. Knight.
Second Row, Left to Right: B. G. Johnston, O. Jonkers, W. A. Dunbar, L. Forbes, P. B. Lewis, C. C. E. Thompson, J. J. Hayes, Miss E. Edmonstone, D. C. Fenwick, A. L. Cook, S. Hopcroft.
Front Row, Left to Right: Miss I. Gant, Miss P. Wilkinson, P. E. Mattner, J. Holt, Miss D. Edmonstone, Miss J. Clout.

Bruce Johnston, as President, and Phil Knight, as Vice-President of the S.U.V.S., have been proving themselves capable; Poss Hayes on the Dance Committee has been working hard. The great roll up of 3rd year to the Vet. Ball was due, in part, to the salesmanship, cunning and friendly blackmail of the great Poss.

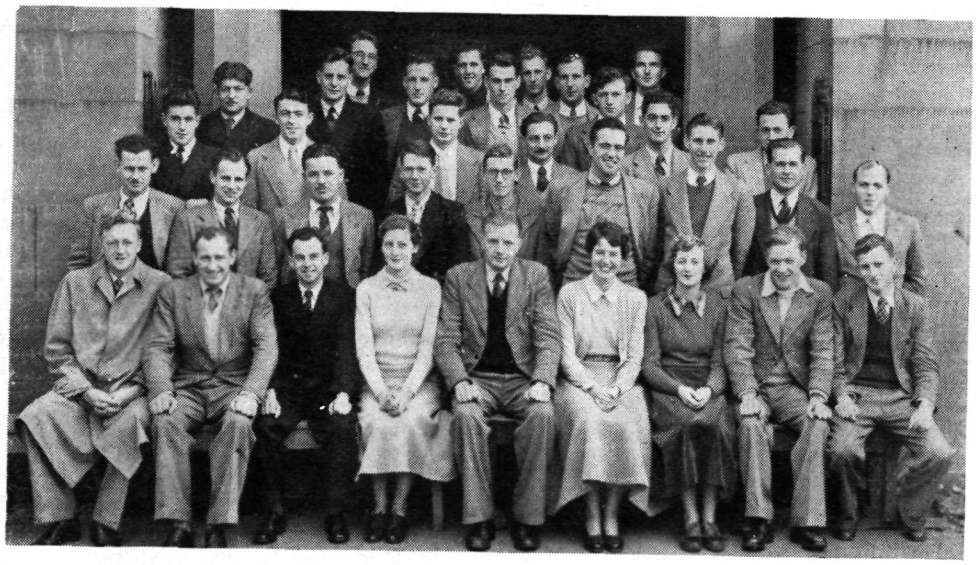
Aussie Rules players are jubilant over the conversion of ex-wrestling fan Jonkers, while local report has it that a Vet. may sometimes turn in a crafty hand at carpentry.

With exams creeping nearer, we wish one and all the best of luck in their ordeals.

FOURTH YEAR

Fourth Year, smaller in numbers than in the previous few years, got away to a good start for 1951. It was unfortunate that two of our members, Kevin Dobson and Bill Tredennick were unable to take their places with us, due to their confinement to Sanatoria, Kevin at Waipukurau, N.Z. and Bill at Concord Repat. We wish them a speedy and complete recovery, and hope that they will be able to resume their studies in the very near future.

Fourth Year seems to be the first year on the journey to becoming a Vet., when all the intricacies of palpation, auscultation, and percussion are unloosed on the innocent in the first week of the year, and the stores of knowledge that you have gained in the past seem all too meagre to fathom the ailments of the dogs, cats, sheep, parrots and canaries that swarm in on the clinic with anything from a sore toe to some nebulous disease of the cerebral cortex.



Back Row, Left to Right: J. C. Hurst, R. B. Dun, R. H. Lane, P. J. Scales, N. F. Courtney.
Fourth Row, Left to Right: M. B. Manson, R. W. Berry, B. H. Bailey, K. G. Austin, J. H. Thomas.
Third Row, Left to Right: G. R. Gee, T. H. Dysart, P. F. O'Connor, J. G. Geschmay, M. A. Spittle, A. H. Brook.
Second Row, Left to Right: J. A. Collard, J. D. Stewart, L. W. Spiers, B. P. Setchell, R. N. Gordon, C. W. Thomson, P. H. Malone, N. I. Paull, R. G. Coward.
Front Row, Left to Right: B. W. Bootes, J. T. Neasey, J. H. Arundel, Miss M. E. Wilson, R. G. Cuming, Miss J. C. Kater, Miss M. A. McKinney, J. M. Wilson, A. K. Lascelles.

Then there are the rodeo exhibitions "down the back," with ropes and eager "bods" flying in all directions one minute, or some ninety minutes later, when the huskier of the class strain muscle and sinew to the task of carrying some nag which has been to bye-byes for some thirty or forty minutes and finds being carried much more comfortable than standing on its own four legs.

B.B.B. — hundreds of pages of it — a never-ending source of wonderment to all who read it, are the energies of the author. We are back to the days now when the whole class can fit into the Lab. at once, and so have two practical periods instead of one per week. The intrigue and mystery of the microscopic world cause many of us to lose hours of precious beauty sleep.

And that man, the parasite mogul, chief contender for the position of dictator in the forthcoming World Speed Shorthand Championship, warns us of the dire consequences of "you" becoming the "intermediator" in the Host-Parasite Dispute, A.D. 1951.

It is in Fourth Year that the mysteries and secret portents of the witch-doctor are whispered in your ears, and you surreptitiously go about compounding the compatible with the incompatible in an air of hope and expectancy.

However, we are an enthusiastic and happy band, ready to have a go at anything from training a trotter at Harold Park to playing a 'cello with a National Orchestra. Our spirits are high, as we strive to emulate the deeds of former Fourth Years with a zest and zeal that behoves us as members of the senior year. Driven and coerced by Year Rep. Cuming, who is fast becoming renowned for his methods of extracting admission charges from hesitant starters, we have turned out in force to the various Faculty functions and helped make them the success they have been.

Jack Arundel, secretary; Andy Brook, vice-president; Margaret Wilson, treasurer; Jack Neasey and Gordon Cuming, are executive members of the Veterinary Society; Margot McKinney and Joan Kater are tireless workers on the Dance Committee (they made a profit on the Informal); Hurst and Spittle, Dinner Committee; Jacob, Cuming, Malone, Dysart and Coward, Sports

Society; Spittle, Hurst, Coward and Scales rowed in the victorious interfaculty "eight"; Charles, Shapcott, Brook, Malone and Austin in the Soccer team; Brook, Malone and Shapcott, Hockey Team; Hurst, Chesher and Lane, Swimming; Gee, winner of Vet's. 8 points in the Interfaculty Athletics; Berry Spittle Stewart, Bailey, Wilson, Panaretto, Austin and Neasey make up half the football team, so far unbeaten; Thomson and Saunders, Rifle Shooting; Spittle, Arnott, Arundel and Clarke are Aussie Rules addicts; Cuming, Dysart, Brook and Shapcott on the Committee of the Animal Genetics Society; Collard, Hickson and Lascelles in the Tennis Team; while Peter Malone has taken on the onerous job of Editor, business manager, advertising manager and chief copy reader of CENTAUR.

Congratulations to: Ran Jacob, captain of the victorious University 1st XV and also captain of the Combined Australian Universities in the Tests against the touring N.Z. University side; Jack Hurst, Chesher and Lane, Swimming; Gee, "eight"; Geoff Gee on winning an Athletic "Blue"; and Charlie Thompson, who has been consistently among the top scorers in the University Rifle Club.

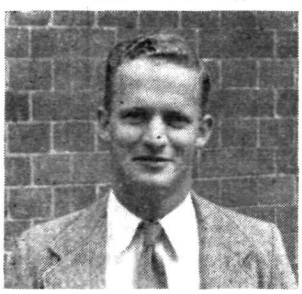
We further congratulate the old "daddy" of the year, Bruce Manson, on the addition to his family, as well as Lin Spiers, Norm Bolas and Pete Taylor on finding time to chalk up their number one; Val Archer, who found Easter a suitable time to change her name; we wish you many happy years of married bliss, Val and Ned; pig-islanders Jack Stewart and Bob Shapcott, for having lassoed, with one ring, the third finger of the left hand of two charming Sydney lasses, all the best June and Mary.

To Mr. Bain, who will be leaving the Faculty temporarily, to do a course at Yale University, we wish every success and a happy stay in the land of the "doughnuts."

The bacteriologists in the year suggest that the stars are right for sub-cultures to be sown on their selected media of Jackobius hursticus, Ianus paullicus, Brucellus bootesis, Johnocus geschmeyski, and Dontontis charlicis, so what about it chaps?

And, finally, we wish success to each and everyone with the hope that we shall be together in final year, next year, showing the same spirit and co-operation that has marked our stay in Fourth Year.

FIFTH YEAR



D. R. WEBSTER: One of the quieter types of the year, but a good investment at a party, as long as the beer is not in short supply. Ex-A.I.F., he acquired that dry humour in the Rabaul Drought. Being the original Pro Forma Boy of the Year, his future is assured whatever he tackles.

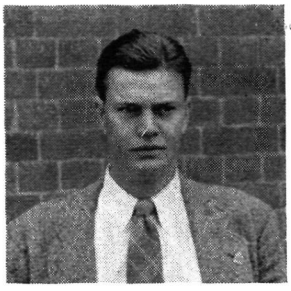
B. L. DIVETT: One of our new and very proud fathers—hence the beaming countenance. Barry has represented the Faculty in football, cricket, swimming, and has even stepped into the hockey goal when the need arose. A country practice seems the future aim and in this we wish him luck.

A. FISHER: Alan hails from Taumaranui, N.Z., is an ex-R.N.Z.A.F. gent and, postwar, he has acquired a wife and daughter—at different times. An active sportsman, he has played football for the Faculty ('47-48), extra curricular tennis and extraordinary golf. His fate probably will be that of the rest of his mob—a club veterinarian.

C. ST. GEORGE: Hails from Auckland, N.Z., and served with the Fleet Air Arm overseas and he periodically meets old Australian friends from this Service ! ! ! Court was a keen Faculty footballer at first, but found his cranium inadequately protected, so took up squash. The marks of his stay in Australia will always remain with him, indelibly imprinted by the walls of Wynyard tunnel.

J. N. FAULKNER: A product of one of the lesser Reform Schools of Melbourne, John, after seeing the world in the R.A.N., dedicated himself to a life of toil in 1947. He has had no disagreements with the examiners, in fact he surprised even his most ardent admirers and backers in 3rd Year. If a glib tongue and a little knowledge count for anything we are not worried about John's future.

A. R. C. TAIT: Alistair hails from Rothesay in the land of good whisky and arrived here by way of the Fleet Air Arm. He has a soft spot for Barracudas and tells some interesting tales of Hong Kong. The proximity of P.A. to Andrews led to his downfall, but as Jock speaks the only legitimate version of the King's English, a bilingual wife will be a blessing in the "apple isle".



K. G. JOHNSTON: "Curly" is a Sydney lad with a Hurlstone Agricultural High background. We are endeavouring to ascertain whether his moustache and the lack of growth around his temples has any correlation with his attitude to the fair sex. Scholastically one of the boys, Ken hopes to take up bacto. lab. work in future years—"Un'ealthy," we calls it.

B. HEFFER: Bruce left the R.A.A.F. by parachute over Germany and walked home to continue his interrupted studies. Some few years ago he was again shot down in flames this time by the "pick of P.A."—a charming girl—and walked into matrimony. A credit to the Faculty, he may be seen on any golf course disappearing into the big timbers—and, at the slightest provocation, returning to the 19th.

G. GIBLIN: Is a Tasmanian, however, his views are anything but insular. Ex-Service—he was a member of the R.A.A.F. It is probably not generally realised that Gordon's health has been far from satisfactory and his scholastic record does him great credit. He has been married for several years, and we expect great things from him when he takes up his appointment on Flinders Island.

L. R. BROWN: Another trans-Tasman refugee, Lloyd arrived here with a great respect for Australian womanhood and his Phoebean tastes have been exemplified by his choice of one as fiancee. He is well known for his ability at basket-ball, sailing, and capacity at Veterinary dinners. His plans for the future involve private practice and dog boarding.

C. H. GALLAGHER: Commanded the respect and friendship of the whole year—ever ready to assist those less fortunate, academically and alcoholically. Had a distinguished cruise through the course and, doubtless, will be a fine acquisition to research. Ex-bomber lad (quite a lad, in fact) but wed long since. A versatile sportsman, but studies came first.

M. L. FITZPATRICK: Despite two years in the Navy and the handicap of his earlier education, Mal has shown that by unstinted labour and unswerving devotion to one's work, examiners can be conquered with confidence. He found an odd spare moment to gain a Blue for rowing, but other indulgences never appealed, and we feel sure that such ideals betoken a rich future for him.

J. N. WALLACE: A New Zealander, who spent five long years in the Army, Jim was married after his return from Italy in 1945, and now has two sons. His family affairs haven't hindered his studies, however, judging by the impressive exam results. Although usually very quiet, he ably supported the Vet. Ball, 1950, (3rd pillar on the left).

J. M. HOLDER: John possesses a face which, by its conformation, must always smile and, incidentally, it reflects his nature. A golfing man above the average, he, at present, holds the McManamny Cup. This he has successfully combined with study and Faculty affairs—being Assistant-Secretary, 1949-50. Other people have decided his next five years' activities.

E. H. MILES: Ern was reared in the Victorian Mallee, worked his way through Dookie and has proved to be a solid worker ever since. He specialises in Pastoral Botany and crosswords, and is keen on Australian Rules. Is candidly outspoken and very methodical—will make a good practical Vet. when clear of the Department.

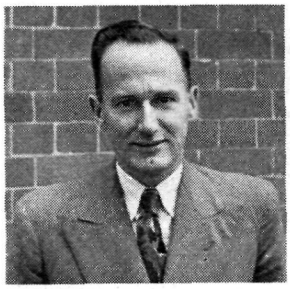
E. R. MANSON: Popular ex-R.A.A.F. type, mesmerised and trapped by charming brunette; finds amber an addictive colour, vital capacity prodigious; keenly interested in veterinary and punting aspects of thoroughbreds, dainty member of sensational "Glow-worms" and lent Herculean support to the Faculty XV. Future probably in private practice.

J. V. HARGREAVES: A married R.A.A.F. ex-serviceman, who spent some time in England poised on one side of the Channel, but never made the trip. Of small stature and normally possessed of an aggressive vitality, John becomes unjustifiably pessimistic around Michaelmas.. A permanent change of disposition was noticeable subsequent to his co-editorship of Centaur, 1950. His future tends to practice.

B. E. WILSON: Came to the Faculty in 1947 after service in Army small ships. Represented the Faculty in Football. Bruce married Dawn Miner at the end of 3rd Year and has gone from success to success ever since. An authority on cryptorchids and the possessor of an amazing store of dubious jokes. His future lies in private practice.

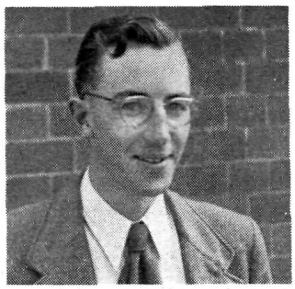
E. N. BUCKLEY: Came to the Faculty from the Air Force, in which he served as a pilot. Has represented the Faculty in basketball and soccer. One of the quieter members of the Year, i.e., always half a page behind in lectures, but is well up at the end of the year. Married Val Archer and is now much more cautious on motor bikes than he has been in the past.

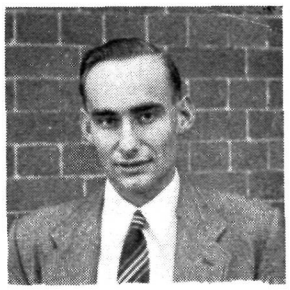
M. T. DAVIES: An ex-Queenslander, who finished the war as Intelligence Lieut. in a N.G. Commando Unit. Has a wife and growing daughter. Was our Second Year Rep. and has ably served the Society in other spheres—an original artist. Will forsake the Sunny North for private practice among Sydney's greyhounds and trotters.



K. A. OULAGHAN: One of the strong, silent type with a keen sense of humour beneath, Ken hails from Hawke's Bay in N.Z. Graduated in Science at Victoria in 1946. Universally popular, interested in all sports and assured of success in the profession.

P. F. LEWIS: A Gippslander, who proudly boasts a wife and three kids. Was a dairy farmer, but Phil discarded gum boots, after 12 years, to join the Vet. course. Co-operative in a quiet way, he has successfully cleared each year, been a member of the 1949 Debating Team and lent valuable assistance to Centaur, 1950. Hopes to practice on his home ground.



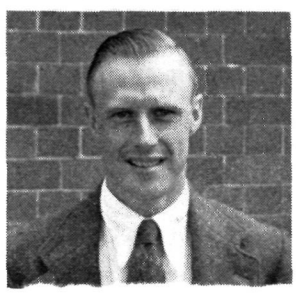


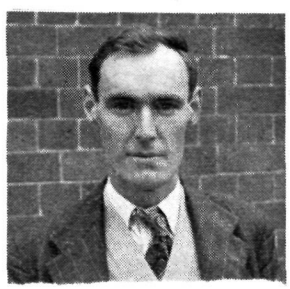
H. M. DEAKIN: A local lad and staunch supporter of all Vet. social gatherings, Hugh is always about when the whips are cracking. His one and only love (although rumoured differently) is horses, which probably explains his periodic absences about Show time. Very keen on the "fences," Hugh was seen last Easter taking one about two lengths in front of the horse. Future uncertain, but must be linked with the equine.

R. E. MOORE: An ex-Spitfire pilot who hails from the North Coast. Rees did a course at Hurlstone Agricultural School, became a bank clerk and then enlisted. On discharge, did a year's "matric." prior to starting Vet. Has had good results throughout and took the MacIlrath Scholarship in 1949. Was S.U.V.S. Secretary, 1949-50. Will probably make for Queensland on graduation.

B. C. EASTICK: A South Australian and a graduate of Roseworthy Agricultural College. Bruce is a successful student who has always been a keen and energetic supporter of the Veterinary and Genetics Societies. Used to have a car, but has marriage, private practice and another car waiting for him on graduation.

N. R. BEASLEY: An ex-R.A.A.F. type, Curly hails from Cowra, N.S.W., where recently he picked for himself a lifetime partner. Although not one of our biggest men, as a centre in the Faculty Rugby team, he wrought considerable havoc in the opposition ranks, and wear and tear on his own person with his tackles. Scholastically battling with most of us, Curly seems set for a country practice.





N. N. SORENSEN: Hails from Hastings, N.Z. Norm has remained single in spite of everything. He has an interesting theory on the aetiology of nymphomania in a certain locality. He always "behaves" himself "nicely" at Faculty dances. Norm plays golf but can't putt for nuts. Returning to N.Z. on graduation.

P. D. RANBY: A Penrith lad, whose speciality is the distant examination of the form and behaviour of the opposite sex. May be found at any time in the Fisher Library or Women's College in pursuit of these studies. Noted for his mystic ties and impeccable manner in the lecture theatre. Phil intends private practice at Tamworth.

MISS H. J. GALLOWAY: Usually a girl of amazing tact in an otherwise male year, Heather was once (only) heard casting doubts on the parentage of a fractious horse, thus illustrating her energetic approach to vet. More notable performances include hockey playing, Women's Sports Rep. and intimidating a man. To them both, we wish all success in their future together.

A. B. LINDSAY: Bruce is from Fruitlands, Central Otago. Served with H.M.N.Z.N. as "Captain of the Heads." At one time looked like a good entry for the Matrimonial Stakes. He likes to spend his leisure hours yachting on Pittwater, fishing at Long Bay and eating at "Weringah," and wields a cunning racquet. With his pleasant smile, he'll go far.

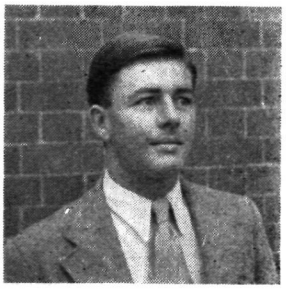
L. C. LLOYD: Final Year's helpful and smiling friend from south of the border, Len deserves our praise for producing an excellent "Centaur" and passing the 4th Year tails at one and the same time. Having graced the 'Varsity Rules squad on numerous occasions, Len, 'tis rumoured, has now turned his talents to the fairways, thereby raising many a greenkeeper's ire. No doubt, the moustache will help in lining up the flag, but the Victorian Department may be too small to hold it.

J. A. MILNE ("A" for 'andsome): John hails from Lake Wanaka, N.Z. Saw service in England with the R.N.Z.A.F. Has very set ideas on Parties —a regular champion of the oppressed taxpayer. After being married last September, John wonders why he didn't do it sooner. Included in his wide variety of activities are cuppa's at the Ovary, secondhand car sales and baby sitting. Creditors can look him up in Oamaru, N.Z.

V. E. WISEMAN: Vic. is a solid character from the Southern State. He joined the Faculty from that great team of deep water R.A.A.F. types, after pushing Catalinas around the sky for many an hour. In his younger and more foolish days, he represented the Faculty in football and, since then, has been a supporter of most Faculty functions.

L. TAMMEMAGI: A veterinary graduate of no mean ability, hailing from Estonia. Leino joined our ranks in 3rd Year, 1949—since then he had gained the admiration of all for his quite, unassuming manner of setting about things. A most welcome addition to our ranks; we hope and know that every success will come his way.

P. L. CUNNINGHAM: Phil is a South Australian who after some years as a radar operator in the R.A.A.F., took to Veterinary Science. Although tied to the Department of Agriculture, has a bent towards small animals. Has lived four years in Sydney, with Scotties and Dachs, on the North Shore.



L. J. FULTON: Hails from Maffra, Vic., and has an almost unique habit of producing High D's and D's. Has taken an active part in Aust. Rules Football during his course and represented Sydney Metropolitan against Broken Hill at the Silver City in 1948. Future undecided, but we predict a very bright one.

L. C. TOMLINSON: "Horrie" hails from the Murray Valley. Though constantly bemoaning his failure to "crack it", is always a keen starter. Essentially a sporting type, he believes in giving the examiner every hope of success. A Wesley man, his ambitions are to see the world, then become a "Sheep Cocky".

M. R. BARRY: A Victorian from the dairying district of Colac, Max started the course after a period in the R.A.A.F.—mostly in Germany. Has been one of the movers behind the scenes in many Faculty activities and the Genetics Society. Did play football, but now taking lessons at Moore Park—for golf, naturally. Other main interest is in the Med. Faculty.

P. D. CARTER: Peter, one of the younger members of the year, is a product of Sydney town. Apparently never troubled by the course, either golf or Vet., he sails serenely through both. Always a keen oarsman, Peter helped to pull the eight through to victory this year. His future lies in the hands of the N.S.W. Agr. Department. Woman's angle: Very fine type and unattached besides.

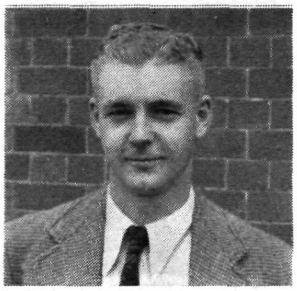
W. SPOTSWOOD (Tasmania): Breast fed, also baked flour instead of "Farex". Versatile sportsman with a Blue, plus a yard or two of trophies for Australian Rules. An ex-Army man and proud of the fact that he has yet to learn the taste of liquor. A thorough gentlemen (he knows who's writing this!).

P. K. van STELLINGWERFF: Known as "the Von" because of alleged prowess at golf, Peter's conversation within the Faculty seemed to be limited to such queries as "What are we smoking?" but apparently he had rather wider interests in other fields, having played basketball for the University 1949-50. He intends to go into small animal practice.

J. ANDERSON: Always a gen man whose blonde, curly hair warrants more than passing attention, ladies. John has established himself, in the year, as the dancer divine and one who can always be called on for a Lifesaver, Bex or reliable lecture notes. His frantic buying of surgical equipment seems to indicate a bent in the good Doctor's direction, but Dance rumour whispers practice at Guildford, N.S.W., the old home town.

C. E. LIEFMAN: After being chased by the morning star, Ted left his "Thousand hour cap" to the moths of Melbourne and pressed on to a new target (E.T.A. Nov., '51). As Year Rep. (1949) he did a great job—dance advertising a speciality. He is an enthusiastic player of the southern brand of football and squash and has represented the Faculty in swimming.

N. B. WALDEN: Neville hails from Waverley, where he is the scourge of the local lovelies. Despite his environment, has shown no Bodgie tendencies. Chief hobbies are worrying, which keeps him fit, and collecting good oil, which he imparts liberally to the less well informed. As a career, Neville favours stock inspecting.

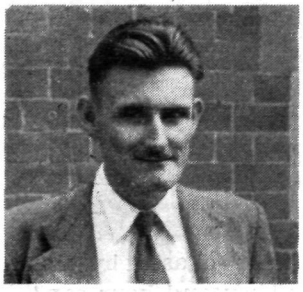


R. R. MAXWELL: Ex-R.A.A.F. type from the Upper Clarence, Rex's attention is now focussing on the private practice field. Renowned for his jitterbug performances during the terminal stages of various Vet. frolics. (Why don't you stand up Maxwell?) Aversions include Herefords without horns and (temporarily) a certain local high-spot.

N. M. WALLACE: Mac, one of our married men, graduated in Science at Auckland in 1943. Confidentially, he is one of the "Whips", as well as winning the War Memorial Prize, 1950, and is destined for Animal Research at Ruaura. He has been an active participant in most sports, including poker. In the future, little grass should grow under his feet.

L. E. A. SYMONS: Ex-R.A.A.F., married, with three young children, and is an expert on house renovating. Prewar, Lawrence was jackarooing in home state, Sth. Aussie. Has accredited himself well in this course and did sterling service as Society President, 1949-50. Has an eye on microscopy at Vet. Institute in Adelaide. P.S. Is a "demon" bowler.

S. H. M. THOMAS: One of the Kiwi boys—noted for his moribund condition following Vet. functions. As a fowl catcher, his mid-night chicken swinging efforts failed to reach Zootechny standard. No high-heeled shoes under his bed *yet,* we are told. Prescribes Rum and Mud plasters for football sessions. Destined for club practice in New Zealand.

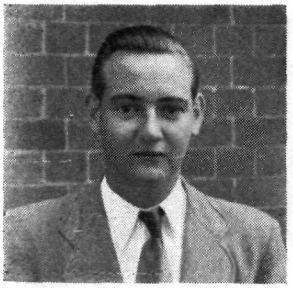


F. J. FLOWER: The possessor of a wit and an original vocabulary to match his height. He says he has never been intoxicated, but has been seen by many having cigarettes flicked from his mouth with a stock-whip. Before starting Vet. Sc., saw service in Syria, New Guinea and Borneo. He has a partiality for poetry, literary ladies and other cultural pursuits.

A. N. MARSHALL: "Mopsy", the junior member of that famous brace of "mountain men"', is one of the quieter, but none the less effective members of the year. A keen footballer, as "rake" he was a valuable acquisition to the Vet. XV. You can be sure that Alan won't forget to fill his bag with corn "sammy gees" when he goes north next year.

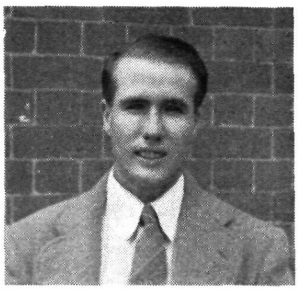
W. E. SOUTHGATE: Wes has pushed his way successfully, and without posts, through each year as it came, in spite of the fact that he was never able to sleep soundly in lectures—someone would keep talking. Tall, handsome, likeable and unattached, he should be quite a "find"—to the Victorian Department, that is!

B. MORRIS: Undoubtedly the brightest spark to have lit the Vet. School in its lifetime, the "great Moritzy" came to us ex Army, and dazzled all with his form each November, his dexterity in innumerable sports and his metamorphosis from a quiet 'un, to the most zealous supporter of all Faculty do's and don'ts. A brilliant research career will be his, but Cambridge beware!




J. F. SAINTY: Yet another Sydney North Shoreite, John has steadily but very quietly progressed towards the exalted heights of 5th Year, very sure that one honour, at least, is his—"baby of the year." An obvious deep thinker, for very little ever passes his lips, the occasional wearing of loud ties may indicate hidden depths. A Sydney suburban practice is rumoured to be John's fate.

D. N. MACKIE: Yet another fearless flier; Don dropped his Flight-Lieutenant disguise in 1946 and commenced his labours in the Faculty of Agricultural Science. He repented, to join us in 1947. In the interim he has managed to become engaged, survive two years' ownership of a small green vehicle and to star in the Faculty Golf Championships. It would appear he is heading for marriage and then for the good green acres down South.

J. C. BALLEK: John came to us from south of the border. His pose as one of the staunch, quiet members of the year, is rather deceptive and we believe that beneath his non-committal grin lie untold depths. Having clashed, on occasions, with the views of certain radical examiners, John is very wary when predicting his future, but we wish him well in all he takes up.

A. R. JACKSON: Hailing from Wollstonecraft, N.S.W., Alan has brought cheer to all around him since he landed amongst us in 1947. Besides showing an unnatural desire to lose himself on numerous bushwalking expeditions, "Jacko" has graced, with distinction, several Vet. hockey teams, the victorious 1951 Crew and, on occasions, our big social events. Success must come his way, despite a certain Minister. All the best, Alan!


O. E. RAYNER: A country lad, hailing from Deepwater, near Glen Innes, Olly is possibly one of the quietest in the year. Has shown a steady determination since entering the Faculty in 1945, in spite of the odd post, and undoubtedly should prove successful as a private practitioner on returning to his home town.

A. J. F. GIBSON: Hails from Goulburn and joined the Faculty in 1947, after serving in the Army up North. Has a solid academic record and is equally solid on the hockey field. A keen photographer, was responsible for the technical excellence of this year's gallery, whilst apologising for the non-photogenic material. His interests in Devons, Southdowns and Galloways augers well for the future. To Heather and yourself, the best of everything, Andy.


D. H. FITZPATRICK: Fitz. has a longing for white sails, an audience for his melodious voice and a woman to appreciate his freely offered charms. Coming from the mud and slush of Gippsland via Dookie College, David, a Wesleyian, is destined for the Vic. Government service.

A. J. BRUCE: A 2nd N.Z.E.F. man from Ashburton, Alan has shown an amazing capacity for swotting and wooing, as his recent engagement and high blood pressure readings in Physiology days signify. Prominent in Faculty Rugby and other activities, he intends returning home "twosome" at Christmas.


D. A. J. WALKER: Happy by nature, possessing a love for the Union "flicks", our Dave, nevertheless, professes a violent dislike for bow-ties and "Enzedders", but doesn't practice what he preaches. During the course, he acquired a brilliant wife and an excellent set of lecture notes. Dave's future thoughts lie in N.Z. practice, presumably aimed at carrying out a lone-handed campaign against the inhabitants. We wish the Walkers all the best.

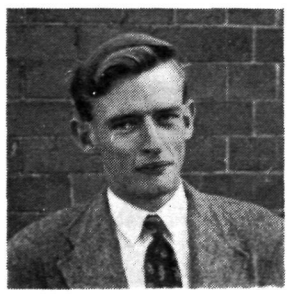
H. A. COLLETT: Harry, a happy character, originated from Gisborne, N.Z., served with the 2nd N.Z.E.F. in the Middle East and has since taken the trials of exams., "ill-health" and wooing in their turn. A keen angler, he hopes to return to N.Z. with an Australian bride and fishing tackle.


P. R. AICKIN: From Auckland, N.Z., and one of the quieter members of the year, Pete saw service in the R.N.Z.A.F. His sporting activities include tennis, golf and billiards, in which he shows occasional flashes of brilliance—hence the name "Accurate Aickin". For the future he intends to go into private practice in Auckland.

K. V. JUBB: Definitely one of the "brains" of the year and a product of the Victorian Western District, Ken is tall, quiet, with "Lincoln" locks and a flair for bright ties and heavy subjects, especially Medicine. However, he indulges in Aussie Rules by way of diversion. Should hear more of him in the future.


P. J. MYLREA: This magnificent specimen came to us from Queensland at the beginning of fourth year, hence claiming distinction as the last refugee from that area. He quickly became acclimatized both academically and socially, though for many months he missed his daily dose of sunshine. Future uncertain, possesses an enquiring mind, and has a leaning for diagnostic laboratory work.

M. C. MORISON: This ex-fighter pilot is the silent type, but we do know that Greg's interests range from polo-crosse to school houses down Nowra way. Has always been well to the fore in the annual obstacle race. Future plans uncertain but should include changing that school-bell to wedding bells.



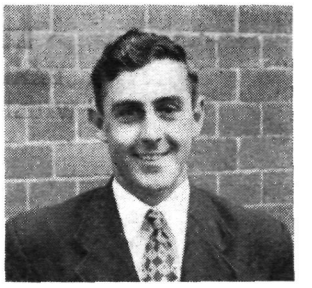

P. T. DIPLOCK: A local lad, Peter is renowned for his ability to apply "Farmer Miles" to a standing animal, and for his love of Union tea and the "Von's" cigarettes. Married in 1950, he is forever expounding on the joys of wedlock to any unfortunate bachelor within earshot. His future plans are mixed up with private practice and the P.M.G.'s Telephone Department.

P. T. GILCHRIST: Of local origin, Paul has progressed steadily through the course, although apparently working best in February. Has been seen on manoeuvres with the S.U.R. and is a mainstay of the Newman Society. Prospects are those of a N.S.W. Departmental man. Woman's view: Looks a bad 'un, but relatively harmless.

K. F. McCLYMONT: Originally from Orange, Mac joined us from the Air Force. He is never stuck for a word and will join a discussion on any subject, his stories providing some amusement to those who have not heard them before. Has played both University and inter-Faculty football. Is intending to return to the land.

J. M. JOYCE: Hails from Hampden, New Zealand. Jim is well versed in politics, the Law of Diminishing Returns and women, and is always eager for an argument on any score. He has always been a "starter" in Faculty football games and is said to wield a fair glove. Jim expects to return to New Zealand, but from this point his future is obscure.

J. N. AUBREY: An ex-A.I.F. type, with an evil bent for practical joking—especially with regard to blind dates. Coming from the upper crust in Vaucluse, he has barely been able to escape a fate worse than death, behind Cathedral doors, on a few occasions. Has disgraced himself suitably at all Vet. functions and is one of Mr. Doab's principal sources of income.



B. PORTWAY: Chubby, Percy or Thymus, an ex-Naval type, graduated with honours for drinking smoking, manoeuvring in hospital grounds all over Sydney and for good company. He represented the Faculty in football, hockey and soccer. We shall all miss his good-natured abuse and penguin story. Ambitions: Private practice and marriage, if unavoidable.

LIST OF PRIZE WINNERS IN 1950

BAKER AND RIDLEY MEMORIAL PRIZE: Peter Francis Taylor

WILLIAM COOPER AND NEPHEWS PRIZE: Leonard James Fulton

S. T. D. SYMONS PRIZE FOR CLINICAL SUBJECTS
William Edward Walmsley

J. D. STEWART PRIZE FOR BEST ESSAY
Bernard Joseph Doyle

FIRST CLASS HONOURS AT GRADUATION
William Edward Walmsley (University Medal)
Bernard Joseph Doyle

SECOND CLASS HONOURS AT GRADUATION
Henry Francis Dewes, James Thomas Kelly, Peter John Claringbold, Rex Milton Butterfield

FACULTY OF VETERINARY SCIENCE FIRST YEAR, 1951

Anderson, D.C.
Bailey, D. A.
Barrass, J.
Baxter, V. J.
Borland, R.
Calley, G.
Cotton, W. G.
Donald, A. D.
Dunlop, R. J.
Ferguson, D. R. (Miss)
Gallagher, B.
Glanville, B. H. (Miss)
Hungerford, P. R.
Ismail, Y.
Johnson, A. J. G.
Kennard, D. N.
Kiss, P. G.
Larsen, R. F.
Leedham, L. N. (Miss)
McBride, J. M.
MacCallum, J. M. (Miss)
McKellar, C. J. C.
Manusu, H. P.
Matthew, F. H.
Ryan, R. K.
Smith, B. D'A.
Smith, D. D.
Todhunter, B. P.
Wearne, P. H.
Weaver, R. N.
White, M. B.
Whitehead, P. W. J.
Williams, P. E. (Miss)
Williams, R. C.

FACULTY OF VETERINARY SCIENCE SECOND YEAR, 1951

Barry, R. D.
Barton, B. D.
Beckett, F. W.
Bonner, R. B.
Borella, J. C.
Bradney, I. W.
Broe, M. G.
Cahn, J. G. (Miss)
Caterson, J. (Miss)
Cole, P. S.
Cooper, K. J. P.
Davidson, G. N.
Dunkley, B. M.
Dunsmore, J. D.
Dysart, L. H.
Edwards, A. A. M.
Falconer, A. M.
Fielden, E. D.
Gallagher, J. P.
Gardiner, K. B.
Goodsell, J. T.
Graham, J. M.
Grundy, E. H.
Handel, W. A.
Haneman, J. H. (Miss)
Hicks, L.
Hollywood, J. E.
Hyne, R. H. J.
Irving, D. V. H.
Johnston, D. E.
Jolly, R. D.
Jones, D. K.
Jowett, E. A. D.
Joyce, H. E. (Miss)
Leaver, D. D.
Lindner, H. R.
Littlejohns, I. R.
McCormick, G. H.
Martin, I. C. A.
Parsons, H. P.
Potter, S. E. (Miss)
Pulver, G. B.
Ramsay, J. W.
Rees, P. B.
Rose, A. D.
Rosen, A. J.
Shalders, M. J.
Slack-Smith, J.
Stutchbury, G. B.
Telfer, D. I.
Tynan, D. A.
Waldron, K. V.
Wales, R. G.
Wilhelm, B. L. (Miss)
Wilson, B. E.
Wootton, J. B. (Miss)

FACULTY OF VETERINARY SCIENCE THIRD YEAR, 1951

Armstrong, J. M.
Blogg, J. W.
Brewer, D. N.
Capell, J. W.
Clout, J. (Miss)
Cook, A. L.
Curtin, K. J.
Dandy, G. A.
Dickens, R. K.
Dreadon, R. G.
Dunbar, W. A.
Edmonstone, D. (Miss)
Edmonstone, E. (Miss)
Fenwick, D. C.
Foote, O. J.
Forbes, L. S.
Frogley, J. A.
Gant, I. (Miss)
Gemmell, M. A.
Gudsell, K. E.
Hales, R. T.
Hayes, J. J.
Holt, J.
Hopcroft, S.
Hopkins, J. B.
Howard, J. J.
Johnston, B. G.
Jonkers, O.
Keene, K. B.
Knight, P. R.
Lewis, P. B.
Marbach, W.
Mattner, P. E.
McCormack, P. F.
Parsonson, I. M.
Roberts, D. S.
Sloss, V.
Street, P. J. L.
Thompson, C. C. E.
Thompson, J. M.
Tregurtha, D.
Van Gyen, J. B.
Whiting, R. H.
Wilkinson, P. (Miss)

FACULTY OF VETERINARY SCIENCE FOURTH YEAR, 1951

Archer, V. M. (Miss)
Arnott, W. J.
Jacob, R.
Jones, N. S.

Arundel, J. H.
Austen, K. J.
Bailey, B. H.
Berry, R. W.
Bolas, E. N.
Bootes, B. W.
Brook, A. H.
Charles, D. D.
Chesher, G. B.
Clark, B. L.
Collard, J. A.
Constantine, K. R.
Courtney, N. F.
Coward, R. G.
Cuming, R. G.
Dun, R. B.
Dysart, T. H.
Gee, G. R.
Geschmay, J. G.
Goldman, J.
Goodwin, M. (Miss)
Gordon, R. N.
Green, P. S.
Helean, N. J.
Helwig, D. M.
Hickson, R. V.
Hurst, J. C.
Kater, J. C. (Miss)
Lane, R. H.
Lascelles, A. K.
McKinney, M. A. (Miss)
Malone, P. H.
Manson, M. B.
Mathers, J. A.
Miner, D. (Miss)
Neasey, J. T.
O'Connor, P. F.
Panaretto, B. A.
Paull, N. I.
Saunders, B. P. A.
Scales, P. J.
Setchell, B. P.
Shapcott, R. C.
Spiers, L. W.
Spittle, M. A.
Stewart, J. D.
Taylor, P. F.
Thomas, J. H.
Thomson, C. W.
Wignall, W. N.
Wilson, J. M.
Wilson, J. P.
Wilson, M. E. (Miss)
Knowles, R. J.

FACULTY OF VETERINARY SCIENCE
FIFTH YEAR, 1951

Aickin, P. R.
Anderson, J.
Aubrey, J. N.
Ballek, J. C.
Barry, M. R.
Beasley, N. R.
Brown, L. R.
Bruce, A. J.
Buckley, E. P.
Carter, P. D.
Collett, H. A.
Cunningham, P.
Davies, M. T.
Deakin, H. M.
Diplock, P. T.
Divett, B. L.
Eastick, B. C.
Faulkner, J. N.
Fisher, A.
Fitzpatrick, D.
Fitzpatrick, M.
Flower, F. J.
Fulton, L. J.
Gallagher, C. H.
Galloway, H. (Miss)
Giblin, A. G.
Gibson, A. J. F.
Gilchrist, P. T.
Hargreaves, J. V.
Heffer, B.
Holder, J. M.
Jackson, A. R.
Johnston, K. G.
Joyce, J. M.
Jubb, K. V.
Lewis, P. F.
Lifeman, C. E.
Lindsay, A. B.
Lloyd, L. C.
McClymont, K. F.
Mackie, D. N.
Manson, E. R.
Marshall, A. N.
Maxwell, R. R.
Miles, E. H.
Milne, J. A.
Moore, R. E.
Morison, McG.
Morris, B.
Morton, H. S.
Mylrea, P. J.
Oulaghan, K. A.
Portway, B.
Ranby, P. D.
Rayner, O. E.
Spotswood, C.
St. George, C.
Sainty, J. F.
Sorensen, N. N.
Southgate, W.
Stellingwerff, P.
Symons, L. E. A.
Tait, A. R. C.
Tammemagi, L.
Thomas, S. H.
Tomlinson, L.
Walden, N. B.
Walker, D. A.
Wallace, J. N.
Wallace, N.
Webster, D. R.
Wilson, B. E.
Wiseman, V. E.

OBITUARIES

Mr. J. W. Newcomb

The Faculty suffered a severe loss by the death of Mr. J. W. Newcomb in December of last year.

Mr. Newcomb had been a member of the staff of the Veterinary School for a number of years in various capacities. Since graduation, Mr. Newcomb had been a House Surgeon, a lecturer in Materia Medica, Therapeutics and Pharmacy, and latterly had been Superintendent of the Veterinary Hospital and Clinic.

His loss was deeply felt by staff, students, and the public, by whom his sympathy and kindliness were always much appreciated.

Mr. Les. McKeand

Mr. Les McKeand, who had represented Australia at the London Olympic Games in the Hop, Step and Jump, was tragically killed in a motor accident last year.

Mr. McKeand had been on the staff of the Veterinary School as a Temporary Lecturer in Zootechny for a year after his graduation in 1948. After he left the staff he acted as assistant to Mr. John Bentley, of Singleton.

His untimely death was deeply felt both by members of the staff and the students.

Mr. Arthur Eedy

Mr. Arthur Eedy, who was a fourth year student, discontinued his course to work on his father's property for a year.

Mr. Eedy was killed in an accident on the Braidwood road when his car skidded and overturned.

MOTHERING

The occasion often arises when it is desirable to find a mother for a good type of lamb, and failing the sympathetic attention of someone to "poddy" it, a not uncommon practice is to transpose the pelt of either a black lamb, or a dead lamb to that of the motherless lamb. This is an effective method, sometimes somewhat odorous if the weather be warm, but always sadistically humorous to the casual observer. More humane people advocate the "Kerosene Theory." The essence of this method is to anoint both the nose of the ewe and the back of the lamb with kerosene, and confine them to a small yard for a day. Both the above methods have one feature in common, viz., deception.

Stud lambs present yet another difficulty. Being the aristocracy of their breed, it is of little wonder that their cortico-spinal tract be extensive, and thus show more intellect than flock sheep. Those familiar with the mothering yard will have many instances to record about the old ewe who would not let her lamb suckle. Stamping of her feet and bunting emphasised her dis-ownership of her thirsty lamb, and many is the time such a ewe and lamb are placed in a small yard and surreptitiously watched. Apparently, out of sight, out of mind, despite well developed C/s tract.

Casual "robber" lambs exist in all flocks, and apart from being mothered by numerous mothers, because of their polydypsia, are usually found to be so full of stolen milk that they are reluctant to show interest in their own mother, even when introduced.

Twins, the bane of any stud breeder, present many an interesting sidelight, and the unmothered lamb of every pair may be always expected to reply to every maternal baa.

Dystokic lambs are forever the problem of the day to the stockman obstetrician. "Make the ewe chew foetal membranes." "Build a brush yard and leave 'em." Probably the stockman, who after delivering a daughter to a timid maiden ewe, had the solution when he tied the ewe's legs with a long cord with releasable knot, and after a stealthy retreat, a smoke and a think, slowly reeled in his cord and released the mother to find her new lamb under her nose.

On a larger scale, boxed lambs probably provide the most interesting material, and the following suggestions were made by two owners in the Western Division, when they met at the boundary yards one morning to draft up such a mob of 1,500 boxed ewes with lambs.

"I reckon the best idea would be to run the whole lot through the race, draft off all my ewes, and we'll swab their udders with Stock Tar. We can then let the whole mob box in the back yard, and in the cool of the evening, run off all my ewes and the lambs with black noses. I'll take them over to my horse paddock by dusk and leave you the yards for your mob to settle down."

The second owner, seeing his low percentage lambing for the year becoming even lower by this method, replied:—

"Well, that sounds a bit tiresome to me. We will only knock the lambs about and get dust in the wool. It will mean running the whole mob through twice. I tell you what we'll do. We'll draft your ewes off from mine and let half of the lambs go with each mob. We can pull the bottom wire out of that good stretch of fence over there for a strain or two, and I'll shepherd my ewes on this side for the rest of the day. You can hold your sheep on your side. By dusk the lambs will have shaken themselves out."

What do you think?

P.R.K. III

"BUGSTALE"

Now the Bugs abide in the land of Spain,
Working all day for the sake of Brain.
For Bain, the First, is the nation's pride,
As reward has been sent to "the other side."
And they sleep at night, for the sake of rest,
For their doctor says this suits them best.
And they spore so readily at sign of antibiotic,
So we're told, to defend their "leucotic,"
Tho' they're not neurotic
They're most averse to that antibiotic.

The Bugs abide in a far, far field,
Thru the eyepiece and beyond the objective,
And to most stains they yield
With a grace so beguiling and most selective.
There the Bugs dwell with their aunts and wives
In draught-proof capsules all their lives.
And they spore so readily when the weather is wet,
To see how asexual they can really get.
Pray, don't forget
This is chiefly done when the weather is wet.

And every demonstrator that laughs and smiles,
And every whip that studies and whiles
His time away at night,
All know the Bugs well by sight.
And they say, "Your staining is bad;
Come back next year, my lad."
They spore so readily as a general rule
For exercise when the weather is cool.
They're taught at school

To spore like that when the weather is cool.
Hiding in technicality so profuse,
Allowing the beginner to accrue much abuse;
The antigenically heterogenous and most phonetically blasphemous,
We will call with them a truce,
For their first cousins do produce
That great brew of Tooth's.
And they spore so readily as they heard
The approaching footsteps of the Jonesy bird.
It seems absurd,
But they're foolishly fond of that Jonesy Bird.

"Bugstale" Reference Dennis, C. J.

—By C.P.O.F. IV.

Latest addition to the Nicholas range —

Nicholas Product

MASTICS for MASTITIS

TRADE MARK

Penicillin in Soluble Stick form for the FIRST TIME IN AUSTRALIA!

Latest U.S.A. method now available in Australia. 25,000 units of penicillin in stick form—easily inserted in the teat—quickly dissolves in the milk. Features of 'Mastics'—Low Cost of Treatment. Extreme Simplicity of Operation. Possibility of Irritation reduced to minimum. Accurate Dosage. No Wastage. Protection against Cross-infection. Tests have indicated that with 'Mastics' there is less evidence of irritation of udder tissue.

Superior Veterinary Emulsion

Nicholas Product

Vetemul

TRADE MARK

Supplying Vitamin A and Vitamins A & D3

'Vetemul' BLUE Label (Vitamin A)

"Vetemul" Blue Label is an emulsion derived from fish livers and contains 5,000 int. units of vitamin A per gramme. This vitamin A content is guaranteed after being spectrophotometrically assayed in the Nicholas laboratories. Literature on request.

'Vetemul' GREEN Label (Vitamins A & D3)

"Vetemul" Green Label is an emulsion with the same vitamin A content as Blue Label (5,000 int. units per gramme) to which vitamin D3 has been added in pure chemical form in one-tenth quantity (500 int. units per gramme) which in practice has proved the most effective balance for general purposes. Vitamin A content is spectrophotometrically assayed. Literature on request.

'Vetemul' BROWN Label (Vitamins A & D3)

HOUSEHOLD SIZE

"Vetemul" Brown Label has been made available for small users such as householders with bird or animal pets or small flocks of fowls. It contains vitamins A and D3 in the same balance as Green Label, but in a different potency—1,000 int. units of vitamin A per gramme and 100 int. units of vitamin D3 per gramme. Literature on request.

RIBON

TRADE MARK

Pure Riboflavin (VITAMIN G or B2)

Riboflavin (vitamin G or B2) in pure form —a fine golden crystalline powder and available in packets of four grammes. "Ribon" is a much more economical method of supplying riboflavin than from natural sources and its introduction to Australia has proved of great benefit to poultry and live stock breeders. Literature on request.

Nicholas Product

SULPHA-G

TRADE MARK

SULPHA DRUG proven effective for WHITE SCOURS & COCCIDIOSIS

"SULPHA-G"—Veterinary Sulphaguanidine —has been successfully used for white scours, and other enteric infections of calves, and enteritis of dogs. It is also indicated for the treatment of fowl and animal coccidiosis, bacillary diarrhoea, and dysentery in all domestic animals, including enteritis of pigs, horses and sheep. "Sulpha-G" is very economical to use. For example, treatment of white scours in calves ranges from 2/- to 3/- per head. Literature on request.

Nicholas Pty. Ltd. AGRICULTURAL & VETERINARY DIVISION
37 Swanston St., Melbourne, Australia

'PROTEGAN'

in penicillin-resistant mastitis

'PROTEGAN' brand dibromopropamidine isethionate 4 *per cent.* (200 mgm.) with sulphathiazole 1 *per cent.* (50 mgm.) in arachis oil/beeswax suspension is available in 5 c.c. collapsible tubes for intramammary injection.

In clinical and field work 'Protegan' has given good results in subclinical and clinical cases of mastitis due to *Staphylococcus aureus*, *Streptococcus uberis*, and *Streptococcus dysgalactiae*, many of which had already failed to respond to penicillin therapy.

Some cases of mastitis due to *C. pyogenes* have also been bacteriologically cured by 'Protegan', and a more extensive use of this product may well be indicated.

'PROTEGAN' is supplied in boxes of 20 x 5 c.c. tubes.

VETERINARY PRODUCTS M&B

manufactured by

MAY & BAKER LTD

VA20

distributors

MAY & BAKER (AUSTRALIA) PTY. LTD

5 Phillip St., Sydney, *telephone* **BW6902** — **266 Lygon St., Carlton N.3, Melbourne**, *telephone* **FJ5780**

Radio Printing Press Pty. Ltd., 146 Foveaux St., Sydney. FA 7054