

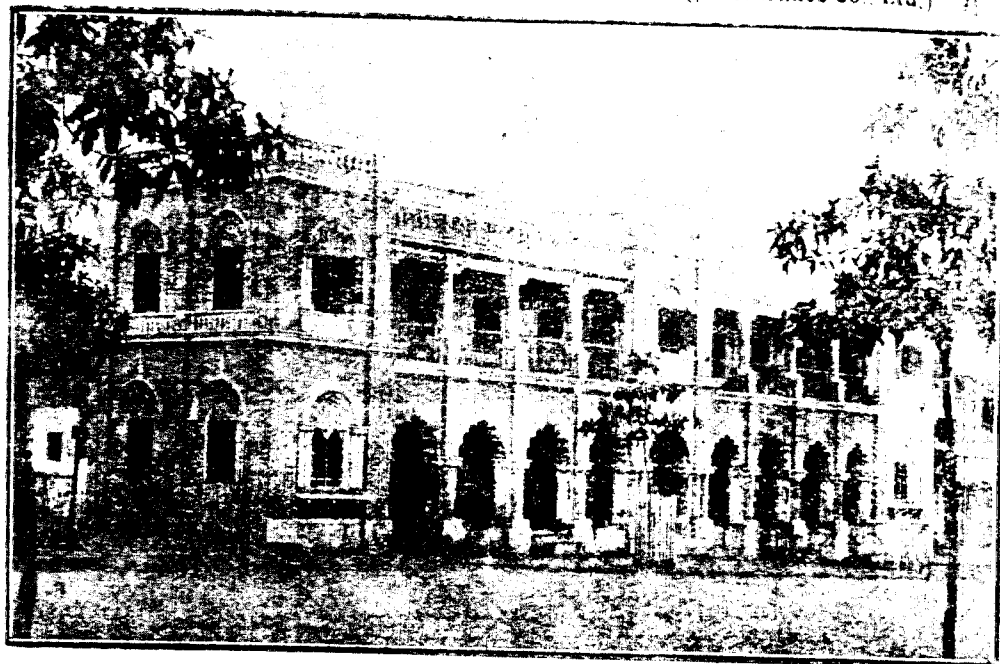
THE
INDIAN
VETERINARY
JOURNAL



Vol. I.	Editor: P. SRINIVASA RAO, G.M.V.C., Veterinary Surgeon, MADRAS.	No. 3.
------------	---	-----------

OM.
**ASIATIC GOVERNMENT SECURITY
 LIFE ASSURANCE COMPANY, Ltd.,**

Formerly Mysore Government Security Life and Marriage Assurance Co., Ltd.)



Head Office:—ASIATIC BUILDINGS MYSORE (S. India)

Capital & Reserves

(paid up)

Government Securities held

Life Insurance Policies issued

Annual Premium Income

Dividends paid to policyholders

Not a Government Security Deposit under the Government Securities Act, 1917.

Insurance Policies of Rs. 1000 and Rs. 10000 are issued on terms of Rs. 1000 and Rs. 10000 respectively, with a minimum premium of Rs. 1000 per annum.

Insurance is granted on Policies of Rs. 1000 and Rs. 10000 on terms of Rs. 1000 and Rs. 10000 respectively, with a minimum premium of Rs. 1000 per annum.

Not a Government Security Deposit under the Government Securities Act, 1917.

WANTED AGENTS EVERYWHERE ON COMMISSION BASIS

Apply for particulars to—

Messrs. P. K. RAU & SONS,

Local Agents for Madras Presidency,

289, Thambu Chetty Street, Madras.



A. D. MACGREGOR, M.R.C.V.S., I.V.S.,
Principal, Bengal Veterinary College.
President, THE THIRD ALL-INDIA VETERINARY CONFERENCE, MADRAS.

Published Quarterly.

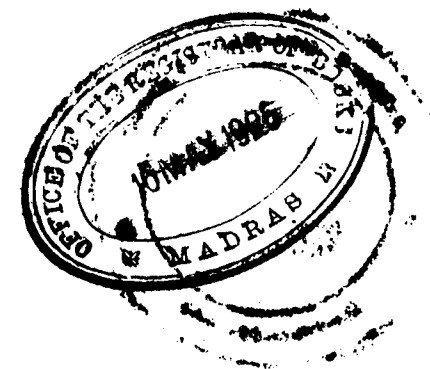
February 1925.

Vol. I.

No. 3.

The Indian Veterinary Journal.

(The Journal of The All-India Veterinary Association.)



Editor :

P. SRINIVASA RAO, G.M.V.C.,
Veterinary Surgeon, Madras.

Office : 18, WALLAJAH ROAD, MOUNT ROAD, MADRAS (S. INDIA).

MADRAS
METHODIST PUBLISHING HOUSE
1925.

NOTICE.

The Indian Veterinary Journal.

A quarterly record of Veterinary Medicine and Surgery
devoted to the cause of the Veterinary Profession.

Published for the All-India Veterinary Association.

EDITOR :

P. SRINIVASA RAO, G.M.V.C.,

Veterinary Surgeon and Proprietor, Dr. Pangal's Veterinary Institute,
18 Wallajah Road, Mount Road, Madras, S. India.

SUBSCRIPTION:-

KZ m 2, N 24
N 25. 1-3

For members and students:—Rs. 4 or 5s. 4d. per annum including postage
in advance. Re. 1 or 1s. 4d. per part.

For others:—Rs. 8 or 10s. 8d. per annum in advance or Rs. 2 or 2s. 8d
per part.

1. Original articles, clinical notes, society reports and notes on interesting cases
are invited. Contributors of original articles will receive 10 copies of their paper
free.

2. All Editorial Communications, reports and books for review and exchange
should be addressed to the Editor.

3. All Contributions should be sent to the Editor. Contributors are requested
to sign their contributions. All communications must be authenticated by the name
and address of the writer, whether intended for publication or not.

4. Members who do not receive the journal regularly or who find
it wrongly addressed are requested to communicate correct address
to the Editor at once.

THE INDIAN VETERINARY JOURNAL

(The Journal of the All-India Veterinary Association)

VOL. I.

FEBRUARY 1925.

No. 3.

CONTENTS

I. EDITORIAL.—

THE THIRD ALL-INDIA VETERINARY CONFERENCE	...	157
NOTES	...	160
REPORT OF THE PROCEEDINGS OF THE THIRD ALL-INDIA VETERINARY CON- FERENCE, MADRAS	...	161
APPENDIX A. WELCOME ADDRESS BY THE CHAIRMAN, RECEPTION COMMITTEE, THE THIRD ALL-INDIA VETERINARY CONFERENCE, by M.R.Ry, K. Kylasam Iyer Ayl., G.B.V.C.	...	169
" B. PRESIDENTIAL ADDRESS TO THE THIRD ALL-INDIA VETERINARY CONFERENCE by A. D. MacGregor, Esq., M.R.C.V.S., I.V.S.	...	171
" C. ANNUAL REPORT OF THE ALL-INDIA VETERINARY ASSOCIATION FOR 1924	...	182

II. ORIGINAL ARTICLES.—

1. WEANING AND REARING OF CALVES. By Mr. Jamaluddin, G.P.V.C., Second Cattle Superintendent, Pusa	...	186
2. ANIMAL DISEASES AND PUBLIC HEALTH. By Mr. K. Kylasam Iyer, G.B.V.C., Officer in charge, V Circle. C.V.D., Coimbatore	...	197

III. CLINICAL ARTICLES.—

1. CAESAREAN SECTION IN A COW. By Mr. C. V. Padmanabhan, G.M.V.C., V.A.S., V.H., Palghat	...	203
2. FITS IN DOGS. By Mr. G. N. Roy Chaudhuri, G.B.V.C., Veterinary Surgeon, Calcutta	...	205
3. A CASE OF CYSTIC CALCULUS IN A DOG. By Mr. R. Swaminatha Iyer, B.A., G.M.V.C., Veterinary Assistant Surgeon, Ootacamund	...	208
4. (a) LAMINITIS	...	210
(b) ACUTE GASTRITIS IN CANINE DISTEMPER	...	211
(c) OPACITY OF CORNEA AFTER DISTEMPER. By Mr. S. A. Sastry, Veterinary Assistant Surgeon, Coimbatore	...	211
5. (a) AMPUTATION OF PENIS IN A PIG	...	212
(b) HARIALI GRASS IN SNAKE POISONING. By Mr. C. V. Padmanabhan, Veterinary Assistant Surgeon, Veterinary Hospital, Palghat	...	213

IV. ASSOCIATION NEWS.—

PROCEEDINGS OF THE GENERAL BODY MEETING OF THE ALL-INDIA VETERI- NARY ASSOCIATION, MADRAS BRANCH, 1924	...	214
---	-----	-----

APPENDIX 4. ANNUAL REPORT OF THE ALL-INDIA VETERINARY ASSOCIATION, MADRAS BRANCH FOR THE YEAR 1924	...	217
---	-----	-----

V. COMMUNICATIONS.—

NEW YEAR GREETINGS.	By Mr. Ambay Prasad Mathur, G.P.V.C., Veterinary Assistant Surgeon, Hapur, U.P.	...	221
VETERINARY SERVICE IN THE MOPUSSIL.	...	...	...
Impressions on the Conference.	By G. N. Roy Chaudhuri	...	223
REVIEW	...	...	225



Dr. Pangal's Veterinary Institute,

18, Wallajah Road, Mount Road, Madras.

A FEW OF DR. PANGAL'S SPECIALITIES.

To all Lovers of Horses, Cattle and Dogs.

1. **Equitone.**—A well-tried and the only genuine tonic powder for horses. Quite indispensable to horse-owners to keep their animals healthy, active and in tip top condition. This creates good appetite, expels all worms from the stomach and improves the coat wonderfully.

Price per 2 lbs. tin Rs. 3-12-0.

1 lb. tin Rs. 2.

2. **Dhum-Dhum.**—A specific for dhum *i.e.*, heavy breathing so common in horses. Acts like magic.

Price per big bottle Rs. 4.

Small bottle Rs. 2.

3. **Colic mixture for horses.**—A cure for all kinds of colic. Quite indispensable for horse-owners. Advisable to have always one bottle in stock.

Price per bottle Rs. 4 only.

4. **Hoof Ointment.**—This strengthens the hoof and is a specific for brittleness, sandcrack and split hoof.

Price per tin Rs. 2.

5. **Cough Electuary.**—A specific for cough and catarrh in horses.

Price per 1 lb. tin Rs. 4.

6. **Embrocation.**—A specific for all kinds of sprains, thickened tendons, cold, catarrh etc., in horses, cattle and dogs.

Price per big bottle Rs. 2-4-0.

Small bottle Re. 1-4-0.

7. **Mange Oil.**—A specific for all kinds of mange in horses, cattle and dogs.

Price per bottle Re. 1-4-0.

8. **Canatone.**—Best tonic powder for dogs.

Price per bottle As. 12.

9. **Canogen.**—An ideal tonic and reconstructive for dogs, a great desideratum in the convalescence, after debilitating diseases, as distemper, hookworm disease, canine typhus etc.

Price per bottle Re. 1-8-0.

10. **Tick Specific.**—A wonderful tick destroyer.

Price per bottle Re. 1.

11. **Mange ointment for Dogs.**—A specific for all kinds of mange.

Price per tin Rs. 2.

12. **Worm Mixture for Dogs.**—A best remedy for expelling all kinds of worms from the system.

Price per bottle Rs. 2.

13. **Canker Wash.**—A specific for internal canker of the ear, otorrhoea and otitis in dogs.

Price per bottle Re. 1-8-0.

14. **Bovotone.**—Best tonic powder for cattle and growing calves and is a good lactagogue. This improves the appetite and general condition of the animal. Fattens the cow and sweetens the milk and at the same time increases the yield of rich and creamy milk.

Price per 4 lbs. tin Rs. 4.

2 lbs. tin Rs. 2.

THE

Indian Veterinary Journal

Vol. 1.]

FEBRUARY, 1925

[No. 8

Editorial.

THE THIRD ALL-INDIA VETERINARY CONFERENCE.



EW of those who had the good fortune to attend the Third All-India Veterinary Conference will ever forget the momentous session that sat for full three days and the unique success that crowned the efforts of the Reception Committee, who left no stone unturned to make the function a record one. Delegates from the Punjab, United Provinces, Bengal, Behar and Orissa, Central Provinces, and the Indian States of Hyderabad, Mysore, Jaipur (Rajputana), Indore and Pudukota were there. Almost every district in the Presidency of Madras sent one or more delegates. It was really a representative gathering that met in the spacious hall of the Madras Veterinary College, during the last week of December 1924.

If the attendance of the local public is any criterion to the amount of sympathy which the profession commands in the City of Madras, we may say that it augurs well for the future. Amongst the distinguished visitors, mention must be made of The Hon'ble Diwan Bahadur T. N. Sivagnanam Pillay Avergal, B.A., Minister for development, Government of Madras. He holds the portfolio of the Veterinary Department. If one remembers that it was a week of great attraction for the whole of India at Belgaum, in the Presidency of Bombay, and that many had left Madras as delegates in special trains for one Conference or another, the attendance of the local public at our last Conference is really something to be proud of.

Over and above all these, it was the genial presence and sympathetic attitude of Mr. A. D. MacGregor, the President, that contributed a good deal to the success of the last Conference. His simple and

unassuming manners, his fervent pleading for better recognition of his profession in India, his appeal to private agencies to utilise the services of veterinarians to the utmost and the indefatigable energy shown by him during those three hard days, have earned for him a warm corner in the hearts of many that attended the Conference. Even the visitors were moved by his pleading for the cause of veterinary science in India. In fact one of them remarked, "If all Europeans can lay claim to such breadth of vision and large heartedness as exhibited by Mr. MacGregor, many of the present day troubles based on race, colour and clime will not exist."

His address which we publish elsewhere, needs careful reading. Some may not be able to see eye to eye with him in all that he says, but none can deny him the 'Honesty of purpose' that pervades his entire speech. It is our intention to draw pointed attention in this article to a few of his remarkable utterances. To such of our professional brothers who do not believe in Associations and Conferences the following advice should serve as a stimulus to change their opinion. "An organisation of this nature is full of possibilities and advantages which, no purely Government Service can ever hold out, either to the country itself, or to the individual worker. The advantages of the profession in India having for its thoughtful and sympathetic sponsor, a body of this kind, are many and varied and require no recapitulation on my part. This (honest purpose) shall be the watch-word of your Conference. It will test your courage, but will efface deceit and selfishness. . . . It is not life that matters, but the courage you bring into it, so we, as a profession, must be brave to carry out our honest purpose in life."

Regarding the grievances of the profession, he says without beating about the bush, "These two wants, viz., an increase in the numbers and an improved scheme or condition of service, form in my opinion, the substrata of our difficulties in dealing with the enormous problem of disease in India. . . . but without the required number of workers, and at that, contented workers, all other factors are inoperable."

In our first issue we pointed out how strongly Col. Pease is of opinion that the cattle wealth of India does not receive as much attention as it ought to. Now Mr. MacGregor says, "If therefore, the cattle of a locality be neglected, *as they most decidedly are in India*, the health of the community must suffer." The italics are ours. It is up to the Government to do the needful in this sad state of affairs.

Regarding the "arresting hand of retrenchment" applied to the veterinary departments, Mr. MacGregor says, "But it must seem to the average mind to be false economy to allow the cattle of a locality, the only true money and food producers, to remain poor, unhealthy and diseased, when small sums judiciously saved from the budgets of less important matters, would do so much towards the improvement of this universal and dominantly needful one."

Mr. MacGregor's remarks on self-reliance, freedom from the "limiting coils of a Veterinary Service" and setting up private practice on a subsidiary basis, are really elevating and well worth serious consideration. But the 'grinding poverty' of India is too well known to need any description here. We are not in a position to forecast the success or failure of such a scheme. But there are many points in his address which deserve to be well pondered over. Mr. K. Kylasam Ayyar, the Chairman of the Reception Committee, has sounded a different note altogether in his address. He says, "The economic condition in relation to Animal Industry is such that no improvement on the side of private veterinary practitioners can be expected for a very long time to come; . . . It is clear, therefore, that the adequacy of veterinary aid afforded must depend upon the provision made for it by the Government." No one can speak with any amount of certainty of what rests in the womb of future. But conservative India would like to tread the path that has been tried and found safe, for conditions in India.

The question of forming an "Indian Veterinary Council" with due regard to the conditions in this country, is to be referred to almost every eminent veterinarian in India and the result will be awaited with interest by everyone concerned.

Mr. MacGregor finishes his address in a manner which is at once simple and telling. He says, "Your wants are legion—no register, no internal laws of punishment or reward—no officially recognised responsible body and many many others."

We congratulate Mr. MacGregor on his able address, and the profession on the happy choice of its President for the last Conference.

Notes.

We published in our second issue a copy of the representations submitted by the Madras Branch of the All-India Veterinary Association to the Hon'ble the Minister in charge of Development Department, Madras. It is regrettable that permission was not granted for a deputation to wait on him, under the plea of the Association not being recognised. Only a 'Service Association' can be recognised but that body is prohibited at the same time by a G. O. from waiting on a deputation on the Government! Is it not queer? We yet hope the present Minister will pay due consideration to all the points raised in the representations and give effect to them and thus earn the lasting gratitude of a noble profession.



One of the points in the representation is to replace the present Touring Veterinary billets by Veterinary Dispensaries. We are glad to learn that the measure is to be experimented in the District of Kistna from April 1925. It devolves on every member of the profession entrusted with this experimental measure to make it the success which it ought to be. They must establish the fact that at a minimum cost a Veterinary Dispensary can turn out better work and be more useful to the ryots than a Touring Veterinary Officer. Let them note down all the salient points leading to the above conclusion and incorporate them in the report which they may be called upon to provide at the end of the experimental period.



It is gratifying to note that the services of Veterinary Surgeons are requisitioned during the Health and Baby week for lecturing purposes. That is a sure sign of the people realising that even a 'Vet' has got something useful to say with regard to public health. One such lecture delivered by Mr. K. Kylasam Ayyar is published in this issue. Messrs. M. S. Sastry and T. Vinayaka Mudaliyar have done the same in their respective places with great credit to themselves and the profession. We hope many more would have rendered similar services but their reports, if any, are not available with us.



THE THIRD ALL-INDIA VETERINARY CONFERENCE
held at Madras in December 1924

AND PRESIDED OVER BY
A. D. MACGREGOR, ESQ., M.R.C.V.S., I.V.S.,
Principal, Bengal Veterinary College.

A REPORT OF THE PROCEEDINGS OF THE THIRD ALL-INDIA VETERINARY CONFERENCE, MADRAS.

The Conference met precisely at 9 A.M. on the 29th December 1924, in the spacious hall of the Madras Veterinary College. Delegates, visitors and students filled the hall to its utmost capacity and it was really a crowded house when M.R.Ry. K. Kylasam Ayyar Avergal, G.B.V.C., got up to deliver his welcome address. (Appendix I.) There were many distinguished visitors including the Hon' ble the Minister for Development, Government of Madras.

Next Babu G. N. Roy Chaudhury, G.B.V.C., in proposing Mr. A. D. MacGregor to the presidential chair, spoke as follows :—

GENTLEMEN,

I propose that Mr. Andrew Dawson MacGregor of the Indian Veterinary Service be elected as President of this Conference.

I am thankful to the Reception Committee for giving me this privilege. I had the pleasure of proposing Col. Walker at Lahore and Col. Pease at Lucknow, the two former Presidents of our Conferences, but on this occasion, I feel it a matter of special pride to propose Mr. MacGregor, as he comes from Bengal, my own native province.

Although young in years, yet in earnest devotion to our cause, in active sympathy with our aspirations, in professional skill and attainments, he is equally great with the other veterinarians who adorned our chairs previously.

In his administrative capacity as Principal of the Bengal Veterinary College, he effected a saving of Rs. 50,000 last year, without discharging a single hand or impairing the efficiency of the college in any way and by cultivation of Fodder Crops in the bare land of the college compound, he saved Rs. 12,000 in the cost of feeding the hospital patients. His professional popularity is so great that the dog ward is now yielding an income enough to meet the cost of its upkeep. As a patron of our provincial association, he has always helped us with money, encouragement and advice.

Sir, we confer on you to-day the highest honour which the veterinary profession in India can bestow on anybody. It is a position of honour, faith and love, flowing spontaneously from the fountains of our hearts. Whoever will serve the profession like you, whoever will share our joys and sorrows like you, whoever will answer our call like you, we will give him the same honour and pay him the same homage as we are doing you to-day.

Officers like you, Sir, by their services in the sacred cause of Science unconsciously bind us in gratitude and admiration to that little island six thousand miles across the seas !

This was seconded and supported by Mr. M. Ananta Narayan Rao and Rai Sahib P. N. Das, and carried unanimously. The President then took his seat amidst deafening applause and was garlanded with a silver lace garland of exquisite workmanship. Mr. A. D. MacGregor next delivered his presidential address (Appendix II) which was listened to with rapt attention.

M.R.Ry. T. Vinayaka Mudaliyar Avl., G.M.V.C., Secretary, Reception Committee, then read out many telegrams and letters of sympathy received from absentee members and other gentlemen.

The next item of the programme being the election of the Subjects Committee, Mr. S. M. Raza Hussain Sahib, General Secretary, All-India Veterinary Association, proposed the following gentlemen and this was seconded by Mr. M. Tahir Mirza, G.P.V.C., Veterinary Inspector, Cawnpore, and carried unanimously.

Mr. Tahir Mirza	....	....	} United Provinces.
Mr. S. M. Raza Hussain	....	....	
Mr. G. N. Roy Chaudhury	....	....	} Bengal.
Rai Sahib D. Dey	....	....	
Mr. Hari Anant	....	....	} Central Provinces.
Rai Sahib P. N. Das	....	....	
Mr. R. K. Ram	....	....	} Behar and Orissa.
Mr. Abdul Sadique	....	....	
Mr. M. S. Sastry	....	....	} Madras.
Mr. V. Janaki Ram Ayyar	....	....	
Mr. Anant Narayan Rao	....	....	
Mr. B. V. Seshadri	....	....	
Mr. P. Srinivasa Rao	....	....	
Chairman, Reception Committee.			
Secretary, Reception Committee.			
Mr. S. R. Bapu	....	....	} Indian States.
Mr. W. R. Mudaliar	....	....	
Mr. T. J. Hurley, I.V.S., M.R.C.V.S.	....	....	} Co-opted.
Mr. P. T. Saunders, I.V.S., M.R.C.V.S.	....	....	
Mr. Jamaluddin	....	....	} Representative mem- bers on the Central List.
Mr. B. K. Badami	....	....	

M.R.Ry. T. Vinayaka Mudaliar Avergal, in proposing a vote of thanks spoke as follows :—

GENTLEMEN,

With great pleasure, I rise to convey the heart-felt thanks of this Conference to all the gentlemen who have honoured us with their presence here to-day in spite of their many engagements. A small profession such as ours needs all the support which the public and the Government can give. If our work had not been sufficiently felt by the public till now, it is because of the field being vast and labourers few.

It had been made clear in the presidential address delivered just now that in India one Veterinarian is in charge of 1½ lakhs of cattle in every 700 sq. miles ! I submit, gentlemen, that the cattle wealth of India needs better protection. It is towards that end in view, we are trying not only to befit ourselves for future demand but also to formulate certain proposals which appear to us to be beneficial and submit them to the Government and the public.

If to-day the attendance of our sympathisers is greater than on any other previous Conference, we take it as an indication of the growing interest of the Madras public in this little profession of ours (cheers). We are convinced that without public support and sympathy, our work in a conservative country like ours will be a highly hazardous one. We are pleased, therefore, gentlemen, to find so many of the esteemed citizens of Madras here to-day. We thank you for so kindly responding to our humble invitation and the interest you have evinced in the proceedings of this morning's function. (cheers).

We are indebted to the Hon'ble Diwan Bahadur T. N. Sivagnanam Pillai, the Minister for Development, for his presence here to-day. Much rests with him to elevate our condition, and this is neither the place nor the time to speak of the many directions in which he can nourish this infant profession. We feel elevated, nay honoured at his presence here to-day and it is proof positive, if one is needed, of the keen interest he takes in our welfare. (cheers). We are highly thankful for all his services in the past and we submit our heart-felt thanks for his presence here to-day.

This Conference will last for two more days and there is time enough for the Reception Committee to express their thanks to the amiable and sympathetic President, it has been our good fortune to

have secured to preside over the deliberations of this Conference and to the various delegates who have come from far and near.

Now, gentlemen, I thank you once again for your response to our humble invitation. (cheers).

The Conference then adjourned and the Subjects Committee met at 2 P.M., to discuss the resolutions and the meeting terminated at 4-30 P.M.

SECOND DAY.

The Conference re-assembled at 9 A.M., on the next day and directly proceeded to read and discuss the professional papers which were varied and many. A general desire was expressed that the professional papers may be printed and circulated in advance or at least published in the Indian Veterinary Journal sufficiently early, so that the discussions may be more complete and useful. The following is the list of papers presented at the Conference :—

1. Rinderpest, by Rai Saheb D. Dey, G.B.V.C.
 2. Weaning and Rearing of calves, by Mr. M. Jamaluddin, G.P.V.C.
 3. Haemogregarine Canis, by Mr. M. Ananta Narayan Rao, G.M.V.C.
 4. Fits in dogs, by Mr. Roy Chaudhuri, G.B.V.C.
 5. Necro-Bacillosis, by Mr. R. N. Naik, G.B.V.C.
 6. Examining the bullocks for soundness, by Mr. M. C. Joshi, G.B.V.C.
 7. Indigenous drugs, by Mr. M. C. Joshi, G.B.V.C.
 8. A fish bone in an abscess in a dog, by Mr. T. S. Venkateswara Ayyar, G.M.V.C.
 9. Outbreaks of Anthrax, by Mr. S. Seshadri Ayyangar, G.M.V.C.
- The following papers could not be taken up for want of time :—
10. Melano Sarcoma in a buffalo, } by Mr. T. S. Venkateswara
 11. Umbilical Hernia in a calf, } Ayyar.

All the above papers with the discussions thereon will be published in this Journal as far as possible.

Before the Conference dissolved for the second day, the President addressed the Conference on the advisability of having an Indian Veterinary Council and invited discussion and suggestion from the delegates. After an elaborate discussion the Conference adopted the following resolution :—

Resolution No. I—

(a) That this Conference is of opinion that an Indian Veterinary Council on lines similar to those of the Royal College of Veterinary

Surgeons in Great Britain and Ireland, be formed as soon as possible, whereby the interests of the profession will be safeguarded and promoted in every direction.

(b) That it will consist of honourable and responsible members of the profession in India, and of such qualifications as are recognised by the authorities of Indian Veterinary Colleges and the Royal College of Veterinary Surgeons, England.

(c) That this Conference go into Sub-Committee consisting of the members of the Subjects Committee to consider ways and means of adopting the above resolution.

Then the Conference adjourned to meet again the next day at 9 A.M.

In the meanwhile the Subjects Committee met again at 2 P.M., to transact the remaining business and dispersed at 4-30 P.M.

THIRD DAY.

The morning session was devoted to the continuation and discussion of the professional papers. In the afternoon, the Conference met at 1-30 P.M. and held its final sitting.

The President submitted the action taken by the Sub-Committee referred to in Resolution No. I, read out the draft letter intended to be addressed to the eminent and honourable members of the profession and elaborately explained many of the points on the subject. Then the following resolutions were adopted by the Conference.

Resolution No. 2—

That the proposal of the Subjects Committee referred to in Resolution No. I, *supra*, to authorise the President of the Conference to address the eminent men in the profession in India, requesting for their opinion and co-operation for the formation of an Indian Veterinary Council, be approved.

Resolution No. 3—

That the All-India Veterinary Conference respectfully approaches the Chamber of Princes with the request that they may be pleased to consider the advisability of having Veterinary Departments in such of the States as have not got them already, with a view to preventing the economic loss of livestock from epizootics and of re-organising the Departments in others on a satisfactory line regarding the qualifications and remuneration of the staff, with a view to efficiency.

Resolution No. 4—

That this Conference conveys its thanks to the Veterinary Advisers and the Heads of the Civil Veterinary Departments in Behar and Orissa, Central Provinces and the Punjab for the help rendered by them in the formation of the Provincial Veterinary Associations in their respective Provinces and earnestly hopes that the heads of the Civil Veterinary Departments in the Provinces where such bodies do not exist at present will be pleased to extend their help in forming similar Associations.

Resolution No. 5—

That this Conference reiterates the necessity of introducing a uniform course of syllabus suitable to the Indian conditions in all the Indian Veterinary Colleges.

Resolution No. 6—

That in view of the ever-increasing number of unemployed Veterinary graduates, even though there is a large scope for their employment in various branches of service such as Meat and Milk inspection, Hackney Carriages, Control of Epizootics in large towns, Conservancy, Cattle Depots of the big Municipalities, etc., where the services of the Veterinary graduates can be profitably employed, this Conference requests once again the Indian States and the Local Governments to make it obligatory on Local Bodies to employ none but the qualified Veterinary graduates for such services.

Resolution No. 7—

That this Conference thanks the Imperial Agriculturist of the Imperial Agricultural Research Institute, Pusa, for his having kindly deputed his able Second Cattle Superintendent, Mr. Jamaluddin, to attend and read at this Conference a paper on "Weaning and Rearing of Calves" which is of great importance to the public.

Resolution No. 8—

That this Conference empowers the President to communicate the various resolutions to the authorities concerned.

Next the General Secretary read out the report on the working of the All-India Veterinary Association for the year 1924 together with a statement of receipts and expenditure. The report was adopted with an expression of appreciation of the work of the General Secretary, Mr. S. M. Raza Hussain.

Extracts from the report are given in Appendix iii.

The last item of the programme being the election of office-bearers, the following gentlemen were duly elected,—

- | | |
|--|--------------|
| 1. Rai Shaib P. N. Das, G.B.V.C., Assistant Director, C.V.D., Behar and Orissa, Patna | } President. |
| 2. Mr. S. M. Raza Hussain Sahib, G.B.V.C., Deputy Superintendent, C.V.D., United Provinces, Jhansi | |
| 3. Mr. M. Jamaluddin, G.P.V.C., 2nd Cattle Superintendent, Imperial Agricultural Research Institute, Pusa | } Secretary. |
| 4. Mr. B. K. Badami, G.B.V.C., Deputy Superintendent, Hyderabad State | |
| 5. Mr. Zia Abbas Hashmi, G.P.V.C., Gwalior State | } Treasurer. |
| | |
- were elected as members of the Managing Committee from the central list.

The other members of the Committee will be duly elected by the various Provincial Associations.

At this stage, Mr. K. Kylasam Ayyar moved that anything pertaining to service question should be excluded from the discussions of the All-India Veterinary Association. Mr. L. Parameswara Ayyar seconded it. Mr. B. K. Badami expressed surprise at Mr. Ayyar's attitude and stoutly opposed it. But it was left to Mr. M. Jamaluddin to save the situation. He rose to a point of order on the ground that the rules of the Association do not permit the change in rules without due notice being given to the Managing Committee who should refer it to the general body. Mr. Ayyar accepted the objection and withdrew his proposition.

The functions of the Conference being over, Mr. K. Kylasam Ayyar, Chairman of the Reception Committee, proposed a hearty vote of thanks to the President and the Delegates and the various Indian States, Associations and the Heads of Departments who deputed the delegates to attend the Conference. Also he heartily thanked the Principal, Madras Veterinary College, for having placed the College at the disposal of the Reception Committee and the students of the College who as volunteers rendered very valuable services and all the other gentlemen who helped in several directions to make the Conference a grand success. This was lustily cheered by all. Mr. B. K. Badami, on

behalf of the delegates next thanked the Reception Committee and the volunteers.

Rai Sahib D. Dey further thanked the students and the Reception Committee for all the attention they paid to the delegates. On behalf of the Bengal Veterinary Association, he invited the next Conference to Calcutta which was accepted with great acclamation.

The President, then dissolved the Conference with very interesting, valuable and encouraging remarks on the success of the session, and spoke as follows:—

"First of all we must thank all the workers who worked last year in the Association and for the extraordinary efforts on their part with result we now see here to-day. The report has been read out by the General Secretary. The office-bearers have devoted a great deal of their time in the work of the Association. We should thank them for their sacrifice.

The next is with regard to my own pleasure. I have got tremendous pleasure in coming here. The whole course has been friendly and there has been no attempt at violence. I hope it is a pleasure to all of you to come here. I trust I may again preside over you, not in any particular year. There may be others who may carry out the duties of the President with greater benefit to you. I am trying to do my best in getting our Veterinary Council formed and I hope that during next year we shall be able to do something more solid. Gentlemen, I am most grateful to each of the office-bearers of the Conference. I am grateful to Mr. Ayyar, Chairman of the Reception Committee, and I am very happy to think that I have met many men in the profession whom I should not have otherwise met and with whom I have had very pleasant talk. I trust that I may at some day in future be elected as President." (Loud applause).

With three hearty cheers for the President, the Conference dissolved.

A group photo was taken next.

Then the Conference moved on to the extensive sporting lawn of the College where the members of the Madras Branch of the All-India Veterinary Association were 'At Home' to the President and delegates and a few friends. The catering was in the hands of Messrs. Harrison & Co., who true to their reputation left nothing to be desired. An enjoyable evening was spent and all parted with many words of regret at the impending separation.

APPENDIX A.

Welcome Address

BY M. R. RY. K. KYLASAM AYYAR AVERGAL, G.B.V.C.,

Chairman of the Reception Committee, the Third All-India Veterinary Conference.

GENTLEMEN,

On behalf of the Reception Committee of the Third Session of the All-India Veterinary Conference, I accord you a hearty welcome and thank you for your presence here to-day. And to you gentlemen, the delegates from the other Provinces and Indian States, who have come here to attend the Conference at great personal inconvenience incidental to long journeys, our heartfelt thanks are due. We deeply appreciate your zeal and devotion to the cause of the profession, and I hasten to assure you that no efforts on our part will be wanting to make your stay amongst us agreeable. If there be shortcomings I am sure you will be generous to our faults and take our will for the deed.

It is likely that some of you, gentlemen, who are visiting Madras for the first time, have heard of that ungracious epithet "Benighted" applied to Madras. I am not sure of its genesis, but I may tell you that in the year of Grace 1924, Madras is far from being in a state of intellectual or moral darkness, as you will see for yourself. I am only anxious that what you have heard should not be allowed to mar your own impressions. I do not propose to anticipate your deliberations and discuss in detail the several subjects that may engage your attention at this Session. I will only briefly survey the more important of them, so as not to encroach upon your time. The Veterinary profession in this country, as it exists to-day, is comparatively of recent growth, and its strength and organisation in the various Provinces are mainly represented by the varying resources of their Government. It is so because the independent side of the profession, so largely represented by the private practitioners in other countries, is so insignificant in volume in India to-day, that it may be considered to be non-existent for all practical purposes. The economic condition in relation to Animal Industry is such that no improvement on the side of private Veterinary practitioners can be expected for a very long time to come, and at the same time it is admitted on all hands that Veterinary aid is an indispensable economic factor in the wellbeing of a country where nine-tenths of the people live by agriculture. It may sound paradoxical, but it is no less true. It is clear, therefore, that the adequacy of Veterinary aid

afforded must depend upon the provision made for it by the Government. Apart from this, the place of the Veterinarian in relation to public health and the obligations of the State in regard to the contagious disease of animals, Veterinary Hygiene and public health generally, are so universally recognised that it is unnecessary for me to dilate upon them here. Whether these ideals are sufficiently on the foreground and worked up to in the various Provinces, I am not in a position to say, but if judged from the pace of the progress made hitherto on the whole, the verdict would appear to be that no serious attempt has been made yet. The question of legislation for compulsory inoculation and other measures for the suppression and control of contagious diseases of animals and the question of making provision for the highest standard of Veterinary education in this country, are a few of the more important subjects that have not received the attention and support they merit. That these have a direct bearing on the scope and development of Veterinary work leading to economic efficiency of the Agricultural classes in India cannot be gainsaid. It is true that the position is not wholly unrecognised, for efforts have been made in some of the Provinces to extend the scheme of Veterinary aid in rural areas. I will take for instance my own Presidency of Madras about the Veterinary work of which, I can speak with some knowledge and experience. Some twenty years ago, the Civil Veterinary Department in Madras was a very very poor show. There were hardly three or four Veterinary men for the whole Province to combat the ravages of Rinderpest, Haemorrhagic Septicaemia, Black-Quarter and Anthrax, to mention only a few of the more deadly contagious diseases of animals. The Government then recognised the needs of the situation. A Veterinary College was soon established and as years rolled on the Department grew steadily in strength and usefulness until quite recently, when the arresting hand of retrenchment was applied to it in common with several other useful activities.

Gentlemen, I have digressed a little to meet the exigencies of provincial patriotism. As I have said, the Madras Civil Veterinary Department within the last twenty years has made some progress and may lay claim to some remarkable achievements with its meagre resources. There are to-day 72 hospitals and dispensaries and 72 itinerating Veterinary Assistant Surgeons who, when not engaged in contagious disease work in the districts, serve as moving dispensaries on a small scale for the benefit of agricultural livestock. That a considerable amount of useful propaganda work also has been accomplished by this

means is evident from the demand for more Veterinary hospitals. The progressive decline in the mortality, from contagious diseases of cattle in general and Rinderpest in particular during these years in this Presidency bears ample testimony to the good work done under adverse conditions by a small band of men—by no means commensurate with the size of the Province, or the magnitude of the task. Their work both in the hospitals and in the field has stood the test of time and experience. And if to-day they make bold to ask for enlargement of the scope for work and due recognition of their service and status, it is because they feel assured of the support of all those who have at heart the economic well-being of Agricultural India.

APPENDIX B.

Presidential Address

TO THE THIRD ALL-INDIA VETERINARY CONFERENCE

BY A. D. MACGREGOR, Esq., M.R.C.V.S., I.V.S.,

Principal, Bengal Veterinary College.

INTRODUCTORY REMARKS.

GENTLEMEN,

It was with the greatest diffidence, although at the same time, pleasure, that I decided to accept this honour of presiding over your deliberations to-day, and until the Conference is over. The only quality which I felt I could bring with me, and which might atone in some way, for my shortcomings as a President, was my keenness of desire to help in the advancement of all matters pertaining to the Veterinary Profession—a profession to which I feel sure, we are all proud to belong. It is this pride—a true honest pride in one's vocation in life, possessed by all in varying degree which, I trust, is the dominating factor in bringing us here to-day; chiefly, in order to discuss and so activate our natural desire to advance and improve both the vocation and ourselves. It is generally accepted, I imagine, that excess of ability and brilliance of intelligence, however welcome, are not at all, the essential factors in the steady progress of any profession; it is, on the other hand, good honest labour,

intelligently directed and controlled; and I would add, that the men of our profession in India to-day, who conform to this axiom, as it were, are the junior ranks of our graduates. It is from those of you, in this category, we must expect the honest labour, and from your elders, the studied direction. In process of time you yourselves will be the directors and your juniors the workers. It is truly said, "The child is father to the man", but before the child can become a man, he must be nurtured, and given a guiding hand; and before the younger men of our profession who, as I have just indicated, should form the foundation and the growing structure of our profession, can be so guided, we, their elders, must put our house in order; and that presumably is our honest purpose to-day.

Honest purpose. Honesty of Purpose. These are small words, but as in every walk of life, they mean to our profession *everything*;—they are the whole substance of progress, advancement, respect individually, and as a collective professional body. Without honesty of purpose, all other qualities, such as a wide sympathy and tolerance, powers of observation, education, intelligence, etc., and which are of such great advantage to all, will be of little avail to our profession as a whole, if they be at all anything more than a temporary gain to the individual. **Honesty of purpose** must be the foundation stone of our character, and must be possible of being laid by the most junior of our members. We must fashion it and shape it and *they* shall handle it and this shall be the watch-word of your Conference; your simple **Honest purpose**. It will test your courage, but well efface deceit and selfishness; and as it has been so truly said about Life itself, "It is not life that matters but the courage you bring into it," so we, as a profession, must be brave to carry out our honest purpose in life.

And now I would like to say a few words regarding last year's Conference. I doubt if I have sufficient time at hand to go through any intrinsic part of the proceedings, and I have no doubt much of it will again come up this time for discussion. What I do wish to say, is that the first point which struck me, was your good fortune in getting such able and experienced officers as Col. Pease to preside last year, and Col. Walker the previous one. Apart from their undoubted talents as Veterinarians, their long years' residence in India in your very midst coupled with their great knowledge of the Country and of the Country's wants, were attributes and advantages which few of us possess to like extent. We must try to show our gratitude by carrying on their good work, and do our best, during the actual proceedings of this Conference to follow in their foot-steps.

Veterinary Profession:—With regard to the Veterinary Profession in India and in particular to its scope, which involves the question of ways and means to be adopted to spread its usefulness, to control and direct its activities, and to encourage its workers, we might first of all look, for a few moments, at its present strength and state.

Strength:—(Vide Statement at end). Without looking into even approximate figures, a casual glance at existing facts, such as that of the number of Veterinarians in India relative to area and cattle they tend, may suffice to prove the colossal task we have in front of us. It works out at one Veterinarian to $1\frac{1}{2}$ Lakhs of cattle in every 700 sq. miles. Whereas in the United Kingdom the figures approximate, one Veterinary Surgeon to 5,241 cattle in every $51\frac{1}{2}$ sq. miles. On the face of these figures alone, it would seem that any amount of effort expended in attempting to cope with a problem of such magnitude would result in so much energy and labour misspent; but although admitting the truth of this, to a certain degree, the work already achieved by all of you, still smoulders, and requires only fresh air and stimulus from outside, to give it new life: fresh air from Government and Local Bodies, in the shape of an increased appreciation of the diverse usefulness of Veterinarians and stimulus, by way of uniform, and where necessary, improved conditions of remuneration. These two wants—*viz.* an increase in the numbers, and an improved scheme or condition of service form, in my opinion, the substrata of our difficulties in dealing with the enormous problem of disease in India. There are other troubles to be overcome, but which appear more on the surface of things, such as State Legislature in the control of Epizootics,—Central State Control of a specific Contagious Diseases Bureau, etc. These latter are of undoubted and vital importance, but without the required number of workers, and at that, contended workers, all other factors are inoperable. I am sure all of you will agree, that it would be premature and superfluous to bring in laws regarding notification, movement and destruction of diseased or the burial of dead animals, at a time, when there is practically no medium in existence to handle, apply or endorse such laws; and again, that all we may avail in the way of improving the breeds of cattle, may profit us little, if such specialised and improved types continue to be ravaged by disease. I would, therefore repeat, we can do little or nothing to benefit Animal Husbandry in India, without an infinitely larger staff of Veterinarians, operating specifically against contagious and infectious disease, as well as numerous general practitioners. It is ever to be deplored, that the almost prevailing expressed desire of Local Bodies in authority, (in Bengal at least) is

to refrain from employing any more men for this work, apparently for reasons of economy. They most probably know best, as without money, in some form or other, very little of organised effort can be achieved, but it must seem, to the average mind, to be false economy, to allow the cattle of a locality—the only true money and food producers—to remain poor, unhealthy and diseased, when small sums, judiciously saved from the budgets of less important matters, would do so *much* towards the improvement of this universal and dominantly needful one. The cattle of a country are its food—and the food of the people, without cows or goats, no milk; and without bullocks to plough, no grain; milk and grain of some sort, form the staple diet of the average inhabitant of India, and if therefore, the cattle of a locality be neglected, as they most decidedly are in India, the health of the community must suffer. It might be imagined, if local bodies would consider the distribution of their funds, with this picture in constant view, the recruitment and employment of Veterinarians in their respective areas would immediately go up. But, as we cannot rely entirely on such a slender possibility, and also as an increased cadre, improving results of labour, does not necessarily spell a bar to discontent; it is up to you, during this Conference to put up, a workable scheme for the expansion of Veterinary aid throughout India. A scheme, whereby employer and employed will be mutually remunerated and the public needs satisfied. It must be based on efficiency and a minimum of expense to both parties. It might take the form of the Subsidisation of Veterinary Graduates by Local Bodies, for a term of years, until such time as they—the Veterinarians—are able to stand on their own legs, by a combination of private and official practice.

An organisation of this nature, is full of possibilities and advantages, which no purely Government Service can ever hold out, either to the country itself, or to the individual worker. Government expert or professional services in any country, were, to my mind, never intended to do more than the initial spade work of any profession, so far as the general routine work of such exists. They are the pioneers, essential, necessary, most useful, but so soon as the benefits of such extensive workers are recognised and appreciated by the public, they *must* give place to more intensive and individual effort, on the part of the members of that particular profession. Only that work, which concerns less, the citizen than the city as a whole, will necessarily remain in the hands of a service. And for this and many other reasons, does it become incumbent upon the members of the profession in India, to break away gradually, but nevertheless surely, from the limiting coils of a Veterinary Service

and set up as members of the state, ready to take on the work you have chosen to follow, in honest competition with your brother practitioners. Then and then only, can you ever hope to stretch out mentally and expand in the full abandon of freedom, from all the petty ties and worries of life and work in a service. Service, in one's callow days, is a most fruitful field of growth of tender, or undisciplined minds, for producing obedience to, and respect of elders, for initiation into the realms of routine, and of method, and withal a guarantee of employment and of increment, (however small). It is in these directions, and these only, that the average youth of the profession may benefit by spending his early years in Government service, discipline, method and respect for others. But unfortunately it is only to the few to rise to any degree of eminence in the profession in a service, and the larger the service, the fewer the chances of such. With the Rank and File, after the first few years of beneficial training, a process of settling down into grooves takes place, and what work, in the early years, were novel and of advantage, are now become too easy of execution and deserted of interests. After the first years, a guarantee of employment and of increment, must nearly always produce want of interest, want of incentive to better oneself, or one's vocation in life. It gives license to a stagnant serenity of mind, and hopeless placidity, which no other form of employment can, and in the tropics, where a driving and dominating desire to progress, to improve, is more essential to the individual than in more temperate climes, we find this form of employment in greater prominence. As already mentioned, this form of employment is necessary to some extent, but only, one would suppose, in paving the way for private enterprise, and to keep control of problems essentially public or state. And when an expert service is sufficiently recruited for these purposes, further employment cannot reasonably be expected. These latter facts are not, it would appear, fully appreciated, and although it cannot at all be conclusively stated yet, that the Veterinary Service in India is sufficiently recruited or raised to a cadre in each Province, to meet exactly its state requirements, there is every likelihood that the prevailing numbers employed to-day, might suffice as service units for state work only, but never as such alone. They must remain, for years to come, totally inadequate to cope alone with the country's demands, but, if supported by private practitioners, doing part-time official work, the needs of all might then be satisfied, provided again the numbers were greatly increased.

It must be admitted, little opportunity has existed in the past, to encourage a complete or even a partial emancipation from the reigning

desire of most graduates to join Government service or to sit and wait, unemployed till vacancies in such service occur. I am the first to admit of this. But since the beginning of things Veterinary in India, many changes have arisen, and one very much to the fore to-day, is the feeling held, possibly unexpressed, by most public bodies, of the necessity for Veterinary help, although they may, at the same time give every sign of antagonism towards employing more men on a service basis. They complain against the service system of employment, as being expensive and out of their control, but if you could put up a reasonable scheme as a body, or as individuals before them, there can be little doubt of your being able to reduce unemployment in your ranks to a minimum.

SCOPE OF THE VETERINARY PROFESSION IN INDIA.

As previously mentioned this includes chiefly, its usefulness and the spread of same in the villages, District Head-quarters, and Towns. At the present time, the demands for Veterinary aid are few and far between; so far as Indian Village practice is concerned, and it is most unlikely for this reason, that any scheme of subsidisation by Local Bodies, unless a generous and elastic one, will be a success or sufficiently alluring to admit of its being given a fair trial; but where the larger stations or towns are concerned, the possibilities of a graduate's establishing himself on a firm basis, in a short period of years are more hopeful. It will be up to the graduate, to choose the most likely and favourable areas or districts, and also, it will be the duty of the Local Authorities to take heed to the suggestions of their adviser, on all questions of Municipal or State Hygiene. With progressively minded Local Authorities, the control and inspection of Dairy sheds, Hack stables, Slaughter houses, etc., etc., could be introduced, and in this way the remunerative opportunities of the Veterinary Surgeon would be gradually enhanced. Such eventualities, with details of charges or pay, for such increased work, could be set down in the terms of the contract.

The field is so enormous, with so much to be done and open to improvement, that I cannot doubt the steady advance of a keen earnest worker. He is bound to be given a hearing in the end, if he presses home to the authorities concerned, the necessity for improved Veterinary control, and organisation of their respective Municipalities and areas.

That is one direction or possible scope for the profession of the future, but it may be argued quite reasonably, that others much more alive, and less probable, should receive our attention to-day, as for instance, in the larger towns and cities of the Empire, in the field of Research and work abroad.

• In large towns and cities, such as Calcutta, Bombay and Madras itself, one would imagine, there exists sufficient reason, for the creation of a Veterinary Department with wholtime Veterinary Graduates at the head, directing and improving all matters Veterinary concerning the health and comfort of the people and their animals. The paramount importance of such work, in large towns, is obviously not yet realised but at no very distant date, the demands of the inhabitants for a pure and healthy milk supply, for clean undiseased meat, and for the suppression of Cruelty to Animals, etc., etc., will have to be complied with. The tendency to-day, is for the creation of such Departments, and when established throughout India, the scope of the profession will then be greatly enhanced.

Opportunities for Research, and also of appointments abroad, are even to-day, not entirely absent from the scope of the Veterinary Graduate in India. Research, demanding as it does, special aptitude, training and funds, is not open to many, but as your numbers increase, and the enormous field for Research in India is laid open to these special few the other necessities—Funds and Training, must follow.

If I did little more to-day, by way of addressing you, than to convince you of the necessity, of giving deep thought to your Post-Graduate steps, and to weighing in the balance very seriously, your aptitude for Government Service, as against that of a self-reliant and independent existence, I shall have done much—as it is known from experience, the past regrets and future fears engendered, from mythical hopes of the one, and too transient a trial of the other. In any case, it is certainly bad for a young graduate, to remain idly quiescent and content forgetting all he ever learnt at College, wait, wait, waiting for a so presumed celestial opening under Government. He must set to, and work, even in his own village, where Veterinary help is always in request, and reward at the end of a day must come, if not to his pocket, to his mind and body and to others. Something towards an ultimate good, is bound to accrue to the earnest, honest worker, however apparently fruitless the immediate effort may be.

AGRICULTURE.

Just as no one can doubt, the all important and extensive grip, held by agriculture on India, so no one disputes logically, its close—almost bloodrelationship to Veterinary Science. Let this be my apology for entering another's Province.

The sum total of my activities here begin and end with two very important subjects, *viz.*:—(1) *Cattle Breeding, i.e.*, with a view to improving only the existing breeds or types, and thereby raising their market as well as their working value. (2) The body or bodies which should organise, finance and control such cattle operations. These two—the actual breeding and the control—are so closely bound up in each other that I shall here deal with them together.

Improvement of the breeds of cattle, as pursued now in India, is chiefly in the hands of Government or bodies of a similar status. That such control is open to grave question both as regards finance and results may be mooted and discussed later, but it appears almost certain that practically nothing in the way of comprehensive, searching, scientific, or expert breeding policy has yet been defined. If such do actually exist and I am guilty of offence, I am sorry, but it has been kept very secret, when on the other hand, it should have been given the greatest publicity for the benefit of private breeders. It is futile to expect one or two workers, however expert and profound in the knowledge of this subject, to evolve a successful scheme, possible of being followed throughout the country, just as it would be foolish to imagine, that the excellence and variety of British breeds to-day, are the outcome of one man's brain and energy.

Successful or improved breeds of cattle, do not come in a day, nor in a generation of man or beast. They are the results of the labour, well and seriously thought out and directed, of many years, and of as many intelligent workers; they are the outcome of numerous trials and experiments, and the cause of much disappointment, and expenditure of money, time and patience. So, what could be expected to accrue from spasmodic and localised twitchings of energy in the sphere of cattle breeding in India has occurred and nothing more; a few Provinces are, possibly, breeding some better cattle than they did previously—whether by accident or design matters little, as the net result is all too microscopic and indefinite, and is limited, as a rule, to the confines of Government Farms, for the edification of Government officials. How such a policy can ever hope to do more than a molecule of good, I cannot imagine, and

it is just as incomprehensible to me, how Government officials and money, can or should continue to compete with problem alone, and without the help and co-operation of the people the Land-owners—the Zemindars. It is they, reaping their income, their livelihood from the land, who should be the main operators and supporters, of any cattle breeding policy, and which might be propounded by themselves in committee, or by an official body relegated by them to do so. Government cannot be expected to spoon-feed every need of the country, through its infancy, its youth and its manhood—nor is it wise of the populace to allow it to do so. Government does, and should, see a universal need through its more tender or lean years, but there is a weaning age to all life, when it must strike out on its own, for the good of itself, and of its fellows. To my mind, the weaning stage has arrived for cattle breeding operations, which should be taken up by the people, in the shape of an organised body, consisting of land-owners, and Zemindars, with experts, such as exists in Europe and in England, under the title of the Agricultural Society of England or of Scotland. Such Societies could start modestly, as Provincial Agricultural Societies, and later amalgamate to form an All-India one, but the outstanding feature of their formation would be their entire freedom of action, on all questions Agricultural, Veterinary, etc. pertaining to their own particular spheres. When sufficient money could be obtained, paid experts could be employed, and specially important problems attacked piecemeal, such as, that of cattle breeding, upon which a special commission of experts and laymen might sit, for as many years as it required, to solve the difficulties, and define the curative policy. The activities and possibilities of such a Society, in each Province, are innumerable, having for its objects, to increase the productivity of the land, and to improve the breeds, and the health of stock; and generally to disseminate knowledge and advice to the farmer, whereby he may improve his farm, and his lot in life. These, and many other objects, might easily be attained, to some degree, in the space of a few years, by the land owners, aristocracy and others in close touch with the soil, whereas a generation of official work and money, might only succeed, in viewing the fields. It is they, and such as they, the Farmer's masters, who should become the "*Master-Farmers*" and show, by actual demonstration and precept the true vocation and location of an Indian Landlord, *viz.* "*A Farmer, on his own Farm.*" This is all that is required, to bring into prominent relief the luckless lot of the average ryot or small farmer in India. His daily task is a trial, his burning body a burden, and yet we try to teach him agriculture and the care of his cattle. His desire to

know, or do things, relating to his work, is only in keeping with his poverty of health and of the ordinary comforts of life, and naturally, until these are improved upon, through the medium of his lord and master, he is never likely to develop beyond the life of least resistance. The country wants better Landlords before it can expect improved farmers or farming, and I feel sure, the only road which can lead to either, is by way of a real live Agricultural Society in each Province.

And now we come to the All-India Veterinary Conference, its opportunities, difficulties and its aims.

The advantages of the profession in India having for its thoughtful and sympathetic sponsor, a body of this kind are many and various and require no recapitulation on my part. The difficulties are chiefly those of distance and time encountered by the members during a call to arms such as this, but the disadvantages of this lonely, solitary and as yet unrecognised body are most prominent of all.

The most pressing one, to my mind, is that it has not yet received the official seal and sanction of Government and it should be part of your many duties during these days of discussion to set this want to right, either by creating a smaller select body to represent the profession on all points and which can more easily and clearly define its objects or to obtain official recognition of the existing one. Personally, I do not see why this Conference, as a Conference or Association should not be allowed to survive with an addition to her family in the shape of a Veterinary Council to be officially sanctioned to take on the full control of the profession in India on a par with similar Councils in Western Countries and representative of Foreign or Indian Graduates.

The Associations could carry on their work as usual and act as constructive critics of the work of the Council and conductors of these social and professional gatherings.

We have only to look for a moment to the excellent work done by the Council of the Royal College of Veterinary Surgeons in England, to appreciate fully the necessity for a similar body in India—Your wants are legion—no Register, no internal laws of punishment or reward—no officially recognised responsible body and many many others.

An Indian Veterinary Council is very sorely needed, and I trust this hint will raise a good discussion. Before I sit down, and I feel sure I have tried your patience greatly, I would like to thank you all for the privilege so kindly granted of allowing me to address you at such length.

Mr Chairman and gentlemen, I thank you all.

APPENDIX

Province.	Area in square miles.	Population.	No. of Cattle.	No. of Imperial Veterinary Officers.	No. of Provincial Veterinary Officers.	No. of Veterinary Inspectors.	No. of Veterinary Assistant Surgeons.	No. of Hospitals and Dispensaries.	Pay of Veterinary Assistant Surgeons.
1. Bengal	1,20,900	46,305,543	24,724,234	3 (College 2 Dept. 1)	8 (College 6 Dept. 2)	20 (College 13 Dept. 8)	118 (College 2 Dept. 116)	41	50-10/5-100
2. Bihar and Orissa	90,731	34,750,000	19,843,381	3	2	11	126	24	50-10/5-100 (Ord.) Senior grad. (100) 12 (125) 2 "60-10/5-100 45-5-30
3. Assam	17,631	6,700,000	5,472,342	1	Nil	3	59	3	60-5/2-100
4. U.-P. of Agra and Oudh.	1,12,000	49,800,000	29,763,764	5	3	16	165	109	100-5/2-120
5. C.-P. & Berar	1,30,000	16,000,000	12,374,780	2	4	16	117	85	60-1-120 (Ord.) 125-2-175 (10) (Selection grade) 60-4-140
6. Madras (including College).	1,50,000	46,000,000	20,017,874	5	5	Nil (abolished)	193	93	
7. Bombay	1,88,000	29,000,000	10,002,060	1 (Presidency proper.)	5 (Presidency proper.)	5 (Presidency proper.)	105	80	
8. Punjab	1,34,000	25,000,000	14,900,000	3 (Col.)	3 (Col.)	27 (Col.)	220	145	150-10-300 Vet. Asst. Surgn. 60, 75 and 90 Vet. Asst.
9. N.-W. Front Prov.	16,500	200,000	...	1	Nil	2	21	19	
10. Sind and Rajputana.	...	...	...	1	Nil	2	17	15	75-4-155
11. Baluchistan	78,000	914,000	...	Nil	1	1	13	6	100-4-120 (Senior grade) 60-2-90 (Jn. grade.) 45 to 80.
12. Burma	2,40,000	12,000,000	6,227,275	4	9	24	226 (Vet. Asst.)	1	

APPENDIX C.

The Annual Report of the All-India Veterinary Association for the year 1924.

GENTLEMEN,

It is about nine months since we met at Lucknow, when we passed 12 resolutions and in addition decided to start an Indian Veterinary Journal, as the official organ of the Association. The journal has now come into existence and already two issues have been published. Thus the year 1924 will ever remain as an epoch-making year in the annals of the All-India Veterinary Association, as providing itself with a mouth-piece of great value and greater future.

Copies of the resolutions then passed were forwarded to the Central Government, the various Local Governments and to the other authorities concerned by Col. Pease with the following results.

Resolution No. 1, regarding the change of designation of Veterinary Assistant to Veterinary Assistant Surgeon was forwarded to the Military Department and it is gratifying to record that they have accepted the proposal and have given effect to the same.

Resolution No. 2, regarding the increase in pay of the subordinate staff of the Veterinary Department and to make it uniform all over India is under consideration of some Governments; but the present financial difficulty is standing in our way of achieving anything in that direction.

Resolution No. 3, suggesting that the proceeds derived from cattle pounds may be ear-marked for the expansion of the Veterinary Department, seems to have received no consideration at all, at the hands of the authorities concerned.

Resolution No. 4, appealing to some of the Indian States to consider the advisability of opening Veterinary Department in their respective areas, has borne some fruit. The States of Jaipur and Nabha have given the lead and we cannot be too grateful to them.

Resolution No. 5, regarding a deputation to wait on the Government of India, was seriously taken up on hand, but the absence of Col. Pease in England stood in our way of proceeding further in a matter which was ready on all other details. (Col. Pease has since expressed his inability to lead the deputation.)

• Resolution No. 6, requesting for admittance of Veterinary Graduates to the Bangalore School of dairying and animal husbandry on the

same terms as Indian Agricultural Graduates, seems to have been given effect to, though we are not officially communicated of the same.

Resolutions No. 7 and 8, pertaining to the promotion of senior Provincial officers to the Imperial cadre and the change of designation of Lecturers to that of Professors respectively, still remain unconsidered and it is hoped that the authorities will realise early the validity of the claims set forth in those resolutions.

Resolution No. 9, suggesting the formation of more Provincial Veterinary Associations seems to have appealed to many with the result that Bihar and Orissa, Central Provinces and Punjab have now Associations affiliated to the All-India Veterinary Association. It is highly fortunate that the Imperial Veterinary Officers of nearly every province are keen about the welfare of the Provincial Associations. The Veterinarians of the enlightened state of Mysore have promised to start an Association and we are sure that such a sympathetic head as Major Simpson will render them all possible help.

Resolution No. 10, requesting for an improved and uniform syllabus of Veterinary education in all the colleges is still under the consideration of the Government of India and the Imperial Veterinary Officers. It is hoped before long, the need for repetition of such a progressive and beneficial proposal will cease.

Resolution No. 11, regretting the various retrenchments in the Veterinary Departments of several provinces, has had no effect. Only the Government of U. P. has promised to stop the retrenchment but so far nothing definite has been decided upon.

Resolution No. 12, suggesting means of employment to the unemployed in this little profession is still under the consideration of some of the local bodies and Governments. In this connection the Committee wish to record the valuable services rendered by Mr. MacGregor, I.V.S. and Mr. Roy Chaudhury for moving the Calcutta Corporation to open a "City Veterinary Department" which will employ Veterinary Graduates on such posts of the Corporation where their services will be highly useful in public interest.

Meetings.—Three meetings of the Executive Committee were held during the period under reference and several questions of importance were decided upon including the arrangement of this Conference.

Accounts.—According to the revised rules of last year, most of the members of the central list had to join the Provincial Associations with

the result that the subscription from the Central list is considerably reduced. The following are the contributions from Provincial Associations.

	Rs.
Madras	100
U. P.	100
Bengal	50
Bombay	85
Punjab	34
From members in the Central list	73
Total	442

Out of this, Rs. 286 were paid to the Editor, the Indian Veterinary Journal and the balance spent for running the Association with an additional deficiency of Rs. 11 spent over and above the amount on hand. (At this stage Mr. B. K. Badami, G.B.V.C., Deputy Superintendent, Hyderabad Veterinary Service asked permission to make good the deficit which was much applauded.) Thus under the present constitution, the parent body is entirely dependent on the mercy of the Provincial Associations. It is hoped that the several Provincial Associations will realise this vital issue and do their best to keep the parent body above want.

An unfortunate incident.—The Committee regret to inform the members that due to unprecedented floods in the Jumna on the 5th October 1924, the Bungalow of the General Secretary, Mr. S. M. Raza Hussain was washed away at Muttra and along with it all the records of our Association. Properties and livestock were under 3 to 6 feet of water for 3 or 4 days together! It is highly providential that Mr. Raza Hussain was out on camp during the occurrence and his people also were not at Muttra then.

The General Secretary wishes to place on record his grateful thanks to all the Provincial Secretaries and Associations for the help rendered during the period under reference and his special indebtedness to the Madras Association and especially to its able Secretary, Mr. T. Vinayaka Mudaliar and to Mr. G. N. Roy Chaudhury of Bengal Veterinary Association who rendered him valuable assistance in all matters of importance.

The Committee while placing this record of the activities of our Association before this Conference will fail in their duty if they omit to record the valuable services of that talented editor, Mr. P. Srinivasa Rao

whose indefatigable energy and resourcefulness are above all praise. The only return which the profession can do for all his labours, is to subscribe in large numbers and make the journal a successful undertaking.

Our thanks are due to Khan Sahib Niaz Muhammad Sahib, Third Superintendent, C.V.D., U.P., for the presentation of his typewriter to the Editor, the Indian Veterinary Journal and thus relieving the Association of some of its immediate and necessary expenses.

An account of the Receipts and Expenditure of the Indian Veterinary Journal up to date is appended herewith.

THE INDIAN VETERINARY JOURNAL.

No. of Members on the rolls on 29-12-1924.

Madras	178	F. M. S.	7
Central List.	47	Zamindars	1
Bengal	24	Foreign	1
Bombay	94		
United Provinces	45	Total	415
Government	18		

Subscriptions due from Members.

F. M. S.	2	Foreign	1
Government	11	Madras	28
		Total	42

Statement of Accounts as on 29th December 1924.

Particulars.	Receipts.	Particulars.	Expenditure.
	Rs. A. P.		Rs. A. P.
1. By Donation ...	286 0 0	1. Postage ...	174 18 0
2. By Subscription ...	1,534 1 0	2. Stationery ...	43 0 6
		3. Printing ...	516 3 6
		4. Furniture ...	94 0 0
		5. Books ...	5 10 0
		6. Typist's pay from 15.6.24 ...	190 0 0
		7. Rent from 15-5-24 ...	150 0 0
		8. Books ...	50 0 0
		9. Railway freight and oocly for type-writer ...	13 14 0
		10. Type-writer's Bell, ribbon etc. ...	12 4 0
		12. By Balance ...	590 5 0
Total ...	1,840 1 0	Total ...	1,840 1 0

Original Articles

WEANING AND REARING OF CALVES.

BY MR. M. JAMALUDDIN, G.P.V.C.,

Second Cattle Superintendent, Pusa.

(A paper read at the Third All-India Veterinary Conference, Madras.)

GENTLEMEN,

While dealing with the question of rearing the calves in India, one has to keep in view,

- (a) the demand for cattle, (both male and female in India),
- (b) the religious sentiments of the majority of cattle owners in India and
- (c) the desirability and possibility of the practice by the cattle owners, of keeping cattle just for their own agricultural and household purposes.

These conditions quite differ from those of other countries, where the practice of rearing the calves by artificial feeding is not only common but also is being carried on with great success and economy.

In western countries male cattle are not considered more valuable than female ones by the dairymen, except when required for breeding purposes, and therefore all the males and many undesirable females not worth rearing are either killed or sold for veal or beef, etc.

The majority of cattle in those countries are kept by the farmers with some business point of view, when economy is always sought for and not so commonly by individual persons as is the case in India.

Religious sentiments of the majority of cattle-owners in India prevent them from killing or disposing otherwise of even the undesirable and unprofitable cattle that are causing such a great loss to the country in general and the business of cattle breeding and Dairy Farming in particular.

I have seen people who would not milk the cow or allow her to be milked without the calf, when the calf dies or when the milk cannot be given to the calf under some reason or other, no matter even if it causes harm to the cow as it generally does, and even if she can yield a great quantity of milk.

Therefore I have nothing to discuss on the subject of calf rearing with those

- (a) who are thus prohibited to remove the calf from the dam,
- (b) who keep cows for their own household milk supply and have nothing to do with the milk market,
- (c) who do not care at all for taking any milk from the cow for the market as the professional breeders, as are found in the Himalayan Tarai, Gujrat Jungles and in certain tracts in the Punjab, and
- (d) owners of poor milking breed but good bullock producers.

I shall here deal with the subject for those who are running dairy farms and have got pretty good market for the milk and its products.

First of all I have got to say whether it is necessary at all for a dairyman to raise calf. There is not the least doubt about the fact that the dairy farming can be a success only to that farmer who pays the greatest attention to the raising of calves. Dairy farming is more than merely producing milk. It includes raising of the desirable heifers to replace the animals in the herd that a dairy farmer has to lose or discard every now and then either owing to death or sickness, old age, etc.

The fact that productive life of a dairy cow does not average more than 6 years, renders it necessary to have at least one heifer coming in every year for every six cows just to maintain the number of the cows in the herd.

Now taking the average age of a heifer to come to the productive period in India to be at the age of about 4 years, means that a heifer will be available to replace a discarded cow every 4th year and thus a dairyman with 6 cows requiring one heifer every year will have to keep at least 4 heifers to keep up the herd.

There are only two ways of maintaining the number of the cows in a dairy herd; the first is to buy heifers or cows and the second is to raise the heifer in the herd itself.

For buying heifers there are only 2 ways in India: first, to buy them from professional breeders as are found in Gujrat, Punjab, Western U. P. and Himalayan tracts. The second is to buy them from dairy farmers and other cattle owners.

1. The first measure in my opinion is very risky for the business, though it needs less time and trouble on the part of the dairyman, and I have seen many a dairy concern fail by this method of farming and

keeping a dairy herd. To buy a cow or a heifer of an unknown pedigree and with no knowledge of the milking capacity of her ancestors is not safe and the practice is more likely to bring the production of dairy herd much lower than what the farmer wants and does not help to breed heavy milkers.

2. When buying a heifer or a cow from some dairy farm or other cattle owners it must be remembered that nobody will sell good cows or promising heifers except for fancy prices. It is quite possible, I admit, that there is a chance of getting a few good ones in the cheaper lot but the majority will prove bad.

Even after going through all expenses and trouble of searching good animals it is almost certain that many of the animals thus purchased will prove unprofitable and have to be rejected and discarded, as you all know what all tricks the cattle dealers (in India) play. Considering all these draw-backs in buying dairy cattle, one has to decide that the dairy heifers must be raised by the dairyman, particularly when one considers the important fact that a dairy farmer should interest himself in his work with the idea of making improvements and progress in the herd. When the question is thus decided in favour of the calves being raised by the dairyman himself, it is to be considered which is the better of the two methods of raising calves in India :

1. Allowing the calves to suck the dams as is the practice in India,
2. or, rearing the calves by artificial feeding.

Before going further I like to give you a rough idea of the average cost of a calf under the present system of allowing the calf to suck its dam. I am sure you will be surprised to hear that very few people have cared to consider that point as yet.

I would not take the case of calves allowed as is the practice amongst the majority of Indian dairy farmers, only to lick or suck a few strips of milk just to make the cows yield milk or I should say deceive cows to allow to be milked.

Such calves are not good for anything, being of stunted growth, weak constitution and never likely to improve. But I take a moderately fed or sucking calf of a cow giving averagely about 3,000 lbs. of milk per lactation period, found in the majority of the Indian dairy herds. Allowing the calf at least $\frac{1}{4}$ of such a cow's milk, i.e., averagely only 750 lbs. a day, means that the calf takes 750 lbs. of milk which alone

values about Rs. 94, when the average lowest price of milk is Re. 1 for 8 lbs. in cities where mostly the dairy farming is being and can be carried on with some success. When we take the average lactation period of an Indian cow to be 10 months during which the calf sucks the milk from her mother we find that a calf 10 months old costs Rs. 94 only for the milk feeding.

It can very easily be judged now how far it is advisable not to find and follow some economical way of raising calves when the increasing population and the demand for milk and its products for human consumption are still threatening to raise the price of milk, etc., further up.

Now I think I should better mention the advantages and disadvantages of the two methods of raising the calves, I have experienced in my past 5 years of work in the line.

1. A fairly well-fed sucking calf consumes milk worth Rs. 94 if fed only on milk ration and thus costs more than the hand-reared one, which even when fed liberally will take milk and skim milk worth only Rs. 75 or so, although it can be reared with no bad results, but more economically if desired, as I can show you hereafter.

2. A majority of cows and buffaloes would not give milk if their calves die or when the latter are not allowed to suck owing to some reasons ; while there is no such trouble when a cow is used to be milked without a calf.

3. A cow or a buffalo if allowed to suckle the calf will take much longer a period to receive the bull and give the next calf, and their remaining dry thus for a long period makes the dairy farming a failure. This difference is clearly seen in the herd at Pusa consisting of cross breeds (Montgomery and Ayreshire) where the two methods of milking the pure Montgomerys without calves and with calves have been practised. A C. B. cow there generally drops calf every $12\frac{1}{2}$ months and a pure Montgomery every 14 months when milked without calf while a Montgomery cow milked with calf drops a calf every 18 months.

4. One cannot find out the actual capacity of a cow or a buffalo as one cannot possibly know what the exact quantity of milk the calf has sucked but it is a thing which a dairy farmer ought to know if he desires to effect improvement and progress in the herd.

5. When allowing calves to be nursed by their dams, each and every calf however unprofitable and not worth keeping it be, has to be brought

up on a cost I have already mentioned, and this will cause a great financial strain on the dairyman, while with the other method only good and desirable ones can be reared.

6. One cannot possibly manage to have clean milk from the hygienic point of view when the calf is allowed to suck the udder. One who has seen the saliva, etc., of the calf sticking to the udder and often dropping in the pail can easily understand this.

7. The only advantage I find in raising the calves by allowing them to be nursed by their dams is that such calves need very little care, while the hand-reared ones need a great care and watchfulness. Keeping all these advantages and drawbacks in view, one has to decide that the calves must be hand-reared artificially on some economical food to save the highly priced milk and that the cows ought to be milked without calves. Now I should tell you how a cow is to be trained to give milk without the calves and when the calf is to be taken off its mother. Many people prefer to leave the calf with the dams for 2 or 3 days and sometimes even a week with the idea that mother is the best nurse and will do all that is required by nature for the calf. There will be natural tendency for the formation and flow of milk and that the slight inflammation of the udder as is occasionally seen in the cows milked without calves, will either never occur or will subside soon if it does occur.

But I have experienced troubles in this practice with the Indian cattle. Sometimes the calf will not easily be trained to the pail and there is danger of the cow also not allowing to be milked without the calf, once she has seen it and has got affection to it, and even if she does there is fear of her not yielding the full quantity of milk she ought to otherwise.

The practice of keeping the calves in front of the cows and milking them is also objectionable. Besides this, on many occasions I have seen the trouble in milking old cows not accustomed for being milked without calves. She may or may not yield to her full capacity.

The best way in my opinion is to train the cows just after their first calving, and I have seen no trouble whatever, if this is done.

Remove the calf just when it is dropped on the ground, don't allow the cow to lick it or even to see it and thus to develop any affection towards the calf. Put a little grain in front of the cow and milk her

shortly after calving and later on 3 or 4 times a day for couple of days. A cow thus milked after her first calving might not remain steady for a day or so, as she feels a sensation when her udder is touched or pressed, but there being a pressure of blood and milk flow in the udder she will soon find relief from being milked, and she will gladly allow to be milked by anybody. Remove the calf away direct to the calf pen, attend to its naval cord, clean it and wipe it dry well and then leave it in a well ventilated room provided with good soft bedding for about 6 to 12 hours. When it is hungry enough the first thing is to put one or two fingers previously dipped in colostrum in the mouth of the calf. It will suck the fingers, and while doing so lower its head down gradually until the hand is in the milk. The calf will thus suck milk also with the help of the fingers from the pail. Many people like to remove the hand as soon as possible and make the calf drink the milk from the pail and thus they save time and pain, but I always prefer the calves to suck the milk with the help of the fingers at least till they are over a month old. This has helped me a good deal in keeping the digestion of the calves in order. Often it is seen that the calves get backward and will not easily lower their heads to the pail; in such cases get it to a corner and get its neck between the legs facing towards the calf's head to stop it from backing away and put the milk pail on a stool, etc., for a day or two.

Besides the above mentioned measures every one interested in calf rearing, must remember, that the secret in teaching the calf to take the milk from the pail is patience, perseverance and practice. The next question is "what to feed a calf with."

Whole milk is nature's balanced ration for the calves and no scientist or any physiological chemist on earth has been able, nor I think would ever be able to replace it with some substitute equally good; but when the whole milk or its valuable components are offered a high and enticing price it is not economical to raise the calves on whole milk for a long period and this is the only reason why the Indian dairy farmers neither care nor can afford to raise the calves at least for their own herd. We have to find out therefore some proper substitute at least as nearly good as possible.

Experiments in finding out some substitute for milk in the western countries have shown that much cheaper stuffs can be substituted for milk with no bad results in rearing calves.

Skim milk differs from whole milk only in its lack of butter and fat, and these can be substituted in the form of grain at much less expense; and experience has shown that the calves with skim milk, grain and hay grow as well as those with whole milk although they may look less fatty. Experiments have also shown that 2 lbs. of well proteined grain is sufficient to replace 1 lb. of butter fat as an energy-producing food for the calves.

The economy of using skim milk with some grain in place of whole milk is well realised when it is taken into consideration that butter fat is averagely sold in India at one lb. for a rupee.

When the dairyman is selling whole milk he cannot afford to raise the calves entirely on whole milk and neither has he skim milk for feeding purposes. Then how to raise the calves is a problem worth considering. It is easy to replace whole milk with skim milk and some mixture of well proteined grains, but with what to replace the skim milk when it is not available there, is a question about which I am sorry I am not prepared to give you any idea as I have no experience of such a case.

I know of certain preparations sold in the western countries as calf meals, many of which are used in those countries with success; but I don't know any such preparation available in India which I can recommend, but I shall give you the principles of prescribing a calf meal. While suggesting a calf meal one must bear in mind that the ingredients should be easily digestible. Its constituents should be as much nearer to those of milk as possible.

There are a number of such articles recommended and being used in western countries, but in India corn meal, cocoanut meal, linseed meal, cotton seed meal, ground barley, ground rice, oat meal, coarse flour, poor quality wheat are the commonest available that can be utilised for the purpose, in the form of gruel mixed with milk.

When butter, ghee, cream, etc. are sold and there is plenty of skim milk available for feeding the calves the problem becomes much more simple.

Without any hesitation one can give whole milk to the calves for only a fortnight and afterwards replace the whole milk with skim milk, at the rate of $\frac{1}{2}$ to 1 lb. a day and thus stop the whole milk at the age of one month or preferably 6 weeks, unless some special reasons render it desirable to continue the feeding of whole milk for a longer

period. At the time of changing the ration of whole milk to skim milk, the calves ought to eat the grain ration from a feed box. This can very easily be done by rubbing a small quantity of grain ration on its nose after it has taken its milk. Give just what the calf will readily eat and develop the appetite slowly. It is always advisable to give the calves grain at as early an age as possible. They, if given opportunity, generally begin to eat grain when they are 2 weeks old and will eat up $\frac{1}{2}$ lb. of grain at the age of one month. The early development of this habit helps a great deal to keep the calves in good condition when the milk ration is stopped.

As I have told you before, there are a number of food grains recommended for the calves but selection of food grains for cattle depends mostly on the stuffs available in the market or which can be grown in the farm if any cultivation farm is close by. Personally I have found a mixture of

4 parts of crushed maize, oats or barley,

1 part of bran,

1 part of Linseed meal with one ounce of salt for each calf, very satisfactory. Raw hay should also be given to the calves as much as they like to eat when grain ration is started. As regards Alfalfa hay and other such things, they have been very highly spoken of and are very commonly used by the calf-rearer in the western countries, but these are not available in India. Barselin (*Trifolium Alexandrum*) and thaftal which are being used in some of the Government Dairy Farms in India are not available in the open market for the public.

Finely chopped Bhusa of wheat or oats, mixed with some green stuff or ensilage, if given is very useful.

There is not much difference in suggesting the quantity of milk the calf is to start with. One-seventh weight of milk of the live weight of the calf is always a satisfactory start per day. This averages to an Indian breed calf, 6 to 10 lbs. per day.

Below, I give a schedule for feeding calves which, I consider and have found quite satisfactory for rearing calves in India.

	Quantity of whole Milk per day.	Quantity of skim Milk per day.	Grain.	Salt.	Raw hay.	Remarks.
1st week	6 to 8 lbs.	...	...	...	...	...
2nd "	10 lbs.	...	...	...	...	...
3rd "	8 lbs.	2 lbs.	Very little	Too little		
4th "	8 lbs.	4 lbs.	Do.	Do.		
5th "	6 "	6 "	$\frac{1}{2}$ lb.	$\frac{1}{2}$ oz.	Free access to Fodder rack provided daily with clean good Fodder as recommended.	Pieces of rock salt should always be provided in the calf pens and let them lick when they like.
6th "	4 "	8 "	$\frac{1}{2}$ "	$\frac{1}{2}$ "		
7th & 8th week.	...	12 "	1 "	1 "		
3rd month	...	12 "	1 $\frac{1}{2}$ "	1 "		
4th "	...	8 "	2 "	1 "		
5th "	...	4 "	3 "	1 "		

From the above schedule it will be seen that even though fed a bit liberally, only about 320 lbs. of whole milk and 1,040 lbs. of skim milk are consumed by each calf. The cost of whole milk calculated all the rate of 8 lbs. per rupee comes to about Rs. 40—and that of skim milk calculated even at the rate of one anna a seer will not exceed Rs. 35. Thus the cost of an artificially fed calf comes to Rs. 75, for feeding, milk, etc., while that of a sucking one comes to Rs. 94. The cost of grain and ration being common to both, has not been included here.

Precautions and care needed for artificially rearing calves can be summarised as follows:

1. Always give a good start on whole milk preferably mother's milk during the colostrum period; underfeeding them too much in the beginning lowers their vitality and stamina, and I have seen a terrible number of mortality owing to this reason alone.
2. Do not overfeed them.
3. Mind the regularity and punctuality in feeding and everything.
4. Always tie the calves or put them in Stauchions at the time of feeding and till half an hour afterwards to avoid licking each other.

5. Feed the calves with their liquid diet always at a temperature of 95 to 100°F. Remember that fingers are not thermometers.
6. See that the water troughs in the calf pens are always provided with clean water to be taken by the calves.
7. Never forget that the hygienic cleanliness of the utensils, the feed, water, the person feeding the calves, the surroundings and of the calf itself is one of the most important things to be observed.
8. Always let the calves have open air exercise avoiding the exposure to chill and rain.
9. Clean, well-lighted and well-ventilated calf pens and boxes provided with sufficient dry bedding will help a good deal in keeping the health of the calves.
10. Watch always the calf's appetite and digestion and give them prompt treatment when the condition is abnormal.
11. Each calf must receive individual attention.
12. Many times I have observed that the calves thus fed keeping very good condition till weaning time, but soon after weaning they went horribly down, but this can very easily be stopped by putting them on to a good pasture and attending to their fodder and grain ration.

13. Never make too rapid changes in the feed.

A slight negligence of the above precautions is likely to cause different ailments often seen in the pail-fed calves. Some of the most common ones that I have experienced are,

1. Indigestion, diarrhoea, dysentery.
2. Tympanitis, catarrh, and pneumonia.

These diseases though they may not cause many deaths, if not properly attended to, retard the growth of calves and may keep them stunted and poor in condition for a long time and might make them not worth rearing.

Gentlemen, I think this is not the place for me to suggest any remedial measures of treatment for the diseases. What I personally do is that first of all I cut down their milk ration to half, and give in 90 per cent. of cases, just at the very onset of the disease, 2 to 3 oz. of castor oil according to the age of the calves and later on, treat them symptomatically with quite satisfactory results.

Now, Gentlemen, I have to thank you for all the patience with which you have heard this note which is a little bit lengthy, and which I am sorry I could not help, the subject being of vital importance for the Dairy Farming in India, and I hope the President will allow any of the gentlemen to speak who want to say something on the subject.

DISCUSSION.

President.—I thank Mr. Jamaluddin for his excellent paper and for the interesting things he has told us. I am very proud he has been able to bring up to us his personal knowledge. He has been able to get fundamental knowledge of the subject. I think actually if he were tried he could teach the subject of The Weaning of Calves in the College. It could be carried out in the colleges in a piecemeal fashion. A good deal of benefit will accrue to the cattle in India. I hope you would discuss the subject at length. I am very much interested in the farming in India, and every note on the subject is worth taking up.

Mr. M. S. Sastry.—We are all thankful to Mr. Jamaluddin for his paper. When he read the title of his lecture, I was eagerly expecting that he would suggest something new about the rearing of calves acceptable to the average Indian. He has treated the subject as an economic veterinary surgeon. The humanitarian sentiment also should assert itself. If we want to introduce these new methods, then I say that the methods suggested are not consistent with the sentiment and the humanitarian views to which we are all accustomed for a very long time in India. Again we have to consider whether our ryots will be able to follow all these methods with the necessary precautions and whether their sentiments would allow them to adopt these methods as they generally believe that the calf has got the greatest and the first claim on its mother's milk. I hope he will be able to tell us next year some method more acceptable to the Indian sentiment.

President.—There are certain prejudices with regard to retaining the calves with the mother, and with regard to removing the calf from the mother. There exists in Bengal a party which wants to take the calf away from the mother. It cannot be discussed here.

Mr. Badami.—I do not see where the humanitarianism is. Generally we care more for sentiment than for humanitarianism. In Pusa they are more kind to the animals than the ryots who starve the calves. There is a want of humanitarianism in the ryots. I think I could go into the economic side as well. If we had money I would say

the calf should be given whole milk. In the northern countries the people give the whole milk. They keep cows only for ploughing and use cows' milk only for children. They depend for milk on the buffaloes.

President.—The paper is wonderfully clear and there is not much for us to discuss. I am very grateful to Mr. Jamaluddin for his paper.

ANIMAL DISEASES AND PUBLIC HEALTH.

(Lecture delivered by M. R. Ry., K. Kylasam Ayyar Avl., G.B.V.C., Officer in charge, V Circle, C.V.D., Coimbatore, during the Health Week, at Coimbatore, under the presidency of Lieut.-Col. A. Chalmers, I.M.S., on 14th January 1925).

When the Secretary asked me if I would speak on some subject of public interest during the Health Week at Coimbatore, I was not sure whether the subject that was uppermost in my mind would interest the audience, not that the subject itself has no bearing on questions of public health, but because so little of it is talked about and acted upon in our big cities and towns, where the need for it though unrecognised, is becoming more and more urgent. On second thoughts this very reason appeared to be sufficient justification to speak on the subject of "Animal Diseases and Public Health."

To what extent and how animals figure as factors in the spread of infectious diseases to man is a question that has engaged the serious attention of eminent men in the Veterinary and Medical profession and other workers in the field of public health in western countries, and the result of their labour is embodied in the form of state legislation from time to time for safe-guarding public health. It covers a very wide field and it is not possible for me to deal with it adequately in a short paper. I shall endeavour to sketch briefly its general outline. For convenience of description the diseases communicable from animals to man may be classed under three groups, *viz.* (1) by ingestion of infectious material through meat and milk, (2) by actual contact and (3) by inoculation.

Group I.—Tuberculosis, Intestinal and other worms, Foot and Mouth disease, Diphtheria, Sore throat, etc.

Tuberculosis or consumption as it is popularly known is common to man and most of the domesticated animals throughout the world, but it is more widely prevalent in some countries than in others. For instance, it is more in evidence in England than in India at the present time.

Some years ago, the disease assumed such alarming proportions in England in both men and cattle, that a Royal Commission on Tuberculosis was appointed. The final report of the Commission was issued in 1912. I will quote a few salient points from the conclusions arrived at by the Commission:

"We have investigated many instances of fatal tuberculosis in the human subject in which the disease was undoubtedly caused by a bacillus of the bovine type and by nothing else. We have compared the lesions from such cases with those obtained from parallel cases of fatal tuberculosis in which the human tubercle bacillus alone was discovered. Except for the difference in the type of bacillus found in them, these two groups of cases presented similar features; the clinical histories of the patients were alike, the cases all terminated fatally, and the lesions examined after death were found to be anatomically indistinguishable.

"Our researches have proved that in a considerable number of cases of the human disease the lesions contain, and are caused by bacilli which are the causes of tuberculosis in cattle. In all such cases, the disease is therefore the same as bovine tuberculosis.

"Bovine tubercle bacilli are apt to be abundantly present in milk as sold to the public when there is tuberculous disease of the udder of the cow from which it was obtained. But these bacilli may also be present in the milk of tuberculous cows presenting no evidence whatever of the disease of the udder, even when examined post-mortem. Further, the milk of tuberculous cows not containing bacilli as it leaves the udder may and frequently does become infective by being contaminated with the faeces or uterine discharge of such diseased animals. We are convinced that measures for securing the prevention of ingestion of living bovine tubercle bacilli with milk would greatly reduce the number of cases of abdominal and cervical gland tuberculosis in children, and that such measures should include the exclusion from the food supply of the milk of the recognisably tuberculous cows, irrespective of the site of disease, whether in the udder or in the internal organ."

Further researches and reports of cases since then have not led to any material modifications of the conclusions arrived at by the Royal Commission in 1911, regarding the transmissibility of tuberculosis from animals to man. As I have already said, legislative measures exist in most of the European countries for dealing with this disease in cattle, the object being elimination at the source of infection by a rigorous system of milk and meat inspection.

Dairy cattle are periodically subjected to what is known as the "Tuberculin test"—a very reliable method of diagnosing tuberculosis in cattle whether clinical evidence is present or not. In India it is believed that tuberculosis in cattle is not so extensively prevalent as to merit consideration from public health point of view. This belief is partly due to the teaching that Indian cattle, on account of their being kept in open, are not prone to the disease. Whether that theory still holds good or not is an open question, but the conditions under which dairy cattle are housed in our crowded cities and towns to-day, would appear to demand systematic and periodical inspection of the animals from which milk is obtained for sale as an article of diet.

In this connection I cannot do better than quote a few sentences from an article by Prof. Sheather in the *Journal of Comparative Pathology*, 30th June, 1920:—

"The published records would appear to indicate that bovine tuberculosis is distinctively uncommon in India, but Taylor's investigations throw a rather different light on the subject, at least so far as the South Punjab is concerned. In the course of systematic inspection at Ferozepore slaughter houses, Taylor found that at least 3 per cent. of the animals actually slaughtered had lesions of tuberculosis. Special attention is drawn to the fact that all animals have to be inspected prior to slaughter, and that nearly 18 per cent. of the whole number were rejected on account of their poor condition. It is therefore reasonable to assume that 3 per cent. does not represent the actual numbers of tuberculous animals, as doubtless many of these rejected prior to slaughter have the poor condition owing to infection with tuberculosis."

If similar evidence of the existence of tuberculosis in cattle in other parts of India is scanty, is it not reasonable to infer that particular attention has not been devoted to search for it?

Foot and Mouth disease affects chiefly cattle, sheep, goats and occasionally other animals. Outbreaks of this disease frequently occur in this country. It is not a fatal disease. The disease can be conveyed to man by means of the milk of affected animals, by butter made from infected milk. Young children are specially susceptible.

Diphtheria is another disease which may be conveyed to man, especially children, by milk. Outbreaks of this disease in boarding houses and schools have been traced to contaminated milk supply, but whether this contamination is from outside source or from the germs of the disease of Diphtheria in animals has not been conclusively proved.

Some septic infections of the throat and intestinal disorders in human beings are undoubtedly caused by the germs contained in the milk obtained from cows with inflammation of the udder. The practice of boiling the milk intended for human consumption generally adopted in this country greatly minimises the risk of infection, but the varying intensity of heat required to render the germs harmless alters the quality of the milk. Raw milk is preferred by many. Butter and cheese are made from raw milk on a larger scale. Risk of infection should not therefore be allowed to exist.

Some of the internal animal parasites or worm infections in man are caused by eating improperly cooked meat of animals, including fish, which serve as intermediate hosts in the life cycle of these worms. It is obvious, therefore, that the importance of an organised and thorough system of meat and milk inspection in all our large cities and towns cannot be over-estimated.

Group II.—I would here mention Mange or Scabies, Ringworm and Variola.

Mange or Scabies and Ringworm are common diseases of domesticated animals such as horse, camel, cattle, dog, sheep, cat, etc. There are several recorded cases of these diseases having been transmitted from animals to man.

Variola in man is known as small-pox. It is a contagious disease of animals affecting cattle, sheep, horses, goats, pigs, buffaloes, camels and monkeys. Cow pox or Variola vaccina is largely connected with public health consideration. In the cow the disease resembles small-pox in man in all its stages, udder and teats showing characteristic features. It is conveyed to man by actual contact or inoculation. I will not take up your time by recounting the various theories propounded and diverse views held by the numerous workers from the very early days of the history of this disease. At the present day it is accepted that Variola in cow and small-pox in man are one and the same disease, and the protective vaccination of human beings against small-pox is based on that principle.

Group III, includes some of the more important diseases not mentioned previously, viz., Glanders, Anthrax, Rat-bite infections and Rabies.

Glanders is a highly infectious disease of the horse tribe, communicable to man and all warm-blooded animals except cattle, pig and white mouse. Like most other dangerous diseases of men and animals its

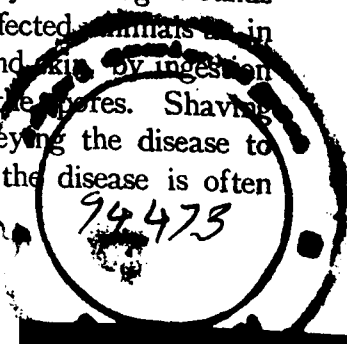
contagious nature was not definitely known until the causal agent of the disease—*Bacillus Mallei*, was discovered by certain French and German scientists in the year 1882, although the disease was recognised and mentioned about 450 B.C. This disease has found its way by trade or war to every country in the world. All the great wars, except perhaps the last one, have increased its prevalence and frequently carried it into countries where previously it did not exist.

Glanders in man is a highly fatal and loathsome disease transmitted by the infective discharges from the nostrils or from the ulcers in the leg of an animal suffering from the disease. It is also known as Farcy in the horse; when ulcers are present in the legs. In India and most other countries legislation exists for the control and eradication of the disease. Here it is known as Glanders and Farcy Act, which provides for the seizure and destruction of animals found to be suffering from the disease. Suspected horses are tested with Mallein—a diagnostic agent obtained by laboratory methods, from the organism causing the disease. Those that react to the test are not permitted by law to be kept alive for any length of time, nor is treatment permissible.

Anthrax.—It is a rapidly fatal disease of animals, caused by a microscopic organism known—*Anthrax bacillus*. Outbreaks of this disease frequently occur in this country, notably among cattle and sheep. The proper disposal of carcasses of affected animals is of the greatest importance in dealing with this disease, because, the means of keeping the infection alive for any considerable length of time can be prevented. The main factor in the spread of the disease is the Anthrax spore, which may be compared to the seed of a plant. Spore formation does not occur inside the animal body, for free oxygen and a suitable temperature are required for it. So if the carcass of an affected animal is buried intact without opening and allowing the blood to shed, the risk of spore formation and infection can be reduced to a great extent.

Anthrax spores are potential sources of infection to man and animals capable of carrying the disease far and wide. Unlike the bacillus, the spores have a great resistance to heat and other ordinary methods of disinfection. To man the disease is conveyed through wounds or abrasions coming in contact with the blood of affected animals or in the case of butchers and others handling the meat and skin, by ingestion of diseased meat and by inoculation or inhalation of the spores. Shaving brushes have occasionally been the means of conveying the disease to man. Among workers engaged in wool industry, the disease is often

102 202, N. 2
N 2 3-1-3



caused by inhaling the dust of infective material contained in the wool obtained from diseased sheep. It is known as wool-sorter's disease in England.

Infections connected with Rat.—Rats have proved to be a real menace to public health, in various ways, some of which are carriers and transmitters of dangerous disease and as contaminators of food materials and water. Rat is the carrier of two serious diseases in man, known as Weil's disease or Spirochaetial Jaundice and rat bite fever.

Spirochaetial Jaundice is conveyed to man by rat bites. During the Great War, cases of this disease occurred amongst troops in France, the trenches being infested with rats. This disease is found to be common in Japan. Rat bite fever is another disease transmitted by rats to man. Whether cases of these two diseases in man have been recorded in this country I have not been able to verify, but cases of rat bite fever in dogs have been met with. The role played by rats in the transmission of plague to human beings is fairly well understood and so I do not propose to deal with it here.

Rabies is another most dangerous disease transmitted to man by the bite of a rabid animal—usually dog. Almost all animals are susceptible to the disease but dog is the natural reservoir and starting point of the disease. If the disease in the dog could be kept under control, there is no risk of man or any other animal contracting the disease. A mad dog in the street is not a rare event in our towns and villages and the signs of disease are too well-known to the man in the street, to need any description.

Two forms of rabies are recognised in the dog—the dumb and the furious. The latter, as the name indicates is the more dangerous of the two, as the unprovoked attacks on men and beasts are made by dogs having it. No better illustration of the saying, "Prevention is better than cure" than the one furnished by this disease, can be wished for. It is possible to stamp out the disease by stringent suppressive measures, and prevent its re-introduction by adequate quarantine regulations, as has been done in Great Britain and Ireland. This was accomplished by the Rabies Order of 1899, and other accessory orders dealing with the importation of dogs. In this country destruction of street dogs has been in vogue for some years now, but, in order that it may produce the desired effect, it needs to be carried out on a large and sustained scale. Killing dogs in the streets by clubbing them is generally condemned. The method now recommended for adoption by all municipalities and

large towns is to catch the dogs and pass them through a lethal chamber.

My object in dealing with this aspect of Public Health has been to stimulate thought in that direction and if I have not succeeded in doing so, it is on account of my poor handling of an important subject.

Clinical Articles

CÆSARIAN SECTION

BY MR. C. V. PADMANABHAN, G.M.V.C.,

Veterinary Asst. Surgeon, Veterinary Hospital, Palghat.

Subject.—A middle-aged cow.

History.—The cow showed labour pains one early morning and exhibited all sorts of uneasiness which continued for two days without natural delivery. On the third day the animal was quiet, eating and ruminating fairly. So the owner thought that the cow might have been suffering from colic. As the animal was not taking its feed as usual and as the udder that was swollen in the beginning had completely shrunk, it was brought to this dispensary on the morning of the 7th day i.e. 10th November 1924.

Symptoms noticed.—The animal was dull, there was foul smelling discharge from the vagina. Temperature 101°F. On examination the foetus could be felt. It was dead and inflated. The hairs could easily be removed. The presentation was transverse. The point of the hock of one of the hind legs could be felt towards one side, having the fetlock and hoof of the same limb thrust deep behind the pelvic rim.

The foetus would not move. The hand could not be thrust in beyond the pelvic rim to have a firm hold on the limb.

All attempts for 3 hours and more to move the foetus and bring out at least one limb and proceed further failed as the one hind limb that could be felt was stuck very firmly behind the pelvic rim. Hence I decided to perform Cæsarian section with the permission of the owner.

Operation.—Put the animal under chloroform and operated on the right flank with necessary possible antiseptic precautions, incising from middle of the flank above, obliquely downwards and backwards about 12 inches in length. While cutting, precautions were taken to stop all

venous bleeding by ligaturing the big veins and by using artery forceps for the small ones. On opening the uterine wall, the edges of the cut ends were held up with both hands of an assistant to prevent the contents of the uterus from falling into the abdominal cavity. The foetus which was swollen and putrified was removed. The uterus contained about 2 pints of foul smelling liquid with particles of putrified placenta.

The uterus was cleaned as far as possible by sponging with a wet towel; a clean towel was put inside the uterus through the cut opening and taken out through the vagina with a view to clean the vaginal cavity. Then sutured the uterine walls with silk and then the peritonium, abdominal muscles and skin—all running sutures except the external skin. Applied Tincture Iodine and Boric Acid and covered with a thick layer of Collodium and a thin layer of cotton wool. After doing so far douched the uterus per vagina with warm saline lotion.

Removed the animal slowly to a clean dry place and applied cold water to the head. The animal that was lying quite motionless under chloroform now raised its head but was unable to rise up. The owner was asked to remain with the animal to avoid any accident by falling while trying to get up. The animal got up two hours after the operation, when it was given rice conjee. The animal was covered with gunny bag the whole night. Only conjee with carbolic acid was given for 3 days and no solid food was given.

The external wound was not at all touched as the layer of cotton wool that was applied over it was firmly sticking to it. For three days the animal could not move quite freely, was lying down most of the time. Whenever the animal was found lying on its right side, it was slowly turned over to the other side as it might injure the sutured structures by the weight of the abdominal contents. Conjee was poured down the throat as it would not take it of its own accord. The uterus was douched with warm Condy's fluid every morning using an irrigator attaching the horse female catheter (metal) at the end of the rubber tube. (The use of this catheter is very good in douching the uterus by inserting right into the womb.)

To my great satisfaction the animal began to ruminate on the third day morning. It also tried to move about. Finding some hope I asked the owner to give milk internally in addition to the conjee which he did for a week.

On the evening of 13th November 1924, i.e. on the 4th day it had 104°F. temperature when I gave the following mixture:—

B

Mag sulph	....	....	....	4 oz.
Ammon Chloride	....	....	....	
Potash Nitras aa	....	....	....	2 drams.
Liqr Ammon Acetatis	....	....	....	2 oz.
Spts aetheris nitrosi	....	....	....	1 oz.
Liqr arsenicalis	....	....	....	3 drams.
Aqua ad.	....	....	....	1 pint.
Mft haust sig now	....	....	....	

The temperature came down the next morning.

The vaginal discharge was smelling very bad after a few days, having the consistence of thick conjee water. Now I used Eusol solution for douching, which had very good effect in removing the stinking smell and reducing the quantity of the discharge.

There was no trouble with regard to the external wound. The sutures were removed on the 9th day.

After 7 days the animal began eating greedily when grass also was given but not to load the stomach full. Conjee was given thrice a day. The animal was discharged cured on 21st November 1924.

FITS IN DOGS.

BY MR. G. N. ROY CHAUDHURI, G.B.V.C.,
Veterinary Surgeon, Calcutta.

"Fits" is a common term used to indicate a state of muscular and nervous phenomena, found in certain diseases. So it is a symptom and not a disease as is commonly mistaken by the lay public. It is characterised in most cases by tetanic convulsions, muscular twitchings, chattering of the teeth, frothing from the mouth, dilated pupil, laboured breathing, arching of the loins, difficulty in deglutition, vague expression and restlessness, with complete insensibility.

All breeds of dogs in all ages may be affected by it.

It may occur, as in epilepsy, depending on an unknown disorder of the brain or as a result of peripheral nervous reflex irritation due to the presence of parasites or other causes.

Diseases that show symptoms of fits.—

- | | |
|--------------------------------|--|
| 1. Epilepsy. | 11. Nervous shock. |
| 2. Worms. | 12. Canine Typhus. |
| 3. Colic. | 13. Ptomaine poisoning. |
| 4. Acute Gastritis. | 14. Strychnine poisoning. |
| 5. Nervous form of distemper. | 15. At the period of dentition in puppies. |
| 6. Meningitis. | 16. In high fever. |
| 7. Rabies. | 17. At the rutting period of sluts. |
| 8. Eclampsia. | |
| 9. Tetanus. | 18. Chorea. |
| 10. In injury and severe pain. | |

In the course of my practice, I have observed most of these cases and I carefully prepared this note, to assist young practitioners to arrive at a correct diagnosis.

Differential points in Diagnosis.—In epilepsy the attack is always sudden. The dog crying, falling to the ground, there is salivation from the mouth, clenching of the jaws, fixed eyeballs and spasm of the muscles. The fit may last for one or several minutes. There is no marked deterioration of the general health. The attack recurring in severer forms, the treatment gives no relief. Dogs of all ages are affected, no rise of temperature and no other constitutional disturbance.

Worms.—The history of the case will generally give a story of inordinate appetite, thin body, harsh coat, irregular bowels. Fits are not so prolonged and so severe a type as that of epilepsy. It affects young dogs and puppies mostly.

Colic.—Fit is a marked symptom of colic in dogs. It will attack suddenly after a feed, the dog will be restless, he will whirl round and round very quickly, make a grunting noise, fits will come at regular intervals, there will not be much salivation, the tongue may be bitten to bleed but he will be able to swallow. Treatment gives immediate and marked relief, no rise of temperature, abdomen may be distended.

In acute Gastritis.—Rejection of food and vomition will be a marked symptom. The dog will not be able to retain even water and the nature of the fit is neither severe nor prolonged, but passes off after a time.

Nervous form of distemper.—"Fits" will occur as a symptom of the nervous form of distemper, the great prostration and other symptoms of distemper will indicate the nature of the disease.

Meningitis.—The symptom may come suddenly or appear gradually. First symptom is a fit of convulsions followed by series of fits at irregular intervals, the conjunctiva is congested, twitching of the muscle of the head and neck takes place, and the pupils are dilated, followed by paralysis, the animal dying in a comatose condition.

Rabies.—In Rabies the symptoms are like those of meningitis but the paralysis of the jaw (lower), salivation, inability to swallow any nourishment, hanging out of the tongue are characteristic points of diagnosis.

Eclampsia.—The sex of the dog, recent delivery, nursing a large litter of puppies will help diagnosis.

In injury and severe pain or in cases of shock due to accident, fit occurs. The history of the case, nature of injury and condition of the dog will give all indication for correct diagnosis.

In canine Typhus.—There are fits of shivering, a desire for warmth and no desire to move. There is stiffness all round. In peracute and acute forms of this malady symptoms of coma appear shortly and death takes place without a struggle.

In Chorea.—In Chorea or St. Vitus's Dance fits occur. It is a nervous disease with characteristic diagnostic symptoms. The twitchings of certain muscles or groups of muscles continue without intermission in sleep as in waking.

In strychnine poisoning.—Fit occurs in strychnine poisoning. Symptoms are laboured respiration, abdominal pain, quick pulse, violent tetanic spasms. During convulsions the head is drawn backward and fore and hind limbs are extended. All the muscles of the body are affected, become hard and firm, after a convulsion they relax and a second convulsion quickly follows till death ends all agony.

In Tetanus.—The symptoms will resemble those of strychnine poisoning, except the lock-jaw in tetanus will be continuous whereas in strychnine poisoning the paroxysms will come at intervals.

In Ptomaine Poisoning.—Ptomaine poisoning is used to indicate "food poisoning"; the term "ptomaine" was introduced by the Italian chemist Selim to designate basic alkaloidal products formed in putrefaction.

Mytilotoxin—found in poisonous muscles is the most dangerous of known ptomaines.

Symptoms will be of nervous manifestation, vertigo, tetanic convulsions and muscular twitchings. Symptoms resemble those of epilepsy, but there will be purging and vomition.

In teething time of young puppies.—Fits may occur, examination of the gum and history of the patient will aid diagnosis.

Treatment.—No general rule can be laid down, but sedatives, rest, cold application on the head, relaxation of bowels, avoidance of exciting causes are palliatives. Other treatment should be on the lines of the particular disease of which fit is a symptom.

DISCUSSION.

President.—In his excellent short paper Mr. Roy Chaudhuri has forgotten to give the symptoms of the disease. Fits in puppies are very common in India and especially in Madras. The fits may be due to worms. We may be successful in treating the disease and we may not find worms; but later on we find that the fits continue.

Mr. Ananta Narayana Rao.—It is really a great pleasure to have heard the very able paper by Mr. Roy Chaudhuri. He has dealt with the subject fully so that there is no loop-hole to catch hold of. As regards fits due to worms my experience is that it is not short at all and I think the duration of the disease is much longer than ordinary fits. Sometimes it causes epilepsy. This may be due to absorption of toxins.

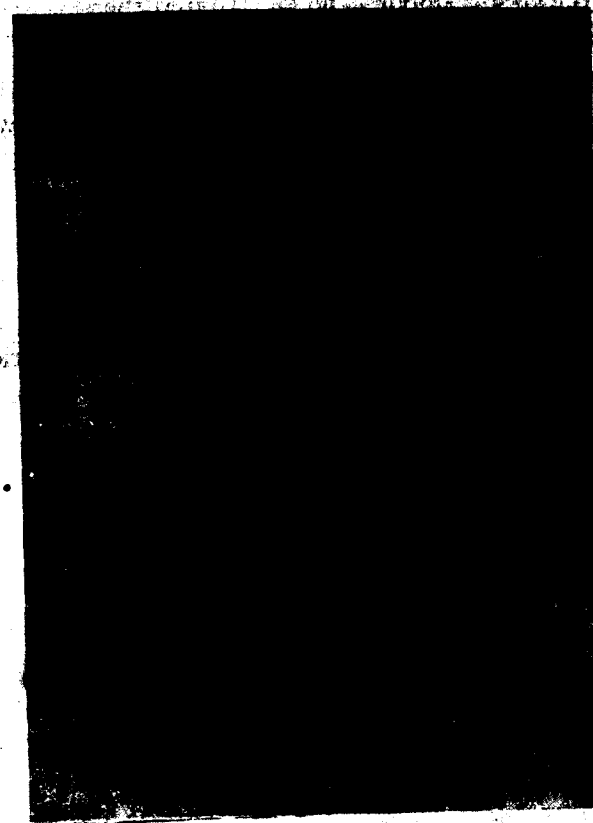
A CASE OF CYSTIC CALCULUS IN A DOG.

BY MR. R. SWAMINATHA AYYAR, B.A., G.M.V.C.

Veterinary Assistant Surgeon, Veterinary Hospital, Ootacamund.

A bull terrier dog, aged about 8 years, in an exceptionally good condition, was brought to the hospital one evening with the following history:—Frequent lameness in one or other of the limbs disappearing with little or no treatment, inordinate thirst, urine frequent and scanty, occasionally blood tinged and arched back. A casual examination revealed some tenderness over the lumbar region with no other constitutional disturbance and the animal was, therefore, kept under observation. Subsequently, a detailed examination was conducted and a hard mass was felt in the region of the bladder. This physical sign combined with the character of the urine led to a suspicion of Stone in the Bladder,

which was later on confirmed by an X-Ray examination. Surgical removal of the stone was thereupon decided.



Operation.—After the usual preliminaries were carried out in the usual orthodox fashion and the bladder washed out with sterile Boric lotion, the animal was put under chloroform anaesthesia by Dr. Rahimuddin, the local municipal veterinary officer (to whom my thanks are due for his able assistance). An incision was then made in the Linea Alba in front of prepuce, the abdomen opened and the bladder brought out and kept in position by sterile gauze. It was then opened and the calculus which was firmly adherent brought into view. The stone was carefully manipulated to avoid rupture of the bladder and slowly removed. The resulting haemorrhage was arrested by swabbing, the organ sutured with Lembert sutures and replaced. The abdominal wound was then closed—the peritonium, muscles and skin done separately. A catheter was then passed into the bladder and kept in situation to drain off every drop of the collecting urine. The animal, was thereupon, allowed to recover from the anaesthetic, which he did soon.

After-treatment.—Except for a slight post-operative rise of temperature, the patient progressed satisfactorily. The catheter was removed after the first 24 hours and the animal then passed freely clear urine. The abdominal wound was daily dressed with Tr. Iodine and Boric Iodoform. Unfortunately on the 12th day, the animal tore off all the stitches with its teeth and infected the wound. It was promptly attended to, but, all the same, the temperature shot up the same day and remained persistently high in spite of any treatment. The animal went off its feed, became quite listless and died on the early morning of the 16th day—the cause of death being probably toxæmia.

The stone which was quite big and rough weighed nearly 3 ounces. The enormous size and the comparative absence of any serious constitutional disturbance are the chief reasons for recording this case.

My thanks are due to Mr. R. Subramanian, Radiologist of the St. Bartholomew's Hospital, Ootacamund, for kindly taking the skiagram of the patient.

By MR. S. A. SASTRY, G.M.V.C.,
Veterinary Assistant Surgeon, Coimbatore.

(Presented before a meeting of the Coimbatore Division, Madras Presidency).

(1)

LAMINITIS.

On 22nd June 1923, a pony was admitted as an in-patient in the Veterinary Hospital, Coimbatore, with the following symptoms:—

Temperature 98.4° F., pain over the region of the abdomen and progression rather difficult. It ate its food all right and had a slight diarrhoea due to some quack having administered a purgative.

The diarrhoea however yielded to treatment but the animal was extremely weak and would not keep standing beyond 10 minutes at a time. He used to stand with the hind limbs drawn well under the belly and fore feet advanced.

When approached for examination or drugging, he swayed backwards and raised his toes. His pulse and respiration were normal. A fortnight later, the temperature still continuing normal and the animal feeding as usual, descension of the sole and extreme pain of both fore feet were noticed.

Diagnosis for laminitis being confirmed, 2 c. c. of adrenalin chloride solution was injected on either side of the leg at the plantars, with a view to relieve the extreme congestion of blood vessels in the feet, which was making the animal grunt and groan during progression. This had the desired effect of relieving the very acute symptoms; but as usual the pain continued. With the usual treatment the animal improved and was discharged cured on 16th August 1923.

The temperature remaining normal and the animal feeding all right as though he had no disease at all, are points of special interest to the clinical practitioner.

(2)

ACUTE GASTRITIS IN CANINE DISTEMPER.

A bull terrier was brought to me with the following symptoms:—

High fever, sores over the abdominal region and persistent vomiting. Food given, solid or liquid, was brought out within two minutes. The paroxysms were so severe that the vomitted materials were covered with streaks of blood. The usual remedies, such as Soda bicarb, Bismuth Sub-nitras, Bismuth Salicylas, Chloretone, mustard poultice to the abdomen, Dilute Hydrocyanic acid, etc., were all tried but only to be brought out immediately and thereby aggravating the affection and making the owner feel anxious about the life of his valuable pet dog.

Finding all remedial agents useless, I cut one fresh lime and squeezed the juice into 4 ounces of sour milk (butter-milk) added half an ounce of sugar and administered the whole as one draught to the patient. To my astonishment this liquid was retained and three hours after, the dog was given milk and eggs, which it took with eagerness. Next day bread, milk, and beef soup were given and the dog made an uninterrupted recovery. The dog, however, having been reduced very much and being a recently imported one, Elixir Glycero-phosphate tonic was given to prevent the dog from falling a prey to the usual and annoying sequelae, skin diseases, etc. The elixir worked wonders and the dog appeared quite fit a fortnight later.

(3)

OPACITY OF CORNEA AFTER DISTEMPER.

Dilating upon the sequelae of Distemper another interesting case may not be out of place.

A soldier's dog had opacity of Cornea in one eye and cataract was just developing in the other, as a result of Distemper.

Internally iron tonics were given and the ordinary external applications used. Noticing an aggravation of the symptoms and the entire chambers getting cloudy, Iodised Sarasaparilla, one drachm morning and evening in an ounce of water was given. Curious to see the eyes cleared up and the dog was discharged completely cured in a week.

From this I think that the sequelae of Distemper are generally caused either by the nervous shock produced during the height of the disease or to the toxins circulating in the blood and thereby poisoning it. Iodised Sarasaparilla purifies the blood, reduces the glandular affections, and clears the system of all deleterious waste products.

In cases of follicular mange and all skin affections, I have tried this medicine with a great degree of success and would very confidently recommend its use in canine affections.

BY MR. C. V. PADMANABHAN, G.M.V.C.,

Veterinary Assistant Surgeon in Charge, Veterinary Hospital, Palghat.

(Presented before a meeting of the Coimbatore Division, Madras Presidency).

I.

AMPUTATION OF PENIS IN A PIG.

A pig aged about 9 months was brought for treatment for paraphimosis, a week after the condition was first noticed.

The penis about 9 inches long, was completely paralysed, much swollen and hard. Thinking that to reduce it would be of no use, I decided to amputate it.

Applied Cocaine over the seat of operation as the owner did not want to put the animal under chloroform. Passed a dog catheter and began dissecting out the urethra and in so doing the whole muscle had to be cut through as the urethra passed right through the centre of the muscle. Naturally it began to bleed. Ligaturing the muscle was not possible as urethra could not be separated. Suturing the urethra round the muscle as is done in the amputation of penis of the horse was also not possible as the calibre of the urethra was very small. Now the difficulty arose in stopping the bleeding. Tried astringent lotions and Adrenalin Chloride solution (1-1000) over the belly near the sheath. Bleeding was controlled.

Tr. Ferri Perchloride was not used as it might burn the urethra and thereby close the passage for urine.

The second day, the sheath was syringed with Zinc Sulphate lotion, when it began to bleed again. Gave another injection of Adrenalin and left alone for 5 days without any dressing. After that period the sheath was regularly syringed with Condy's fluid and the animal was discharged cured on the 10th day.

II.

HARIALI GRASS IN SNAKE POISONING.

In Indian medicine "Kuri-mooti-ka" is considered to be an antidote for snake poisoning. Different physicians interpret different plants as "Kuri-mooti-ka." In Malabar "Kuri-Kizhangu" the root of a plant is said to be the thing. But none of these has any decided effect upon snake poisoning.

Recently it was found out from old records preserved secretly, that the Hariali grass is "Kuri-mooti-ka" and nothing else. It was subsequently tried in human beings with great success. The grass is crushed and ground well and given internally—about 2 or 3 ounces in weight. A "Chatni" or paste is also made out of the grass and applied over the region of the heart as a cardiac stimulant.

The rarity of cases of snake poisoning amongst horses and cattle is probably due to their grazing on Hariali grass now and then.

On two occasions I tried this grass on two goats suspected for snake-poisoning with success.

THE FIRST CASE.

A goat aged about 8 months was brought to the hospital with the following symptoms:—The animal all on a sudden was found in an excited condition, jumping about, with frothy discharge from the mouth and rolling of the eye-balls.

The owner suspected snake-bite as it was found in that condition in a place where snakes were frequently met with.

I could not think of any disease from the symptoms shown. I thought of trying this hariali grass. Gave internally about 4 ounces of the grass crushed and dissolved in water. Five minutes after this dose, the animal was quiet and got alright.

THE SECOND CASE.

A kid aged about 20 days. The mother and the kid were grazing near a bushy hedge, when all of a sudden the kid was found rolling in an excited condition. It was immediately brought to the dispensary when it showed the following symptoms. The animal was not able to stand up. The neck was stiff and turned to one side, eyes rolling and injected, breathing hard, and abdomen bloated.

Here also as the animal had a sudden attack without any special cause, it was suspected for snake-bite.

About one ounce of Hariali grass was crushed and given dissolved in water. Five minutes after the first dose, the animal was quiet; there was no rolling of the eyeball but the neck was in the same condition. After 10 minutes another dose was given and the third dose was left with the owner to be given half an hour after the second dose. It was done so and the kid got all right in two hours and ran up to the mother.

It is hoped that members of our profession will give this grass a fair trial whenever opportunity occurs.

Association News

THE ALL-INDIA VETERINARY ASSOCIATION,
MADRAS BRANCH.

Proceedings of the General Body Meeting of the All-India Veterinary Association, Madras Branch, held in the Veterinary College Hall on 30th December 1924.

MEMBERS PRESENT.

Mr. M. Anantanarayana Rao,	Mr. S. M. Narayanaswami Pillai
in the Chair	" T. S. Venkatesa Ayyar
" M. S. Sastry	" P. Ramachandran
" P. Thiagaraj	" A. Krishnaswami Ayyar
" T. Raghavan	" P. Srinivasa Rao
" R. Visvanatha Pillai	" L. Jagannatha Rao
" Francis Joseph	" B. V. Seshadri
" P. Venkatgovindan	" K. S. Veerabahu
" S. Seshadri Ayyangar	" N. Soundaraja Ayyangar
" T. Vinayakam	" K. A. Ramaswami Ayyar
" S. Srinivasa Rao	" G. R. Viswanathan
" T. R. Rajagopala Rao	" G. Ali Hyder

Mr. P. M. Thillanayagam	Mr. H. R. Rangaswami
" V. Krishnaswami Ayyangar	" G. P. Srinivasan
" P. Subramanyan	" M. Ramaswami Naidu
" T. A. Ratnaswami	" L. S. Parameswara Iyer
" P. A. Parthasarathi Naidu	" K. P. Doraiswami

Minutes of the last meeting held on 29th December 1923, were read and confirmed.

1. Read the Annual Report for the year ending 31st October 1924. (vide Appendix IV.)

It was proposed by Mr. Parameswara Iyer that the sum paid on freight on the pamphlets sent by the Central Association be recovered from the Central body.

Seconded by Mr. A. Krishnaswami.

Put to vote:—Twenty six voting against the proposition and 4 voting for it. The proposition was thrown out.

The Report was adopted.

2. Resolved—all standing—that condolence letters be sent by the Secretary to the bereaved families of Messrs. Brown, Rajappa, and Ramasubbu.

3. Mr. A. Krishnaswami moved that a sum of Rs. 200 be given to the Service Association as an initial contribution from the funds of the Madras Branch of the All-India Veterinary Association and that a further recurring annual contribution of Re. 1 per member be paid to it.

A point of order to the effect that there was no letter of requisition from the Service Association for this grant, was raised by Mr. S. M. Narayanaswami Pillai.

The President finding the point of order to be sound, ruled that the proposition was out of order.

4. It was proposed by Mr. Parameswara Iyer that the Annual subscription of the Madras Branch Association be reduced from Rs. 5 to Rs. 3. This to take effect from the current year.

Seconded by Mr. P. Sreenivasa Rao.

Supported by Mr. T. Vinayaka Mudaliar.

(Carried unanimously)

5. It was unanimously resolved that the Secretary may take necessary steps to dissolve the old Veterinary Graduates' Association, Vellore, and to rename the same as the Madras Branch of the All-India Veterinary Association. That the Registrar, Vellore, be informed of the same, and that the present Madras Branch need not be registered.

Moved from the Chair and carried unanimously.

6. It was resolved that a Tea Party be given to the President, Delegates to the All-India Veterinary Conference and friends at the end of the sittings of the Conference.

7. Proposed that Mr. M. Ananta Narayana Rao be re-elected as President.

(Carried unanimously).

The following Office-Bearers were elected:

Secretary: Mr. T. Rajagopala Rao.

Joint Secretary and Treasurer: Mr. V. Janakiram.

MANAGING COMMITTEE

Messrs.—

T. Vinayakam

M. S. Sastry

A. Ramalinga Mudaliar

P. Srinivasa Rao

M. Adimula Mudaliar

S. Seshadri

P. S. Kuppusawmi

R. Swaminathan

Messrs.—

T. Raghavan

A. Castelino

K. A. Ramaswami

P. Thiagaraj

L. Gangadhara Rao

M. Ramaswami Naidu

L. S. Parameswaran

H. R. Rangaswami Ayyangar.

The President, Secretary and Treasurer, Ex-Officio members.

8. Resolved to place on record the valuable services rendered by Mr. Vinayakam as Secretary.

M. ANANTA NARAYANA RAO,
President.

30th December, 1924.

APPENDIX IV

THE ALL-INDIA VETERINARY ASSOCIATION,

MADRAS BRANCH.

Report of the Managing Committee, for the Fourth Year ending 31st October 1924.

Membership:—The year opened with 208 members on the rolls, but there were only 206 at the end of the year as there were 2 casualties during the period under reference.

Meetings:—Two meetings were held during the year under report. The first meeting was the annual general body meeting held at the Madras Veterinary College on the 28th December 1923, when thirty-one members were present. Mr. Garudachar the delegate from the presidency of Bombay attended the meeting as a visitor. The question of starting a Service Association was taken up at this meeting and was referred to a Special Committee who sent in their report the very next day.

The second meeting was an extraordinary meeting of the General body held on 29th December 1923, to consider the above report. Thirty-two members were present and it was unanimously resolved to start a Service Association.

The usual Easter meeting was not held during the year under report as per decision of the Managing Committee, since it was thought that it may enable larger number of members to attend the All-India Veterinary Conference this year.

Professional Work:—As in previous years the following professional papers from our members were presented at the Provincial Veterinary Conference held during the same week.

1. "Observations on the Trematode Cercariae of Madras" by Mr. M. Ananthanarayana Rao, G.M.V.C.

2. "Sterility" by Mr. K. V. Raghavachari, G.M.V.C.

3. "Notes on infection" by Mr. G. R. Visvanathan, G.M.V.C.

4. "Papillomata or warts on the mucous membrane of the buccal cavity in dogs" by Mr. P. Margabandhu Mudaliar, G.M.V.C.

5. "Some observations on the use of the Burdizzos, castrator" by Mr. T. A. Ratnasami, G.M.V.C.

Branch Associations :—The Coimbatore Branch of this Association held one meeting on 22nd June 1924. The following professional papers were read at the meeting :—

1. Amputation of penis in a pig. 2. The cure of snake poisoning by Hariyali grass—by Mr. C. V. Padmanabhan.

Mr. S. A. Sastry read papers (1) on the use of Antimonium tartarum (a) In nasal granuloma, (b) Epithelioma of eye, (c) Cancer of horn, (2) Saline injection in ophthalmic practice, (3) Intestinal lavage in canine practice.

Delegation :—Due to the inability of Mr. M. Ananthanarayana Rao, the President of our Association, to attend the last All-India Veterinary Conference at Lucknow as originally arranged, as it collided with the annual examination of the Madras Veterinary College, Mr. G. R. Visvanathan, the next elected representative undertook to attend the Conference. But as many matters of vital importance such as reduction of provincial contribution to the Central Association, the starting of the All-India Veterinary Journal, the question of an All-India Deputation, the question of changing the Office of the Parent Association and inviting the next Conference to Madras, were coming up before the Conference, the Managing Committee on the request of the General Secretary thought it fit to send the Secretary of our Association also to attend the Conference. These two delegates were instructed to attend the Bombay Provincial Veterinary Conference also at Surat, on their return journey. The speeches delivered by our delegates at the last All-India Veterinary Conference were published in the Indian Veterinary Journal.

The Royal Commission :—On representation from our Association we were permitted to submit our Memorandum to the recent Royal Commission on superior services. In consultation with many members of our profession the Memorandum was prepared and submitted, and it was duly acknowledged by the Commission.

Deputation :—As per Resolution No. 9 of the last Provincial Conference a Deputation headed by Mr. V. P. Subramanya Mudaliar was arranged by the Committee to wait on the Hon'ble Minister for Development, Madras, but it had to be given up for want of official support, and the refusal of the Government to receive the Deputation on the ground of the Association not being recognised. But the Government had asked for an advance copy of our representations, which we

submitted in due time. A copy of our representations is published in the Indian Veterinary Journal.

The Indian Veterinary Journal :—It is gratifying to record that Madras has been honoured with the work of editing the Indian Veterinary Journal, the Official Organ of our Parent Association. As many as 175 of our members have subscribed for the Journal. The remaining few also, the Committee are glad to note, are slowly coming under the list of subscribers.

Finance :—A statement of Receipts and Expenditure is attached to this report. The submission of monthly statement of accounts to the members of the Managing Committee greatly facilitated the work of the Committee.

Remarks :—The Committee wish to place on record the fact that this Association is making rapid strides in the fulfilment of its objects. From small beginnings only four years ago, it has taken deep root and grown into a strong organisation and promises to be a medium of great utility to the profession. To those who are impatient about immediate gains, the Committee wish to point out the fact that it took the Sub-Assistant Surgeons, 35 years of sustained agitation to get the present grade. It is too late in the day to need any necessity of impressing on the minds of our members the immeasurable advantage of having such an independent Association as ours. If this Association maintains the present lines of working, the Committee are of opinion that the day may not be far off when the profession can look back with pride, that all its efforts had not been in vain.

The Committee wish to record their thanks for continued co-operation from all members of the profession.

Statement of Accounts of the

ALL-INDIA VETERINARY ASSOCIATION, MADRAS BRANCH,
FOR THE YEAR 1923-24.

Beginning from 1st November 1923, to the end of October 1924.

No.	Particulars.	Receipt.	No.	Particulars.	Expenditure
		Rs. A. P.			Rs. A. P.
	Closing Balance of 1922-23	... 453 15 5	1.	Expenses of the two delegates to the Lucknow and Surat Conferences	... 270 3 3
1.	Subscription in 1923-24 and donation	... 788 13 9	2.	Last Provincial Conference expenses	... 135 11 6
2.	Savings Bank Interest received	... 9 4 7	3.	To the Editor, Indian Veterinary Journal, being contribution towards the Central Association	... 100 0 0
3.	Received from Mr. M. S. Sastry	... 5 3 0	4.	Deputation expenses	... 11 12 0
			5.	Subscription for Veterinary Journal	... 15 13 0
			6.	Subscription to Central Association, Agra	... 5 9 0
			7.	Branch Association expenses	... 8 8 8
			8.	Printing charges	... 154 5 0
			9.	Stationery	... 31 5 9
			10.	Postage	... 59 1 6
			11.	Trainage and railway freights	... 67 14 0
			12.	Conveyances	... 16 3 9
			13.	Miscellaneous	... 1 15 3
					877 13 0
	Total receipt for the year 1923-24	... 803 5 4		Balance	... 379 7 9
	Grand total	... 1,257 4 9		Grand total	... 1,257 4 9

(Sd.) V. JANAKIRAMA IYER,
Joint Secretary and Treasurer.

Communications

NEW YEAR GREETINGS.

By Mr. AMBAY PRASADA MATHUR, G.P.V.C.,
Veterinary Assistant Surgeon, Hamirpur, U.P.

Gentle readers, the year 1924 which gave birth to our Magazine has finished its course. The new year has set in and we hope to see many happy things in its womb. Our little Magazine, though in a nascent state, promises to be the strongest mouthpiece of the Indian Veterinary Service in the long run. Just as one year is bound indissolubly to another in ties of love and friendship, so we expect to bring all the scattered Veterinarians in one string of love and friendliness. We long to see more and more of that exquisite love generating in our service which is invariably found in a good family.

Happy be the new year to all of us! We have begun with the happy New Year and hope to end with the happy eve of the "Christmas Tide"!

VETERINARY SERVICE IN MOFUSSIL.

By Mr. AMBAY PRASADA MATHUR, G.P.V.C.,
Veterinary Assistant Surgeon, Hamirpur, U.P.

The utility of a Veterinarian is not demonstrated fully to the general villager who is the real owner of cattle in India.

The main reasons, in my opinion, for this state of things are as follows:—

1. Inadequate number of Veterinary Assistant Surgeons in a particular locality.

2. Insufficient popularity in the locality to which they are attached.

India is primarily an agricultural country and agriculture here depends entirely on cattle. Every true Indian should evince an intelligent interest in the well-being of cattle, whether in health or disease. Often epidemics go on unchecked for months together, sweep thousands of cattle and thus prove a colossal drain on the national wealth of India. Nobody can under-rate the Veterinary needs of the country if he has the good of India at heart. Surely it is the Government's duty towards the cultivator to provide treatment for his sick cattle and to place within his easy reach preventive treatment and measures against the

spread of contagious diseases. This requires an adequate district Veterinary staff. If one Veterinarian for each *Pargana* (sub-division of a *tahsil*) is allowed, Veterinary work would be much facilitated. Veterinary work with a view to reach the stage of efficiency requires more men and to meet this demand a most reasonable and equitable way could be reached. The solution of this problem is plain in the following words: "Allot all the income derived from cattle to the good of the cattle themselves." Incomes derived from slaughter houses, cattle-pounds, *nakhas* (a place where transaction in birds is carried on), roadside grazing plots and other grazing grounds, sale of animals during fairs and cattle huts can be safely counted under this head. Really Veterinary department's claim to these is undisputed.

The average villager is slow to adopt new things; country people here are blind followers of one another. One would agree to any sort of treatment in the case of one's animal provided it is adopted or recommended by the influential man or *lumbardar* of the spot. If people of status in the *mofussil*, especially the members of the district board or local boards would come forward to help the Veterinary department—a service to the motherland in the real sense of the term—much work would be accomplished with the least inconvenience and trouble. Weekly fairs and such other occasions, when large concourse of people of adjoining villages gather, should be utilised for arranging lectures and discourses on different Veterinary subjects. If these can be illustrated by means of lantern slides, it would be to the best advantage of the concerned. People may be informed beforehand to gather in a certain place and the veterinary doctor be introduced to the audience by the *zamindar* or such other well-known man in the locality. The doctor may take up any Veterinary subject and try to approach the heart of the people in a missionary spirit, by telling them simple and practical hints which constitute First Aid in Veterinary science. This kind of introduction would create a loving link between the doctor and the people of the locality. The more the Veterinary doctor is known and relied upon, the more will be the interest of the people in the doctoring of their animals. Consequently, the demand for a scientific and humane treatment would increase and people would clamour for more Veterinarians. This object can only be fulfilled by increasing the staff and thus multiplying the opportunities of mixing with the people. Punjab has taken the lead in serving the needs of the poor dumb animals. People there have begun financing Veterinary hospitals, just

as they do other charitable institutions. This is a real co-operation with the Civil Veterinary Department. In these and other provinces it is not that the people are apathetic to animals but there is no organised and regular effort to draw their attention and make them open their purse strings. For, people spend considerable amounts of money on *Gowshalas* and *Pinjrapoles* which are at present worked on unprofitable and unprogressive lines. If I may be excused for the digression I may urge the Government to bring all such *Gowshalas* maintained on public money under some sort of legislation in order to make them really useful.

THE THIRD ALL-INDIA VETERINARY CONFERENCE (MADRAS) SOME IMPRESSIONS.

We reached Madras by the Calcutta Mail on the morning of the 28th December last, with the President-elect, Mr. A. D. MacGregor. We got a very cordial reception on our arrival at the station. A number of students of the Madras Veterinary College wearing badges, with the Chairman of the Reception Committee, Mr. K. Kylasam Iyer and various other members of the Committee were present. Mr. K. Kylasam Iyer garlanded Mr. MacGregor. Mr. Hurley of the Madras C.V.D. was also there to receive the President. He left with him amid cheers from the crowd. Mr. MacGregor was the guest of Mr. Hurley during his stay. We were taken to the College Hostel and were put up there very comfortably. Mr. Vinayaka Mudaliyar with his devoted assistants rendered us all help and tried their best to meet our creature comforts. We passed a few happy days in company with professional brothers gathered from distant parts of India. If the All-India Association has done nothing else, it has at least on its social side afforded an annual meeting place of all Veterinarians in India either in service or in private practice.

The Conference opened on the morning of the 29th December in the Veterinary College Hall, the gathering was large and the spacious hall was packed to its full. Many distinguished gentlemen attended including the Hon'ble Minister in charge of the Veterinary Department and the Sheriff of Madras. Every one missed very much Mr. Aitchison, the well-known Principal of the College, whose achievements for the profession and the College in Madras, were visible on every side.

Mr. K. Kylasam Iyer, Chairman of the Reception Committee, in a nice speech welcomed the members. I then proposed Mr. MacGregor

to the Chair and was seconded and supported by Mr. Ananta Narayana Rao of Madras and Rao Sahab P. N. Das of Bihar and Orissa.

Mr. MacGregor after being garlanded with a very artistic and valuable lace garland, delivered his address. It was heard with rapt attention. He took over one and a half hours to finish his speech. He touched on all the important matters affecting the profession. Specially his plea for improved Cattle Breeding was very much appreciated. There was a ring of sincerity pervading his noble speech. The delivery was impressive and the knotty and debatable points of the speech, he explained in his own inimitable style and when he sat down, the burst of applause from all sides indicated that the speech had gone home to the audience and every one was greatly pleased with it.

The second day was set apart for professional papers and Rai Sahab Dibaker Dey of Bengal opened with "Rinderpest" paper. It was a clever one containing the experience of a lifetime of study of this terrible disease, which causes the greatest economic loss to the country; it received careful consideration. There followed a discussion on "Simultaneous Serum Method", "Serum alone method" and the "treatment by drugs" by Mr. K. Kylasam Iyer, Mr. B. K. Badami and Mr. Parameswaram Iyer. The President then in a few words summed up the debate pointing the lines on which the profession can best help to combat this scourge.

The paper on "Haemogregarine Canis" by Mr. Ananta Narayan Rao was next read and its originality was then contested by Mr. Parameswara Iyer. Mr. Rao then replied. The President then congratulated both the writer and the critic and for further elucidation, requested professional opinion on the paper after its publication in the journal.

A few other papers were then read. "Weaning and Rearing of Calves" by Mr. M. Jamaluddin of Pusa Research Institute was greatly appreciated.

The third day was devoted to general resolutions affecting the interest of the profession. At the suggestion of the President, the remaining portion of the day was spent to finally settle the best ways and means of forming "Veterinary Council" and the tactful way, in which he managed this, evoked admiration from all.

In the afternoon, a garden party was given by the Madras Association in honour of the President at which many distinguished ladies and gentlemen of Madras attended and an enjoyable evening was spent. It

may be said without any fear of contradiction, that the Madras Session was a great success and the Conference added impetus to the working of the All-India Veterinary Association.

Lastly, the indefatigable General Secretary, Syed Raza Hussain, Mr. B. K. Badami, Rai Sahab P. N. Das, Mr. Mudaliyar, Mr. Srinivasa Rao, Mr. K. K. Iyer, and the charming band of volunteers with their captain were responsible for the success of the session. A word of praise is due to them all.

G. N. ROY CHAUDHURY.

Review

Diseases of the Horse's Foot, by H. Caulton Reeks, F.R.C.V.S., Second Edition.

Published by Baillière Tindall & Co., 2, Henrietta Street, Convent Garden, London: Size Demi-Octavo, Pages XX+555, Illustrations 125, Price 21/- nett.

The work thoroughly attains the aim of the author, which is stated to be "to refresh the memory of the practitioner and to make the work a useful textbook for the student". Every chapter contains a fund of useful information and where all are good it is very difficult to mark out any for special praise; yet we may invite special attention of the readers to those on General remarks, on operations on the Foot, Faulty Conformation, Inflammatory affections of the Keratogenous membrane and Diseases of the Joints. It seems hard for the purpose of up-to-date knowledge of the Diseases of the Horse's Foot, to hit upon a work better suited than Mr. Caulton Reeks' second edition of the book. The book is profusely illustrated and the printing and get-up are excellent.

We feel no hesitation in saying that it is a volume well worth the careful perusal of not only the profession but also those interested in the Horse.

The Indian Veterinary Journal.

A quarterly record of Medicine, Surgery and of
General Veterinary Intelligence.

Devoted to the Cause of the Veterinary Profession
in the Indian Empire.

EDITED BY

P. SRINIVASA RAO, G.M.V.C.,

Veterinary Surgeon, Madras.

CONTENTS:

Original Articles, Reports of interesting cases, Editorial, Veterinary Society Reports, Extracts, Reviews and Notices of Books, New Veterinary inventions in Medicine and Surgery, Therapeutic Notes, Service Notes and Correspondence.

Amongst the Contributors to the Indian Veterinary Journal are some of the most eminent men in the profession in India and abroad.

The Indian Veterinary Journal circulates among Veterinary men of all classes and ranks in Civil, Military, Municipal, Local Fund and Mission Services, Private Practitioners, etc.

The Indian Veterinary Journal visits Government, Municipal and Local Fund and Private Hospitals, Dispensaries, Charitable Institutions, etc., etc., in India and abroad.

The Indian Veterinary Journal affords a very powerful medium for all advertisements appealing to the Veterinary profession in these countries.

It is especially suitable for advertisements relating to:—

Drugs	Soaps	Optical Goods
Fine Chemicals	Veterinary Books	Veterinary Publications
Surgical Instruments & Dressings	Hospital Furniture	Dietetic Preparations
India Rubber	Appliances	Laboratory Fittings, Etc.
Surgical Goods	Proprietary Medicines	
Disinfectants	Toilet Goods	

Advertisements of a select character only are admitted into the Journal.

All correspondence relating to Advertisements should be addressed to:—

The Editor, 18, Wallajah Road, Mount Road, Madras,
Remittance and Cheques should be made to the Editor.

N.B.—The Editor reserves the right to exclude from the Journal any advertisement which, in his opinion, is contrary to the ethics of the Veterinary profession.

Size of Printed Page of the Journal.

Scale of Charges for Advertisement:—

Whole page per insertion	...	...	...	Rs. 15
Half page do.	...	...	...	" 8
Quarter page do.	...	...	...	" 5
One-eighth page do.	...	...	...	" 3

1. Payment must be made **in advance**, except when approved accounts are opened and in such cases all bills are to be paid within 15 days of presentation.

2. The Editor declines any responsibility in the event of one or more of a series of advertisements being omitted from any cause whatever, and he also declines to account any responsibility for damage to or loss of blocks.

3. No guarantee is given that an advertisement will appear in any special issue, but care will be taken to meet the advertiser's wishes.

4. No deduction may be made from advertisement bills on account of alleged defective insertions; claims on such account will be adjusted by extra free insertion.

5. All extra space used during the period of the contract will be charged *pro rata* to the existing contract.

6. No advertisement contracted for a certain period shall be withdrawn by the advertiser before the expiry of such period and if withdrawn shall be charged at a rate at the discretion of the Editor.

7. All sums due under the contract shall be recoverable either from the advertiser or from the Agent.

VOUCHER COPY FREE.

SPECIMEN COPY FREE.

Customs duty, to and fro postage on blocks, cost of mounting unmounted blocks, preparing blocks from matrices and bank commission on cheques will be charged to the advertisers' account.

