VOLUME 1. NUMBER 3.

THE JOURNAL

OF

THE SOUTH AFRICAN VETERINARY MEDICAL ASSOCIATION.

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The South African Veterinary Medical Association.

NOVEMBER, 1929.

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1930.

CONTENTS.

EDITORIAL.

The Future of the Profession.

The year which has elapsed, although not marked by any epoch making events, i.e., for the S.A.V.M.A., has nevertheless not been without interest to those of us who have the welfare of the profession at heart. The most outstanding event, especially for colleagues who belong to the Colonial Veterinary Services, is the publication of the report of the Lovat Committee. Their difficulties and ambitions have been realised at last and with the present energetic Government in Great Britain, it is to be hoped that the recommendations of the Lovat Committee (set up by the former Conservative Government) will be fulfilled.

What have we in South Africa to console or rather cheer us ? Salaries and leave privileges in the State services are less favourable than ever before, and generally the material side of professional prospects are unsatisfactory. We are therefore forced to consider the spiritual aspect of the position. It is, under the circumstances, most gratifying to observe the keen interest taken by the younger members in professional affairs. This has been shown both in committee and general meetings and some very outspoken, but true, comments have been made with regard to our prospects. This is all to the good and although we may possibly differ as to the best means of bringing about an improvement, the fact that the younger generation are interested is a matter for gratification. The first essential naturally is legal protection for our calling, and we rejoice that the value of the Natal Veterinary Act (21/1899) is being appreciated.

We trust that this enthusiasm will be maintained and that all members will assist in making the S.A.V.M.A. a live organisation. We wish, however, we were supported more loyally by the private practitioners, who, after all, will benefit most by a Veterinary Act. We therefore greatly appreciate the example set by old members such as Messrs. Amos, Crowhurst and Strachan.

Reverting to the keenness of the younger men, we feel that just as it is necessary to introduce new blood in order to improve a breed, so is it desirable to encourage them to take a more active part in our deliberations. By representation on the Council (unfortunately most inactive) and standing committees we can therefore best bring about this state of affairs and so ensure a more fitting place for our profession, especially in the sphere of public health.

6th Pan-African Veterinary Conference

This Conference met in Pretoria during August and many of our members who attended the S.A.V.M.A. meeting on 5/8/29 availed themselves of the opportunity of listening to some of the discussions. It is not proposed to allude here to any of the topics discussed, as all our members will in due course peruse the full report of the Conference at their leisure. Those of us who were privileged to attend day by day could not help but being impressed with the high standard which was maintained throughout, and we came away with an increased feeling of pride in our profession and its activities throughout the so-called Dark Continent.

Apart altogether from the purely professional and scientific side of the discussions, we noted that veterinarians from the various African states were also taking a big share in the **economic** development of their territories. Throughout the various debates it was evident that our colleagues were imbued with the very highest motives, and that they were carrying out pioneer work of the utmost importance. They are indeed the torch bearers of progress in Africa and may we all worthily carry on the tradition !

THE ASSOCIATION.

South African Veterinary Medical Association.

Although the S.A.V.M.A. represents the amalgamated Cape, Natal and Transvaal Veterinary Medical Associations, yet the initiative in forming this organisation was taken by the T.V.M.A. At the Sept., 1919 Council meeting of the T.V.M.A. held at Pretoria, the following resolution was carried unanimously :—"That the T.V.M.A. sacrifice its identity, handing over all funds at its disposal, to the new South African Veterinary Association (1) with whom all members of the T.V.M.A. shall become affiliated, and that the existing officers of the T.V.M.A. shall become for the time being, officers of the South African Veterinary Association." (2) At that time membership was 51, and the Cape and Natal bodies, although possessing funds (later handed to S.A.V.M.A.), were inactive.

The inaugural meeting of the S.A.V.A. was held on 1/4/20 in the Board Room of the Witwatersrand Agricultural Society, Johannesburg. Mr. C. E. Gray acted as Chairman in the absence of Mr. R. E. Montgomery and Mr. D. T. Mitchell, to whose energy the formation of the S.A.V.A. was primarily due, was Hon. Secretary. The initial membership was 79 representing a total of 83% of the profession in South Africa, i.e., including Southern Rhodesia.

The annual subscription is one guinea (£1 1s.) which is due in advance on 1st June of each financial year.

Members are expected to notify the Hon. Secretary of any change of address.

PAST AND PRESENT OFFICERS.

Past Presidents.

R. E. Montgomery 1920-21.
J. Irvine-Smith 1921-24.
P. J. du Toit 1924-29.

Past Hon. Secretaries.

D. T. Mitchell 1920-21.
A. C. Kirkpatrick 1921-29.

Past Hon. Treasurers.

J. G. Bush 1920-28.
J. B. Quinlan 1928-29.

Past Vice-Presidents.

C. E. Gray 1920-21.
F. C. Gavin 1921-24.
R. W. Mettam 1924-25.
W. M. Power 1925-26.
G. de Kock 1926-27.
A. Goodall 1927-28.
——— 1928-29.

Year Easter 1929 - Easter 1930.

President : Dr. P. J. du Toit, P.O. Laboratory.
Vice-President (3) : J. Chalmers, P.O. Box 877, Johannesburg.
Hon. Secretary : A. C. Kirkpatrick, P.O. Box 1620, Johannesburg.
Hon. Treasurer : Dr. J. B. Quinlan, P.O. Laboratory.

(1) The name was changed to S. African Veterinary Medical Association at the general meeting held in Johannesburg on 11/4/22.

(2) This resolution was confirmed at the general meeting of S.A.V.A. on 1/4/20.

(3) Of the nine members of Council elected, one is appointed Vice-President.

Members of Council.

Messrs. Chase, Curson, de Kock, Goodall, Power, Robinson, Spreull and P. R. Viljoen.

Dr. de Kock resigned 5/8/29 on account of his departure oversea on study leave. Col. Bush was elected by the Council to fill this vacancy.

Status of Profession Committee.

(Elected 28/3/29).

Messrs. Fourie (Chairman), Chalmers, P. J. du Toit, Goodall, Kirkpatrick, Quin and P. R. Viljoen.

No one has been elected to replace Major Johnston who died 5/8/29.

Parliamentary Committee.

(Elected 28/3/29).

Messrs. P. J. du Toit (Chairman), de Kock, Goodall, Kirkpatrick, Spreull and P. R. Viljoen. Mr. P. L. le Roux was chosen (5/8/29) to fill the vacancy caused by Dr. de Kock's resignation.

Financial Committee.

Nothing has been done in regard to membership for the current year. Both the President and Hon. Treasurer therefore remain members. A substitute, however, should be elected to replace Dr. de Kock, especially as the matter of investing £1,000 at a more profitable rate of interest will come up prior to the next general meeting.

Editorial Committee.

Messrs. Curson, de Kock, Goodall and Kirkpatrick.

In view of Dr. de Kock's resignation, Dr. Thomas was appointed by the Council, this step being approved by the General Meeting on 5/8/29.

The functions of the various Committees are more or less clear, but it may be added that the purpose of the Parliamentary Committee is primarily to obtain legal recognition of our professional status. At present it is only in Natal where the profession has this protection. A Veterinary Bill has been prepared but the difficulty is to get our legislators to pass it.

The Status of Profession Committee is naturally concerned with all matters affecting the status of the profession. Members therefore should not fail to communicate with Mr. Fourie, P.O. Laboratory when they consider necessary.

Besides the above standing committees two provisional committees have been appointed as follows :

(i) **Rules Committee** (Elected 28/3/29).

Messrs. Alexander, Bush and de Kock.

Dr. Curson was elected (5/8/29) to replace Dr. de Kock.

As it has been realised for some time that the Rules of the Association require revision, this Committee has accordingly gone into the matter. The amended Rules, now ready for distribution, will be brought up at a future general meeting, when a decision must be taken as to acceptance, either partial or entire, or rejection.

(ii) **Advertisements Committee** (elected 5/8/29).
Messrs. Chalmers, Curson and Spreull.

Council decided (5/8/29) that the acceptance of advertisements for the Journal would depend on the report of the above committee. If sufficient material offered, the insertion of suitable advertisements would be favourably considered. We therefore appeal to Colleagues in the large centres to assist in this matter.

Bankers :

The Standard Bank of South Africa, Church Square, Pretoria.

Journal.

The Journal of the South African Veterinary Medical Association is owned by the S.A.V.M.A., which body is entirely responsible for control. At present are published mainly addresses delivered at the Spring General Meeting which usually takes the form of a scientific gathering. An Editorial Committee, appointed by the Council of the Association and approved of at a General Meeting, is responsible for publication.

A copy of each issue is posted to every Honorary Associate, Honorary Life Vice-President and Member, with exception of those Members who have not paid their annual subscription for three years. Contributors receive free of charge 25 reprints, but an additional number can be supplied at cost price provided members apply on submitting a communication. The price of a single copy is 5/- post free.

Communications.

Communications should be complete and concisely written, preferably typewritten, and full details supplied as to photographs, figures and references.

AUTUMN GENERAL MEETING.

This was held in the Veterinary Office, Showgrounds of the Witwatersrand Agricultural Society, on 28/3/29 at 2.15 p.m. The President took the Chair and 24 members were present. The following matters were dealt with :—

(a) The Minutes of the Spring General Meeting held in Pretoria (24/7/28) on the occasion of the Department of Agriculture Conference were passed.

(b) Dr. Quinlan explained that S.A.V.M.A. possessed the following funds :—£1,000 on fixed deposit at the Standard Bank, £150 in Union Loan Certificates at Pretoria, and a credit

current account balance of £131. He further proposed a vote of thanks to Dr. Curson who deputised during his absence in Europe.

(c) It was resolved to leave the matter of arrear subscriptions (i.e. for three years and more) in the hands of Drs. Quinlan and Curson (1).

(d) The names of the office-bearers for 1929-30 were announced.

(e) Messrs. Barnes, Blomfield, Clark, Dawson, Holmes, M. C. Robinson, Sharpe, Thorburn, G. Watt, J. S. Watt and Zschokke were elected members.

(f) The Report of the Status of Profession Committee was presented, and resolutions regarding B.V.Sc. Status and press comments on members were passed. Mr. le Roux brought up the more important question of salaries and Dr. Curson reminded the meeting that in 1923 the S.A.V.M.A. had passed a resolution to the effect that anything under £500 p.a. was not a fit salary for qualified veterinarians.

(g) The Status of Profession and Parliamentary Committees were re-elected, the latter with the addition of Dr. P. R. Viljoen. A temporary Rules Committee was also appointed.

(h) Mr. Chalmers referred to the saving of expense which would follow amalgamation of the posts of Hon. Secretary and Hon. Treasurer (2).

(i) Information was sought on the position regarding a Veterinarian at Port Elizabeth and Maritzburg Abattoirs, and in connection with the appointment of a Manager to the Transport and Cleansing Department, Johannesburg Municipality.

(j) Mr. Dickson referred to the Report of the Lovat Committee, and it was resolved that the matter should be considered by the Status of Profession Committee.

Accompanying the Minutes of the above Meeting is a Report drawn up by the Status of Profession Committee. Both these documents have been distributed to all members.

SPRING GENERAL MEETING.

The Spring General Meeting was held in the Conference Hall, Union Buildings, on 5th August, 1929. The morning was devoted to the reading of papers and the Association was honoured by the presence of several of the Pan-African Veterinary delegates. The afternoon was spent in discussing business matters, a résumé of which is given below. The President was in the chair and 56 members and 4 visitors were present.

(1) In terms of Rule 8, registered letters were sent to all defaulters. Owing to Dr. Quinlan's absence at the Spring General Meeting (5/8/29). No further action was taken; but at the next Generel meeting the matter will be dealt with.

(2) This has been incorporated in revised draft of Rules.

The items dealt with were as follows :

(a) The Minutes of the Autumn General Meeting of 28/3/29, held at Johannesburg, were passed.

(b) The subject of advertising in the press was referred to the Status of Profession Committee.

(c) On account of Dr. de Kock's resignation (owing to a trip oversea), Mr. le Roux was elected to the Parliamentary Committee, Dr. Thomas to the Editorial Committee and Dr. Curson to the Rules Committee.

(d) Mr. Max Henry M.R.C.V.S. Department of Agriculture, Sydney, Australia, was elected a member of the S.A.V.M.A.

(e) A temporary committee (Messrs. Chalmers, Curson and Spreull) was appointed to deal with the matter of advertisements for the Journal.

(f) Dr. Curson's resolution "That Act 21/1899 (Natal) be applied throughout the Union of South Africa and South-West Africa" was referred back to the Parliamentary Committee with the instruction to consider the advisability of introducing it as such or with simple amendments. This amendment was proposed by Dr. Viljoen, (1) and seconded by Mr. Melck.

(g) Mr. Coles' motion "That the Association request the University of South Africa to take such steps as to enable veterinarians, qualifying outside the Union of South Africa, to obtain B.V.Sc. status, provided that their qualifications are of sufficient standing and that B.V.Sc. in the University of South Africa obtain reciprocal recognition in the Institutions from which those veterinarians graduated," was rejected as such, but when considered in two parts was carried unanimously. The first part was "That the Association... ..... of sufficient standing," and the second portion, after amendment, read as follows, "That the S.A.V.M.A. request Dr. de Kock while in Europe to interview the governing body of the R.C.V.S. with a view to ascertaining whether it is possible for veterinarians holding the B.V.Sc. degree to be addmitted to M.R.C.V.S. status thereby enabling them to present theses for the F.R.C.V.S. diploma."

(h) Dr. Curson's motion regarding a bursary to assist members of the S.A.V.M.A. to make observations of Association interest while oversea was withdrawn.

(i) Mr. Spreull drew the attention of the meeting to the fact that a member of the S.A.V.M.A. had been prohibited by the State Authorities from carrying out the tuberculin test. Under these circumstances his client (a farmer) had

(1) Members interested in the Act should apply to the Director of Veterinary Services, P.O. Laboratory, for a copy.

himself applied the test ! It was reported by the Director of Veterinary Services that the position had since been righted.

(j) The question of members in arrears with their subscriptions for 3 years and over was deferred to the next general meeting in view of the Treasurer's absence.

(k) The Director of Veterinary Services (Dr. P. J. du Toit) kindly agreed to send a report of the proceedings of the 6th Pan-African Veterinary Conference to every member.

After a vote of thanks to the Chairman, the meeting terminated.

FINANCIAL STATEMENT AS AT 31st MAY, 1929.

To Balance B/F 1927/28 a/c.					£169	19 11
,, Subs. received					123	13 9
,, Interest on fixed deposit					44	15 0
					£338	8 8
To Balance at Bank					£72	17 5
July 6, 1928	Cheque	73	D. Gestetner stencils ...		£1	1 2
July 16, 1928	,,	74	D. Gestetner stencils ...		4	4 4
	,,	75	Central News Agency, envelopes			12 10
	,,	76	C. Hall, Stamps		1	0 0
July 27, 1928	,,	77	Central News, 10 Gazettes			5 10
Aug. 7, 1928	,,	78	Post Master, Union Loan Cert.		100	0 0
Aug. 17, 1928	,,	79	J. G. Bush, Honorarium		5	0 0
Sep. 1, 1928	,,	80	W. M. Nielson, Typing of minutes		3	3 0
Sep. 13, 1928	,,	81	P. J. Condon, Typing etc.		5	5 0
Oct. 9, 1928	,,	82	C. Hall, Stamps		1	0 0
Nov. 2, 1928	,,	83	C. Hall, Clerical exs. ...		5	5 0
Dec. 19, 1928	,,	84	C. Hall, Stamps		3	0 0
Mar. 1, 1929	,,	85	G. M. Horne, Printing of Jnls., etc.		20	13 6
Mar. 2, 1929	,,	87	Post Master, Union Loan Cert.		24	16 0
Mar. 4, 1929	,,	88	Post Master, Union Loan Cert.		24	16 0
Apr. 18, 1929	,,	89	C. Hall, Stamps		1	0 0
	,,	86	Govt. Printer, Printing of Jnls.		43	2 0
May 15, 1929	,,	90	P. J. Condon, Sec. Clerical expenses ...		7	17 6
	,,	91	A. C. Kirkpatrick, disbursem.		4	18 7
May 18, 1929	,,	92	C. Hall, Treas. clerical exp.		5	5 0
May 29, 1929	,,	93	D. Gestetner, stencils ...		1	3 6
			Bank Charges		1	17 0
			Balance		92	17 5
					£338	8 8

JL. S.AFR. VET. MED. ASSN.
I (3) 1929.

PAPERS AND COMMUNICATIONS.

East Coast Fever and Its Eradication*.

By F. J. DUNNING, F.R.C.V.S. Dundee.

This disease has been occupying the attention of veterinarians for many years, and though we have been able to control it and reduce the losses to a comparative minimum, yet so far we have not been able to evolve a scheme which would enable us to eradicate it. I may go further and state that, if it is to be eradicated, we must introduce stronger legislative measures and an additional expenditure in the form of an increased field staff, unless of course science gives us some simpler method of control than the one in use at present.

Theoretically, the measures adopted by the Department should have been crowned with success years ago, but in actual practice they fall far short of being effective. I feel therefore that further steps should be taken if we wish to see the disappearance of the disease within a reasonable time. Our reputation is at stake and we should tackle the problem, and justify the use of the money we are expending on it.

At present, to the majority of cattle owners, the restrictions are far worse than the disease; hence the lack of co-operation. Further, cattle owners are inclined to become restive at the continued restrictions, consequently there is an unwillingness to report deaths.

The present measures we adopt for the prevention, control and eradication of the disease consist of :—

(1) Dipping and handdressing to control tick infestation.
(2) Smear-taking to diagnose the disease in its early stages.
(3) Control of cattle movements by the permit system.
(4) Slaughtering of infected herds.

Both the two first fail because they are not carried out in a sufficiently conscientious manner by the stock owners. The institution of the third has no doubt assisted considerably in reducing the spread of the disease, but it cannot, and does not, prevent illegal movements, which can take place at night.

(1) Dealing with dipping, this to be effective, means a thorough saturation by immersion of every beast in a "standard arsenic solution" in such a manner that it thoroughly penetrates the hair and leaves a thing coating of arsenic on the skin. This brings about the death of the ticks, apparently in two ways :—

* Paper read on 5/8/29 at Spring General Meeting of S.A.V.M.A.

(a) The soaking of the tick probably has a poisonous effect on its economy, either causing it to die or else preventing it from carrying on its life cycle.

(b) As the tick sucks the blood it probably also absorbs sufficient arsenic from the skin to actually poison it.

Thus we see that if any part of the body is not well wetted a proportion of ticks will not be affected.

The dipping in arsenic also acts as a tick repellant, as the following observations will show :—When taking over the dipping of an infected herd the brown ticks may not be much in evidence, being probably fairly well distributed over the body. After dipping for a few weeks, however, it is often noticed that they are much in evidence, and have concentrated on particular spots, viz. the ears, base of the horns, and round the eyes. My interpretation of this is that the skin of the body is now well saturated by 5-day dipping and that the least poisonous, and consequently most attractive places are on the head. In an ordinary tank the body gets well wetted, but the head escapes entirely in some instances, and in others just goes under and out, the solution failing to penetrate to the skin.

The remark has often been made to me that East Coast fever is now much more difficult to eradicate. Farmers often relate how, when it first appeared, they had little or no supervision, but commenced dipping without clipping or handdressing, and soon controlled and eradicated the disease. Nowadays, even the most efficient dipping, clipping and handdressing often means a long drawn out business, which, I think, can be explained as follows :—When Tick Fever first invaded the country, the cattle were of the short-haired Native or Africander type. Their skin is not so attractive to tick life; they have no woolly polls or ears and when dipped, saturation occurs. After the first invasion (which was called a blessing in disguise) had been controlled, farmers restocked with either pure-bred cattle or grades from European breeds; these have long woolly coats which become full of grease and dirt, and give ideal cover for ticks. If such be examined after emerging from the tank it will be found that the skin, in many parts, is still dry. Some years ago, when outbreaks were often accompanied by a rather serious mortality, I noticed in a number of herds that the largest percentage of deaths was amongst the long-haired cattle.

When considering the relative advantages of the different dipping intervals, I think that three days is infinitely superior to five days and that it can be done at a strength of 1½ lbs. Arsenite of Soda to the hundred gallons, when cattle are accustomed to it. Its advantages are :—

(1) All ticks are bound to be caught at such a short interval.

(2) Any cattle missing a soaking the first time will have a chance of being caught the next.

(3) Affected cattle will be killed off quicker, and have less chance of distributing infection.

(4) Handdressing is carried out at shorter intervals. In some cases I have adopted the four days interval with appreciably better results than the five days interval.

It is advisable in all cases to keep the solution at an invariable strength. Cattle can be dipped in quite a strong solution, if brought to it gradually and then dipped regularly; whereas ordinary standard strength will cause serious scalding if cattle are unaccustomed to it. It is also advisable to have tanks cleaned out when it is found that the solution is very dirty. This makes testing easier, gives a better immersion, and does away with one of the causes of scalding.

When a new centre of infection is discovered, there is often a tendency on the part of farmers and inspectors to adopt drastic steps by bringing the strength up to 2 lbs., or even over, without considering previous handling of the herd. If the farmer has been a regular and conscientious dipper no untoward results may follow, but if not, then bad scalding occurs, and sometimes a few weeks after the outbreak when the position is still critical, one is compelled to exclude a number of cattle from the dipping. Personally, I advise dipping a couple of ounces below strength for the first few weeks.

New born, calves particularly those with white skin patches are a second cause of trouble. Once they are scalded they become casualties, unless also exempted until recovery is complete. I always advise owners to submerge them by hand and not to let them swim through until they are a month old. One must exercise caution during the period September-October, at the time of the first rains and when cattle are changing their coats. It is advisably at this time to reduce the strength of the solution slightly.

Referring to tanks, seven feet is a better depth than six feet, not requiring such frequent filling and giving a better immersion.

Regarding handdressing, the most important point is the way it is carried out. The merits and demerits of oily or watery dressings have been discussed and have been the cause of controversy between owners and inspectors. I have found the ordinary solution from the tank very effective, for it has the advantage of being cheap, is always at hand, and, when a beast's head is not saturated this receives attention with the same solution. If labour is abundant and tick life plentiful, heads are washed as routine treatment. An oily handdressing, on the other hand, is retained for a longer time, and an inspector can easily see whether it has been applied properly. An oily handdressing should be comparatively thin, and should preferably be applied with a brush in a very thorough manner.

(2) Dealing with the second method of control, i.e., the taking of smears, there is no doubt that if this was carried out properly it would be of the greatest assistance, but it has the following weaknesses :—

(a) When inspectors have large areas, smears are usually taken by owners; they may be improperly made or taken after decomposition is advanced, thus masking the disease.

(b) Smears may be submitted from the healthy cattle with the statement that they are from dead animals. Thus when the disease is diagnosed later, there is a reflection on the professional staff which cannot be satisfactorily explained, although we may have our suspicions.

(c) It is quite possible for a wrong diagnosis to be given. The owner, even if suspecting disease, very seldom gives a hint of it, thus, if one is busy the smear may not receive too critical an examination, and, if it is badly made or slightly decomposed, may be passed as negative.

(d) Except in a closely watched area, very few owners report deaths. If they were all reported we could not cope with the smears to be examined. To obtain the maximum benefit from this method would mean that in all East Coast fever areas we secure slides from all sick, dead and slaughtered cattle, so as not to exclude anything. In this way we should not only know with certainty which were clean areas, and the extent of the disease, but we should get the first death, and often find the source of infection. This would be the unattainable ideal.

(3) Next comes control by issuing permits for all cattle movements. Although this is of great help, it cannot entirely prevent cattle movements for the following reasons :—

(a) Owners, particularly natives, can and do still carry out undetected movements without permits.

(b) Any owner, suspecting that disease exists on his farm, can dispose of a lot of his cattle on permits, meanwhile controlling it by efficient dipping and change of grazing.

(c) As only a percentage of deaths come to light, permits are issued from all farms on which disease is not known to exist, thus unwittingly officials and owners can spread disease and the original source of infection will never be suspected.

It is at present a peculiar feature of the disease in South Africa that the majority of our present outbreaks are discovered in the autumn or even in the winter, viz. June and beginning of July. I explain this in the following manner :—The statement " East Coast fever has appeared or has broken out on a certain farm or area," does not always describe the true position. I would rather say " East

Coast fever has been discovered." I consider that when we are aware of the existence of the disease, infection has been there for a considerable period, hence our total inability to trace its source. My theory is that infection is brought there during the spring or summer, one or two cattle die, but the cumulative effects of this infection are not felt until the autumn, when dipping intervals are extended and everyone is lulled into a false sense of security. If a close inspection, however, is made it is found that the brown tick is still prevalent, hiding in the coat which has now grown long.

(4) Slaughter of infected herds. This is the quickest way to eradicate individual infections and, where it has been applied to countries and to areas together with thorough inspection, has given very good results. Many Transvaal districts were cleaned by this method and these have remained free to this day. Those not so cleaned are still infected, with the notable exception of Pretoria district. I still think that greater use should be made of this method, especially in outbreaks where a heavy mortality can be anticipated resulting in protracted quarantine restrictions. When a farm is cleaned in this manner, the in-contact farms must be closely watched and short interval dipping continued and fences must be inspected frequently. It is better for the infected farm to be burnt out and then heavily stocked with sheep, goats, or equines, and natives must be prevented from cutting thatch grass from it.

In advocating slaughtering remember that once a farm is infected there is a possibility of infection reappearing, either on the farm in question or in the vicinity. Some farms have a history of three separate infections at varying intervals.

Many veterinarians and cattle owners were firmly convinced at one time that a recovered beast was a permanent reservoir of infection, which, under certain conditions not understood, could cause an outbreak. As science seems to disallow or disprove this, we must accept alternative explanations as follows :—

(a) The disease was not entirely eradicated, because, either a sick beast recovered and no smear was submitted, or a death was concealed, or an unsatisfactory smear was sent in.

(b) The farming methods of the occupiers, either Europeans or natives, are at fault. Infection may result from legal or illegal movements of cattle or even from ordinary transport riding, etc.

Suggestions for Permanent Eradication.

" Is it a practical possibility to eradicate East Coast fever from all territories in South Africa in our generation ?" If we say, " Yes," we must first say how we propose to do it, and next, set about putting our policy into action. Personally I have been engaged in " eradicat-

ing" it since 1903, and although some districts have been cleaned, yet we have not brought entire eradication within sight. If we intend to do this, we must concentrate on :—

(1) The full co-operation of the farming community; without this we are lost. If farmers and farmers associations would make a united effort and give us their full confidence, better results could be expected.

(2) Appointing sufficient inspectors to control, not only infected districts, but all districts liable to harbour infection. This applies to all Natal and some districts in adjoining Provinces. Suspected districts should be controlled until they have been clear for a number of years and also until there is no danger of the re-introduction of the disease.

(3) Giving clean areas a considerable measure of protection, as is done in controlling scab, but with sufficient staff to enforce it.

(4) Treat each outbreak on its merits, and where it appears advisable, slaughter. For instance outbreaks in a new centre where dipping has not been thorough, that is, where the brown tick is very much in evidence and if there is the probability of a heavy mortality or a succession of deaths over a long period.

(5) Apply the census regulations to all East Coast fever areas, if we have asufficient staff to carry it out. If we attempt to enforce any law, which has not the full approval of the public, we are faced with failure, and this is one of the reasons why we have not secured the maximum beneficial results from our efforts in the past.

If the Department of Agriculture adopted a very definite attitude, and explained the position thoroughly to farmers individually, and to all associations, we might get them to realise the significance of the position and elicit their full co-operation in order to ensure total eradication within the shortest possible period. At present we must admit a lack of sympathy with and appreciation of our efforts, if we carry out the regulations strictly according to the letter of the law.

Jl. S.Afr. Vet. Med. Assn.
I (3) 1929.

A Case of Sporotrichosis in the Horse.*

By Dr. E. M. ROBINSON,
and
B. S. PARKIN, B.A., M.R.C.V.S.
Veterinary Research Laboratories, Pretoria.

Introduction.

Sporotrichosis is uncommon in South Africa and there is no previous record of its occurrence in the domesticated animals. References to sporotrichosis in domesticated animals are not very frequent in the literature on the subject. Carougeau (1909) in Madagascar described the condition in horses and K. F. Meyer (1912, 1915) reported on several outbreaks in horses and mules in the United States of America, mainly of a sporadic nature. In dogs the disease has been described by Gougerot and Caraven (1908) and in rats by Lutz and Splendore (1907). Knuth and du Toit (1921) consider that the diseases known as "bursatee" in India and as "leeches" in the United States of America are probably sporotrichosis. Donkeys and cattle appear to be refractory to infection but experimentally, cats have been infected. There is some evidence to show that man may be infected from the domesticated animals.

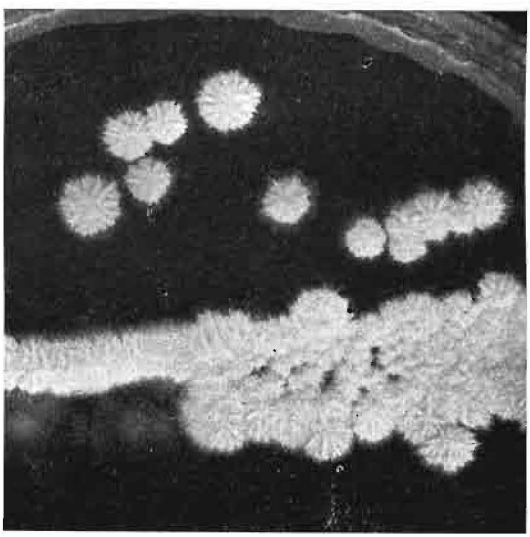

Fig 1.
Colonies of *Sporotrichon schencki* on serum agar (natural size).

* Paper read on 5/8/29 at Spring General Meeting of S.A.V.M.A.

In man the disease has often been described as a sporadic condition and a large number of cases are on record. In South Africa the only reference to it which can be found is one by Pijper and Pullinger (1927) describing some cases seen in natives on one of the gold mines in Johannesburg. From five cases a sporotrichon was isolated and they yielded to treatment with Potassium Iodide. The authors found that the organisms from all five cases were identical as far as could be determined and that they conformed to the description of *Sporotrichon beurmanni*. The growth on various media was described and serological tests were carried out. Lesions were produced in white rats inoculated experimentally.

Clinical Observations.

H.19505., a bay gelding in fair condition, was admitted to this Institution on 8th April, 1929. The owner, who stabled the horse in a suburb of Pretoria, stated that the skin lesions had been present for some six months and that the animal had recovered from a previous attack. The horse was in contact with others which, however, did not show any evidence of infection.

The skin lesions were the only abnormalities observed. These lesions were distributed somewhat irregularly over the body. On the near side the lesions were present on the whole of the lateral sides of the hind limb, as far down as the coronet, on the medial side of of same limb to below the hock and up to the inguinal region, on the prepuce, along the upper anterior portion of thigh, over the region

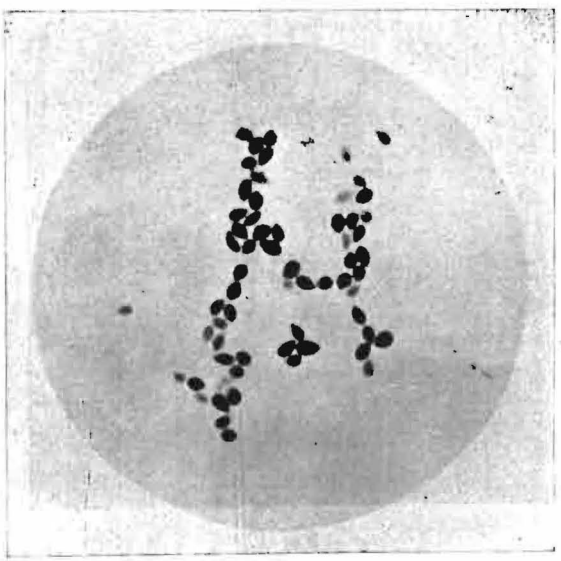

Fig. 2.
Conidia of *Sporotrichon schencki* (x 500).

of the point of the hip, on to the upper flank, on the lower half of thorax, and then around to the anterior part of the sternum and upper pectoral region. On the **off** side the distribution on the hind limb, prepuce, inguinal, sternal and pectoral regions was as on the near side; but there were no flank lesions and numerous lesions were present in the region of the triceps.

On examination, these were found to be of various types :—

(a) Nodules which were firm, from one to three ccm. in diameter, spherical, not attached to skin but to the musculature and non-painful on manipulation.

(b) Nodules which were attached to the skin and which were approximately of same dimension as those of previous type, also firm and non-painful.

(c) Nodules whose centres were semi-solid, or even liquid in consistence; in some, fluctuations were quite distinct.

(d) Lesions over which there was a loss of hair and thinning of skin by excoriation, resulting in a denuded grey surface.

(e) Open lesions which were in the form of ulcers, showing a very small amount of thick creamy purulent material and rough, bright-red granulations, which projected above the surface of the skin. The skin edge was not prominent and had a clean, clear-cut invariably circular outline.

(f) Granulations some of which were covered with a dry, cap-like scab which, when removed, exposed a moist, red, granulating surface.

Fig. 3.
Natural case of Sporotrichosis.

(g) Strangulated or pedunculated granulation tissue, due apparently to the strangulating effect of the centripetal growth of the skin. The result was that narrow projections of granulation tissue of a diameter of about 2 cm. and a height of about 1 cm., often capped, were produced.

(h) Scar formations.

If pressure is applied to the lesion when in the stage of loss of hair (d), rupture can easily be produced but the amount of purulent material thus obtained is much greater than if rupture is permitted to take place spontaneously. The material used for cultures was obtained from such lesions.

Discussion of Lesions.

From observations carried out on this case for a period of over three months, the course of the lesions was observed to be as follows : The primary lesion is one which is first detected as a firm nodule about the size of a pea and attached apparently to the musculature. This nodule increases in size and at the same time it becomes more difficult to separate it from the skin. Ultimately it becomes firmly attached to the skin, which loses its hair over the point of attachment and excoriates. The nodule now clearly has a fluctuating centre. Rupture next takes place with the escape of a surprisingly small amount of material. Some nodules seem to remain in the stage of fluctuation for a long time until there is almost complete absorption of the fluid con-

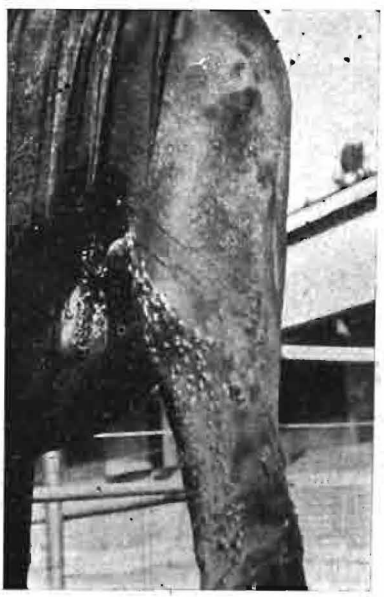

Fig. 4.
Natural case of Sporotrichosis.

tents with no rupture. If such a lesion is removed surgically it is found to contain a small amount of rather thick pus. Following spontaneous rupture, there is the appearance of the prominent wart-like granulations, which gradually become constricted by the centripetal growth of the skin to a thin finger-like projection, often carrying a greyish-white cap, which can be easily removed. There is then a gradual diminution in size of the projection until ultimately a small scar is left. The whole course of a lesion may occupy a period of three months or more.

The patchy distribution of the lesions on the body is somewhat peculiar, leading one to the belief that various parts became separately infected. At no examination could it be decided with certainty that the lymphatic vessels were affected. The front limbs below the elbows were entirely free of lesions, whereas the hind limbs carried numerous lesions and became markedly swollen.

Just prior to the destruction of the horse it was extremely difficult to find any lesions other than those which were in the advanced granulation or scar stages. At the autopsy no lesions of the internal organs were detected.

Transmission.

Cultures grown from the material obtained from the natural case were used in a transmission experiment. A horse in good condition had the material applied by the following methods :

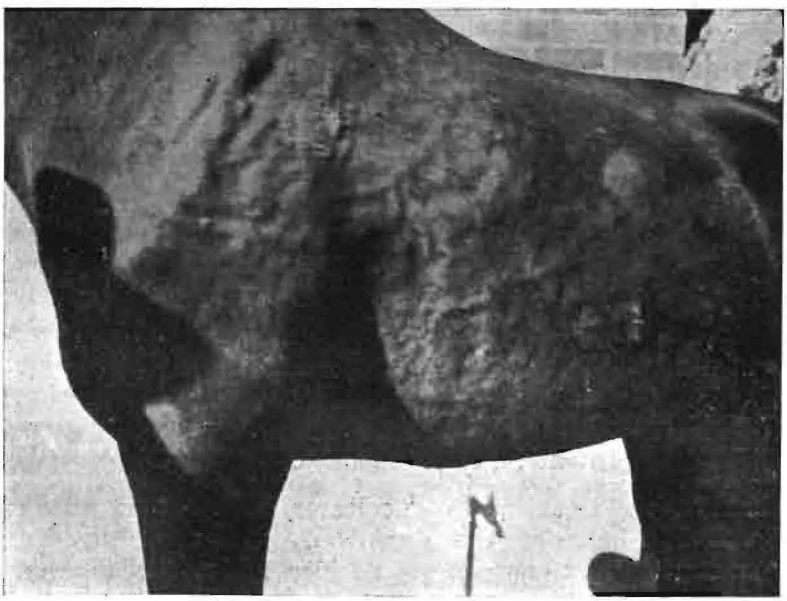

Fig. 5.

Experimental case of Sporotrichosis showing enlarged lymphatics.

(a) Scarified skin,
(b) Intradermal,
(c) Subcutaneous,
(d) Unscarified skin.

Intradermal and subcutaneous sites showed slight swelling on the following day. The intradermal site, on being submitted to pressure, exuded a small amount of pus on the 8th day. In fourteen days the above swelling appeared to be smaller. The unscarified site showed about this time small, rather dry nodules. On the 24th day, there were noticed in connection with the scarified skin, intradermal and subcutaneous sites, distinct cord-like lines from each of these directed downwards and forward towards the point of the shoulder. Along their courses could be detected under the skin small hard lumps, about the size of a pea. These were non-painful. The cord-like, lymphatic vessels became more prominent during the following days, and were noticed in connection with the unscarified skin site. The intradermal site became abscessed, forming later a cavity with granulations, projecting slightly above the surface. The swollen lymphatic vessels could at all times be easily seen. Abscesses formed also in the subcutaneous site. Later, progress of the case showed more prominent lymphatics with well developed nodules, manipulation of which was resented.

No marked advance has been noticed recently. The horse has now been under observation for a period of about 3½ months.

Etiology.

The diagnosis in the case referred to was only made as a result of cultural work. Originally epizootic lymphangitis or ulcerative lymphangitis was suspected, but no evidence of cryptococci or diphtheroid bacilli was found in smears from the pus of the lesions. In cultures from pus on various media after about a week's incubation, colonies of an organism developed which were soon shown to contain a sporotrichon in pure culture.

On examining fresh samples of pus from the lesions and after careful search, a few oval bodies 4 to 5 m. in length by about 3 m. in width were found, some in the cytoplasm of leucocytes. With Gram's stain they showed up better than by other staining methods such as Giemsa, Thionin, etc. on account of being Gram positive.

Morphology. In smears from cultures, one sees very little except the conidia or buds of the organism. Pieces of mycelium are occasionally seen but one can get no idea of the way in which the organism grows from examination of smears. This is best seen by examining the edge of a colony under a high magnification, when one sees that the conidia are arranged along the mycelia like fruit on a

fruit spur, large numbers being cast off and lying loose. In young cultures most of the organisms stain well by Gram, but in old cultures one often sees portions which are Gram negative. The conidia have an average length of 4-5 μ and width of 2-3 μ. The mycelia have an average thickness of 1.5 to 2 μ. The organisms stain well by any of the ordinary methods but the best results are probably those obtained with Claudius' method.

CULTURAL CHARACTERS.

Cultures of the organism have been made on various media such as glucose agar, serum, liver agar, glucose liver agar, blood agar, Sabouraud's milieu d'epreuve, broth, serum broth, liver broth and potato. A large range of sugars was also inoculated.

Growth on all media occurred at 37°C, was better at 28°C and quite good at room temperature. The latter during the winter, when the cultures were made, was low, i.e. in the neighbourhood of 15-18°C.

Broth, serum broth and liver broth. The fluid remains clear. A whitish fluffy growth forms at the surface of the fluid resulting in the formation of a dense pellicle. A few fluffy colonies like pieces of cotton wool are seen floating in the fluid. After a week to two weeks incubation some of the surface growth has sunk to the bottom and eventually all the growth is found at the bottom of the tube.

Glucose agar. Growth occurs in the form of a thick white rather dry layer with a serrated edge due to the occurrence of fine hair like outgrowths. The growth is not easily detached from the medium, and takes on a black colour in the course of a few weeks.

Serum agar. After about a week's incubation at 28°C. small colonies form with a whitish colour and with a moist appearance. They are star shaped with a serrated edge as seen in glucose agar cultures. In some colonies after a few weeks growth there is a heaping up in the centre giving somewhat the appearance of a button. In young colonies, however, this is not seen and one has a typical radiate form as can be seen in the photo at the end of this article. The growth on serum agar can be easily detached and it is quite moist in the upper layers.

Blood agar. On this medium the growth is much the same as on serum agar, but it takes on a chocolate brown colour and is rather dry.

Liver agar. The growth resembles that on serum agar and in plates one gets the typical star-shaped colonies mentioned as occurring on that medium.

Sabouraud's medium. A whitish dry growth occurs with a finely serrated edge. After about two weeks incubation the growth commences to turn brown and eventually the central portion of the growth becomes black. The growth is always very dry and difficult to detach

and is not as profuse as on some of the other media. The colony form on this medium is essentially the same as on serum agar but blackening in the centre occurs fairly rapidly.

Gelatine. The growth is in the form of a thick, whitish, dry layer similar to that seen on other media. The growth may be seen to send filaments to a depth of $\frac{1}{4}$ inch into the medium giving a somewhat brush-like appearance to it below the surface. No evidence of liquefaction of the medium was obtained.

Dorset's egg. On this medium the growth is essentially the same as on serum agar. The superficial layers of the growth are moist and easily detached.

Fermentation of sugars. Tubes of the following sugars were inoculated with the organism using as a basis, serum water plus 1% of the particular sugar :—Glucose, maltose, levulose, galatose, lactose, mannite, saccharose, dulcite, raffinose, dextrin and glycerine. Growth was good in all the tubes but no definite evidence was obtained of the production of acid or gas. From the morphological and cultural characters of this particular sporotrichon we are inclined to classify t as *Sp. schencki.*

Animal inoculations.

Apart from the horse which has been mentioned as having been used for transmission experiments, rabbits, guinea-pigs, white rats, brown rats and white mice were inoculated with material from cultures. In all cases intradermal, subcutaneous and intraperitoneal inoculations were carried out. The animals were killed two months later, but no lesions were found in any of them. White rats have again been inoculated but at the time of writing have not been killed as the interval after inoculation is too short.

An ox was inoculated intradermally, subcutaneously and material was rubbed into the scarified skin. No lesions developed subsequently.

Conclusions.

(1) A case of sporotrichosis in the horse has been described, apparently the first recorded case in domesticated animals in South Africa.

(2) The causal sporotrichon appears to belong to the species *Sp. schencki.*

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Lamsiekte of Sheep in South West Africa.*

By Dr. H. SIGWART, Keetmanshoop.

Not much has been published about natural lamsiekte in sheep, and, when studying the literature, above all the standard work of Theiler and his co-workers (1927), one must become convinced that the parabotulism in sheep does not play any economic rôle in the Union of South Africa. Though the South African authors have established the high susceptibility of sheep to the lamsiekte toxin, they state that, contrary to reports received from farmers, no veterinary records show that sheep or goats contracted the disease naturally. They state further that the only reason why sheep do not contract lamsiekte naturally is that they do not develop osteophagia to any appreciable extent, and so do not ingest the toxin.

We veterinary surgeons in South West Africa have been forced to alter our former opinion regarding the non-existence of osteophagia and natural lamsiekte in sheep. This disease has become a very important factor in the sheep industry of South West Africa, especially in its southern part. To prevent a wrong impression, I must state before going into further details, that the great majority of the S.W.A. stock consists of fat-tailed sheep (africanders and karakuls), and that my observations regarding lamsiekte are more or less limited to these types. It appears that the merino does not often contract natural lamsiekte.

The losses sustained by the farmers are by no means trifling. It is in my opinion a low estimate to state that in the lamsiekte areas about 3 per cent. of the ewes die of the disease. I know farms which lost 10 per cent. within a year, and I have received reports putting the percentage of deaths from this cause as high as 50%. Naturally these figures can not be proved scientifically, but I wish to stress the fact that, whenever I was called in by farmers to investigate the cause of a disease resulting in remarkable losses amongst their sheep, and for which they found no other name than lamsiekte, or the so much abused term "galsiekte," I had to diagnose lamsiekte.

I am not the only veterinary surgeon who diagnosed the natural lamsiekte in South West African sheep. In 1921, O .Henning, at that time Veterinary Officer of Keetmanshoop, whote to me :—"Moreover, also the bone-eaters amongst the sheep contract lamsiekte and they are even more susceptible than cattle and succumb quickly." Dr. G. Schmid who relieved me not long ago and toured the eastern parts of

* Paper read on 5/8/29 at Spring General Meeting of S.A.V.M.A.

the districts of Rehoboth and Gibeon, writes in his official report to the Senior Veterinary Officer :—" I fully confirm the opinion of Dr. S. that lamsiekte is in fact the most important cause of all the numerous deaths amongst sheep and cattle in this area."

It is evident that lamsiekte does not occur in all parts of the country. I have observed that the lamsiekte area of cattle is also that of sheep, with one exception, viz. that an area largely covered with small-leafy bush provides better food for the sheep and therefore postpones the onset of phosphorus deficiency in them. On the other hand, an area like the Kalahari, with its sand-dunes, is most dangerous for sheep. One finds there a strong growth of grass, hardly palatable for sheep, and but few bushes. The soil there is also deficient in phosphorus to a very large degree as stated by Schultze (1907).

The lamsiekte season of cattle and that of sheep generally coincide, but some small variations, due to the different kind of pasture, as mentioned above, may happen. South West Africa has practically no winter rains. The first cases of lamsiekte are observed during August and the losses increase as the progressing drought reaches its culminating point in December or January, when the summer rains usually commence.

As in cattle, the great majority of sheep affected with natural lamsiekte are females. During a heavy drought ewes may die also from starvation, but these cases can easily be distinguished from those caused by lamsiekte, as lamsiekte sheep are very often in a fairly good condition.

As regards cattle, we know that phosporus deficiency in the pasture leads to osteophagia or allotriophagia. In South West Africa both these forms of depraved appetite considered as factors in the production of lamsiekte, are also shown by sheep and goats. This, however, is not so much noticed in the neighbourhood of the homestead or the watering place, when the thirsty sheep are hurrying to the water, or are being driven to their resting place shortly afterwards. It is in the veld generally that the grazing sheep pick up portions of carcasses with which they try to satisfy their depraved appetite. This is my own observation, but there is no reason to distrust similar observations made by farmers. That osteophagia in sheep occurs also in Australia, is reported by Seddon (1926). He writes :—" It occurs at times that cattle and even sheep develop the habit of chewing and even eating the carcasses."

Notwithstanding these observations, it is a fact that sheep do not seem to relish the protracted chewing of bones as do cattle. One must therefore look for another proof of osteophagia or allotriophagia, and this proof is furnished by the finding of **foreign bodies** in the stomach of sheep which either died of suspected lamsiekte or were killed when showing clinical symptoms of the disease. I

examined the stomach contents of 14 known lamsiekte sheep, and found in the rumen and reticulum of 8 of them the following foreign bodies :—Pieces of bones (in 4 cases), of sinews and skins, feathers, small stones, pupae shells of blow-fly, conglomerated horsehair and pieces of tissue which I considered to be parts of foetal membranes. The last-mentioned finding is in my opinion worthy of being specially commented upon. I have found parts of after-births as stomach contents in three cases out of fourteen. For this reason I made it a rule to draw the attention of sheep farmers to the dangerous possibilities of decaying after-births. My opinion became strengthened when the manager of a large merino farm in my area informed me that, when searching for the cause of losses amongst his sheep, he came to similar conclusions. This man had not received any warning in this respect, but immediated took practical steps, and by isolating the lambing ewes, and repeatedly changing the lambing camps, he claims to have achieved complete success.

This communication was of great value to me for another reason. It threw some light upon the question as to whether the merino contracts natural lamsiekte. So far all farmers had alleged that this was not the case. I have never succeeded in establishing lamsiekte in the merino sheep, whereas in the same area africander sheep and their crosses, as well as karakuls, were suffering heavily. As regards the occurrence of lamsiekte in pure-bred black-head persians, nothing can be said at present. If there is a difference in susceptibility between the fat-tailed sheep and the merino, the reason for this is not easy to find. Has the merino, reflecting as it does the artificial product of a type decided upon a century ago, partly lost its natural instinct of helping itself ?

The symptoms of natural lamsiekte in sheep are very similar to those seen in cattle, and my observations correspond with those of Theiler and his co-workers who drenched some sheep with pycnosoma larvae and pupae. Some points peculiar to the sheep may be mentioned.

A conspicuous nervous excitement, seen at the beginning of the disease is shown by frequent wagging of the tail and urinating. One of the first symptoms, the disturbance of the locomotor system, is very often accompanied by an impaired muscular action of the neck. Cattle also suffer from this paresis of the neck, but the specific anatomical structure of the sheep's neck makes this more marked. Most sheep suffering from the first stages of lamsiekte therefore offer a typical picture and can be recognised from a good distance (See Fig. 1). The attitude is like that of a lively riding horse, which is reined in by the rider. The hindquarters are moved under the body, the neck seems to be bent forward, and the head is lifted, the animal exerting its last strength to do so.

With the increasing paresis of the muscles, the neck becomes totally paralysed, and at last the head is seen doubled back on the flank.

In acute cases affection of the muscles of deglutition and mastication, paresis of the tongue and also salivation are frequently observed. The salivation is often shown as a distinct foam at the mouth. The Dutch farmers speak of this as " nat bek." When these symptoms manifest themselves on the head of a small animal such as a sheep, they are not so easily recognizable and I must confess that at first I overlooked them. The temperature of many sick sheep examined was always within normal limits.

The course of natural lamsiekte in sheep is as far as I could observe, more acute than in cattle. The great majority of the cases may be considered as acute and subacute. Chronic cases with subsequent recovery I have not encountered.

The macroscopical pathological anatomical changes in the natural lamsiekte of sheep are indeed very similar to those in cattle. Only some few points may be mentioned here. The finding of foreign bodies in the rumen and reticulum has already been recorded above. The impaction of the omasum is often very pronounced. We know that this condition, though only a symptom of disturbed digestion, has given rise to the terms " droë geilsiekte " or " droë galsiekte," used by the South African farmers to signify a specific disease. De Kock (1928), is doubtful whether the above-termed disease, " characterized by an extremely rapid course, e.g. sudden death and impaction of the omasum," can be regarded as a disease *sui generis*. In S.W.A., when farmers reported to me the occurrence of droë-galsiekte or droë-geilsiekte amongst their small stock, and I had an opportunity to investigate, I was able to diagnose lamsiekte.

In the great majority of post-mortems made on lamsiekte sheep, I found the pericardial fluid increased. In fresh cases the liquid was usually as clear as water or of pale yellow colour. I have estimated the amount to be 10 to 50 ccm. or even more. Similar findings have been recorded at Onderstepoort in cattle as well as in sheep, but it seems to me that sheep show this pericardial liquid more regularly and to a greater extent. It may be that sheep are generally more prone to hydropericardium than other animals. From many cases of acute lamsiekte in sheep, blood-smears have been taken and examined by me. I was not able to detect any microorganisms in them.

In regard to the **prevention** of lamsiekte in sheep I have given the usual advice to feed bone-meal (with certain modifications) and to remove the toxin producing material. I am pleased that my diagnosis —lamsiekte in sheep—has been confirmed by reliable farmers who sent me favourable records about successful results obtained by the

feeding of bone-meal or precipitated calcium phosphate. Some time must certainly pass before the average farmer will fully recognise the benefits of regular and early feeding of phosphorus containing supplements.

So far I have confined myself to lamsiekte in sheep. But I may mention that in S.W.A. in areas with severe lamsiekte, goats also die of the disease. These animals, though just as susceptible to the parabotulism toxin as sheep, contract the disease in a minor degree and very often display the chronic form. The cause for this difference I ascribe to the fact that the goat feeds mainly on bushes and the branches of trees which are out of reach of sheep.

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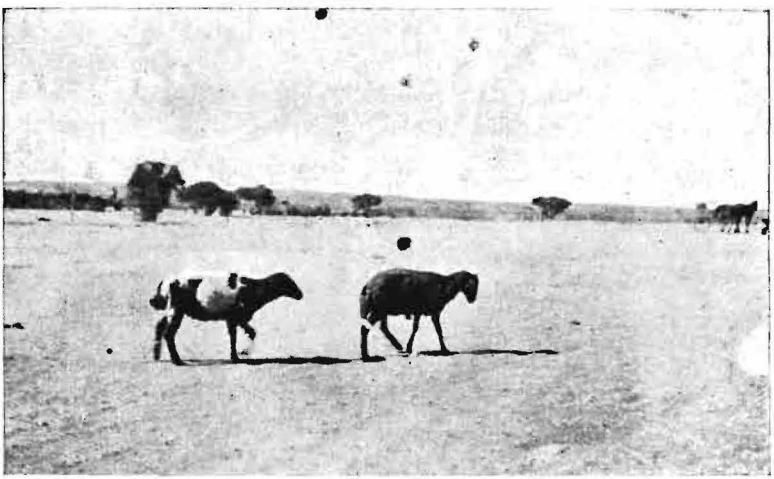

Fig. 1.

Afrikander Sheep (on right) shows typical attitude of acute lamsiekte. There was already paralysis of tongue. District Gibeon, S.W.A.

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An Unusual Case of Sex Ratio in *HAEMONCHUS CONTORTUS* Cobb 1898.*

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Suspected haemonchosis, trichostrongylosis, oesophagostomiasis or bunostomiasis in sheep is most readily confirmed by the cultural method and the examination of the larvae (Veglia 1928). That this method is not absolutely infallible in diagnosing strongylosis was proved recently in the case of a five year old merino hamel. This animal had received repeated doses of *Haemonchus contortus* larvae and developed clinical symptoms strongly suggestive of haemonchosis, although faecal cultures remained negative. Examination of the faeces by means of the recognised egg flotation methods revealed only an occasional egg. The sheep was ultimately destroyed *in extremis* and the abomasum was found teeming with nematodes which one of the veterinary officers present at the post-mortem believed to be the brown stomach worm, *Ostertagia circumcincta* (Stadelmann 1894). More careful examination, however, proved them to be mostly males and judging from their size, and the characters of the few females present, they were specimens of the common wire-worm of sheep. This was confirmed microscopically.

Most of the parasites were collected for the estimation of the sex ratio which proved to be 1086 males to 31 females, and explains why the cultural method had failed to establish the suspected haemonchosis. While separating the sexes, three cases of three males, and seven cases of two males, clasping the same female were observed. This preponderance of male over female is considered very unusual for nematodes, but has been recorded for certain species of schistosomes. Experimenting with schistosomes some workers experienced that by utilising cercariae from a single snail they established either a male or a female infestation in the experimental animal. This induced them to deduct that the cercariae developed from one miracidium are all of the same sex.

* Paper read on 5/8/29 at Spring General Meeting of S.A.V.M.A.

It is not proposed to offer any explanation for the unusual case recorded here; but it may be mentioned that the larvae utilised for infecting the hamel were obtained from the faeces of an animal in poor condition. That this fact or the method of incubation could have influenced the sex ratio is disproved, since other animals in the same experiment became heavily infected with females as was evident from the good cultures obtained. Another case of male preponderance, but not to the same extent, has since been brought to my notice by my colleague, Dr. A. D. Thomas (1).

Stoll (1928) in a preliminary communication reports on a self-cure phenomenon in sheep infected with *H. contortus* and observes that such animals were protected almost completely against re-infection. It is difficult at present to judge whether his conclusions are well founded, but it is significant that he had no lethal infections. My experience with *H. contortus* is that sheep and cattle in good condition, protected against adverse climatic conditions, free of any other malady, and on a well-balanced and easily assimilated diet, are rather resistant to artificial infections, and lethal infestations are practically unknown. The longevity of the different parasites in their definitive host or hosts is imperfectly known. Should not some of the self-cured cases recorded perhaps be attributed to the ordinary span of life of the particular parasite having been completed ? It would be interesting to know whether in these " self-cured " cases the animals had freed themselves of all males as well. For example, in human schistosomiasis some authorities believe that the female parasites are killed more readily than the males, and that the mere absence of eggs from the faeces or urine is no indication that all the parasites have been destroyed.

One of the most perplexing problems confronting the parasitologist is : " Why do ecto- and endo- parasites establish themselves more readily on or in an animal in poor condition ?" Should not the establishment of a parasite on or in an animal in low condition be attributed to the presence or absence of favourable substances in the body fluids of that animal ? Again, the mineral requirements of worm infested stock need investigation if prophylatic measures for the

(1) Both Dr. Thomas and myself have noticed in certain cases of severe haemonshosis (and other diseases) deep erosions of the abomasal mucosa with, in one case, actual perforation. This, in view of Maclean's (1928) observations in connection with hyperacidity in man and the persistence of gastric and duodenal ulcers, is significant.

reduction of mortality from parasitosis are to be established. Such investigations may also shed light on the questions of determination of sex and metazoal immunity.

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A Note on *SALMONELLA GALLINARUM* Infection of Ten-Day Old Chicks and Adult Turkeys.*

By Dr. G. MARTINAGLIA,
Veterinary Research Laboratories, Pretoria.

General experience throughout the Union has shown that fowl typhoid is mainly a disease of adult poultry. Martinaglia (1929). Beaudette (1925), however, on several occasions isolated what appeared to be fowl typhoid organisms from chickens one to five weeks old. Here, it is intended to record the occurrence of *S. gallinarum* infection in ten-day old chicks showing symptoms similar to *S. pullorum disease.* From the history of the outbreak it appears that the owner purchased day-old chickens, which, on arrival were apparently healthy. When they were about ten days old, deaths occurred among them, the mortality being very high. These chickens were running with adult fowls but it is not yet certain where these chicks contracted the infection. Serological tests, however, are in progress in order to detect carriers amongst the in-contact adult birds. The organisms isolated from the heart-blood of the affected chickens were morphologically, biochemically and serologically identical to *S. gallinarum* of local fowl typhoid epizootics. Two adult fowls were each given 3 ccm. of a twenty-four hour culture of the organism isolated from these chickens; both developed typical clinical symptoms of fowl typhoid on the fourth day. One died on the sixth day and the other survived after having passed through a severe illness. From the heart-blood of the one that died the organism was isolated in pure culture. It is of interest to the field veterinarian to know that a malady similar to pullorum disease may also be caused by fowl typhoid organisms. This may be readily understood when it is remembered that these organisms are very closely related. Mr. Alexander, B.V.Sc. informed me that he also encountered a similar outbreak of *S. gallinarum* infection in young chicks in Natal.

Another note of interest to practitioners is the occurrence of fowl typhoid among turkeys. On two occasions the disease has been diagnosed bacteriologically in turkeys kept in close contact with fowls suffering from fowl typhoid. On examination of the turkeys, the general symptoms and post-mortem lesions were found to be similar to those commonly seen in fowls. So far, in the Transvaal, the most serious diseases of turkeys have been coccidiosis, pox and infectious coryza. Fowl typhoid appears thus to be a new danger to the turkey

*Paper read on 5/8/29 at Spring General Meeting of S.A.V.M.A.

industry. Farmers would be well advised to keep turkeys separate from fowls, and to resort to preventive inoculation wherever the disease has established itself.

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I (3) 1929.

Tuberculosis of Human Origin in the Parrot.

By Dr. G. MARTINAGLIA,
Veterinary Research Laboratories, Pretoria.

Of our domesticated birds, the parrot seems to be particularly prone to the human type of tuberculosis. Cadiot, Gilbert and Roger (1894-95) recorded cases of tuberculosis of human origin in parrakeets and parrots. Eberlein (1894) has also written extensively on the same disease in parrots.

The writer, while stationed at Maritzburg in 1926, examined a parrot which was sent to the laboratory with cutaneous lesions on the foot, wing and back of neck, as well as a prominent grey nodule in the region of the eye (see A, Fig. 1). After dissecting the skin from the cheek, three similar nodules were exposed.

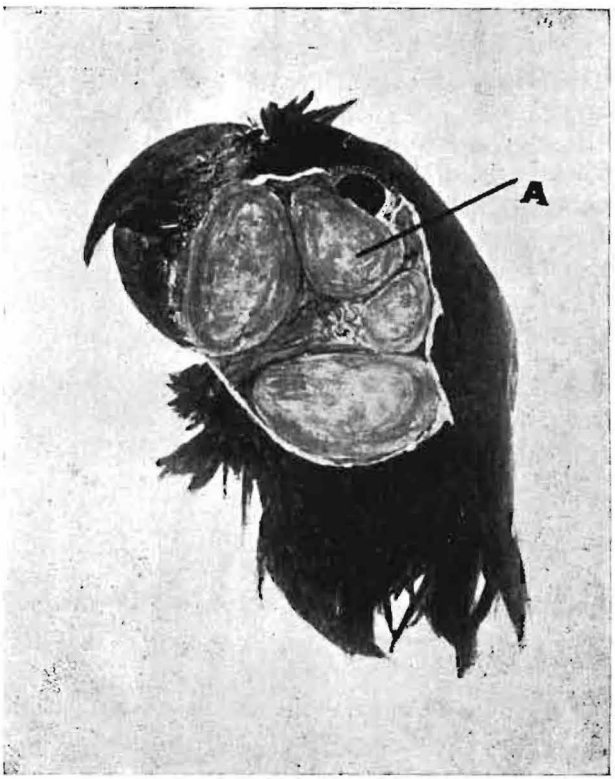

Fig 1.
Parrot showing facial lesions of tuberculosis.

On necropsy the liver and spleen also displayed tiny nodules, whereas the other organs appeared normal. Microscopic examination of the various affected organs showed the presence of acid fast bacilli, but these were not as numerous as one usually encounters in typical avian tuberculosis.

Four fowls, four guinea pigs, and four rabbits were injected with an emulsion of the facial nodules. All guinea pigs died of generalised tuberculosis within three months, but the rabbits and fowls showed no signs of the disease after the same interval, except that one rabbit displayed a few nodules on the intestinal serosa. These biological tests indicate that the parrot was suffering from human tuberculosis, apparently the first record of such infection in this country.

In conclusion I wish to thank Mr. L. Hill, of the Allerton Laboratory, Maritzburg, for the drawing.

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NOTES AND NEWS.

MUNICIPAL.

In view of the present renewed interest for creating openings for Veterinarians, especially with regard to municipal appointments it might not be out of place here, to mention the extent to which our premier city, Johannesburg, has availed itself of veterinary experience in the past.

Within seven years of the proclamation of the township of Johannesburg (December 1886) a veterinary surgeon, Arnold Theiler, had been appointed as Consulting Veterinary Surgeon to the Sanitary Board, which existed from 1887 until 1897 when the Town Council was established. In 1896, however, Theiler secured the post of Veterinary Surgeon to the Republican Government and therefore left for Pretoria. In 1894 the Volksraad had passed Law 8 concerning glanders, and as the disease was exceedingly prevalent in Johannesburg, it is probable Theiler was indirectly responsible for this measure. Occurring throughout the text of the Law are the words " Gouvernements veearts," and it is likely that Theiler, in order to be able to take necessary action, was gazetted as a Government Veterinary Surgeon under the Glanders Law. After Theiler's departure it would seem that a private practitioner William Pye, M.R.C.V.S., until 1896 veterinary assistant to the Colonial Bacteriologist, Grahamstown (Dr. A. Edington), succeeded him, but nothing is known definitely until the latter half of 1902 when affairs were settling down after the 2nd Boer War(1). At this time glanders was rampant and the Medical Officer of Health (Dr. Chas. Porter) was forced to issue in August of that year a clinical description of the disease along with a summary of Law 8. The following month Wm. Pye was gazetted (G. 26/9/02) a Government Veterinary Surgeon to enable him to take necessary action regarding glanders within the Municipality. From the beginning of January 1903, however, a whole time Municipal Veterinary Surgeon was appointed, this being John Peddie, who acted as Government Veterinary Surgeon (G. 16/1/03) until 13/3/05 when an officer of the Civil Veterinary Department, Peter Conacher, M.R.C.V.S., was stationed in Johannesburg(2).

Peddie's duties included not only the administration of the various

(1) Pye left Johannesburg as a refugee when the 2nd Boer War broke out. He with a Johannesburg colleague, E. A. Hollingham, joined the I.L.H. in Natal and served in the ranks during the war.

(2) Previous to this, J. P. Dunphy, M.R.C.V.S., who was stationed at Krugersdorp, supervised the Witwatersrand as well as his own district, the Municipal Veterinary Surgeon being responsible for scheduled animal diseases only in the Municipal area.

contagious diseases ordinances (1), but also the care of municipal animals and the supervision of slaughter-houses and meat inspection. These activities were grouped as a sub-department under the general control of the Medical Officer of Health. After the arrival of District Veterinary Surgeon Conacher in 1905, it was possible to concentrate more on general municipal duties, e.g., care and shoeing of horses and mules, inspection of dairies and pounds, and frequent visits to the zoo. As time went on, especially after Col. J. Irvine-Smith's appointment as Municipal Veterinary Surgeon in August, 1907, the public health aspect developed to such an extent, that with the opening of the Live Stock Market and Abattoir on 4/1/10 and 24/10/10 respectively, it was impossible for the Municipal Veterinary Surgeon to give his attention to general matters, e.g., care of municipal animals including the farriery section. The Veterinary and Shoeing Branch was accordingly transferred as from 1/7/11 to the Manager of the Sanitary Dept. (2), who fortunately was a Veterinary Surgeon (F. C. Gavin, M.R.C.V.S.), and by his energy and business methods had so impressed the Council that from 1/1/09 the animals and transport of the Municipality had been placed under his control.

Although the provision of a public abattoir was recommended as early as 1902, it was not until 13/4/09 that the Inauguration and Foundation Stones of the Live Stock Market and Abattoir respectively, were dedicated by the Earl of Selborne. At this time stock sales were conducted from railway trucks in an atmosphere of dust accompanied by brutal handling including non-provision of drinking water for long periods. Regarding arrangements for slaughter stock, there were several private "Slaughter Poles" scattered over a wide area, a most unsatisfactory state of affairs, especially as the Principal Veterinary Surgeon, Transvaal, would not permit cattle from proclaimed (3) areas to be accepted unless off-loaded from a railway truck direct into the lairages of an abattoir. As a result of the general lack of facilities, much frozen meat was imported. The new Live Stock Market (with a section put apart for the sale of quarantine stock) cost originally £17,000, but additional accommodation, e.g. railway sidings and pens, has and is still being provided. At present over a million and a quarter animals are handled annually, aggregating in value up to £6,000,000. The Abattoir, costing originally £50,000 has been modernised by the

(1) Vide Ord.: 17/02 (East Coast fever); Proc.: 4/02 (rinderpest); Proc.: 1/03 (lungsickness, tuberculosis, foot and mouth disease, anthrax, glanders, scab, swine fever and swine erysipelas); Proc.: 3/03 (redwater); Proc.: 36/03 (mange, ulcerative lymphagitis and sheep pox; Ord.: 27/04 (rabies).

(2) Owing to Mr. Gavin's retirement on pension in 1928 it has been necessary to re-transfer these duties to the Director of the Live Stock Market and Abattoir since Mr. Gavin's successor is a layman.

(3) One of the measures adopted in the suppression of East Coast fever was the slaughter, with compensation, of all cattle in a district proclaimed to be infected with the disease.

installation of by-product and refrigerating plants and much extension work has been done in cold storage accommodation, and abattoir lairage and slaughter space. No less than 600,000 animals are slaughtered annually, of which 110,000 are adult cattle. The amount of meat condemned has risen from approximately 140 tons in 1910 to nearly 700 tons in 1928. It is therefore, not surprising that from 14/8/17 the Johannesburg Council agreed that the Live Stock Market and Abattoir should constitute a separate Department with the Director (Col. Irvine-Smith) as Head. With the increasing responsibilities, an Assistant (A. C. Kirkpatrick, M.R.C.V.S.) was appointed in 1919.

The above outline gives an idea of the magnitude of the operations controlled by a member of the profession; and any colleague visiting Johannesburg should certainly call on the Director and see for himself how greatly an efficient veterinary service contributes to the excellent health enjoyed by the public of the most important metropolis in Africa. (1)

Tuberculosis in a Giraffe.

Much has appeared in the press lately regarding the illness and death of Rebecca, a pet giraffe of the Johannesburg Zoo. The curator attributed the indisposition to " all sorts of things that were never intended for her consumption," but from a post-mortem examination conducted on 13/8/29 by Mr. Kirkpatrick, it appeared tuberculosis was responsible. This he confirmed by bacteriological examination, and cultured tests carried out by Dr. Martinaglia indicate that the infection was of human origin.

We agree with the curator in condemning the practice of the public feeding the Zoo animals, and steps should be taken to prevent this. On the other hand, zoological authorities generally should cooperate more with the members of the profession, not only with regard to treatment, but also in the identification of the ecto- and endoparasites affecting their charges.

Retirement of Mr. F. C. Gavin.

Frederick Charles Gavin, who left the service of the Johannesburg Municipality last year on pension, was born at Ayr in February, 1868. After passing through Ayr Academy and serving a pupilage with Mr. T. Campbell, F.R.C.V.S., of Kirkcudbright, he entered the Royal Veterinary College, London, graduating in May 1889. He then saw practice in Burton-on-Trent and Drogheda and later joined the temporary staff of the Veterinary Department, Dublin Castle, but subsequently became a permanent veterinary inspector. On the outbreak of the South African War (1899-1902) he obtained leave to join the A.V.D. and after training at Aldershot accompanied a squadron of 8th Hussars and Mounted Infantry details to the Cape. For his

(1) Nothing has been stated regarding the dairy aspect of public health in Johannesburg; but Col. Smith has this matter in hand and a satisfactory inspection scheme may be expected shortly.

services in the Boer War he received both the Queen's and King's medals with five bars. In December 1902, he was appointed Manager of the Sanitary Department, Johannesburg Municipality, and owing to his business methods and professional skill his duties were from time to time extended, e.g. on 1/1/09 the municipal animal transport was placed in his charge, and from 1/7/11 he took over the duties of municipal veterinary surgeon. His title was accordingly changed to Manager, Transport and Cleansing Department, and Municipal Veterinary Surgeon. On the outbreak of the Great War he joined the A.V.C. as Captain and after doing duty at Aldershot, Basingstoke and Winchester he was appointed A.D.V.S. 38th Division with the rank of temporary Major. He proceeded to France with this Division remaining with it until after the cessation of hostilities. He was awarded the D.S.O., was mentioned twice in despatches receiving the 1914-15 Star, Victory and King's medals, and retired with the rank of Major. On returning to South Africa in 1919 he resumed his duties with the Johannesburg Municipality; and on reaching the age limit at 60, he was presented with a testimonial bearing the Common Seal of the Council.

Our colleague, possessed of that organising ability and business acumen so characteristic of the Scot, has settled down to farming in Swaziland. We are sure he will make the same success of this venture as he did of his municipal duties.

Successor to Mr. F. C. Gavin.

In view of the splendid services rendered by Messrs. J. Irvine-Smith and F. C. Gavin to the Johannesburg Council, it was hoped that another veterinarian would be selected to fill the vacancy caused by Mr. Gavin's retirement. Unfortunately Major Keppel (one of the considered applicants) who applied for the position (salary £1,250-£1,550 p.a. plus locomotion allowance of £17 10s. 0d. p. m.) was handicapped by reason of his not being resident in Johannesburg. At the Council meeting, when a successor was appointed, much sentimental nonsense was spoken regarding discontent among staff, blockage of municipal promotion by an outside appointment, etc., etc., and in spite of these arguments our colleague only failed to secure the position by two votes. Such is democracy ! This is the third municipal post our profession has lost recently.

Rand Municipalities and Veterinarians.

Apart from Johannesburg the only municipality which has employed a qualified veterinary surgeon is Krugersdorp. It is extraordinary, in the XXth century and with South Aficans qualifying as veterinarians, that responsible public health positions should be held by non-qualified persons.

Port Elizabeth Abattoir Appointment.

It seems extraordinary that the salary offered for the position of superintendant should have been reduced from £650-£800 to £500-£650. Maybe the idea was to rule out veterinarians who are undoubtedly best qualified for the post.

DEPARTMENTAL. (UNION GOVERNMENT).

Department of Justice.

Major Morton, V.O. to the South African Police, is kept exceedingly busy, being the only regular veterinarian in the Force. If it were not for the Government Veterinary Officers, who assist a great deal in police work, our colleague would find it impossible to keep things going.

Department of Defence.

PERMANENT FORCE.

Few members are aware of the fact that Col. Bush is not only Director of Veterinary Services U.D.F. but also Staff Officer for Supplies and Transport and responsible for Remount Services.

A Committee appointed by the Department of Defence to enquire into the horse resources of the Union of South Africa has recently submitted its report to the Minister of Defence. The Chairman, Col. Truter S.A.P., (later his successor, Col. de Villiers, S.A.P.) was assisted by General Brink, Q.M.G., Col. Bush and Major Goodall. The Committee wishes to thank all veterinarians who arranged the distribution of questionaires among the horse breeders. With the universal use of motor transport, but few of the younger generation are able to ride and the horse shortage is undoubtedly a serious problem.

Col. Bush, by virtue of his position, is attached to the South African Staff Corps. The S.A.V.C. therefore has only one permanent V.O. The subordinate personnel consists of a Sergt. Major Instructor, Staff Sergeant and Corporal.

ACTIVE CITIZEN FORCE.

Two sections of the S.A.V.C. have been formed as follows :—

(a) No. 1 Veterinary Hospital, although established in 1926 only came into being in 1927. The O.C. is Capt. Quin, and the members are for the most part students of the Faculty of Veterinary Science. The unit serves more or less as an Officers Training Corps but in the event of hostilities it would function as a hospital. The course of training includes mounted and dismounted drill, musketry, horsemastership, and general military knowledge.

(b) No. 1 Mobile Veterinary Section. This is a Natal unit raised in 1927 and commanded by Capt. Alexander. It is attached to the 1st Mounted Brigade, and Headquarters are at Maritzburg.

Department of Agriculture.

School of Agriculture

Of the four schools of Agriculture only Grootfontein and Potchefstroom have permanent Veterinary Lecturers, viz :—Messrs. van Rensburg and Starke, respectively. Mr. Ewing is acting at Cedara and Mr. Canham at Glen. Veterinary Lecturers come under the Principal (who is responsible to the Division of Extension) for discipline, but are controlled by the Director of Veterinary Services with regard to lectures and research work.

Division of Veterinary Services.

Yet another amalgamation must be registered, for since 1/4/29 the Director of Veterinary Services controls also the Division of Animal Industry including the Dairying Division. We firmly believe that the policy of placing allied divisions under one responsible head to be an excellent one. It is to be regretted that such a step was not taken at Union.

The following divisional changes relating to the veterinary branch of the Department of Agriculture have taken place within the past nine years :—

(a) The Director of Veterinary Research in 1920 took charge of the new section of Veterinary Education (Faculty of Veterinary Science) with the title Director of Veterinary Education and Research.

(b) In 1924 the Principal Veterinary Officer took over the Sheep Division with no change of title.

(c) In 1927 (a) and (b) were amalgamated, i.e. the divisions of Veterinary Education and Research and Veterinary Administration were united as the Division of Veterinary Services, not to be confused with the section of like name in the Department of Defence. The head of the latter division is designated Director of Veterinary Services U.D.F.

(d) From 1/4/29 (as mentioned above) the Director of Veterinary Services became also head of the Division of Animal Husbandry with the designation Director of Veterinary Services and Animal Industry.

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Dr. Martinaglia received information in July that his thesis "Diseases of Domesticated Animals in South Africa due to organisms of the Salmonella group" had been accepted by the University of

Toronto. Although the Faculty of Veterinary Science of that University has been in existence for 20 years, only seven doctorates have been awarded, two being honorary.

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In the photograph taken July 1928 of the 1st Deparment of Agriculture Conference, and shown in our previous issue, the following veterinarians are to be seen (from front row backwards : Messrs. P. J. du Toit, Chalmers, Bush, Melck, Martinaglia, Goodall, Paine, Parkin, Smith, Pfaff, Frean, Alexander, Cooper, Monnig and May.

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New appointments in the Division of Veterinary Services include:

Thorburn, J. A., appointed G.V.O. 2/1/29.
Blomefield, L. C., appointed G.V.O., 14/1/29.
Clark, R., appointed G.V.O., 10/1/29.
Robinson, M.C., appointed G.V.O., 19/3/29.

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By reading papers at important assemblies, Messrs. Goodall, Chalmers and Paine are doing valuable public health work, and incidentally the profession will benefit. Messrs. Goodall and Chalmers addressed the Transvaal Municipal Conference at Vereeniging (30/9/29) on "The value of veterinary services to Municipalities and their relationship to public health," and Mr. Paine lectured to the Rhodes University College students (15/10/29) on "The Veterinarian and some of South Africa's problems."

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Mr. W. M. Power, senior veterinary officer in Natal since 1907, was born 29/12/1873 and came out to the Natal C.V.D. in June 1899, after graduating at the London College in December 1896. On the formation of the Natal Veterinary Corps three months before the 2nd Boer War. Power received a commission, being gazetted Lieutenant on 5/9/99. He was attached to the Border Mounted Rifles, which unit served in the Siege of Ladysmith. After the Natal Volunteers returned home at the end of 1900, Power served as V.O. to the Natal Volunteer Composite Regiment. On the re-organisation of the N.V.C. early in 1904 he was promoted Captain and in March 1908 was appointed Major. On the departure of Col. Watkins-Pitchford in 1912, Power took command of the N.V.C. and remained so until its disbandment in 1913. Possessed of considerable tact Power, although having to institute irksome restrictions in connection with East Coast fever, is well respected by the farmers of the Garden Colony; and since his recent retirement on December 28th, 1928, he has established a lucrative practice in Maritzburg. Always keen on matters pertaining to the profession, he was a foundation member of the Natal V.M.A. and joined the S.A.V.M.A. in 1920, serving on the Council of both bodies. He is at present president of the Natal Veterinary Board.

Mr. J. L. Webb, now of Longview, Ixopo, was born at Bishop Stortford in Hertfordshire on 20/9/73. Soon after qualifying at the Royal Veterinary College, London (March 1896) he joined the Natal Veterinary Department, his appointment dating from 21/10/96. Soon after his arrival, rinderpest swept through the country and our colleague had seven magisterial districts under his supervision ! a difference when compared with present day organisation. In 1898 when the Griqua le Fleur attempted to instigate a rebellion in East Griqualand, Webb was attached to the Natal Police, but owing to the prompt action of the C.M.R. no action was necessary in Natal. In the formation of the Natal Veterinary Corps by Col. Watkins-Pitchford in July 1899, he received a commission as Lieutenant, and was for some time attached to the A.V.D. on remount duty at Fort Napier. In October 1902 he obtained the Fellowship of the Royal College of Veterinary Surgeons. Since that time he has been engaged in the suppression, first of lungsickness and then of East Coast fever in Southern Natal. His retirement dates from 19/9/28.

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Mr. E. M. Jarvis, born 10/3/73, qualified on 14/12/94 at the Royal Veterinary College, London, obtaining his Fellowship on 8/12/10. He first came out to South Africa in 1897 when he served a year with the Cape Government during the rinderpest epizootic. He returned to this country as a C.V.S. in the Army Veterinary Department during the South African War of 1899-02. Later he entered the Civil Veterinary Department of the S. Rhodesian Government and during the Great War (1914-18) joined the S.A.V.C. and saw service in German East Africa. As a result of experience gained there he wrote a most instructive report on Ixodic lymphangitis (Vet. Jl. XXV. 44) and for his services he received the M.C. In 1920 he took up an appointment in the Union Civil Veterinary Department (29/10/29) and was stationed at Middelburg, C.P. where he soon established a sound reputation for his practical methods. Unfortunately for the Veterinary Department he decided to take up farming at Umtali and left the service on 30/9/28.

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Mr. C. H. Wadlow, who retired from the Union C.V.D. at the end of June 1927, was born in Shropshire 7/3/1877, and educated at Shrewsbury. He obtained his diploma at the New Veterinary College, Edinburgh in May 1903 and then joined the Orange River Colony C.V.D. in October 1904. During the Great War he joined the S.A.V.C. and was attached to the 5th Regiment S.A.M.R. during 1914-15. For his services he was awarded the M.C. He has now settled down in private practice at Port Elizabeth where we feel sure he will be successful in establishing a good practice.

We wish our colleagues, whose careers have been briefly described above, the best of wishes in their retirement. By their assiduity they have set a high standard; and having served the State so faithfully, may they be spared many years to enjoy their well earned pensions. We rejoice that though no longer employed in government service, they have not given up membership of the S.A.V.M.A. a step usually taken by pensioners !

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We notice in the Rand Daily Mail (7/8/29) that " eligible candidates for employment on the waiting list of the Public Service Commission at the end of 1928 numbered 816 men and 1067 women." In spite of the fact that no veterinarian is included in this total, the scale of salaries for veterinary surgeons is nevertheless unsatisfactory.

Faculty of Veterinary Science.

(The Faculty is part of the Transvaal University College which is a constituent college of the University of South Africa. Although under the Department of Education, the professors and lecturers are officials of the Department of Agriculture and act only as part-time teachers).

Mr. Bisschop left in February for twelve months special leave in Europe. He commenced post-graduate work in Basle under Sir Arnold Theiler, but intends visiting the chief veterinary institutions in Germany, Holland, France and Great Britain.

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Dr. de Kock left last August for a year's sabbatical vacation which he intends spending in Germany, Great Britain and the United States.

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Dr. Thomas has been appointed Lecturer in Pathology (February 1929) and is taking over some of Dr. de Kock's duties. Messrs. Parkin (October 1928), Alexander and Pfaff (February 1929) have received lectureships in Medicine, Infectious Diseases and Anatomy combined with Surgery respectively. It is intended shortly to appoint another lecturer for either Anatomy or Surgery.

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The degree of B.V.Sc. was in Easter last conferred on Messrs. Blomefield, Clark, Robinson and Thorburn.

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The degree of D.V.Sc. was at the same time awarded to Dr. Quinlan and Messrs. Quin and Thomas. The subjects chosen for thesis were :—" Researches into sterility of cattle in South Africa " by Dr. Quinlan; " Studies on Anthrax Immunity " by Dr. Quin; and " Skin Cancer of Angora Goats in South Africa " by Dr. Thomas.

We are pleased to learn that Dr. Quin contemplates a visit to Europe shortly for study purposes.

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The students attending the Faculty at Onderstepoort number 20, being distributed as follows : Second Year 6, Third Year 6, Fourth Year 2, and Fifth Year 6.

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With regard to the question of recognition of the status of non-South African graduates for doctorate purposes in the University of South Africa, the following passage (from a letter dated 24/8/29) from the Assistant Registrar, University of South Africa) explains the nature of the recommendation first made by Senate to Council in 1921 :

"**Section 5 of the Universities and Higher Education Acts Amendment Act, 1920 (Act No. 42 of 1920).**

The Senate recommends that the Council take the necessary steps to have Section 5 of Act No. 42 of 1920 amended so as to read as follows :*

"Section 13 of Act No. 12 of 1916 is hereby amended by the addition of the following words :

"The word graduates shall, for purposes of this section, include women students who have been classified in the honours list of a tripos at the University of Cambridge, or a school at the University of Oxford, **and persons who hold degrees or diplomas of institutions of University standing."**

(In the existing Section 5 of Act No. 42. of 1920, the last clause—commencing immediately after the word "Oxford"—reads as follows :—

".....**or who are graduates of institutions of University standing which confer degrees.")**

Obviously M.R.C.V.S. are included in the proposed alteration. It may be added that the question of reciprocity as between South Africa and other countries e.g. Great Britain, is an entirely different matter.

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We were pleased to notice that some of the students have contributed notes to the Veterinary Record. Veterinarians generally encounter many interesting conditions which they seem disinclined to report. This manifestation of interest in the coming generation is therefore to be welcomed.

* Notice of amendment has since been published in the Govt. Gazette Nov. 8th 1929.

Dr. Neser's sudden death on 17/6/29 has been a great loss to the Faculty. We extend to his widow and children our deep sympathy in their sad bereavement.

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The following extract from the Veterinary Record of 20/4/1907, page 677, is not without interest in view of present day developments :

" There is another point in connection with the status of " veterinary surgeons abroad which it would be well to recognise " now, as it will become one of great importance in the future. " At present, the idea seems to be that graduates of the R.C.V.S. " should take precedence throughout the Empire. This is quite " right until such time as the Colonies possess schools, the train- " ing and diplomas of which are equal to ours—and that time is " not yet. Some of our Colonies possess no veterinary schools at " all. Schools are to be found in others again, which have not yet " reached the level of our Colleges at home. But sooner or later " this will alter, and the larger and more important Colonies will " be able to show that they possess veterinary schools comparing " favourably in every respect with those in Great Britain. In " that case they will demand recognition of their graduates by the " R.C.V.S. for which clear and distinct provision was made in " the Act of 1881. When a Colonial or foreign graduate possesses " a diploma of sufficient value, he is legally entitled, upon payment " of a registration fee, but without examination, to be registered " by the R.C.V.S. and become to all intents one of its members. " The value of his diploma and the status of the school at which " it was obtained are points which may be settled if need be, by " an appeal to the Privy Council."

General.

The S.A.V.M.A. has a warm supporter in Mr. McNae who has not only succeeded in enrolling **all** his staff as members, but has also made arrangements that half will attend each Spring General Meeting. As a matter of fact the Administration gains in the end, for a visit to the Onderstepoort Laboratories and an interchange of views with professional colleagues act as a stimulus for the future.

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The President of the Incorporated Law Society of the Transvaal refers in his last annual report to the practice of certain attorneys who advertise themselves on their letter paper or elsewhere " This .....especially in the smaller towns is undignified," he states. (Rand Daily Mail 16/8/29).

* * * * * * *

Dr. Andrews, in an address to the Rotary Club, Johannesburg, on 20/8/29, referred to the drastic measures taken in Great Britain

with regard to the eradication of foot and mouth disease. Although causing a mortality of only 5 per cent., the authorities still consider it more economical to adopt a policy of slaughter, and in 1920 compensation amounting to £2,000,000 was paid. In Australia similar drastic methods were employed with success for scab. In Mozambique we believe the same steps were taken for East Coast fever.

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While salaries for State Veterinarians are unsatisfactory in South Africa, it is pleasing to note that elsewhere the position is improving. In the Sudan the commencing salary is £E 676 p.a., rising to £E 720 on the 1st January following the completion of two years service and thereafter by two biennial increments to £E 852 and then to £E 936 after ten years service. There is finally the £E 1,200 notch for higher grade appointments (Vet. Rec. 20/7/29).

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In Burma the commencing salarly for the temporary post of Superintendent varies from £495 - £900 p.a. according to whether the age of the successful candidate is 23 or 29, a most curious qualification. (Vet. Rec. 13/7/29). In India a veterinary specialist is offered a commencing salary of £180 p.m. (Vet. Rec. 13/7/29). All these posts carry better leave and transport facilities than are enjoyed in South Africa.

* * * * * * *

Since the Report of the Lovat Committee (formed by the former Colonial Secretary, Mr. Amery) is not known to all our members, we give the most important recommendations as follows :—

(1) the Colonial Veterinary Service should be concerned with animals in health as well as disease,
(2) the veterinary staffs of the present non-self-governing territories are inadequate,
(3) a single Colonial Veterinary Department should be formed,
(4) a central veterinary research station should be established in Africa, and
(5) salaries should begin at a minimum of £600 p.a. plus local allowance, with study leave as a normal condition of an officer's appointment. Higher salaries are proposed for the more important administrative posts, the highest being the scale of £2,000-50 - £3,000.

The veterinarians represented on the Committee (of ten) were Sir Arnold Theiler, Dr. Andrews and Prof. Buxton (Vet. Rec. IX. 107).

* * * * * * *

We regret to learn from the Deutsch. Tierärz. Wochen, (8/6/29) that Wilhelm Ellenberger of Leipzig, born 5/3/48, died 5/5/29. His contributions to anatomy are known throughout the world and will serve as standard works for many generations.

It is satisfactory to learn that Northern Rhodesian veterinarians intend forming a Veterinary Medical Association. What has happened to the Southern Rhodesian Society ? May we suggest that our colleagues there link up with the North. Our Association, however, is not a Union of South Africa body but a South African organisation and stalwarts are to be found even in the Belgian Congo (M. Sterne), Kenya (J. Walker), Tanganyika (J. M. Dawson), and Southern Rhodesia itself (P. D. Huston, E. M. Jarvis and D. Lawrence).

* * * * * * *

The title of Dr. Bullock's thesis recently accepted for the LL.D., University of London, was " The Law relating to Medical, Dental and Veterinary practice." Although the profession is still unprotected in this country, there is much valuable legal information relating to veterinarians which should be put together (see Vet. Rec. 18/5/07 p. 748). We look to the Professor of Veterinary State Medicine (Dr. P. R. Viljoen) to take this matter in hand. Concerning law, we trust all have seen Elliott's " South African Law on Disease of Stock " (Juta & Co.) and Blaine's " Dog Law " (Esson & Co. 1928).

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We are pleased to note that Mr. N. Reid has secured an appointment in the Tanganyika Veterinary Service, being at present stationed at the Veterinary Research Laboratory, Mpapwa. In 10 years time he will be earning as much (besides better leave and pension prospects) as some Union veterinarians who have given 30 years of the best period of their lives to the State.

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On page 54 will be seen an interesting photograph of one of the first dipping tanks constructed in South Africa. We are obliged to Mr. J. Buck of Kimberley for this view.

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The magnificient grant of £10,000 (capital amount) and £11,000 annually from the Empire Marketing Board towards improvements at Onderstepoort, the central veterinary research station of the Empire, will enable library facilities to be extended. The Director of Veterinary Services intends to put aside a room for the collection of material relating to the pioneers of the profession. Will members who joined **prior** to Union (31/5/1910) send a photograph (accompanied by short biography) not only of themselves but of views of a veterinary historical nature ? Such material should be addressed to Dr. H. H. Curson, P.O. Laboratory. Quite a number of interesting photographs, e.g., taken of Dr. Koch in 1896, have already been presented.

The results of the elections to the Natal Veterinary Board are awaited with much interest. We trust that this body and the S.A.M.V.A. will keep in closer contact than has been the position hitherto.

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It is to be hoped that we have seen the last of the Bill for the curtailment of the importation of thorough-bred horses. We require the best blood possible.

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Major Gavin is to be congratulated on having purchased Major Johnston's Veterinary Vaccine Agency in Johannesburg. May he prosper as he deserves to do.

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Conferences.

The following conferences of veterinary interest have been held recently :—

(a) Royal Institute of Public Health at Zurich from 15th - 20th May 1929. Several British colleagues attended and Sir Arnold Theiler, who is at present resident in Basle, not only took an active part in the discussions but also assisted greatly in interpreting.

(b) International Congress of Military Medicine and Pharmacy in London from 6th - 11th May 1929. The Presidents of the Royal College of Veterinary Surgeons (Sir John Moore) and National Veterinary Medical Association (Lt. Col. W. Rainey) were appointed Vice-Presidents of the Congress.

(c) National Veterinary Medical Association at Ayr from 1st - 6th September 1929. Among the interesting papers presented were those of Dr. Orr. (The mineral requirements of farm animals) and Principal Hobday (The clinical and epidemiological aspects of so-called hysteria of the dog).

(d) Sixth Pan-African Agricultural and Veterinary Congress at Pretoria from 6th - 17th August 1929. The Veterinary Section was presided over by our President, Dr. P. J. du Toit, and the gathering was most successful. It is not intended to refer to the papers read since, owing to the courtesy of the Director of Veterinary Services (Dr. P. J. du Toit), a copy of the Proceedings will be sent to each of our members.

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Next year the following conferences will take place, both in London :

(i) The World's Poultry Congress from 22nd - 30th July. This will be the Fourth gathering, previous conferences having taken place at Ottawa (1927), Barcelona (1924), and Hague

(1921). The World's Poultry Science Association, membership 500,000, has a most useful publication, the International Review of Poultry Science, which is sent to members, the subscription being £1 0s. 0d. per annum. Abstracts are made of all current literature bearing on various aspects of the poultry industry and any interested veterinarian should certainly become a subscriber. We trust the veterinary profession will be well represented at the Congress since it takes place about the same time as the Eleventh International Veterinary Congress.

(ii) Eleventh International Veterinary Congress to be held from 4th - 9th August. It will be remembered that the last meeting, also in London, broke up as a result of the outbreak of the Great War in August, 1914. The organising Committee has been in communication with our President, (who represents South Africa on the Permanent Committee) and he has been requested to express to all veterinarians in South Africa " the pleasure it would give the veterinary profession in England to meet and offer hospitality " to colleagues who may be able to attend.

The President has informed the Permanent Committee that the National Body for South Africa is the Council of the S.A.V.M.A. The draft programme of both General and Sectional meetings has already been distributed to members.

The last meeting of the Permanent Committee, held in Paris on 13/6/29, agreed that the names of reporters at the Congress would be selected by the Executive Committee in London and due notice given in the veterinary press.

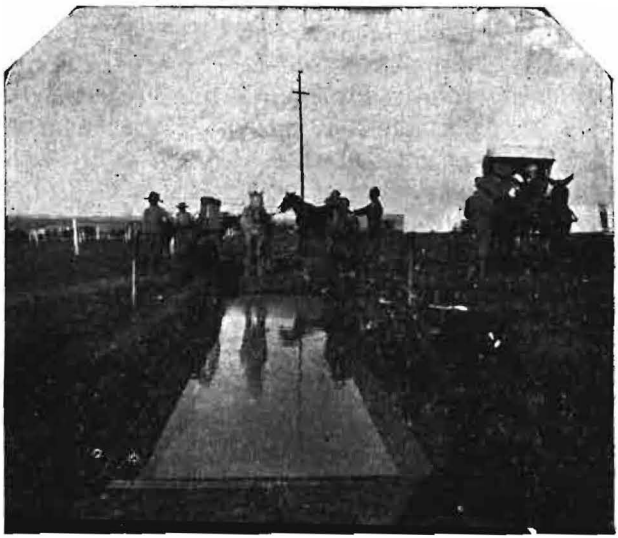
* * * * * * *

We were pleased to see so many of our colleagues in Pretoria last August for the Pan-African Veterinary Conference. The following members of the S.A.V.M.A. represented their governments :—Messrs. Chase (Bechuanaland Protectorate), Elder (Swaziland), Lawrence (S. Rhodesia), NcNae (South-West Africa), Walker (Kenya) and Verney (Basutoland). Drs. du Toit and Viljoen represented the Union of South Africa.

Other delegates were :— Dr. Poisson (Madagascar), Drs. Botelho and Sheppard Cruz (Mozambique), Professor Carpano (Egypt), Dr. v. d. Elst (Belgian Congo), Dr. Andrews (Great Britain), and Messrs. Hornby (Tanganyika), Mulligan (Kenya), Bennet (Sudan), Carmichael (Uganda), Henderson (Nigeria), Sinclair (S. Rhodesia), de Meza (Nyasaland), Smith, Turnbull and McDonald (N. Rhodesia). See frontispiece for photograph of the delegates.

The meetings of the Agricultural Section of the Pan-African Congress were also most successful, the botanical papers by Drs Pole-Evans and Phillips being exceedingly useful. One of the suggestions made was the institution of a Pan-African journal of research but the practicability of such a scheme was doubted by most delegates. As far back as 1909, Sir Arnold Theiler, at the 3rd Pan-African Veterinary Conference, also held in Pretoria, brought forward a similar proposal. We feel sure that the idea of a common scientific publication for Africa, or perhaps British Africa, will yet eventuate.

The Congress might be looked upon as an unqualified success and the exchange of information and personal contact will undoubtedly stimulate further work.



ABSTRACTS AND RECENT REFERENCES.

1. A short note on chronic Anaplasmosis and Gonderiosis in small ruminants after Splenectomy (1). de KOCK, G.

The author, whose publications on splenectomy and its sequelae have appeared in previous divisional reports, (de Kock and Quinlan 1927, 1929) has collected and tabulated further data on the course of these two diseases in four sheep and one goat over varying periods after splenectomy.

From his observations he draws the following conclusions :—

(1) In a large percentage of the animals in his experiments the course of anaplasmosis was long protracted. In one sheep and the one goat anaplasms were observed for five years and are still present in the blood.

(2) Some of the animals revealed anaemia both clinically and microscopically. There was emaciation and pallor of the visible mucous membranes. The red blood cells showed remitting low counts alternating with partial recoveries, for instance, in one case from a normal of 10 millions cmm. there was a drop to 3.2 and 2.8 millions and returns to higher counts up to 8 millions. During the lower counts, distinct morphological cellular changes indicative of anaemia were evident.

(3) During the lower counts an erythrophagocytic monocytosis and an eosinophilia were apparent.

(4) Contrary to earlier observation anaplasmosis in the goat was also ultimately associated with a definite oligocythaemia.

(6) The writer is of the opinion that the immunisation mechanism against anaplasmosis and gonderiosis has in some way been interfered with by the removal of the spleen.

2. Abstract from the Annual Report, Department of Agriculture (1928) of Kenya Colony. (Abstracted by Dr. D. G. Steyn).

The undermentioned plants have been definitely proved **poisonous** for sheep :—

ASCLEPIADIACEAE.

Asclepsias platycalyx * 1772 g. caused an acute gastro-enteritis with marked purging and death.

(1) This paper will appear in the Sixteenth Report of the Director of Veterinary Services and Animal Industry.

COMPOSITAE.

*Dichrocephala chrysanthemifolia:** This plant, which grows in vleis, damp places and in open grass lands, proved to be poisonous to sheep in quantities of 1584 g., the symptoms being those of a severe gastro-intestinal irritant. Natives allege it to cause abortion in pregnant animals.

CUCURBITACEAE.

*Cucumis prophetanum.** This plant is only eaten by animals under very adverse conditions on account of the numerous bristles on the stem and leaves. The symptoms resemble those of rinderpest. 900 g. proved to be poisonous to sheep.

LABIATAE.

*Leonotis mollisima,** 1867 g. caused the symptoms of a severe irritant poison in sheep.

LEGUMINOSAE.

Cassia didymobotrya. Quantities as small as 72 and 185 g. proved to be exceedingly poisonous to sheep, causing an intense inflammation of the intestinal canal. The Masai use an infusion of these leaves as a purgative. Sometimes cultivated in this country.

RANUNCULACEAE.

Ranunculus pinnatus.† This is a weed of damp places and often grows partially submerged. The symptoms closely resemble those seen in Rinderpest. 3050 g. proved poisonous to sheep.

UMBELLIFERAE.

Sium? latifolium. This plant also proved to be definitely poisonous, causing an acute gastro-enteritis in sheep.

Ipomoea cardiosepala; Lantana salvifolia; Pentas purpurea; Melothria longipunculata; Solanum incanum; Chenopodium opolifolium; Typha ausiralis; and *Gloriosa carsonu.* Of these plants *Gloriosa carsoni** and *Melothria longipedunculata** caused transient symptoms of colic, uneasiness and salivation but ultimately recovered despite the fact that feeding with these plants continued for several days.

* Not known to occur in South Africa.

† Now known as R. pubescens in S. Africa. This plant differs slightly from R. pinnatus. (See Jl. S.A.V.M.A. I (1), 46).

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* It would appear from this article that pithing was well known to the Carthaginians at least 2 centuries B.C.

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CLINICAL AND GENERAL ARTICLES.

Anatomical Studies No. 11.—Anomaly of the Thymus Gland in a Calf.

By Dr. H. H. CURSON,
Veterinary Research Laboratories, Pretoria.

Heifer Calf 2172, kindly sent to Onderstepoort by Mr. R. de Villiers of Klipstapel, Breyten, at the suggestion of Mr. P. L. le Roux, M.R.C.V.S., then stationed at Ermelo, was born early in September 1926 (File 124/276). It showed a large pendulous tumour arising from the dewlap at the lower part of the neck and extending as far down as the knee. There was an entire absence of hair and as a result of friction with the ground the ventral aspect showed signs of injury followed by infection. Characterising the upper part of the anomaly was a well marked pulsation, or as it was described to Mr. le Roux, "the calf showed a pulsating lump in the dewlap."

On arrival at Onderstepoort on 15/9/26 the calf was in fair condition, and a week later it was decided to remove the tumour (See Fig. A). This was accordingly done by Dr. Quinlan, and progress was satisfactory until the second week of October when pneumonia supervened, death following on 14/10/26.

Of teratological interest is the nature of the tumour. On post-mortem examination (P.M. No. 5526 dated 14/10/26) the thymus

Fig. A.
Calf 2172, before operation

gland, which in a calf normally extends from the anterior mediastinal space as far forward as the thyroid gland, was described as "small." Sections, however, of the extirpated swelling, taken at different levels, indicated that the main mass was composed of thymic tissue, and the attached microscopic photographs (See Figs. B and C) confirm the identity of this gland (Path. No. 6320).

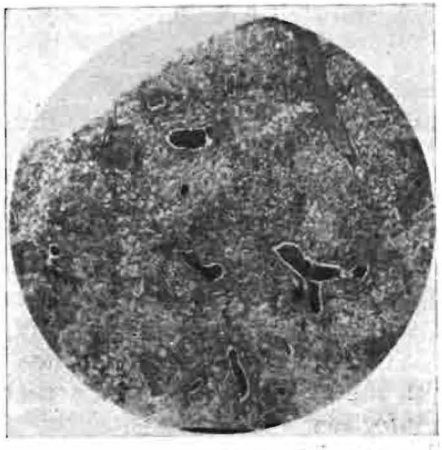

Fig. B.
Section at one level showing early thymic tissue (x 25).

It would seem that during embryonic development the thymus, which arises from the pharyngeal pouches, had become displaced, and instead of being normally disposed, had taken up an unusual form in an abnormal position.

I am obliged to Dr. Quinlan for a photograph of the calf before operation.

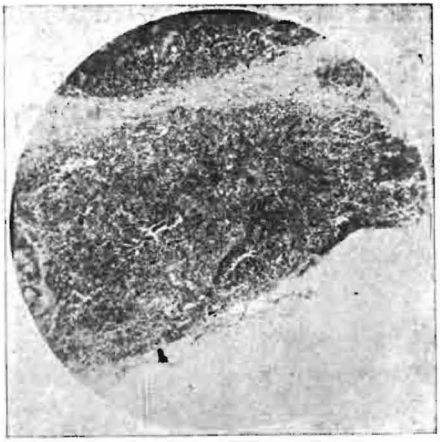

Fig. C.
Section through another level showing later stage characterised by more lymphoid structure and presence of Hassal's corpuscles (x 55)

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Anatomical Studies, No. 12.—An Anomaly of the Left Cornea in an Ox.

By Dr. H. H. CURSON,
Veterinary Research Laboratories, Pretoria.

The attached photograph (Fig. D) clearly demonstrates the nature of the lesion referred to in the title. Such "moles" while apparently not infrequent in the dog are certainly rare in the ox, and I am obliged to Mr. Pilditch, Superintendent of the Pretoria Abattoir for this interesting specimen (8417, 17/8/28).

Occluding as a rule the pupilla, such growths, however, show little or no tendency to spread. Peddie (1908) describes a case in a dog where both corneae were thus affected, but generally the condition is unilateral.

Both Peddie and Leggett (1909) have successfully removed these unsightly anomalies.

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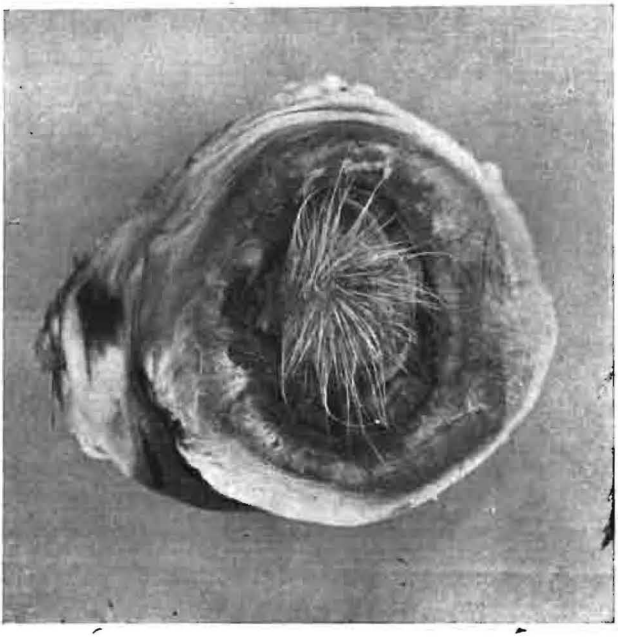

Fig. D.
An anomaly of the left cornea in an ox.

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Foreign Bodies in the Abomasum of Merino Sheep.*

By R. PAINE, F.R.C.V.S., Grahamstown.

A farmer complained that a number of his sheep were gradually losing condition, finally becoming so emaciated that they either died or had to be destroyed. On post-mortem examination the one abnormality observed was a number of foreign bodies in the fourth stomach.

The sheep were young full mouth, grade Cape and Merino cross, reared on the farm, and within a few months eleven had died in a flock of three hundred.

Two sheep were sent to the Veterinary Research Laboratory for observation purposes. One being *in extremis* was destroyed at once, and post-mortem examination revealed five bodies in the abomasum (up to 1½ inches in diameter) being in a line directed towards the pylorus so as to cause actual obstruction. The organs were otherwise normal. The second sheep was kept under observation for a further 16 days, and as it became gradually weaker it was destroyed. The examination revealed thirteen similar shaped bodies weighing altogether 225 g. (See Fig. E).

A month later I visited the farm and on opening a lamb which had died during the night, four similar bodies were present. The herd boy then picked out two other sheep which he suspected of suffering from the same trouble. One was killed and revealed 17 bodies in the abomasum.

The Botanical Division of Rhodes University College kindly reported that the specimens were of vegetable nature, showing presence of cellulose; no hair or animal material was present nor could any nucleus be detected.

The veld appeared to be ordinary karroo, and no clue could be obtained as to the causation, but suspicion was raised by the fact that the sheep were receiving a lick containing large pieces of uncrushed sulphate of copper. Whether this drug in that state caused impaired digestion, or whether the cause was a constitutional defect in the sheep could not be ascertained.

A large proportion of the young stock being apparently affected, and no curative treatment being possible, it seemed best to advise disposal of the flock and to restock with a new strain.

* See *Vet. Jl.* LXXXV. 264.

This the owner did not do, but instead he discontinued the administration of the lick. Four months later he reported that no further cases of unthriftiness had developed, so it would seem that the sulphate of copper in the lick had been responsible, possibly by destroying the bacteria necessary for cellulose digestion.

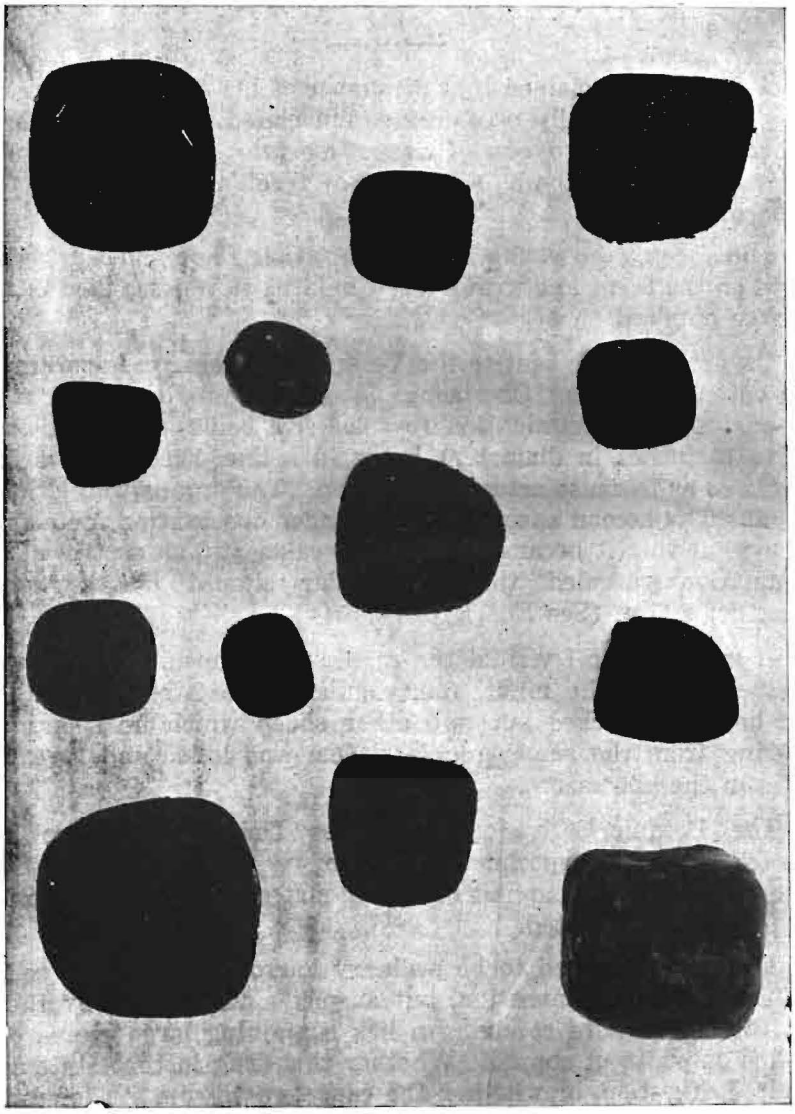

Fig. E.
Foreign bodies in the abomasum of merino sheep.

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The Necessity for a Housing Scheme for Field Veterinary Officers.

By J. R. FREAN, M.R.C.V.S., Stellenbosch-Elsenburg College of Agriculture, University of Stellenbosch.

The above subject is one of very great importance to our profession in this country as, to my mind, it affects our status. I have tried to persuade a number of my more able colleagues to introduce the subject, but unsuccessfully. The position is therefore practically forced upon me, for I feel that the matter must be broached some time and the sooner the better.

The object of this paper as indicated by its title is to interest the Association and more especially the President, so that he may be persuaded to act in his official capacity to bring about an early achievement of such a scheme. In short I wish to emphasise the urgent necessity for the erection of a residence at every recognised Government Veterinary officer station, on the same lines as is done for the magistrate, sometimes for the postmaster, not infrequently for police officers, and for some research officers.

What is the position now ? A government Veterinary officer is transferred to say Paulpetrusfontein. Upon his arrival there he finds no accommodation available apart from that offered by a questionable hotel where the attention he receives is in direct proportion to his patronage of the bar. The other alternative of course is a boarding house, and we all know what our country boarding houses are like ! ! After a longer or shorter period, if he is lucky, he may be able to obtain a house, probably because no one else will have it. Thus, during my limited experience in the field, I have seen a veterinary officer whose local standing, by the way, should be second only to that of the magistrate, share a room with a bank clerk; a married officer living in a two-roomed cottage; another sharing with his wife a room 10 feet by 7 feet; another married officer in a rondavel vacated by a constable because the latter's wife refused to live in it any longer. No doubt, every member of the field staff could cite similar and perhaps more harrowing experiences. Now, it is not so much the inconvenience that counts, as every person must take a certain risk as far as housing accommodation is concerned; but this state of affairs does affect the status of the profession adversely, and it is hardly to be wondered at that in some parts doubts exist as to who is the senior official, the government veterinary officer or the sheep inspector ! A glance at their respective residences often influences the opinion formed in favour of the sheep inspector.

As you all know, external appearances are of great importance. If an officer is so little esteemed by his own Department that he is allowed to live in any hovel available, it is only natural that such an officer will be treated accordingly by the public. On the other hand, if the public sees that an official is sufficiently thought of to be provided with a residence, it is at once realised that such an officer is of some standing, and so, at any rate, the officer **starts off** in his district with a certain amount of prestige. After that it is for the individual to keep his end up. This, shall we call it, enhancement of our status is bound to reflect favourably upon the results achieved in the district. We are no doubt aware that most of our colleagues from adjoining territories have not only accommodation provided for them, but that this is free of charge, not to mention the fact that they are in addition, more highly paid than we are. All we ask for, is the privilege of accommodation for which we are willing to pay !

There is another important aspect from the Department's point of view. If it is decided that an officer is required at a certain station, there need be no question as to whether or not that station is suitable for a married officer on the score of accommodation. I understand that the position is, under the present circumstances, often influenced by this consideration.

As some officers already know from bitter experience, it is not advisable for a government veterinary officer to buy or build a house of his own, for he may not even be given the chance of occupying it.

I have been told that a former principal veterinary officer had in mind such a scheme, but, unfortunately, he left the country before he could carry it out.

I think I have said enough and I only hope that my humble effort will be strongly supported and will, in the near future, bring about an alteration of the most unsatisfactory state that now exists in this country, and which is, incidentally, a not inconsiderable cause of the dissatisfaction encountered in the field staff at present.

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Dehorning of Calves by means of Rorke's Calf Dehorner.

By L. STONIER, B.V.Sc., Vryburg.

A method frequently advised for removing the horn buds of calves is the use of chemical caustics, e.g., hydrates of sodium or potassium. A great disadvantage of this procedure, however, is that the animals may get wet shortly after the operation in which case the caustic runs down the face and may actually destroy sight.

A superior method is by the use of the actual cautery or for preference a dehorner. The calf is first firmly secured and the iron, used at a dull red heat as in castration, next applied to the horn bud with a slight pressure so as to ensure sufficient cauterisation. In order to save time when many calves are to be treated, it is advisable to have two irons.

In the case of calves up to four months of age the dehorner is applied direct, but in animals over this age it is usually necessary first to remove the horn button with a strong knife.

I first carried out the procedure recommended above on the Compton Ranch, Vryburg last December, and four months later no sign of horn growth was to be seen. The method is now applied as a fortnightly routine on all calves born since the preceding period.

JL. S.AFR. VET. MED. ASSN.
I (3) 1929.

Two Articles of Clinical Interest.

By G. McINTYRE, M.R.C.V.S., George.

(1) SCABIES IN POULTRY.

Subject : White Wyandotte cock about four years old.

History : This bird was purchased with others after my arrival at George. It was observed that he looked rather " rough " but not much notice was taken of this. Time went on, however, and though feathers were cast, the new ones did not come on normally. Ultimately the bird looked quite ragged. As it was noticed he was getting bare round the vent and on the back, he was examined and scabies diagnosed provisionally. This was about six months after purchase.

Symptoms : The feathers on back and abdomen were very rough and scraggy and many had broken off level with the skin, the stumps remaining in the follicles. The skin of the back was thickened and covered with a dry grey scurf. The skin round the vent and on the abdomen was also inflamed. Where feathers had broken off the follicles were filled with debris from the decaying quills and epidermis. Further the skin of the neck was inflamed and denuded of feathers, and there were also small patches of infection on the wings. (See Figs. J and K.)

When scratched the bird evinced great excitement, turning the head and nibbling at the part scratched. This symptom was very marked and was typical of scabies.

Fig. J.
Scabies in Poultry.

The bird was never noticed to scratch himself or to rub against anything, so no suspicion of scabies had been entertained before the examination.

Scrapings taken from the skin showed *Cnemidocoptes laevis gallinae* though not in any great number.

Course of Disease : This disease evidently spreads very slowly. The bird must have been infected when he was purchased as he was brought on to new ground. His outward condition had not changed much during the past six months except that the skin of the abdomen had become denuded of feathers.

Infectivity : The cock was kept in a run with five pullets, bought at the same time, but none of the pullets became infected.

Treatment : I tried dipping with Cooper's Dip in the same strength as used for scab in sheep. There was a decided improvement after the first dipping, but at the second dipping I must have given the bird too long an immersion, which, combined with the cold night that followed, was too much for him, as he was found dead next morning.

Twenty five fowls were dipped and they seemed to stand the operation very well.

Remarks : Scabies in poultry seems to be rare. This is the first case observed by me.

The place where the bird came from has been visited but no other cases were found. The seller stated that a short time previously he had destroyed a bird that showed similar symptoms.

Scaly leg, due to *Cnemidocoptes mutans*, is a common condition but does not spread to the body. It was remarkable how in the case in question the cock showed no loss of condition; but, without doubt, if food had not been supplied liberally malnutrition would have been accompanied by a more acute form of the disease.

Fig. K.
Scabies in Poultry.

(2) Scrotal hernia in a ram.

Subject : Four year old merino ram, property of Mr. C. Gerike, Voorbaai, Mossel Bay District.

History : A little more than a month previous to my arrival, the scrotum had been noticed somewhat enlarged. The owner, on examining the region in question, had noticed a tick *(Amblyomma hebraeum)* attached to the skin, but after removing it thought that the condition would improve. A week later, however, the swelling had increased and this time the scrotum was opened with a knife, but only a small amount of blood-stained fluid escaped. On the ram becoming worse, I was called in and on my arrival he was in a state of collapse.

Symptoms : When the ram was held in the standing posture the scrotum touched the ground. It was hot, hard and painful to the touch, the right side being affected whereas the left was apparently normal. It was obvious infection of the scrotal contents had taken place resulting in formation of connective tissue. As recovery was out of the question, the owner consented to slaughter the ram.

Post-Mortem Appearances : A loop of bowel, which had descended through the inguinal canal into the right scrotal sac, had not only grown together, as a result of connective tissue formation, but had also become adherent to the scrotal wall. Quite half the space was occupied by intestine, the remainder being purulent material following infection and degeneration of the testicle. The entire scrotum and contents weighed 13 lbs. The rest of the carcase was normal.

Remarks : It would appear that the proliferation of connective tissue had brought about gradual strangulation of the right spermatic cord resulting in degeneration of the corresponding testicle. This process was further assisted by the artificial opening of the scrotal sac which led to bacterial infection of the wound. It is, however, remarkable that strangulation of the bowel had not taken place.

JL. S.AFR. VET. MED. ASSN.
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Three Cases of Clinical Interest.

By W. HAY, M.R.C.V.S., Lobatsi.

(a) INTRA-THORACIC ABSCESS FOLLOWING INJURY OF ARM IN DOG

Subject : Alsatian.

History : This dog suffered an injury during a fight in which he was bitten through the muscles at the back of the arm. The subsequent inflammatory change involved the axillary space which became the seat of abscess formation. About three weeks elapsed and as the wound was still discharging the animal was brought to me.

On examination, I found the whole axillary space a pus sinus, discharge of the contents being prevented by the partial closing of the surface wound.

Prognosis : With opening of the area, to allow of preliminary dressing and free discharge of accumulated pus, I anticipated recovery in due course.

Treatment : The original wound was extended with a lancet in an upward direction to the length of an inch. This allowed inspection of the axillary space from which a good deal of pus was evacuated. The surface was lightly curetted, then irrigated with Eusol solution, and finally boracic lint was lightly packed into the cavity to prevent the free access of air on axillary movement. A couple of stitches, leaving a dependent opening, were then inserted to start healing of the skin wound and retention of the lint.

Next day the lint was removed and the sinus subsequently irrigated twice daily. The irrigation solutions were alternated, Eusol, Chinosol and zinc sulphate in weak solution being employed. Treatment was continued for at least two weeks, but the wound showed no sign of healing, in fact the parts seemed to lose any vitality they possessed, even the skin wound refusing to unite. Dry dressings were were tried, also the painting of the local area with tincture of iodine to stimulate phagocytosis. This seemed to improve matters a little. The dog although easily handled was rather surly and unhappy, to which I ascribed a habit he had of howling at night. He would occasionally refuse his food for a day. His temperature remained in the neighbourhood of 103-4°F and I was puzzled to give a reason. Obviously the wound was not the cause.

Sequel : Having discussed the case with the owner, the latter decided to continue treatment at home and the dog was taken away. Some weeks later I was informed that the howling of the dog at night

had so got on his nerves that he had him destroyed. This howling was, I might add, quite unusual. Generally it was a single effort, repeated at intervals, a half moan half groan pitched in a low key and not as loud as usual. Being a "doggy" man he had the carcase opened and discovered a large abscess "on top of the lungs." I have no doubt that this was associated with one of the lymph glands, infection having been derived from the axillary abscess.

(b) ACTINOMYCOSIS OF THE PREPUCE IN A BULL.

Subject : A 3 year old Friesland bull.

History : Bought by a dairy farmer some 2 or 3 months previously at a sale. Owing to the entrance of the sheath being enlarged and somewhat pendulous the farmer obtained him rather cheaply. He served normally for a few weeks but as time went on, the enlargement became more pronounced and service was more difficult. Finally the owner requested me to remove the enlargement if possible.

Diagnosis : On examination, I found a large hard growth on the lower surface of the opening of the prepuce which was partly obstructed and not easily dilated. No superficial lesion being evident, I diagnosed the case as a tumour, probably a fibroma, and decided to remove it.

Prognosis : Good.

Treatment : The bull was cast and the parts clipped and disinfected. A local anaesthetic, cocaine hydrochoride, was applied and the growth exposed. It was found, however, that the upper aspect of the preputial opening was also involved and it was necessary to remove the entire anterior portion of the sheath for a distance of 2 inches, thus leaving a fresh preputial ring.

After removal of the growth, I was surprised to discover after microscopic examination that it was due to *Actinomyces bovis.*

Sequel : Owing to the slow healing of the wound due chiefly to urine irritation, the operation was a disappointment. Had I known before the operation that I was dealing with actinomycosis, I should have administered iodine treatment and thus avoided surgical interference in a region where stenosis is so likely to occur.

(c) SARCOMA (?) WITH METASTASIS FOLLOWING AMPUTATION.

Subject : A wire haired fox terrier about 2 years old.

History : The dog, which snapped at strangers, was one day kicked in return. The tibia was injured and later the femoro-tibial joint was involved, lameness resulting. When seen by me 2-3 months later the upper half of tibia and fibula were enlarged to the extent of three times the normal size and the distal end of the femur seemed similarly affected. There was no external lesion and it appeared that the case had developed into a chronic periostitis.

Prognosis : If limited to local treatment, bad; but with amputation of limb, good.

Treatment : The owner having consented to amputation, the dog was anaesthetised, first with chloroform, and then with ether.

A circular incision was made around the limb over the distal third of the femur, the arteries being picked up as exposed. An incision was then made over the femur on the inside of the limb, from about an inch above the original circular incision and down to it. The exposed portion of the femur was carefully dissected away from the adjacent tissues. A flexible chain saw was passed beneath the femur at the highest point thus exposed, and the bone sawn through. The severed portion of the femur was then removed, together with the distal portion of the leg, and the wound partially closed with interrupted sutures. By thus removing an additional portion of the femur the flesh was brought over the end of the bone.

The dog contrived during the night to tear the bandages off, got at the wound, and the result was that the severed end of the femur was exposed. I dressed the parts, stitched them up again as far as possible, but a couple of days later the femur was again projecting slightly from the wound. I had no option but to anaesthetise the patient and resect another portion of the femur. Progress was then uninterrupted. After a fortnight in kennels the patient went home and healing was complete in a month.

Sequel: For some weeks afterwards I had the pleasure of seeing my late patient paying spontaneous calls to my premises and obviously in the best of health. The owner came to me one day and told me that the dog seemed uneasy and moaned at nights. It was then seen that his abdomen was becoming enlarged.

Pain and discomfort increased and the dog was destroyed. On post-mortem a new growth about the size of a cricket ball was discovered associated with the iliac lymph glands. It would seem that this was the result of metastasis from the original tumour of the bone and it is regretted that microscopic examination was not made.

REGISTER of VETERINARIANS of the UNION of SOUTH AFRICA and SOUTH-WEST AFRICA.(1)

along with

MEMBERS of S.A.V.M.A. in other COUNTRIES.

(Year of admission is given in the case of MEMBERS of the S.A.V.M.A.).

Association Year 1/6/29 - 31/5/30.

Abbreviations.

A. —Hon. Associate.
Au. —Austria.
Ca. —Canada.
D. —D.V.Sc. (S.A.)
F. —F.R.C.V.S.
G. —Germany.
L. —Hon. Life Vice-President.
N. —Netherlands.
S.E. —Staats Examen.
S. —Switzerland.
T. —Member of Transvaal V.M.A.
W. —Wurttenburg.
T.A. —Tierârz. Approbation.
B. —Univ. of Berlin.
Be. —Univ. of Berne.
C. —Univ. of Cape of Good Hope.
Cor. —Univ. of Cornell.
E. —Univ. of Edinburgh.
Gi. —Univ. of Giessen.
H. —Univ. of Hanover.
Sg. —Univ. of Stuttgart.
St. —Univ. of Stellenbosch.
Sy. —Univ. of Syracuse.
Syd. —Univ. of Sydney.
S.A. —Univ. of South Africa.
To. —Univ. of Toronto.
V. —Univ. of Vienna.
Wit. —Univ. of Witwatersrand.
Z. —Univ. of Zurich.

Name.	Academic qualifications.	Address.	Membership.
ALEXANDER, R. A.	B.Sc. (Agr.) (S.A.) ('22); B.V.Sc. (S.A.) ('25)	Box 593, Pretoria	1926
Allchurch, W. B.	B.V.Sc. (S.A.) ('25)	Ixopo,	1926
Amos, S. T. A.	M.R.C.V.S. ('97); F. ('09)	305, Musgrave Rd., Durban.	T.
BARNES, W. G.	M.R.C.V.S. ('88)	Municipal Abattoir, Durban.	1929
Bekker, J. G.	B.Sc. (Agr.) (St.) ('22); B.V.Sc. (S.A.) ('25)	Box 14, Vryburg	1926
Bergh, M.	B.V.Sc (S.A.) ('24)	Middelburg, Tvl.	1925
Bisschop, J. H. R.	B.Sc. (Agr.) (S.A.) ('20); B.V.Sc. (S.A.) ('24)	Box 593, Pretoria	1925
Blomefield, L. C.	B.V.Sc. (S.A.) ('28)	Umtata	1929
Borthwick, J. D.	M.R.C.V.S. ('88); L.	96, Rissik St., Pretoria.	1921

(1) It will have been noticed that the Government Notice (No. 751 dated 19/4/29) authorising members of the veterinary profession to import, purchase, keep, use, prescribe, etc., poisons and habit-forming drugs for the treatment of animals under their care under the provisions of Act 13/1928 (Medical Dental and Pharmacy Act) was incomplete.

Name.	Academic qualifications.	Address.	Membership.
Brummer, B. J.	Veearts (N) ('15)	Vryheid	1920
Buck, J.	M.R.C.V.S. ('95)	Kimberley	1921
Bush, J. G.	M.R.C.V.S. ('02)	Director of Vety, Services, U.D.F., Artillery Barracks, Pretoria	T.
CANHAM, S.	M.R.C.V.S. ('20); F. ('26)	Box 502, Bloemfontein	1923
Cannon, G. T.	M.R.C.V.S. ('89)	23, Empire Road, Johannesburg	——
Carless, F. J.	M.R.C.V.S. ('90)	"Ingestre," Mooi River, Natal	——
Chalmers, J.	M.R.C.V.S. ('00)	Box 877, Johannesburg	T.
Clark, R.	B.V.Sc. (S.A.) ('28)	Box 405, Maritzburg	1929
Chase, W. H.	M.R.C.V.S. ('01); F. ('07)	Box 106, Mafeking	T.
Clayton, N. M.	M.R.C.V.S. ('21)	Municipal Abattoir, Bloemfontein	1923
Clemow, E. T.	M.R.C.V.S. ('04)	Port Elizabeth	T.
Coles, J. D. W. A.	B.V.Sc. (S.A.) ('26)	Box 593, Pretoria	1927
Conacher, P.	M.R.C.V.S. ('89)	Box 5258, Johannesburg	——
Cooper, V.	B.V. Sc. (S.A.) ('25)	Eshowe	1926
Cordy, C. H.	M.R.C.V.S. ('90)	Uplands Hotel, Swartkopskloof, Natal.	——
Crowhurst, J. W.	M.R.C.V.S. ('87); F. ('93)	141, Longmarket St., Cape Town	1920
Curson, H. H.	M.R.C.V.S. ('14); F. ('26) Dr. Med. Vt. (H.) ('26)	Box 593, Pretoria	T.
DALY, L. L.	B.V. Sc. (S.A.) ('25)	Barberton	1926
Dawson, J. M.	M.R.C.V.S. ('13)	C/o Director of Vety Services, Dar-es-Salaam	1929
de Kock, G. v. d. W.	M.R.C.V.S. ('13); Dr. Med. Vet. (Be.) ('23); D. Sc. (Wit.) ('28)	Box 593, Pretoria	T.
de Villiers, O. T.	M.R.C.V.S. ('23)	Kroonstad	1924
de Villiers, S. W.	M.R.C.V.S. ('21)	Pietersburg	1923
de Wet, G. J.	M.R.C.V.S. ('24)	P.O. Hluhluwe	1926
Dickson, J. L.	B.V.Sc. (S.A.) ('26)	Nongoma	1927
Diesel, A. M.	M.R.C.V.S. ('21)	Standerton	1923
Dixon, R. W.	M.R.C.V.S. ('86)	C/o National Bank, Wynburg, C.P.	——
Donaldson, J.	M.R.C.V.S. ('05)		
Duck, Sir F.	M.R.C.V.S. ('67); F. ('91) A.	"Aylmersfield," Arcturus, S. Rhodesia	1928
Dunning, F. J.	M.R.C.V.S. ('01); F. ('11)	Box 35, Dundee	T.
du Toit, P. J.	B.A. (C.) ('07); D. Ph. (Z) ('12); S.E. (G.) ('15); Dr. Med. Vet. (B) ('16)	Box 593, Pretoria	1920
du Toit, R.	B.V.Sc. (S.A.) ('27)	C/o Division of Vety. Services, Union Bldgs. Pretoria	1928

Name.	Academic qualifications.	Address.	Membership.
Dykins, W. A.	M.R.C.V.S. ('10)	Box 920, Durban	1920
ELDER, W. A.	M.R.C.V.S. ('02); F. ('14)	Mbabane, Swaziland	T.
Elley, S.	M.R.C.V.S. ('03)	Oudtshoorn	——
Ewing, S. H.	M.R.C.V.S. ('09)	Box 397, Maritzburg	1920
FLIGHT, C. H.	B.V.Sc. (S.A.) ('26)	Butterworth	1927
Footner, W. E.	M.R.C.V.S. ('09)	Box 276, East London	1923
Forrest, J.	M.R.C.V.S. ('00)	Municipal Abattoir, Cape Town	1920
Fourie, P. J. J.	M.R.C.V.S. ('19)	Box 593, Pretoria	1921
Franz, H. G. J.	B.V.Sc. (S.A.) ('27)	Estcourt	1928
Frean, J. R.	M.R.C.V.S. ('23)	University of Stellenbosch	1924
Freer, G. W.	M.R.C.V.S. ('94)	Box 276, East London	——
GARRAWAY, R. S.	M.R.C.V.S. ('99)	Box 502, Bloemfontein	T.
Gavin, F. C.	M.R.C.V.S. ('89)	P.O. Stegi, Swaziland	T.
Goodall, A.	M.R.C.V.S. ('02); F. ('21)	Division of Vety. Services, Union Bldgs., Pretoria	1920
Graf, H.	B.Sc. (S.A.) ('22); B.V.Sc. (S.A.) ('25)	Box 593, Pretoria	1926
Green, W. J. B.	B.V.Sc. (S.A.) ('24)	Box 405, Maritzburg	1925
Grist, A. G.	M.R.C.V.S. ('92)	"Watersmeet," P.O. Tweedie.	——
HAMBLYN, W. P.	M.R.C.V.S. ('12)	Box 3, Komgha	1920
Hamilton, J. R. R.	M.R.C.V.S. ('94)	21, St. Andrews St., Durban	
Harber, A. F.	M.R.C.V.S. ('97)	Box 6, Mooi River, Natal	1920
Hartig, R.	——	Gobabis, S.W.A.	——
Hay, W.	M.R.C.V.S. ('15)	Lobatsi, Bech. Protect.	1920
Henderson, G. T.	M.R.C.V.S. ('07)	Kokstad	1921
Henning, M. W.	M.R.C.V.S. ('19)	Transvaal Univ. Col. Pretoria.	1920
Henning, O.	T.A. (Sg. ('87); S.E. (W.) ('91)	"Felsenquell" Grootfontein, S.W.A.	——
Hodder, A.	M.R.C.V.S. ('98)	Johannesburg	——
Henry, M.	M.R.C.V.S. ('06); B.V.Sc. (Syd.)	Dept. of Agriculture, Sydney, Australia	1929
Holmes, B.	M.R.C.V.S. ('24)	Box 106, Mafeking	
Howie, A. M.	M.R.C.V.S. ('10)	C/o S.V.O., Capetown	T.
Huston, P. D.	M.R.C.V.S. ('14)	Buluwayo, S. Rhodesia	1920
Hutchinson, J.	M.R.C.V.S. ('89)	"Rockleigh," Hilton Rd.	1920
JACKSON, S. T.	M.R.C.V.S. ('15)	Box 397, Maritzburg	1921
Jarvis, E. M.	M.R.C.V.S. ('94); F. ('10)	Umtali, S. Rhodesia	1924
Jones, W.	M.R.C.V.S. ('07)	Worcester	1920
KELLET, E.	M.R.C.V.S. ('89)	Box 6053, Johannesburg	——
Keppel, J. J. G.	M.R.C.V.S. ('11)	De Aar	1920

Name.	Academic qualifications.	Address.	Membership.
Kirkpatrick, A. C.	M.R.C.V.S. ('10)	Box 1620, Johannesburg	T.
Kind, G.	S.E. (S.) ('18); Dr. Med. Vet. (Z.) ('22)	11, Harley St. Yeoville, Johannesburg	1928
LAWRENCE, D. A.	B.V.Sc. (S.A.) ('25)	Salisbury, S. Rhodesia	1926
le Roux, P. L.	B.Sc. (E.) ('23); M.R.C.V.S. ('23)	Box 593, Pretoria	1926
Lee, G. W.	M.R.C.V.S. ('93)	P.O. Kalkfel, S.W.A.	——
Lund, A. E.	B.V.Sc. (S.A.) ('25)	Lydenburg	1926
Lyons, J. H. L.	M.R.C.V.S. ('02)	Box 3, Capetown	1920
MAAG, A.	T.A. (Sg.) ('08); Dr. Med. Vet. (Sg.) ('11); S.E. (W.) ('14)	Gobabis, S.W.A.	1921
MacIntyre, J. F.	M.R.C.V.S. ('01)	21, Hooper Lane, Durban	1920
Marais, I. P.	B.Sc. (Agr.) (S.A.) ('21); B.V.Sc. (S.A.) ('25)	Box 593, Pretoria	1926
Maré, C. V. E.	B.Sc. (St.) ('21); B. V. Sc. (S.A.) ('24)	Zeerust	1925
Martinaglia, G.	V.S. (Ca.) ('19); B.V.Sc. (To.) ('19) M.Sc. (Cor.) ('20); B.V.Sc. (S.A.); D.V.Sc. (To.) ('29)	Box 593, Pretoria	1923
Matthew, A.	M.R.C.V.S. ('08)	Bedford	1920
May, G.	M.R.C.V.S. ('01)	Box 216, Pretoria	T.
Maybin, J. A.	M.R.C.V.S. ('24)	Grootfontein, S.W.A.	1925
McCall, D. B. J.	M.R.C.V.S. ('10)	C/o Jockey Club, Durban	——
McIntyre, G.	M.R.C.V.S. ('10)	George	1920
McKie, W.	M.R.C.V.S. ('87)	" Blenheim," Dealesville.	T.
McNae, A.	M.R.C.V.S. ('99) ——	Box 296, Windhoek, S.W.A.	1920
McNeil, J.	M.R.C.V.S. ('96)	Capetown	——
Melck, G. H.	M.R.C.V.S. ('14)	Box 397, Maritzburg	1920
Mitchell, D. T.	M.R.C.V.S. ('08)	Box 405, Maritzburg	T.
Mönnig, H. O.	B.A. (C.) ('17); D. Ph. (Z.) ('21 B.V.Sc. (S.A.) ('26)	Box 593, Pretoria	1927
Morice (Miss) J. A.	B.V.Sc. (S.A.) ('27)	36, Denbeigh Rd. Parkwood, Johannesburg.	1928
Morton, D. D.	M.R.C.V.S. ('21)	C/o S.A. Police, Headquarters, Pretoria	——
NELSON, E. C.	M.R.C.V.S. ('16)	Capetown	——
Neser, M. M.	M.R.C.V.S. ('23)	Louis Trichardt	1924
Nicol, J.	M.R.C.V.S. ('10)	Umtata	T.
O'DOWD, L.	M.R.C.V.S. ('21)	S.W.A.	——
Osrin, R. B.	B.V.Sc. (S.A.) ('26)	Port St. Johns	1927
PAINE, R.	M.R.C.V.S. ('01); F. ('07)	Box 41, Grahamstown	1920
Parkin, B. S.	B.A. (C.) ('12); M.R.C.V.S. ('18)	Box 593, Pretoria	1920

Name.	Academic qualifications.	Address.	Membership.
Peddie, J.	M.R.C.V.S. ('93)	96, Siemert St., Doornfontein, Johannesburg	1928
Pfaff, G.	B.Sc. (E.) ('23); M.R.C.V.S. ('23)	Box 593, Pretoria	1924
Pilkington, J. K.	M.R.C.V.S. ('81)	326, Main Street, Jeppestown, Johannesburg	——
Potter, M.	M.R.C.V.S. ('91)	"Sannieshof," Lichtenburg	——
Power, W. M.	M.R.C.V.S. ('96)	75, Loop St. Maritzburg	1920
QUIN, J. I.	B.V.Sc. (S.A.) ('24); D. ('29)	Box 593, Pretoria	1925
Quinlan, J. B.	M.R.C.V.S. ('12); F. ('28) Dr. Med. Vet. (H.) ('22) D. ('29).	Box 593, Pretoria	T.
REID, J.	B.Sc. (Agr.) (S.A.) ('22); B.V.Sc. (S.A.) ('26)	Box 397, Martizburg	1927
Reid, N. R.	B.V.Sc. (S.A.) ('27); M.R.C.V.S. ('28)	C/o Dir of Vety. Services, Dar-es-Salaam	——
Robinson, E. M.	M.R.C.V.S. ('12); Dr. Med. Vet. (Be.) ('21)	Box 593, Pretoria	T.
Robinson, M. C.	B.V.Sc. (S.A.) ('29)	Umtata	1929
Ryksen, W. J.	B.V.Sc. (S.A.) ('27)	Potgietersrust	1928
SCHEUBER, J. R.	S.E. (S.) ('18); Dr. Med. Vet. (Z.) ('20)	Box 593, Pretoria	1923
Schmid, G.	T.A. (B.) ('05); S.E. (G.) ('09); Dr. Med. Vet. (Gi.) ('09)	Omaruru, S.W.A.	1921
Schulz, K.	B.V.Sc. (S.A.) ('20)(?)	Otjiwarango, S.W.A.	1926
Sharpe, C. M.	M.R.C.V.S. ('99)	56, College Rd., Maritzburg	1928
Sigwart, H. H. S.	T.A. (Sg.) ('08); S. E. (G.) ('11); Dr. Med. Vet. (Gi.) ('11)	Keetmanshoop, S.W.A.	1921
Simson, W. A.	M.R.C.V.S. ('03); F. ('12)	Queenstown	1920
Smith, P. R. B.	D.V.M. (Cor.) ('23)	Burghersdorp	——
Smith, J. I.	M.R.C.V.S. ('98)	Box 1620, Johannesburg	T.
Snyman, P. S.	B.V.Sc. (S.A.) ('24)	Greytown	1925
Spreull, J.	M.R.C.V.S. ('95); F. ('08)	Box 3, Capetown	T.
Starke, N. C.	B.V.Sc. (S.A.) ('26)	School of Agriculture, Potchefstroom.	1927
Sterne, M.	B.V.Sc. (S.A.) ('27)	Sac privé, Cie. Pastorale du Lomani, Kishinde, B.C.K., 293, Belgian Congo.	
Steyn, D. G.	B.Sc. (St.) ('19); S.E. (Au.) ('24); Dr. Med. Vet. (V.) ('25)	Box 593, Pretoria	1926
Stonier, L.	B.V.Sc. (S.A.) ('27)	Vryburg	1928

Name.	Academic qualifications.	Address.	Membership.
Strachan, C. H.	M.R.C.V.S. ('06)	"Hlani," P.O. Zwartberg, C.P.	1921
Stranaghan, D.	M.R.C.V.S. ('90)	123, Nelson Rd., Booysens, Johannesburg	1927
TATE, J. M.	M.R.C.V.S. ('99)	"The Boma," Woodgate Rd., Plumstead	T.
Theiler, Sir A.	S.E. (S.) ('89); Dr. Med. Vet. (Be.) ('01); D.Sc. (C) ('11); D.Sc. (Sy.) ('23); D. ('25); D.Ph. (Be.) ('23); L.	Frankenstrasse 18, Lucerne, Switzerland	T.
Thomas, A. D.	B.V.Sc. (S.A.) ('26); D; ('29)	Box 593, Pretoria	1927
Thorburn, J. A.	B.V.Sc. (S.A.) ('28)	Box 405, Maritzburg	1929
Tyler, C.	M.R.C.V.S. ('00)	Port Shepstone	1920
VAN HEERDEN, C.J.	M.R.C.V.S. ('23)	Piet Retief	1924
van Rensburg, S. W.	B.A. (C.) ('17); M.R.C.V.S. ('21)	Sch. of Agric. Grootfontein, C.P.	1923
van der Vyver, B.	M.R.C.V.S. ('14)	Box 216, Pretoria	1920
Verney, F. A.	M.R.C.V.S. ('96); F. ('05)	Maseru, Basutoland	T.
Viljoen, N. F.	M.R.C.V.S. ('25)	C/o C.V.O. Chase, Box 106, Mafeking	1928
Viljoen, P. R.	M.R.C.V.S. ('12); Dr. Med. Vet. (Be.) ('21)	Division of Vety. Services, Union Bldgs., Pretoria	T.
WADLOW, C. H.	M.R.C.V.S. ('03)	4, Phoenix Chambers, Market Square, Port Elizabeth	1920
Walker, J.	M.R.C.V.S. ('96)	Kabete, Nairobi, Kenya	T.
Watt, J. S.	M.R.C.V.S. ('27)	Walvis Bay, S.W.A.	1929
Watt, G.	M.R.C.V.S. ('28)	Box 31, Maraisburg	1929
Webb, H. M.	M.R.C.V.S. ('98)	Maun, P.O. Kasana, via Livingstone, N. Rhodesia	
Webb, J. L.	M.R.C.V.S. ('96); F. ('02)	"Longview," Ixopo	1924
Webster, G. C.	M.R.C.V.S. ('08); D.V.S.M. ('22)	Box 397, Maritzburg	T.
Williams, J. G.	B.V.Sc. (S.A.) ('24)	Bethlehem	1925
Wilson, E.	M.R.C.V.S. ('10)	Box 4063, Johannesburg	1924
Woollatt, S. B.	M.R.C.V.S. ('97); F. ('05)	Rosetta	——
ZSCHOKKE, M.	S.E. (S.) ('17); Dr. Med. Vet. (Z.) ('18)	Okahandja, S.W.A.	1929

CORRESPONDENCE.

The Editor,

Jl. S.A.V.M.A.

Dear Sir,

Being unfortunately unable to attend the meetings of the S.A.V.M.A. on account of distance, I would like to know something about the work done by the various committees, for little concerning their activities appears either in the Minutes or Journal. Would it not be possible for each committee to submit an annual report and a summary of this could then be circularised with the Minutes ?

Yours faithfully,

M.R.C.V.S.

(The revised rules, drawn up by the responsible Committee, provide for our correspondent's suggestion.—H.H.C. for Editorial Committee).

OBITUARY.

MAJOR-GENERAL SIR FREDERICK SMITH, K.C.M.G. (1857-1929).

Sir Frederick Smith, who became an Hon. Associate of the S.A.V.M.A. in 1928, died 27/7/1929 at St. Leonard, Sussex, after having been in indifferent health for the past year. Born in 1857, he qualified at the London College 3/4/1876 and obtained his Fellowship 26/1/1893. After some months in general practice he entered the Army in 1876 and was the last officer but two to join under the old regimental system. In 1877 he was gazetted to the R.A. and three years later to the 12th Royal Lancers. From 1878-1885 he served in India, and while there was co-editor of the Quarterly Journal of Veterinary Science in India. In 1886 he joined the staff of the Army Veterinary School, Aldershot, and was made professor the following year. In 1892 he was appointed to the Remount Dept. Six years later he served with the Nile Expedition and then came out to South Africa for the 2nd Boer War, gaining both the Queen's (4 clasps) and King's (2 clasps) medals. From 1903-05 he was P.V.O., South African Command. In 1907 he was appointed Director-General of the Army Veterinary Service and retired in 1910. During the Great War he was re-employed from 7/8/14-10/5/16, and again from 26/12/17-23/9/19. He was made an Hon. Associate of the Royal College of Veterinary Surgeons in 1914 and created K.C.M.G. in 1918.

Sir Frederick was undoubtedly the hardest worker in the profession, his enthusiasm for veterinary science keeping him busy when he might have enjoyed the eve of his life in peace. Up to 1925 he had written approximately 150 papers and books, and since then his "History of the R.A.V.C." and other papers have appeared. Among his important works were manuals of Veterinary Hygiene and

Veterinary Physiology; but in South Africa he will for ever be remembered for his " Veterinary History of the War in South Africa 1899-1902." It is due to men of his calibre that the R.A.V.C. is to-day the aristocracy of the profession.

A gallant fighter, especially for the rights of the profession, a stern disciplinarian but withal possessing a kindly disposition, we who knew him intimately, realise we have lost a sincere friend. The veterinary profession has lost its most distinguished son.

Major General Sir Frederick Smith KCMG, CB, FRCVS
PVO. South Africa 1903 1905.

DR. C. P. NESER (1889-1929).

Christiaan (Christo) Petrus Neser, born 31/5/1889 at Venterstad. C.P., was the eldest son of the late Frans Neser and Lettie Spies. His father died in 1897 and with the outbreak of the Anglo-Boer War two years later, he and his three brothers accompanied their mother to the concentration Camp at Norval's Pont. At this early age he showed evidence of the qualities of direction and versatility, for not only did he assist his mother in her household duties, but he also cared for his brothers while she was away teaching. It is remarkable that under these circumstances camp life did not cause him to be embittered, but on the contrary, his attitude towards English-speaking people was always most sympathetic, and in this country of racialism, his broad outlook and sense of justice were particularly refreshing. His education, although seriously interrupted by hostilities, was sufficient to enable him in 1903 to accept a position in the post office at Wepener, whither his mother had moved after leaving the Concentration Camp. Realising her son's ability, Mrs. Neser insisted on the boy resuming his schooling and in 1906 he entered Grey College, Bloemfontein, where he secured a Thomas Robertson bursary tenable for three years. While at College not only was he a brilliant student, but he also excelled in sport, being captain of the 1st Cricket XI, as well as a member of the Students' Representative Council.

DR. C. P. NESER (1889-1929)

On the institution of the Faculty of Veterinary Science in 1920 he was appointed at first Lecturer and later Professor of Medicine. In 1921 he received the Doctorate of Science, University of South Africa, his thesis entitled "The Blood of Equines," being a unique physiological study. Horsesickness particularly appealed to him, and in 1926 he published a valuable paper on the pathology of the blood.

In 1920 our late colleague became a member of the S.A.V.M.A. and on several occasions he read papers. His loss to the veterinary profession is sorely felt, for by his forceful yet lovable personality he was respected by all with whom he came into contact.

After leaving Bloemfontein in 1910 his ambition brought him to the Simmer and Jack Mine on the Rand, his knowledge of mathematics and physics specially fitting him for the engineering profession. An attack, however, of double pneumonia, the effects of which no doubt contributed to his early demise, caused him to take up teaching for a few years.

His love for engineering then caused him to abandon teaching and we next find him engaged on survey work in Natal on behalf of the South African Railways. One of his last tasks, prior to his acceptance of a Government bursary in Veterinary Science in 1916, was in connection with the new deviation at Swartkop near Maritzburg.

Having obtained in 1910 the B.A. of the University of the Cape of Good Hope, he was enabled to complete the four year veterinary course at Dublin in three years. There again he had a brilliant career winning several class medals and being the Williams Memorial Prizeman in 1919 for the best final examination in the M.R.C.V.S. course.

On his return to South Africa the same year, Neser was appointed Research Officer at Onderstepoort, where he remained (except for a short period in 1920 when he was at Allerton, Maritzburg) until his death on 17/6/29.

MAJOR S. I. JOHNSTON, M.R.C.V.S. (1866-1929).

Born in Augher County Tyrone, on 26/3/1866, Samuel Irvine Johnston died on 5/8/1929 at Johannesburg from pneumonia. He qualified at the Royal (Dick) Veterinary College, Edinburgh in 1895 and came to South Africa in 1901 for the Boer War, being for some time Veterinary Officer in the 7th Hussars. When this regiment returned to England he joined (3/10/05) the Transvaal Civil Veterinary Department.

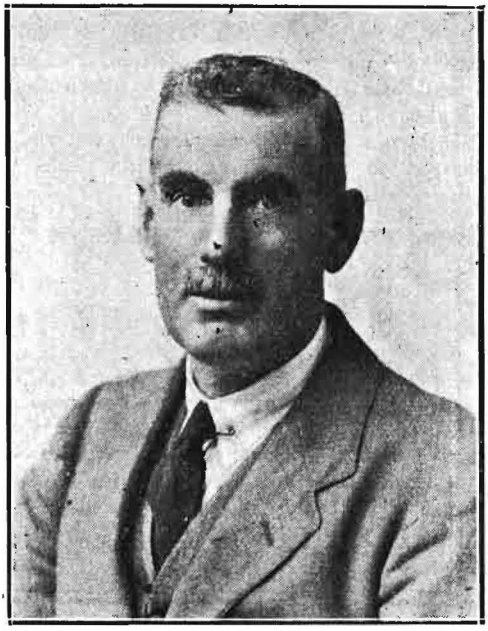
On 6/11/06 he was appointed Veterinary Lieutenant in the Eastern Mounted Rifles, and was promoted Veterinary Captain, Southern Mounted Rifles 3 years later (6/11/09). On the establish-

ment of the Union Defence Forces in July 1913 he transferred to the 10th Mounted Rifles, and was appointed Captain in the S.A.V.C., Citizen Force, as from 18/1/15. He was actively employed in the Union until 10/8/20, chiefly with Remounts, but served in East Africa and for a time acted as O.C. Veterinary Hospital, Roberts Heights, and as Veterinary Officer to the S.A.M.R. His resignation from the Union C.V.D. dated from 22/3/18.

After leaving the S.A.V.C. he commenced practice in Johannesburg, building up the Veterinary Vaccine Agency, and on account of his sound knowledge of horses, he frequently officiated as judge in the horse section at most of the leading shows of the country. He was a member of the Council of the Witwatersrand Agricultural Society and one of the founders of the Johannesburg Polo Club.

In 1922 he was recalled for military duty during the Rand disturbances and served on a Remount Purchasing Board. On reaching the age limit he was placed on the retired list on 13/2/24.

He was an enthusiastic member of the Transvaal Veterinary Medical Association and later of the South African Veterinary Medical Association. As a private practitioner he set an example to his colleagues and his decease is a great loss to the profession.



MAJOR S I. JOHNSTON, M.R.C.V.S. (1866-1929)

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