

444

The Indian Veterinary
Journal

1946 - July

VOL. 23. NO. 1



JL
KZm2, N24
N46.23.1
79822

Plate No. 4

Vol. XXIII, No. 1

THE ALL-INDIA CATTLE SHOW

Auction Sale of Pedigree Cattle.



H. E. Sir EVAN JENKINS, Governor of the Punjab,
Distributed the Challenge Cups at the Auction Sale of Pedigree Cattle held at Amritsar.
Picture shows Ch. Shauq Mohd. with the Sir Jogendra Singh Challenge Cup
won by his Sahiwal heifer "Bachi" sold for Rs. 1,300/-



H. E. Sir EVAN JENKINS, Governor of the Punjab,
Distributed the Challenge Cups at the Auction Sale of Pedigree Cattle held at Amritsar
in April 1946. Picture shows the Punjab Governor with Ch. Shauq Mohd.
whose Sahiwal heifer "Bachi" was sold for Rs. 1,300/-
and won the Sir Jogendra Singh Challenge Cup.

Ram Lila grounds, a most central place between Delhi and New Delhi. Delhi Municipality provided free water supply and conservancy staff. 11 Sahiwal bulls, 11 heifers and 10 cows were received from Allahabad Cattle Farm and Jahangirabad Farm in Multan District, Punjab. 15 Hairana bulls, 3 Heifers, 10 cows and 2 Murrah buffaloes were received from Rohtak District, Punjab. Out of these the following animals were sold at the prices shown against each :—

SAHIWAL BULLS.

S. No.	Auction No.	Price for which Sold.
1.	1.	Rs. 500
2.	2.	550
3.	3.	800
4.	4.	325
5.	5.	550
6.	6.	380
7.	7.	350
8.	9.	390
9.	10.	350
10.	11.	350

SAHIWAL HEIFERS.

11.	12.	415
12.	13.	780
13.	14.	400
14.	15.	810
15.	16.	760
16.	17.	725
17.	18.	755
18.	19.	1,095
19.	20.	625
20.	21.	880
21.	22.	1,200



SAHIWAL COWS.

22.	23.	620
23.	24.	530
24.	25.	875
25.	26.	740
26.	27.	625
27.	28.	575
28.	29.	850
29.	30.	665

KLM2, N2C
N4V230

52

THE INDIAN VETERINARY JOURNAL

SAHIWAL COWS.

30.	31.	1,000
31.	32.	1,000

HARIANA BULLS.

32.	33.	500
33.	34.	400
34.	35.	730
35.	37.	300
36.	38.	500
37.	39.	800
38.	40.	470
39.	43.	500
40.	44.	600
41.	46.	480
42.	47.	650

HARIANA HEIFERS

43.	48.	375
44.	49.	400
45.	50.	900
46.	50 (a)	180

HARIANA COWS.

47.	52.	295
48.	59.	405

MURRAH BUFFALO COWS.

49.	68.	600
-----	-----	-----

This will show that the highest price obtained i. e Rs. 1,200 in the Sahiwal breed was for a heifer. Similarly in the Hariana breed, the highest price obtained i.e. Rs. 900 was for a heifer. The average price for a Hariana bull and Sahiwal cow was Rs. 539 and Rs. 748 respectively. The average price obtained for Sahiwal breed was Rs. 660 and for Hariana Rs. 499. A glance at these figures will show that the demand for Sahiwal heifers, cows, Hariana heifers and Hariana bulls was good but there was not much demand for Sahiwal bulls. On account of delay in transport of animals, they could not have sufficient rest before being put up for auction. An encouraging feature was that not only the breeders from Delhi Province but from other parts of India, e.g. U. P., C. P., Punjab, Khairpur State attended the auction sale. The show ground was visited for the last two days by thousands of people who made interesting enquiries and showed keen interest. The Hon'ble Chief Commissioner, Delhi Province declared

the sales open in the morning and was taken round the animals by the Chairman. In the evening His Excellency the Viceroy so very graciously honoured the Society with his visit and was received by the Chairman and members of the Executive Committee. His Excellency was taken round the animal stalls and was pleased to give away the Williamson Challenge Cup to one Bhag Mal a petty Zamindar of Rohtak District who bred the heifer that fetched the highest price in the Hariana breed.

The second auction sale was held at Amritsar on 19th April 1946 at the Cattle Fair Grounds. As a result of the experience gained at Delhi auction sales the the number of Sahiwal bulls was reduced to 4 and more heifers and cows were put up for auction. The following animals were included in the auction sales and prices obtained are shown against each animals:—

SAHIWAL BULLS.

S. No.	Auction No.	Price for which Sold.
1.	3.	Rs. 400
2.	4.	450

SAHIWAL HEIFERS

3.	5.	1,300
4.	6.	425
5.	7.	450
6.	9.	400
7.	10.	575
8.	11.	500
8 (a)	8.	450

SAHIWAL COWS.

8 (b)	17.	475
9.	18.	450
10.	19.	575
11.	21.	750
12.	22.	810
13.	23.	625
14.	24.	425
15.	25.	900
16.	26.	405
17.	27.	910
18.	28.	925
19.	29.	925
20.	30.	315
21.	31.	410

200

Vol. XXIII

266

JULY, 1946

No. 1

THE
INDIAN VETERINARY JOURNAL

Published Bi-monthly

(THE JOURNAL OF THE ALL-INDIA VETERINARY ASSOCIATION)

26, WALLAJAH ROAD, MOUNT ROAD P.O., MADRAS (S. India)

HHH

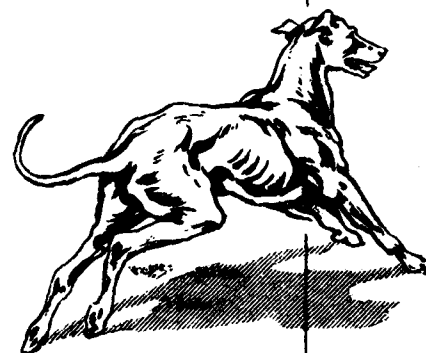
8 NOV 1946

'CESTARSOL'

TRADE MARK

TRADE MARK

Arecoline-Acetarsol



'CESTARSOL' is a simple and effective anthelmintic in the form of small tablets for the treatment of taeniasis of dogs and cats.

The best effects are obtained when treatment is carried out two or three hours after a light meal. The tablets readily dissolve when swallowed, and the drug takes effect as a rule in twenty-five to forty minutes. No additional purgation is required as 'CESTARSOL' has a purgative as well as an anthelmintic action.

'CESTARSOL' is supplied as follows:
Containers of 12 x 18 mgm. tablets
.. 100 x 18 mgm. ..



MAY & BAKER LIMITED
d by MAY & BAKER (INDIA) LIMITED

KZ mR, N24

N46.23.1

79822



Coramine, pyridine-beta-carboxylic acid diethylamide, is the world-famous analeptic with dual stimulating effect on the nerve centres, regulating circulation and respiration. It has low toxicity and no cumulative effect.

AVAILABLE IN
AMPOULES, TABLETS & LIQUID.

SOLE IMPORTERS:

CIBA (INDIA) LIMITED.

PHARMACEUTICAL DEPARTMENT,

P. O. Box 479 - BOMBAY.



RAVI BUFFALO HEIFERS

22.	39.	400
23.	40.	500
24.	41.	525

RAVI BUFFALO COWS

25.	44.	900
-----	-----	-----

This will show that at Amritsar the highest price fetched of Rs. 1,300 was also for a Sahiwal heifer. The average price obtained for Sahiwal and Ravi animals was Rs. 602 and Rs. 581 respectively. This shows that the average price obtained for Sahiwal breed or Delhi was higher by Rs. 58 than that obtained at Amritsar. The demand for bulls of Sahiwal and Ravi breeds was not encouraging. Amritsar Municipality provided the following facilities free of any charge;—

- A site for holding the auction sales.
- Arrangements for tying and fencing for about 50 animals.
- Feeding arrangements for about 50 animals for about a week.
- Five tents fully furnished and 12 chhouldaries.
- Four bhishties and four sweepers for a week.
- Arrangements of light, water and conservancy staff.

The animals were exhibited at Amritsar 4 or 5 days before the date of auction and that was responsible for a lot of publicity. His Excellency the Governor of Punjab honoured the Society with his visit on the last day and was received by the Chairman and other members of Executive Committee and was taken round the animals auctioned. The Chairman while requesting His Excellency to give away the Challenge Cups made a very impressive speech which was greatly appreciated by all concerned. The following 2 Challenge Cups were won by the breeders.

1. Sir Jogendra Singh Challenge Cup won by Ch: Shauq Modh. Allahdad Cattle Farm, Jahania, (Dist: Multan)
2. Walker Challenge Cup won by Rai Sahib Mahla Singh, Lessee, Bahadurnagar Buffulo Farm, P.O. Youngpur. (Distt. Multan)

Delhi }
21-5-1946 }

RAI SAHIB M. R. SHARMA, P.V.S.,
Secretary,
All-India Cattle Show Committee.

THE THIRD AKOLA DISTRICT CATTLE SHOW

23rd to 25th January 1946.

Wednesday the 23rd January '46:—This show, the third of its kind, was held at Murtizapur, under the auspices of the District Livestock Improvement Association in a spaciouly erected pandal. People from all walks of life streamed in their thousands to the spot, where scores of, some of the best specimens were exhibited, in recognition of the fundamental part which the latter have been playing for the happiness and comfort of man since his advent on this planet. From the prince of the paradise, down to the dweller of the desert and vandal of the wilderness, each in his own sphere, has acquiesced certain units of this creation in adorning the theme of poem and story for countless generations and wrapping them in an aurora of sentiment and romance that has placed them on a par with legendary figures.

Nation building departments, such as Veterinary, Agriculture, Public Health, Animal Husbandry, and Dairy etc. were allocated stalls to familiarise the people with their respective activities.

S. K. Banerjee, Esqr., I.C.S., the Deputy Commissioner, Akola was received and introduced to the members of the reception committee.

In strains, sweet and sonorous, the daughters of Bharat welcomed the guests and the gathering to the accompaniment of melodious music played by the Song Publicity Organisation.

Mr. V. N. Jamadar, the President of the Reception Committee, in his characteristic simple style, welcomed the guests and the gathering and alluded to the steps, the livestock improvement Association is taking for the improvement of livestock. He laid special emphasis on the difficulties encountered by an average cattle owner for the procurement of concentrates and other cattle feeds despite the Government regulations, and pleaded for State intervention to retrieve the situation.

He exhorted the people to emulate the example set by those saints and sages, who sanctified the very name and served the dumb creation, which in turn formed the back-bone of their prosperity and power.

He then requested the Deputy Commissioner to declare the show open.

S. K. Banerjee, Esqr., I.C.S., rose and delivered his inaugural speech expressing delight at what he saw of the Show and the enthusiasm of the people. He promised to move the authorities in respect of cattle feeds, at the same time inviting the co-operation of the traders.

He then declared the show open.

In the night, for the first time, in the history of the Cattle Shows, the musicians and singers of the Song Publicity Organization under the able direction of Mr. P. S. Tripathi, gave performance of their talents. A mammoth gathering including ladies and children had the occasion to feast their finer feelings and become the automatons to the thrilling tunes of music.

The potential that poetry and music hold as a vehicle for the cultural and spiritual regeneration of mankind is undisputedly immense.

In a reflective mood and silent musings from an easy-chair, one addresses himself to the thought, that, but for Mr. Shahi's inspiring guidance and the efficient execution thereof by Mr. Sundaram, the consummation of such happy moments would not have occurred and occupied a prominent place in the biography of the individuals.

Thursday the 24th January 1946 :—Chakada races and milk yield tests, as usual provided attraction to a large section of people.

Instructive and practical demonstrations were given at the stalls to the inquisitive and eager crowds by the officers in charge.

Sawatram dairy of Akola, a private concern, which was allocated a stall, demonstrated the modern methods of making milk products and many of its exhibits came out with flying colours in the competition.

Selection of the best exhibits for the award of prizes, was made by a Judging Committee of non-officials assisted by Officials Messrs. Abdul Azeem and Khond.

In the evening, the Field Publicity Organization headed by Mr. Wagh held cinema show demonstrating the activities of the nation building enterprises.

Friday the 25th January 1946 :—Ploughing competition with improved types of implements was held and keenly contested.

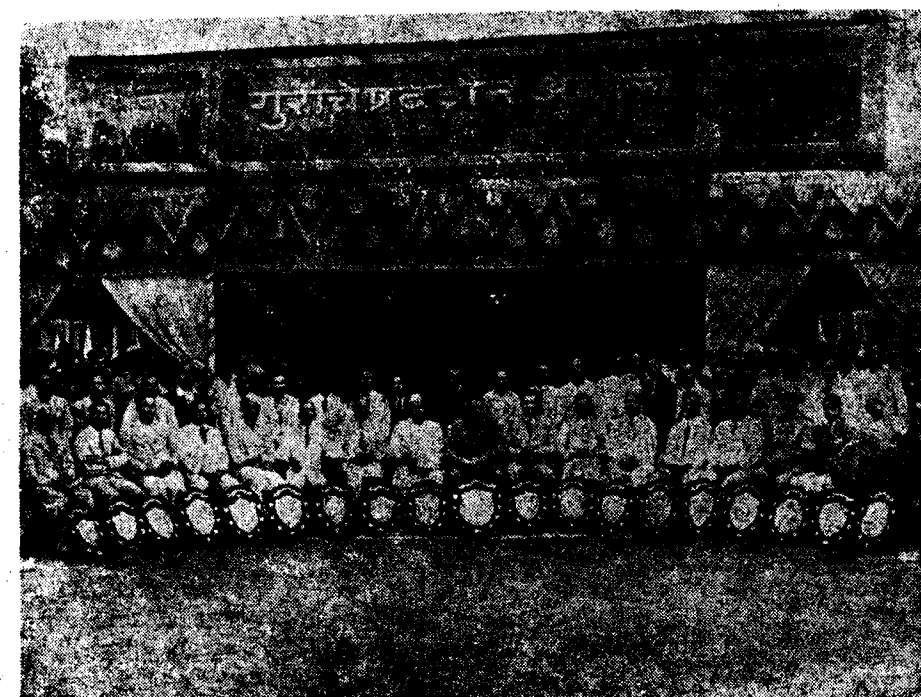
Scouts of the Government English Middle School under the able baton of Mr. N. J. Joglekar entertained the audience with impressive drill.

In the evening the concluding phase of the show was staged in a specially erected and tastefully decorated "Shamiana". The elite of the town assembled in large numbers. The colourful costumes of the graceful ladies and smart suits of the gents, added attraction to the scenic beauty of the surroundings. With pindrop silence pervading, the song and music of the concert provided and produced a salubrious atmosphere, which can find its rival only in the magic of Alaudin's Lamp.

THE 3rd AKOLA DISTRICT CATTLE SHOW



Opening Ceremony of the 3rd Akola District Cattle Show.



Prize Distribution Ceremony of the 3rd Akola District Cattle Show.

Published Bi-monthly
Vol. XXIII

July 1946
No. 1

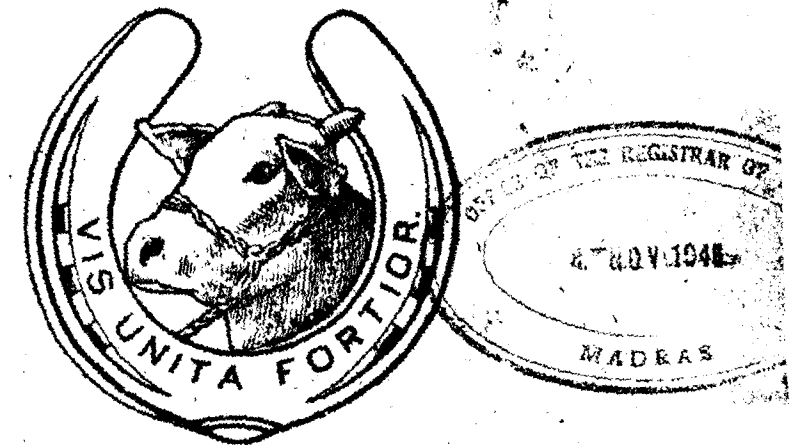
The Indian Veterinary Journal

(The Journal of the All-India Veterinary Association)

MADRAS
1-8 '46.

The Editorial Board regrets the delay in sending the journal to the subscribers due to labour difficulties. All attempts are being made to expedite future issues and our subscribers are requested to send their subscription for Vol. 23 by money order.

THE INDIAN VETERINARY JOURNAL.



Editor:

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

Veterinary Surgeon, Madras.

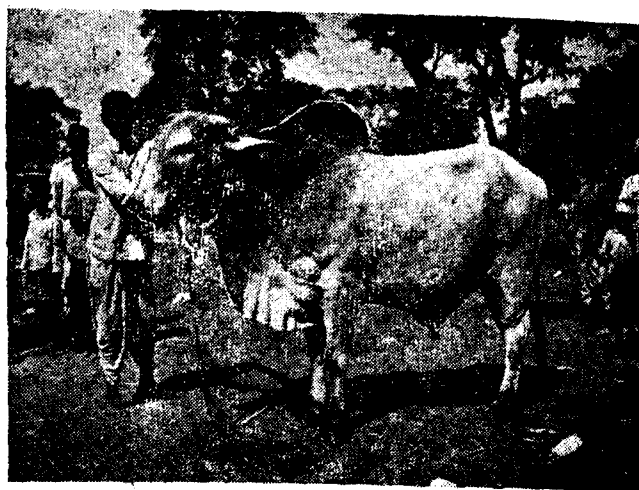
Office: 26, WALLAJAH ROAD, MOUNT ROAD, MADRAS (S. INDIA)

PRINTED AT

THE PARAMOUNT PRESS, (PROPRIETORS: JAYA & CO.)
HIGH ROAD, TRIPPLICANE, MADRAS

1946

THE 3rd AKOLA DISTRICT CATTLE SHOW



STUD BULL
(Montgomery)



STUD BULL
(Bhil Dongar)



STUD BULL
(Khamgaon breed)

STUD BULL
(Hissar breed)

Informative and instructive lectures were delivered by the officers of the departments that participated in the Show. Mr. V. S. Khaire, the Secretary of the Association read his illuminating report of the last show and the progress made during the previous years.

M. I. Rahim, Esqr., I.C.S., the well-wisher of the Livestock movement in Berar in a brief speech expressed delight at the orderly arrangements made by an efficient management and concluded by extending grateful thanks to all the officials and non-officials who were instrumental in making the show a success.

A large number of prizes, excluding 20 rolling shields, worth about Rs. 1300/- were awarded at the hands of the Commissioner. Mrs. Laddibai the winner of the Championship shield was awarded a cash prize of Rs. 50/- in recognition of the service, this aboriginal lady is rendering by rearing best breeds of livestock to the basic livestock industry of India.

Mr. V. N. Jamadar in whom the virtues of hospitality and simplicity, were admirably blended, in a suitable speech thanked the President, the guests, and the congregation in general for the interest they had evinced in the show and concluded by paying handsome tributes to the officers of all the Departments.

Messrs P. R. Dass, and S. S. Venkatesan, Veterinary Assistant Surgeons Murtizapur and Karanja, respectively strove hard for the success of the show.

Mr. V. N. Jamadar was "at Home" to a large number of guests, in honour of the Commissioner, Berar.

Thus, this remarkable event came to a close late in the evening, leaving happy memories to last even unto the bosom of the future.

THE FIFTH AMRAOTI DISTRICT CATTLE EXHIBITION

18th to 20th January 1946

Friday the 18th January 1946:—The Amraoti District Livestock Improvement Association for the second time in succession, held at Amraoti, under its auspices, this annual exhibition in a gaily decorated pandal. Special stalls, inlaid with elaborate settings of portraits, models, charts and lavish exhibits spectacularly displayed by such departments as Veterinary, Animal Husbandry, Dairy, Agriculture, Public Health, Village Uplift, Textile, Technical, Co-operative and Cottage industries were among the most striking features that gripped the imagination, alike, of the peasantry and the stockmen from far afield.

To reflective thousands, this rare moment provided a silent and serene spectacle to offer grateful homage to those species that have recently

NOTICE

The Indian Veterinary Journal

A Bi-monthly Record of Veterinary Medicine and Surgery
Devoted to the Cause of Veterinary Profession.

PUBLISHED FOR THE ALL-INDIA VETERINARY ASSOCIATION

EDITOR:

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

SUBSCRIPTION:

For members of the profession and students:—Rs. 4 or 8s. 8d. per annum including postage, in advance. Re. 1 or 1s. 8d. per part.

For others:—Rs. 8 or 13s. 8d. per annum in advance, or Rs. 2 or 3s. 4d. 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 papers *free* if wanted.

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 their correct address to the Editor at once. Non-receipt of a particular issue should be intimated before the receipt of the subsequent issue. If not those copies will be charged for.

JL

KZ m2, N24

VERMIFUGE DRAGEES BASED ON GENTIAN VIOLET



Meroxyl

A NEW AND VERY ACTIVE SUBSTANCE FOR COMBATING OXYURIS

Dr. A. WANDER S.A. BERNE-SWITZERLAND

SOLE IMPORTERS: Dr. A. WANDER (INDIA) Ltd., POST BOX 1125, BOMBAY.

When writing to advertisers, please mention this Journal.

contributed, in no small measure, to the dawn of much needed peace on this stricken earth. To the economist and the capitalist who are facing with grim determination the coming new era of industrialisation, this exhibition provided much food for thought. On witnessing the array of such colourful scenes, one carried the impression that vast vista, pregnant with specialised and fundamental knowledge was revealing itself.

For vouch-safing opportunities, such as these, one is indebted to Mr. H. B. Shahi, the Director and his assistant Mr. P. S. Sundaram, Assistant Director of Veterinary Services, Berar Division, who undaunted, and, undeterred, has been directing with rare imagination and unusual zeal, the machinery of the District Livestock Improvement Associations in Berar all these years.

The pleasant function of opening ceremony devolved upon Sir M. V. Joshi that veteran and grand old man of Amraoti, whose alert and active habits have been the inspiration for the rising generation.

He was received at the gate by the President and introduced to the members of the Reception Committee. The proceedings began with a patriotic welcome song sung by a batch of girls.

Mr. N. J. Deshmukh, President of the Reception Committee read his welcome speech (Appendix "A") and requested Sir M. V. Joshi to declare the exhibition open.

Sir M. V. Joshi rose and amidst public approbation read his inaugural speech (Appendix "B") which was heard with rapt attention.

Saturday the 19th January 1946:—A competitive milk yield test, with a view to adjudicate the best strains of milch cattle that are the pride of this Province, was held for two consecutive days. It amply demonstrated that these heavy milkers are not only an asset for the economic improvement of the stockman, but also a real index of the nations' physical fitness to perform the tasks that lie ahead. Obviously, a certain degree of in-breeding to stabilise the productive characters of the milch cattle to meet the ever growing demand was envisaged.

"Shankar-pat" races as usual attracted many a race enthusiast.

Judging of exhibits was performed by a Committee of non-officials assisted by an official Mr. A. Karim.

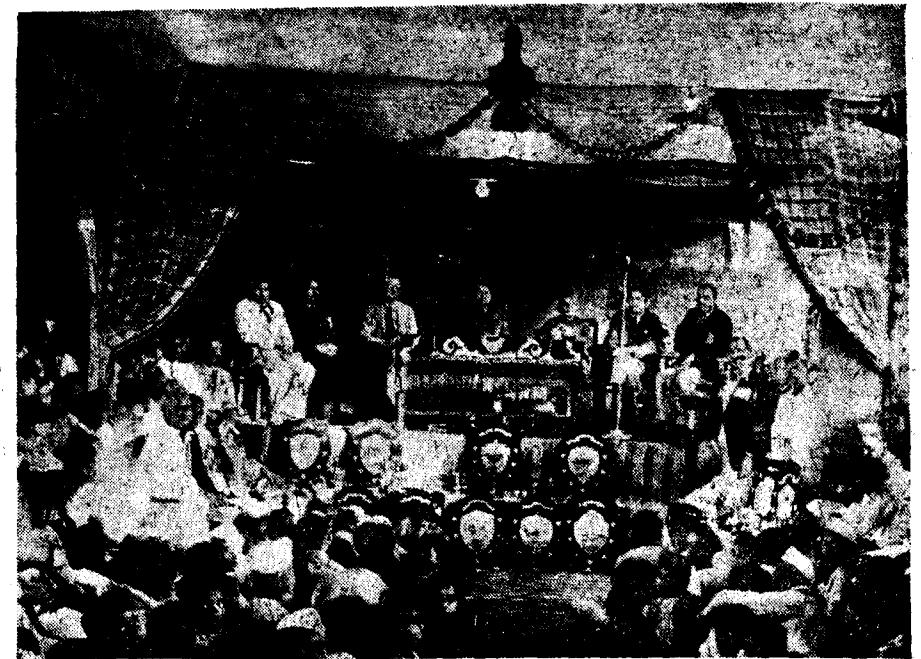
Sunday the 20th January 1946:—Practical demonstrations were held in all the stalls which were thronged in the full. Through charts and models, instructive and explanatory discourses were entered into, by the Officers in charge of the various stalls.

In the evening, the final phase of the function was staged in a specially erected "Shamiana". Distinguished among the many invitees, were

THE 5th AMRAOTI DISTRICT CATTLE SHOW



Opening Ceremony of the 5th Amraoti District Cattle Show.



Prize Distribution Ceremony of the 5th Amraoti District Cattle Show.

CONTENTS—(cont.)

PAGE

VII. Cattle Shows

All-India Cattle Show	... 50
The Third Akola District Cattle Show	... 55
The Fifth Amraoti District Cattle Show	... 57
The Third Buldana District Cattle Show	... 64
The Fourth Yeotmal District Cattle Show	... 71
The Fourth Morsi Taluq Cattle Show	... 79

VIII. Correspondence

Memorial of Veterinary Assistant Surgeons of Bengal to the Director of Veterinary Services	... 81
Scandals of Bihar Veterinary Service	... 83
The Refund of Rs. 35 lakhs of Collective Fine in U.P.	... 85

IX. Extract

Veterinary Service in Ceylon	... 87
------------------------------	--------

X. Review

Index of Diagnosis—Clinical and Radiological—By Hamilton Kirk, 2nd Edition	... 88
--	--------

XI. Obituary

The Late Mr. C. M. Mukherji G.B.V.C. P. Madhava Menon, B.V.Sc., R. Narsinga Rao, G.B.V.C.	... 89
---	--------

XII. Errata

...	90
-----	----

WANTED

Immediately a qualified Veterinary Graduate for the post of a Veterinary Surgeon in the Stables Veterinary Hospital, Bikaner in the Grade of 75 5-120.

Applications together with attested copies of the testimonials stating age, qualifications, previous experience etc, etc, should reach the undersigned through the Superintendent, Veterinary Department, Bikaner State, Bikaner.

If required the selected candidate shall have to come for interview, for which single interclass fare only will be paid.

DHIR SINGH,
Officer Karkahas, Bikaner,
Rajputana.

THE Indian Veterinary Journal

(The Journal of The All-India Veterinary Association)

Vol. XXIII

JULY, 1946

No. 1

General Articles

FLUORINE AND FLUOROSIS*

Fluorine is one of the trace elements that are normally present in our body, and in small quantities it is believed to exert a beneficial influence. It is so widely distributed in nature that a small intake of the element is unavoidable. It is present in drinking water and many of our foodstuffs, and was at one time frequently used as a preservative, although its use as such is now prohibited in most countries. Certain insecticides and fumigants contain fluorine, and industries, such as mining and the conversion of phosphate rock into superphosphate, a common fertilizer, and the manufacture of glass, enamel and aluminium, expose workers to appreciable dangers of excessive fluorine intake. Prolonged ingestion of abnormal quantities produces a chronic toxic state, the earliest visible sign of which is hypoplasia of the teeth often described as 'mottled enamel', 'chronic dental fluorosis', etc. Its commonest source is drinking water, and the level above which effects are produced is about one part per million, equivalent to 1/120 grain of fluorine to a pint of water. It was first noticed in cattle grazing near a superphosphate factory in Italy, and it has since been recognized in farm animals in many places. The affected animals show lameness, thickening of bones and cachexia, and analysis of their urine and bones shows an increased amount of fluorine. The bone marrow is considerably reduced.

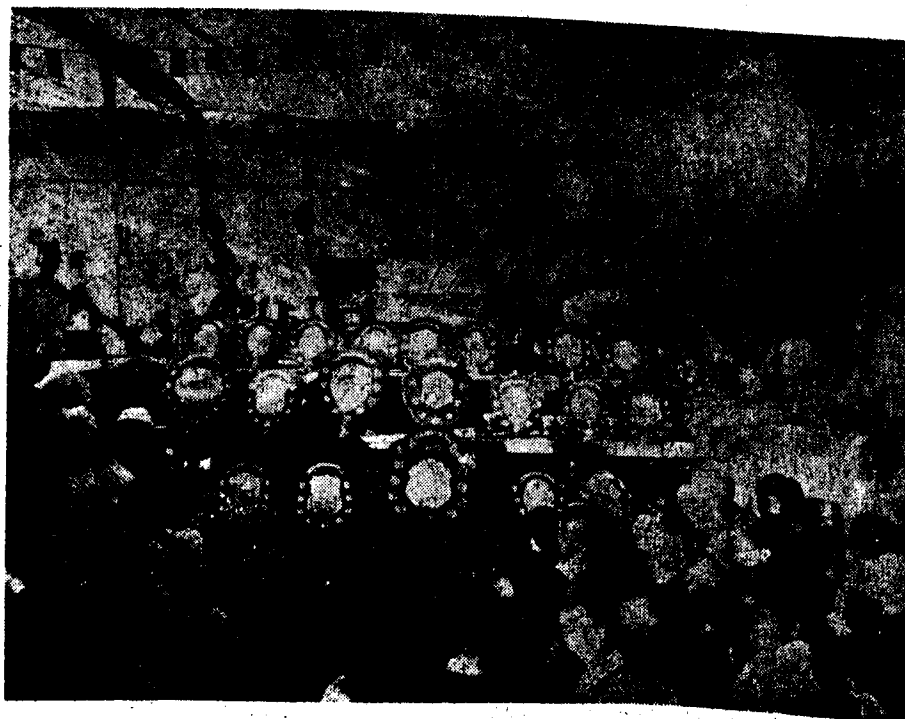
The first account of mottled enamel in human beings was given in 1902 by Eager of the United States Public Health Service who noticed its frequency among Italian emigrants from Naples. Black and McKay (1916) found it occurring in various parts of the U. S. A. and described it more fully in 1916. Since then, cases have been reported from every continent, but although popular belief associated the condition with drinking water, it

* Editorial, Indian Medical Gazette, June, 1944.

THE 4th YEOTMAL DISTRICT CATTLE SHOW



Opening Ceremony of the 4th Yeotmal District Cattle Show.



Prize Distribution Ceremony of the 4th Yeotmal District Cattle Show.

F. N. Cole, Esqr., I.C.S., Deputy Commissioner, Amraoti and Messrs. R. K. Sanyal and K. B. Pillay, Assistant Directors of Veterinary Services who graced the occasion with their presence.

Interesting speeches were delivered by the representatives of the Departments that are materially contributing to the growth and stature of the nationhood.

The Secretary, District Livestock Improvement Association read his interesting report on the previous show and the work done for the realisation of the ideals of the Association.

Mr. P. S. Sundaram, Vice-President of the Association read his speech, (Appendix "C").

M. I. Rahim, Esqr. I.C.S., Commissioner, Berar in a short speech observed that opportunities through such shows do offer themselves to judge and gauge the extent of the work done for the improvement of the livestock and concluded after thanking all those responsible for the success of the exhibition.

A large number of prizes worth about Rs. 1500/., besides 22 rolling shields were awarded at the hands of the Commissioner, Berar.

Mr. N. J. Deshmukh, the President of the Reception Committee, in winding up the function extended his heartfelt gratitude to all those who strove their utmost in making the show a success. Special mention of the services rendered by the Veterinary and Revenue Departments was made.

Mr. Laxminavis was "At home" to meet the Commissioner, Berar.

The Field Publicity Organisation held cinema shows for the benefit of the public showing some of the best breeds in India and their utility services.

Mr. Mitra of "Indian News Parade" had filmed some of the scenes from the commencement to the end of the Show.

Messrs. Abdul Azeem and G. R. Ramaswami, Veterinary Assistant Surgeons of Amraoti bore the whole brunt for making the show a success.

The function came to a close amidst scenes of enthusiasm.

was not till 1932 that fluorine contained in it was established experimentally by Smith and her associates, as the aetiological factor. Its recognition in India is more recent. In 1936 the health authorities noted a peculiar disease in the Nellore district in Madras Presidency, which was characterised by stiffness and pain in the spinal region and in various joints. A preliminary survey revealed the presence of fluorine in the drinking water of the district and a heavy incidence of mottled enamel in the teeth of school children, and subsequent investigation showed that both these conditions were present in several other districts as well.

The average fluorine content of water in the endemic areas is well over the threshold level, it being derived from the fluoride-containing strata of earth. The depth of the wells does not appear to have any connection with fluorine concentration, but sometimes it has happened that the substitution of deep well water for that of shallow wells for sanitary reasons led to the occurrence of mottled teeth. It may be stopped by changing to a water supply containing fluorine less than one part per million. Even before the discovery of the causative agent it was not uncommon for people to abandon otherwise satisfactory water supplies, feeling that the water was responsible for the defective enamel formation. In Madras, sometimes whole villages moved from one site to another in search of better water.

Fluorine is a normal constituent of our teeth and bones, and in chronic poisoning these structures suffer most. Mottled enamel is one of the first signs and is seen in people who, during the period of calcification of the enamel, have resided in an area with a high fluorine content in the drinking water. The process is naturally slow in appearing and in progressing. The outer surface of the front teeth is usually most affected, showing opaque paper-white patches or horizontal bands of varying widths. Sometimes the whole surface loses its normal glossy translucency and assumes a dull chalky white appearance. Later, the whiteness is replaced by brown or yellow, occasionally black, markings. As the condition progresses, pits appear. Histologically there appears to be a lack of cementing substance between the enamel rods. The discoloration is described as due to deposit of a pigment in the interstices between the rods. The teeth are of normal shape. The severity of the lesions increases with the concentration of fluorine in the water and the length of time of its ingestion. Normally there is no effect on general health, and in very mild cases there may be nothing more than some white spots. The mottled teeth contain more fluorine than carious teeth, and American work has suggested that they are less prone to caries, and work in England seems to bear this out. This has led to the suggestion that non-toxic amounts of sodium fluoride may be added to drinking water for the prevention of dental decay.

Endemic dental fluorosis occurs in many parts of the world, but cases with skeletal changes seem to be comparatively rare. They were first observed by Flemming Moller and Gudjonsson (1932) in cryolite workers near Copenhagen, who had been exposed to fluorine for long periods. Cryolite, a double fluoride of sodium and aluminium, containing as much as 54 per cent of fluorine, is used in the manufacture of aluminium. Besides showing some anaemia and dyspeptic symptoms, many of these workers had restricted mobility of the spine, and in severe cases almost complete rigidity. Radiography showed a progressive sclerosis of the bones, especially of the vertebrae, pelvis and ribs, with calcification of the costal cartilages. In typical radiograms the osseous pattern is completely effaced, the bones appear marble-white and structureless and their contours are irregular. The attachments of muscles become thickened and ossified, and there is considerable ligamentous ossification, especially about the intervertebral and costo-vertebral articulations. In a study of some advanced cases in Madras, Short and his colleagues (1937) found similar changes in the bones, the clinical picture resembling spondylosis deformans, but the articular cartilages were not affected. They also observed that the bone changes appear in adults usually preceded by symptoms, such as general tingling sensation in the limbs and body, followed by pain and stiffness, especially in the lumbar spine. The stiffness increases until the entire spine behaves like a continuous column of bone. The ribs become fixed and the breathing entirely abdominal. The final stages of the condition are generally evident in people past forty; there is definite cachexia with complete rigidity of the spine and joints, the patient becomes bedridden, and dies of some intercurrent disease. Such severe cases are restricted to villages with a high fluorine content in water (about 6 parts per million). Similar lesions have also been reported from South Africa.

It is not known whether the bones begin to be affected at the same time as the teeth. Kemp, Murray and Wilson (1942) made a preliminary enquiry in some English villages to find out whether the fluorine in the drinking waters, while sufficient to produce dental fluorosis, caused any skeletal changes during the growing period which might lead to incapacity in later life as seen in other countries. They found early signs of spondylosis deformans in some children and young adults, but the correlation was by no means definite. The authors believe that fluorine may favour the development of such defects, but probably there are other factors as well, such as defective nutrition. This is borne out by the work of Pandit and his colleagues (1940) who found that the incidence and severity of the disease had a definite relation to the economic and nutritional status of communities, and that the two important factors concerned in the production of severe chronic fluorine intoxication were the high fluorine content of water supplies and deficiency of vitamin C in the diet. A diet rich in

(Appendix "A")

WELCOME SPEECH

By

MR. N. J. DESHMUKH

*President, 5th Amraoti District Cattle and Agricultural Exhibition
on the Opening day of 18th January 1946*

Sir Moropant Joshi, Ladies and Gentlemen,

I am really fortunate to have the honour of being the President of the Reception Committee of the 5th Amraoti District Cattle and Agricultural Exhibition also this year.

Amraoti District Livestock Improvement Association is fortunate to present the Exhibition at Amraoti a second time, which is indeed creditable in these days of controls.

We are fortunate to have the opening ceremony performed at the hands of Sir Moropant Joshi, who is, I should say, perhaps the oldest man of erudition in Amraoti and we are sure to get the best possible guide from his treasure. I thank him for his response in accepting the invitation, inspite of the inconvenience, which must have been caused to him due to his old age.

Now, with the formation of proper District Livestock Improvement Association for the Amraoti District, this exhibition has become a regular annual function. You are perhaps aware as to who has been responsible for this annual feature. It is Mr. P. S. Sundaram, Asst. Director of Vety. Services who with his untiring energy has been and is ever-ready to exert for the cause of dumb creatures.

The various exhibits displayed at the Exhibition will show how he has infused in the Agriculturists the idea of improving cattle breed. With the improvement of breed, we must look to the proper feeding, care and up-keep of animals. We cannot overlook the advice of the Agriculture Department. The "Grow more food" policy advocated by the Agriculture Department, should be liberally brought into practice so that in respect of food-grains, we may not be required to depend on others. As regards the cotton seed which is a nutritious food for cattle, I have to reluctantly state that it is not readily available though the prices are controlled by Government. Active measures are needed to ease the situation so that animals including milch cattle should get adequate cotton seed.

Of the many schemes of the Veterinary Department coming forward in Post-war reconstruction programme, the opening of a dairy at Amraoti, forms a prominent factor. For this Mr. H. B. Shahi, the Director of Veterinary Services, deserves to be congratulated.

With regard to the cattle breeding as well as other livestock improvement activities, Berar is meeting only the step-motherly treatment at the hands of Government. Hence, I will again impress on the authorities the urgent necessity of opening a breeding farm with Khamgaon breed and Berari buffaloes, to cater the needs of the public.

Livestock improvement work cannot be done individually. It can best be done on a co-operative basis. Let us therefore co-operate, strengthen our Taluq and District Livestock Improvement Associations and achieve our desired goal, unitedly.

I do not want to keep you waiting for a long time. I now request Sir Moropant Joshi to deliver his inaugural speech.

(Appendix "B")

INAUGURAL SPEECH

By

SIR M. V. JOSHI,

At the 5th Amraoti District Cattle and Agricultural Exhibition

On 18-1-46

President of the Reception Committee of the Cattle and Agricultural District Show, Ladies and Gentlemen,

I thank the Amraoti District Livestock Improvement Association, for the honour it has extended to me, to open the 5th Cattle and Agricultural Exhibition, this evening.

India is an agricultural country and its prosperity naturally depends on good cattle. Thanks to H. E. Lord Linlithgow, who was the sponsor of this livestock improvement scheme. He brought home to the public, the necessity of good improvement of cattle. Since some years, these shows are being held all over India, with the main object of educating the agriculture class to improve their cattle breed and thus their economic conditions.

In Berar, these shows have become regular annual functions in every District and the whole credit goes to Mr. P. S. Sundaram, Assistant Director

calcium, phosphorus and vitamin D has been reported to have a beneficial influence on the condition. There is no doubt that economic conditions are the factor responsible for the rarity of advanced bone changes in countries such as the U. S. A. and England.

FLUOROSIS OF CATTLE IN THE MADRAS PRESIDENCY*

By

G. R. VISWANATHAN, G.M.V.C.,
Veterinary Investigation Officer, Madras.

In 1934-35 the writer recorded the existence of a disease which on clinical ground he described as chronic rheumatic arthritis in cattle in certain villages of Kurnool district. Since then the condition has been reported from other districts and the present article includes an account of the disease as observed in cattle in the Madras Presidency.

The disease is locally known in Telugu districts as Voyupotlu or Voyunoppulu (Voyu=Rheumatism, Potlu or Noppulu=pains) and in Tamil as Keelvoyu (keel=joint and Voyu=Rheumatism).

OCCURRENCE AND SYMPTOMS

This disease occurs in several villages of various taluks in Kurnool, Anantapur, Cuddapah and Nellore Districts, the endemic regions being adjacent to Hyderabad State where this disease is also prevalent. The endemic areas of the Madras Presidency lie on the borders of the Nallamalais range, situated on one side of the Kurnool district and divided by the Thungabhadra and Kistna rivers.

The disease generally affects breeding bulls, working bullocks and cows. Calves and buffaloes suffer only occasionally. Few cases have been observed in sheep, but none in other domestic animals.

Amongst cattle the condition has been observed more frequently in Ongole breed of cows in milk and bullocks at work kept under stall feeding condition. Number of cases have been observed in cows during lactation period and after their first calving. Only two cases have been observed in sheep, both of which were handfed.

Animals of the Ongole breed appear to be more susceptible than others; Mysore, Alambadi, and in certain villages 5 to 10 percent of cattle of this breed might be found affected.

The condition is rare in young animals and a few cases only have been recorded in suckling calves.

Cases of the disease may be observed throughout the year, but the symptoms appear to be more marked during the ploughing season and at the commencement of rains.

The history given by the owners is that the animals purchased when young, get the affection one or two years after their arrival in the endemic area.

The first indication of this condition is lameness in one or more limbs, more often the forelimbs, and more particularly in the shoulders, which appear to be thrown forward. The lameness is usually a constant feature, generally obscure and progressive in nature and metastatic in character.

In about six months to a year from the onset of lameness, the animal shows stiffness of gait, evinces pain while walking, and finds difficulty in arching its back.

Later on the animal shows extreme emaciation due to atrophy of muscles all over the body, experiences difficulty in lying down and getting up and finally remains recumbent.

The hoofs are found twisted, distorted and over-growth, the digits having a tendency to separate, and the points of the toes frequently curving inwards.

Skeletal abnormalities are manifested by swollen joints and exostoses over the long bones and the jaw. These appear as hard, bony enlargements on the medial and lateral aspects of the joints and the bones giving them a thickened or deformed appearance. In very severe cases, the pastern becomes affected with even ankylosis of the joints so that the limbs present a club-shaped appearance, causing marked lameness and a peculiarly stiff gait.

Calluses are noticed on the prominent bones and the ribs. These occur in the form of nodular elevations on the middle of the ribs in a lengthwise manner on one or both sides and range in size from a walnut to a hen's egg.

The animal feels pain over the exostosis.

In certain endemic areas the affected animals show discoloration of teeth, with brownish pigmentation and mottling, and even chipping off at places.

In the early stage of the disease animals feed normally but later the appetite becomes impaired, coat becomes harsh and rugged, emaciation advances and death ensues.

In young stock, growth remains poor in spite of good feeding.

* The Indian Journal of Veterinary Science and Animal Husbandry, Dec. 1944.

of Veterinary Services, Berar Division, who takes keen interest in his work and through his untiring zeal and enthusiasm, the Livestock Associations have been properly organized in every District.

People in Berar, like the Khamgaon breed, best. Some years back an attempt was made to introduce Hissar breed, but it did not suit the climatic conditions of this part and we have now to revert to our old breeds the Khamgaon breed and revive it.

Side by side with the scientific breeding we have to look to the proper upkeep, care and feeding of animals. In this respect we have to look to the Agriculture Department. The Agriculturists should take advice as regards the seed and manure etc. to be used.

For the sake of money, they should not resort to sow more cotton. All possible cultivable land should be brought into use and they should follow the "grow more food" policy, so that Berar may be self supporting in respect of food grains.

The cattle population of the Amraoti District is about 10 lakhs and to cater for the needs of so many dumb creatures, I am told there are only 9 full-fledged and 7 cheap-plan dispensaries. Of these, total number of 16 dispensaries, only one outlying dispensary is maintained by the Government, while the rest are under the control of the District Council, Amraoti. In order that Veterinary aid should be readily available, I commend the opening of more cheap plan dispensaries by Government, as the District Council has done its best.

The question of disease control also forms an important factor. This can be effectively tackled, if we have adequate staff. I am told that there is only one Gazetted officer in the Veterinary Department for the whole of the Berar Division. It is therefore necessary to have some extra supervising staff to advise and check the work of the subordinate staff in respect of disease control.

Gentlemen, all of you would be pleased to know that in Mr. H. B. Shahi, we have got an able Director of Veterinary Department. He has outlined several schemes. The most important of these for our Berar are (1) the establishment of Quarantine Stations on the border of Berar, to check the ingress of Rinderpest into Berar, and (2) the starting of a Dairy at Amraoti. These schemes, when come into operation, will go a long way in the interest of cattle owning public and for this Mr. Shahi deserves our sincere thanks.

The goat virus vaccination introduced by him to check the spread of Rinderpest has brought the number of outbreaks to its lowest ebb. With the establishment of Quarantine Stations, I am sure the menace of Rinderpest

will be nipped in bud. By way of suggestion, I point out that cattle coming from Burhanpur side through Melghat should not pass unvaccinated into Berar.

Ladies and Gentlemen, I am not going to tax your patience any longer. You are doubtless anxious to see the beautifully decorated exhibits, displayed in the Show. Before declaring the show open, I thank all those who have contributed liberally for this show.

I now declare the show open.

(Appendix "C")

CONCLUDING SPEECH

BY

MR. P. S. SUNDARAM,

*Assistant Director of Veterinary Services, Berar Division, and
Vice-President, District Livestock Improvement Association,
Amraoti on 20-1-1946.*

Ladies and Gentlemen,

Before the prizes are distributed by the Commissioner, I like to touch a few salient points in connection with the Livestock improvement work.

I am sure, all of you must have seen the various exhibits displayed at the different stalls. I think they are decidedly better than the last year. The charts and posters hung therein are also educative and instructive.

The India map, drawn in an attractive way provides one, at a glance which breed of cattle he requires and where he can find it out.

Even in normal times, though the cattle wealth of India was considered surplus, the quality and the recognized breeds were not properly developed. During the 6 years of War, there has been an appalling slaughter of animals. Milk and milk products and cattle for ploughing and carting etc; were never over burdened as we notice to-day. The paucity of animals has resulted in the soaring up of sky high prices of a pair of good bullocks. Pure milk and ghee are not available even in Berar, where from surplus ghee was exported before.

The International Veterinary Conference called by UNRRA, during the last month at Sydney, has approved of the formation of International Veterinary and Livestock Secretariat, which has been entrusted with the

Other symptoms include lowered fertility, delayed oestrus, sterility, reduction in milk yield and in some instances photo-phobia. The course of this disease runs from a few months to a few years, but in buffaloes the duration is shorter.

POST MORTEM FINDINGS

Due to religious sentiments of the people the writer had some difficulty in getting affected animals for destruction and postmortem examination. An opportunity was, however, availed of for examining post mortem of two animals destroyed in extremis in a very badly affected village. In both, the internal organs appeared to be normal and the lesions were confined to the skeleton only. The following is the protocol of *post mortem* findings.

Case No. 1. The hip and shoulder joints were severely inflamed, metatarsal bone and the knee joints showed bony exostosis and diffuse periostitis and the nodular prominences present on the ribs were porous in character. The median suture in the skull showed a tendency to give way and the mandibles of the lower jaw were disunited at the symphysis. The epiphysis of the left humerus had the tendency to separate from the proximal end and those of the radius and ulna at their distal ends. The cancellated tissue in the interior of the long bones was found infiltrated with a lardaceous material.

Case No. 2. Of the ribs examined, one showed partial fracture about its middle at two places and another showed the two fractured ends, one riding over the other with callus formation around them. None of the long bones showed any exostosis, but numerous osteophytes were found on the non-articular surface of one of the os pedis bones. The cancellated tissue of the long bones showed infiltration with lardaceous material.

ETIOLOGY AND EPIZOOTIOLOGY

In this rheumatic affection of cattle, the etiological factors likely to be considered are (1) in balance of diet with regard to its mineral contents (2) deficiency of phosphorus (3) deficiency of vitamins and (4) fluoride poisoning.

From investigations carried out by the Government Agricultural Chemists, Coimbatore on samples of pasture grass from affected and healthy areas, it has been shown (Ramiah, 1941) that the former contains a high Ca and low P and the latter normal values for these minerals. Similarly, 14 samples of other fodders sent to the same worker for analysis revealed a striking unbalance with regard to these minerals. Again, a survey of pastures of Malabar and Kurnool districts carried out by the Government Agricultural Chemist showed a shortage, if not the actual deficiency of these minerals. In the former district both CaO and P₂O₅ were low, whereas in the latter a shortage of P₂O₅ only was revealed.

The deficiency of P in the pasture leads to lowering of inorganic P value of blood, and in order to obtain further evidence regarding the etiological significance of this factor, blood samples from affected and normal animals were analysed by the Government Agricultural Chemist, Coimbatore with the result that whereas in the latter Ca and P both showed a normal value, in the former, P content was found to be low. In certain number of cases the P value was found to be below 1 mg, per 100 c.c. of blood. Blood samples sent from Madras cases for analysis at the Imperial Veterinary Research Institute, Izatnagar, showed no variation from normal; but those sent from Hyderabad, where a similar disease occurs, proved deficient in P.

Vitamin A deficiency was suspected to play a part in causation of this disease as the number of cases are less in the rainy season when the animals usually ingest plenty of green fodder.

Analysis of well water and soil samples from certain affected localities have revealed the presence of fluorine in a concentration higher than the amount present in those of healthy areas. Representative rocks and soils of an area stretching from Kurnool division to Markapur revealed on analysis a high content of fluorine. According to the Government Agricultural Chemist Coimbatore (Ramiah, 1938-39) the Cuddappah-Kurnool system of sedimentary rocks shows a high fluorine content ranging up to 960 part per million or about 500 times that of well water. Work carried out at the King Institute of Preventive Medicine, Guindy, shows that the highest fluorine concentration is to be found to lie in the narrow belt of granitoid rocks stretching north, north-east from south of Kanigiri Nellore and to the Krishna river near Amravati in Guntur. The presence of fluorides in high toxic quantities in certain areas, especially North Nellore and isolated places in Cuddappah and Anantapur has also been noticed.

Analysis of well water samples by the Government Agricultural Chemist (Ramiah, 1938-39) reveals a fluorine content ranging from 0.5 to 2 parts per million in samples from the affected areas, and a little or more from those of healthy ones. Table 1 shows the fluorine content of water samples collected from various Taluks in four endemic areas of the Presidency.

task of collecting data and circulating them to the Nation members, regarding the animal diseases, particularly that affect the traffic in animals and animal products, for relief and rehabilitation. They have further been entrusted with the work of circulating information on breeding and livestock in rebuilding of flocks and herds reduced by War. These aims, if put in practice, will bring about desired improvement, in the livestock of India.

With the little resources, at our hands, we are trying to achieve the aims, aimed at the above conference in a very small proportion.

Mr. H. B. Shahi, Director of Veterinary Services, C. P. & Berar deserves tribute for initiating and giving impetus in this livestock welfare work, which, in the long run, is sure, to improve the economic condition of the Agriculturists.

Ladies and gentlemen, words fail to adequately thank for the help rendered to the Livestock Improvement Association, by the President of the Association, the President of the Reception Committee, the revenue officials in the District and the gentlemen who liberally contributed to the Show and to those who sent their exhibits and to all the departmental officers, who participated in the show.

My whole-hearted thanks are due to Mr. Rahim, the Commissioner, Berar who is so kind and sympathetic towards the dumb creatures and ever ready to help all the District Livestock Improvement Associations in Berar.

I must thank all those who are lucky in winning the prizes for their exhibits. To those, who could not get any prizes, I have a word of encouragement; they should not lose heart, but try again.

Now Ladies and Gentlemen, I thank you once more and resume my seat.

THE THIRD BULDANA DISTRICT CATTLE SHOW

From 23rd to the 25th February 1946.

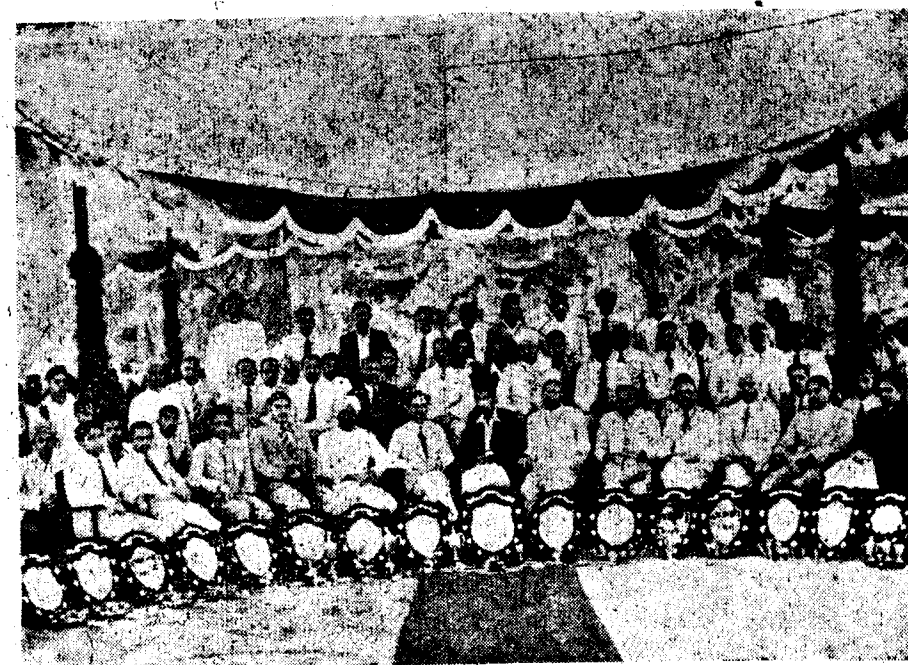
A district Cattle show, the third of its kind was held under the auspices of the Buldana District Livestock Improvement Association at Chikhli in a gaily decorated pandal. Scores of exhibits of the livestock wealth of the district were displayed.

The departments that participated namely, Veterinary, Public Health, Agriculture, Animal Husbandry, Village Uplift and Co-operative added grace with their numerous exhibits, models, charts, etc., which collectively served as a miniature "University" to the untrained and untaught of mother India who in their thousands visited the spot.

THE 3rd BULDANA DISTRICT CATTLE SHOW



Opening Ceremony of the 3rd Buldana District Cattle Show.



Prize Distribution Ceremony of the 3rd Buldana District Cattle Show.

Table I

THE FLUORINE CONTENT OF WATER SAMPLES.

No. Taluks.	Fluoride content in sample.				Total.
	Nil or trace.	Under 1 p.p.m.	1 to 3 p.p.m.	Over 3 p.p.m.	
I. KURNOOL DISTRICT.					
1. Koilkuntla	6	23	25	1	55
2. Sirvel	...	10	8	1	19
3. Cumbum	...	7	7	...	14
4. Markapur	1	2	4	...	7
5. Dhone	...	1	1	...	2
6. Kurnool	...	8	1	...	9
7. Nandyal.	...	2	...	...	2
II. NELLORE DISTRICT.					
1. Podili	...	2	12	3	17
2. Darsi	...	1	8	7	16
3. Kanigiri	...	...	1	...	1
4. Gudur	...	...	1	...	1
III. ANANTAPUR DISTRICT.					
1. ANANTAPUR	...	1	1	...	2
2. Kalyandrug	1	1	...	...	2
IV. GUNTUR DISTRICT.					
1. Vinukonda	...	1	1	...	2
TOTAL	8	59	70	12	149

The table shows that nearly 58 per cent of the affected villages contain one to three parts or more of fluorine per million. In one village of Nellore district the stream water was found to contain 13.85 p.p.m. of fluorine. The analysis of water from certain 'curative' villages has revealed a fluorine content less than 0.5 p.p.m.

Increased diuresis and pronounced pathological changes in kidney suggested that the high concentration of fluorine ingested with water had some deleterious effect on this organ when passed through urine, but twelve samples of urine sent for the detection of fluorine at the Imperial Veterinary Research Institute, Izatnagar, revealed nothing of significance. Samples of teeth from the affected animals were analysed at this Institute with the results quoted below.

The materials forwarded by you has been analysed for their fluorine content which appears to be somewhat higher than that in normal calves as reported by some Western workers.....

Field investigations reveal that there might be several factors, all exercising their effects on the etiology, occurrence and the progress of the disease. The endemic areas are known to be related to certain type of rock formation imparting to the soil, water and the herbage a higher concentration of fluorine and a state of unbalance with regard to Ca and P. When the affected animals are removed to certain "curative" villages where these soil and herbage abnormalities do not exist, they develop freedom from the disease.

Although it is not unlikely that the animals in these localities suffer from a mild form of hypophospherosis, certain epizootological factors suggest that the condition described in this paper may be looked upon as fluorine intoxication. These are (1) spontaneous cure of clinical cases when removed to certain "curative" villages, where the soil, herbage and water contains a normal amount of fluorine, (2) the presence of mottling and brown pigmentation together with the chipping tendency of enamel of teeth. This feature is characteristic of human fluorosis, (3) in cattle enzootic areas of this disease in the Presidency human beings are also known to suffer from skeletal and dental abnormalities as described by Shrott *et al* (1937).

TREATMENT

So far any form of treatment has not been found effective in advanced cases of the disease although cases in early stage are amenable to treatment. Mention has already been made of certain, "curative" villages where the general practices are paddy cultivation, irrigation from tanks and less groundnut cultivation. Animals, when taken to these villages during early stage of the disease, show gradual improvement without any treatment. This is attributed to a change over from a brackish water to rain or soft water of these villages.

(a) *Curative*.—During the year 1934-35, Mahajan, in Hyderabad, treated some cases with sterilized bone meals and reported encouraging results as no further cases occurred when he visited the same tract again after five months. He advocated this treatment both as curative and preventive. In this Presidency, bone-meal was first tried in Joladarsi village of Koilkuntla Taluk in Kurnool district in the year 1934-35. The affected animals were given each one ounce of bone-meal per day for six months and complete recovery was observed in two animals thus treated. On another occasion, seven animals in Cuddapah and thirteen in Kurnool district were treated with bone-meal given in doses of two ounces daily to each animal. As a result of this treatment in about two months from the administration of bone-meal the animals in the early stage of the disease showed rapid improvement. In well-advanced cases with marked anatomical abnormalities such as bony exostoses etc. the bone-meal feeding

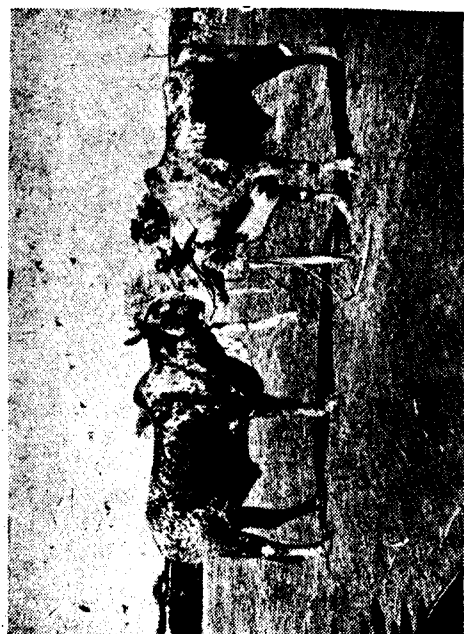
THE 3rd BULDANA DISTRICT CATTLE SHOW



STUD BULL (Khamgaon Breed)



COW (Khamgaon Breed)



PAIR OF BULLOCKS (Khamgaon Breed)



STUD BULL (Khamgaon Breed)

At a time, when the spectre of the most devastating famine is hanging like Damocle's sword over the head of the already weighed down masses of India and when the clarion call from the highest in the land, has gone forth reverberating from the snow clad Himalayas, through the Indus, the Gangetic and the Wardha valleys down to the steppes of Ceylon for the observance of frugality and austerity to counter and corner this surging avalanche, this exhibition, like his predecessors provided a media for the dissemination of the necessary knowledge. This juncture, which the dispassionate historian of the future may recognise as a turning point in the destiny of the India's masses, offers opportunities to Veterinary Science to foster the spirit of inquiry and research. The profession that boasts of men like Messrs. H. B. Shahi, and P. S. Sundaram, can supply the men who in virtue of their outlook and training are competent to perform the tasks envisaged.

Opening Ceremony, Saturday the 23rd February 1946. In a tastefully decorated "Shamiana", which was crowded to the full, the opening ceremony of the show was held. Mr. J. H. Rowley, I.C.S., the Deputy Commissioner, Buldana was received at the entrance by the Chairman of the Reception Committee and conducted to the dais. The office bearers and the members of the Committee were introduced to him. With scintillating songs accompanied by the most enjoyable musical extravaganza groups of boys and girls welcomed the gathering.

Mr. R. M. Bondre, Chairman of the Reception Committee, welcoming, addressed the congregation. After praising Mr. J. H. Rowley I.C.S., for his keen interest in the show and the District Livestock Association for holding annual shows at Khamgaon and Malkapur in the previous years and in the present at Chikhli, he said that such shows were necessary for propagating the ideas of livestock improvement on which 90 per cent of the population depend. He eulogised the services rendered by Messrs. H.B. Shahi and P. S. Sundaram, in the cause of livestock wealth. He expressed satisfaction at the prospect of opening a Veterinary Dispensary at Amdapur. Pleading for the supply of better livestock, good manures and improved implements, he appealed to the Government to come forward and establish Veterinary dispensaries, breeding, dairy, poultry and Agricultural farms in every Revenue circle. He concluded by suggesting the incorporation of these subjects in the school curriculum and the organisation of publicity on a wider basis.

He then requested the Deputy Commissioner to declare the show open.

Responding, Mr. J. H. Rowley, I.C.S., rose and delivered the inaugural address. (Appendix "A") Himself being a member of the peasant class, he was proud to be indentified with the peasantry. He referred to the previous shows held at Khamgaon and Malkapur which were instrumental not only

relieved them of acute symptoms like lameness and painful joints, but had a very little effect in reducing the exostoses. The duration of the treatment is long and marked improvement is noticed after a course of treatment lasting from six months to one or two years. When the treatment with bone-meal is discontinued on finding improvement in condition, there is a possibility of relapse, hence affected animals in enzootic areas require treatment as long as they live.

(b) *Preventive*.—Prophylactically the bone-meal may be recommended for supplementing the diet of cattle grazing on deficient pasture, as it would not only prevent the disease, but also improve the rate of growth of young stock. Moreover the bone-meal fed animals have got a tendency to maintain the advantage during the seasons when the grazing is generally poor. The Government Agricultural Chemist recommends the addition of lime to the water of the wells in affected localities, as this process reduces the fluorine content of the water.

SUMMARY.

1. This disease in cattle known *Voyo potlu* locally, was first observed in Madras Presidency in 1934-35 in Kurnool district. Since then its incidence has been known in certain villages of Nellore and Cuddappah districts around the hills, being related to the condition of the soil, pasture, food-stuffs and water and the nature of the prevailing agricultural practices.

2. There is no seasonal incidence. The disease runs a chronic course affecting 5 to 10 percent of cattle population in an enzootic area. One peculiarity about the disease is that while its incidence is heavy in one village, the neighbouring village may be free from it.

3. The main etiological factor is the presence of fluorine in an abnormal amount in soil, pastures, in the water followed by aphosphorosis and vitamin deficiency.

4. The main feature of the disease is the presence of exostosis on the ribs and the joints and over-growth and deformity of hoofs. Fractures and ulcerations of articular heads and a few bony prominences are the characteristic lesions on *post mortem* examination.

5. There is no complete or successful treatment in advanced cases. In early stages treatment is only palliative.

ACKNOWLEDGEMENTS.

I wish to express my great gratitude to major G. Williamson, Animal Husbandry Commissioner with the Government of India, for help in preparing the article for publication, and to Mr. T. J. Hurley, M. R. C. V. S., D. V. S. M., I. V. S., the Director of Veterinary Services, Madras and his departmental staff for all the assistance rendered in the course of investiga-

tions. My thanks are due also to the Director of the Imperial Institute of Veterinary Research, Mukteswar and his staff of the Nutrition Section, to the Principal and staff of the Madras Veterinary College; to Mr. P. V. Ramiah, the Government Agricultural Chemist, Coimbatore, for kindly carrying out the analysis of water, fodder, bone, teeth, etc., for determining the fluorine content, to Dr. C. G. Pandit, the Director, and Rao Sahib T. N. S. Raghavachari of the King Institute of Preventive Medicine, Guindy, for helpful advice and constructive criticisms; to S. Venkatarama Ayyar, G. M. V. C., the Veterinary Assistant Surgeon, for valuable help rendered; to the College artist Duraiswami Mudaliar for taking photographs.

REFERENCES.

- Ramiah, P. V. (1938-39) Detailed report of work done under the I. C. A. R. scheme for the extension of animal nutrition at Coimbatore for 1938-39.
 Ramiah, P. V. (1941). (1941). *Indian Fmg.* 2. 634.

INTERNATIONAL VETERINARY CONGRESSES

BY

DR. DRAGUTIN HAMAN,
Vienna, Austria.

War events are naturally detrimental to a favourable development of veterinary science, more especially of an international character.

So far, regular meetings of the International Veterinary Congresses have been the only method by which the veterinarians of the whole world could meet for this common field of work. During the period of time in which 13 Veterinary Congresses have been held from 1863 to 1938 this form of activity has twice been stopped and that for a long while. The German-French War-1870-1871 and the political disorder in Europe interrupted the continuity for 16 years and the Great War-1914-1918 caused a standstill of another 16 years. Similarly, the present war also is menacing the International collaboration. Since the last meeting in 1938 seven years have already passed.

Of the above mentioned periods of interruptions of continuity, we must especially point out the pauses after the war—the interval between the end of a war and the first post-war congress. During a war nothing can be done for maintaining the international relations; it is, however, not so after the end of the war. As has already been experienced with the post-war congresses hitherto held, full advantages of the post-war facilities have not been availed of immediately. Solitary voices only are to be heard calling for the convocation of International congresses and for a renewal

in rousing the innate ideas but also in presaging the setbacks in the way of the livestock development. He went on, that whatever be the political status of future India, it was incumbent on every one to strive to improve the stock till it reached its perfection. After thanking the assembly and the members of the Association, he exhorted the people to co-operate with the Government in meeting the threat of famine.

Concluding, he declared the show open.

Sunday, the 24th February 1946. Milk-yield Test:—Some of the best milch cows of the Khamgaon breed and Berari buffaloes were employed for testing the milk yield capacity of these species and thereby giving the necessary stimulus for rearing the right type of milch strains.

Chakada Races:—Large crowds, whose interest in these races is proverbial were assembled at the race course. Scores of pairs competed giving satisfaction to the sportive instinct of the witnesses.

Judging of Exhibits:—Best specimens of the livestock that was displayed, were selected for award of prizes, by a panel of non officials assisted by Drs. Abdul Azeem and Ahsanul Karim. The Khamgaon breed which is noted for its qualities of draught and endurance predominated. Though flourishing "in cognito", it demands development and wide distribution.

Practical Demonstrations:—Interesting and educative demonstrations were given in the various stalls, by the officers of the departments that participated. The Village uplift stall where the preparation of fruit juices and quashes was demonstrated attracted a record number of people. Some of the hand machines namely cotton ginning machine, rope making, wool carding, wool spinning, twine twisting and a host of other machines which were invented and perfected by Mr. T. Y. Deo would go a long way in solving the rural poverty.

Cinema Show:—In the evening, the Field Publicity Organisation, under the able direction of Messrs M. P. Bhisnikar, Assistant Director of Field Publicity Organisation, Central Provinces and Berar, Nagpur and S. V. Bokare, District Publicity Officer, held a cinema show depicting some of the rural life and their relation to post-war development schemes.

Monday the 25th February 1946:—Ploughing with improved types of implements was keenly contested. Large number of farmers whose primitive instruments were progressively replaced by their modern counter parts were visibly impressed.

For the exclusive benefit of the housewives Mr. T. Y. Deo gave a treat on domestic science canning, preparation and preservation of quashes fruit juices which make the domestic life wholesome and the table sweet. With his impassioned Aristotelian articulation, which held the crowd of

fair sex spell bound painted a sombre picture of India's rural industries which in times of yore added an immortal and glorious chapter to the citadel of cultural exuberance.

In a pleasantly decorated Shamiana which was crowded to the full the final functions of the show were gone through. Officers of the various departments delivered impressive speeches.

Mr. N. L. Deshpande, Sub Divisional Officer, Secretary, District Live-stock Improvement Association read his illuminating report on previous show held at Malkapur.

Prize Distribution:—Prizes worth Rs. 1200, besides 21 rolling trophies, 2 shields were given away to successful competitors at the hands of Mr. R. P. Kolte, A.D.M. in the absence of Mrs. Rowly who was indisposed.

He however read out the speech Appendix "B" of the Deputy Commissioner in which he thanked all for making the show a success.

Mr. R. M. Bondre winding up the function thanked all and paid special tributes to Mr. D. D. Randive, Tahsildar and Messrs S. A. Ahmad Miah, G. J. Khond, and K. Shreerangachar, Veterinary Assistant Surgeons for their selfless services.

Distinguished amongst the many visitors were Khan Sahib Muniruddin, Officer-in-charge, District Council, Buldana, Messrs M. W. Rahalkar, Extra Assistant Director, Animal Husbandry, N. Y. Kher, Assistant Registrar, Cooperative Societies, A. X. Rebello, Deputy Director of Agriculture, and H. H. Barde, Extra Assistant Director of Agriculture.

The map of India illustrating the best breeds in their respective Provinces and a model village with schools, hospitals, etc and the model pits for the preparation of composite manures and the furnace for the manufacture of gur exhibited by the Agriculture Department were among the other prominent features that attracted much attention.

The resolutions that were passed at the show held at Malkapur for the opening of the Veterinary Dispensary at Nandura and Amdapur were given effect to by the President, Municipal Committee, Nandura and the officer incharge, Khan Sahib Munirudin, respectively. A vote of thanks to the officers concerned was proposed and passed by the assembly in the open session of the show.

Further resolutions demanding the opening of a Veterinary Dispensary at the Bori Adgaon and the establishment of a breeding centre for the development of Khamgaon breed and Berari buffaloes were reiterated, and passed.

of International collaboration of the veterinarians of the whole world. It is true that International relations get cut off during a war and that an entirely new start has to be made after the cessation of hostilities; but this beginning of the work is always deferred. During the war and after, there are very many problems increasing from day to day which require a prompt solution. Therefore too long an interval in the post-war period is dangerous for the advancement of the science itself and of the Profession.

12 whole years passed since the end of the war to the convocation of the IVth after-war Congress in Bruxelles 1863 and the same period of time to the meeting of the XIth Congress in London 1930.

How many years of a barren pause may pass again from the end of the war in 1945 to the next congress? How are we to shorten the long lasting and noxious interruption in the continuity of the veterinary congresses and how are we to keep and to deepen the idea of International collaboration?

The Congress Idea:—In consequence of the great development of international commerce in animals and animal products and of greater changes for dissemination of infectious diseases in the second half of the nineteenth century there arose some special veterinary problems of an international character. Such problems cannot possibly be solved by independent measures of single states. The one-sided prescriptions of that time did not correspond to the exigences then arising and the veterinarians of Europe were conscious of the gravity of such a situation. It was England that at that time mostly suffered from the diffusion of infectious diseases.

The great veterinary expert, Prof. Gamgee of Edinburgh, was the first to formulate a concrete proposal for the solution of those problems. Clearly discerning their importance, he said "It is necessary to convocate an International Veterinary Congress which will discuss those questions and submit common proposals for the solution of those problems to the interested States".

On his own initiative, he sent out in April 1863 invitations to a meeting in Hamburg. Hundreds of invitations were sent out to Veterinary High Schools, to Professors of Veterinary Medicines and to practical Veterinarians but on the European continent only.

The English Professor Gamgee has, therefore, become the founder of the International Veterinary Congresses and the collaboration of the European Veterinarians, the basis on which the subsequent congresses have been built up.

Since then, the Congress idea has been developed and extended with persistent force all the world over. From the little group of Veterinarians—

in all 103—who had assembled at the first congress a large community has grown up, which reached at the 12th Congress in new York in 1934 its largest extent. The number of the members amounted to 3341.

Statistics show the steady growth from one Congress to the next one. With the increasing number of the participants, the number of the participating nations also increase and, when, gradually all the continents enter in its compass, the congress acquires a more and more true International character.

At the First International Veterinary Congress representatives of European States only assembled. At the second Congress in Vienna, 1865, Veterinarians from Asia participated, from the 4th Congress in Bruxelles 1883, America became a permanent and active member, the 5th Congress in Paris 1889 counted amongst its participants representatives from Africa while at the 13th Congress held in Hague, 1909, representatives from Australia also attended. Therefore the 13th Congress was the First truly International Congress with Veterinarians from all the five continents. This world character has been maintained in all the following Congresses.

Gradually the number of participating nations also increased. At the First Congress only *ten* European nations met; whereas at the last congress, the 13th, in Zurich, 1938, representatives of *sixty five* nations joined in collaboration, for the advancement of common ideals and the solution of common problems.

The components of a congress:—Within the frame of a Congress, are three closely knit sections viz. *the scientific, the social* and *the technical*. Each one of them has been developed separately and, while far from being independent sections, they are mutually intertwined and contribute materially for the harmonious functioning of the whole Congress.

The scientific activity has at all times been the fundamental base of the Veterinary Congresses. During the reports and discussions, questions are debated and special scientific demonstrations and exhibitions are organized. The representatives of the Veterinary Science gladly seize the favourable occasion of a Congress for pointing out their problems and searching for their solution before a forum representing the International science.

Regularly only questions which are of actuality for the determined Committee of the International Veterinary Congresses, during the 8th meeting in Budapest, 1905, care has been taken that the programmes are so arranged as to guarantee the mutual organic connection.

In the course of the meetings which have been hitherto held the Congress work has extended to more and more various branches of Veterinary science. Whereas the first Congress had mainly concerned itself about

Messrs Kelkar and Sons of Amraoti whose artistic paints and decorations of pandals and the selection of prizes of practical utility which formed part of Cattle Shows in Berar have made a mark and enhanced the credit of their business.

Messrs K. A. Bondre and D. A. Bondre, were at home to a large number of guests.

Amidst scenes of enthusiasm the function came to a close leaving happy memories in its trail.

(Appendix "A")

OPENING SPEECH

By

MR. J. H. ROWLEY, I.C.S.,
President of the Committee.

I must first of all express my gratitude to you for having given me this opportunity of declaring open the 3rd Buldana District Cattle and Agricultural Exhibition. Two such Shows have been held previously one at Khamgaon and one at Malkapur, and they have both been very successful. The success of those two shows has encouraged the District Livestock Improvement Association to arrange this 3rd Show here at Chikhli and I very much hope that this year's Show will even beat the highest standard in previous shows.

It is impossible to over-estimate the importance of agricultural development in a country like India. In England, I myself belong to a family interested in agriculture and it is my conviction that agriculture is the basis of economic happiness and prosperity every where. Without a successful and progressive agriculture no country can really survive in present conditions and this is particularly so in India, where the great majority of the people earn their living directly from the land. Unfortunately so far the development of agriculture in India has not always had the attention it deserves. In my opinion, the Agriculture Department should be one of the most important departments of Government and the work of this department should reach even the remotest village in each district. Whatever the future of India may be I am convinced that any plan for the betterment of India must have as one of its foundations an all round improvement in agriculture.

It is because of my conviction that agricultural development is a key to India's progress, that I particularly welcome Cattle and Agricultural Exhibitions such as this. In England, Agricultural Shows are a feature of Agricultural Life throughout the country. Such Shows in England are arranged on a very big scale and serve a two-fold purpose—in the first place they stimulate a healthy feeling of competition among agriculturists and

show them the best methods and the highest standards obtainable and in the second place they interest people not connected with agriculture in all the work done by the agricultural community. In the same way as Agricultural Shows in England have stimulated agricultural development and have ensured sympathetic interest in agriculture among all sections of the community. I hope these Agricultural Shows here will also help the agricultural development of the district.

The District Livestock Improvement Association is to be congratulated on the energy and enthusiasm shown in arranging these shows. At the last annual meeting of the District Livestock Improvement Association I expressed my deep interest in the working of the Association and promised to give every help in increasing its membership. At the time of the last annual meeting, the membership of the association was as follows:—

Donors-22, Life members—45, Annual Members-176.

I issued immediate instructions to all Tahsildars to take a keen interest in this work and I am very glad to be able to report that by now the membership of the association has been increased to the following figures:—

Donors-24, Life members 58, Annual members 263.

This progress shows that the Livestock Improvement Association is going to occupy a real place in the life of the district and I hope that the progress attained this year will be continued and even improved upon in succeeding years.

At the present time the whole world is facing the after-effects of war. The most terrible war the world has yet seen has ended in Victory for the allied nations but it will take a long time for the evil effects of the war to disappear. Prices are still high and many of the essential commodities are still very difficult to obtain. India has played a worthy part in the war efforts and the bravery of Indian Troops has become well known throughout the world. The agricultural community in India has, however, also played its part in helping the war effort and as most of you present here are agriculturists I take this opportunity to thank you for the help you have given India and the United Nations in producing as much food as possible during the war years and in disposing of as much as possible to Government. The Food Problem has been difficult throughout the war years, but now that the war is over it is even more difficult and the whole world is facing an acute shortage of food. In England and in most of the countries of the world rations have had to be reduced during the last few months and India is also facing the same difficulty. Government is doing everything possible to procure the maximum quantity of grain which each district can spare and I appeal to you all to give every possible help in this most important work.

the infectious diseases of domestic animals and about the questions relating to Veterinary Police, and had only just touched upon questions of other veterinary scientific work. At the last Congress there were many different sections arranged according to a precisely worked out plan: viz. Infectious diseases, Parasitic diseases and Parasitology, Tropical diseases, Poultry diseases, Cattle diseases, medicine and surgery, Veterinary Physiology, inspection of meat, milk, hygiene, Cattle breeding, Veterinary education and Military Veterinary matters. Besides the above mentioned special branches there were discussions on the organization of the veterinary service, on the sale of Veterinary medicaments, Veterinary hygiene, anatomic nomenclature, veterinary jurisprudence, Bacteriology, Practical questions of Veterinary practice, Obstetrics and nutrition.

According to the increasing number of special branches, the number of the concerned problems also increased. The first Congress had on its agenda a total of *eight* questions only whereas at the last Congress there were as many as *forty-four* problems.

On the basis of expressed opinions and often of long and thorough discussions, resolutions and proposals are formulated. The Congresses specially endeavour to make their influence felt in questions of International importance, and give a guide and direction to the scientific world and the administrations of States in order to obtain everywhere a uniform solution of the respective problems. With these objects in mind 112 resolutions have been formulated.

The organisers of the Congresses appreciate very much the social side also. The social functions are the ideal places for the development of a lively sociability for they represent an International meeting place of men of the same profession and therefore of common interests and view too.

At the first Congress, there were only about hundred participants and therefore it was very easy to organize the social side. As, however, later on, the number of participants grew up to one thousand and more, arrangements had to be made more elaborately to make it possible for the members to get acquainted. Special Committees are entrusted with this task and arrangements are made for excursions, inspections of veterinary institutions, special and artistic exhibitions. The town where the Congress is meeting and its environs are visited by the participants in common.

The Congresses which have been held hitherto have always ended with a solemn banquet. Some states and towns have given special receptions and banquets in honour of the Congresses guests also. A glance at "The Toasts" on those occasions shows an agreeable social atmosphere at those gatherings and the good fellowship among the veterinarians of the whole world. These social functions have become very popular. Since

the seventh congress in Baden, 1899, many veterinarians participating in the Congresses have been accompanied by their ladies.

Up to the Congress at the Hague, 1909, each Congress had its own separate regulations, but there the "Permanent Committee of the International Veterinary Congresses" proposed regulations which were approved and adopted by all the following congresses, excepting some little changes. Those regulations concern the aims, the organization and the convocation of the Congress, the rights of the members, the functions of the managers of the Congress, the establishment of sections, the courses of the discussions, the closing of a congress, the reports, the keeping of archives and finally the financial matters of those international meetings. The Organising Committee is entrusted with the preparation of the Agenda for the Congress. For special purposes, if needed, special committees are instituted. With the organisation of the last Congresses, the following Committees have functioned: Programme, Exhibition, Report-printing, Finance, Press, Local gatherings, Reception and Ladies Committees. Since the 9th Congress an Honorary Committee has been created whose members are high state functionaries and diplomats of the States participating in the Congress. In most states—since the 7th Congress, in Baden—National Committees also are established for propaganda for the Congress and to admit members.

The above mentioned Committees submit proposals concerning the programme to the Organising Committee.

Since "the Permanent Committee" has been instituted the scientific programme must be approved by that Committee.

The pre-congress organization has to arrange the scientific and entertaining social programme. The main organisation has to solve all technical questions during the Congress itself.

A special Secretariat Office or Congress Office is established before and during the Congress.

The Congresses have been of great value in International collaboration of the profession and they should be our guide in the future.

It has been increasingly felt necessary to extend the international scientific and social collaboration beyond the narrow limits of the few Congress days by aid of suitable technical means.

From the scientific point of view especially, the wish has been pointed out to extend and to deepen the scientific activity and its practical application.

The various sections that have already been established are by no means exhaustive, although they have been subjects of Congress discussions; there are many other questions which have not been considered. The extent of that work will become larger, as during this war

Food is the basic necessity of life and it is the duty of each one of us to do everything possible to help India to feed every single person in these difficult days. You have helped magnificently during the war years and I know that, now when the need is even greater, you will respond in the same wholehearted way.

I am aware of many of the difficulties which you agriculturists are facing at present and I assure you that I am doing and will continue to do everything possible to help you. In particular I am trying at the moment to make arrangements to ensure adequate supplies of cotton seed for you throughout the district. I hope to be able to arrange for cotton seed to be available at a controlled price at all the big centres in the district, and I hope that these arrangements will be in working order in the very near future.

It gives me very great pleasure to see so many people present here to night and I feel sure that with your support this show at Chikhli will be a real success. I am sorry that owing to the severe illness of my wife I will not be able to spend much time here but I shall follow all your activities with great interest. I hope that there will be good entries for all the competitions and that at the end of the Show both those who have taken part and those who have to watch will be able to say that the Chikhli Show in 46, was a memorable success.

I hope that these few words of mine have shown you both my interest in the work that you are doing and my gratitude to you for giving this honour of opening the Show. I wish the Show every success and now with these few words I have great pleasure in declaring the Show to be open.

J. H. ROWLEY,

Deputy Commissioner, Buldana District.

25-2-1946.

(Appendix "B")

CONCLUDING SPEECH

BY

J. H. ROWLEY ESQR.,

Deputy Commissioner, Buldana.

It is with deep regret that I find that owing to my wife's illness and pressure of work it is not possible for me to come again to Chikhli today. It was pleasure to come to the Show on Saturday and to see the excellent arrangements which had been made and to witness the fine public support with which the show concerned.

I have followed with interest the happenings during the Show as given in a report from the Tahsildar. Nothing would have given me more pleasure than to be able to stay at Chikhli throughout the period of the Show, but unfortunately this has not been possible. I am most grateful to the Chikhli Taluq Livestock Improvement Committee for their very kind invitation to my wife and myself and I hope that they will understand and forgive my present inability to come to Chikhli again today.

I am very glad that the Show at Chikhli has proved such a success and I hope that the District Livestock Improvement Association will now make these shows an annual feature of their activities. I am very glad that during the year the Livestock Improvement Association has increased in membership and I hope that its progress will continue.

I heartily congratulate all those people who have taken part in the various activities of the Show, and especially those who have won prizes. My thanks are also due to all the various non-officials of every Department who have helped in so grand a manner to make this Show such a success.

It is a great regret to both my wife and myself that we are not able to be present. We sincerely hope that the success of this Show will inspire you all to arrange an even bigger and more successful show next year.

THE FOURTH YEOTMAL DISTRICT CATTLE SHOW

8th to 10th February 1946.

Friday the 8th February 46:—The Yeotmal District Livestock Improvement Association organised a show under its auspices at Pandharkawada. A spacious pandal pleasantly decorated with festoons and flags and stalls with various attractive exhibits provided an imposing scene.

In a holiday mood, thousands of people, motivated by the surging desire of improving their economic lot, marched to the spot, in an un-ending stream from the confines of the Deccan Trap. The ill-clad and ill-fed peasantry—a sharp contrast to a few fabulous rich—fighting fate with faith were assembled at the demonstration stalls in search of a panacea for the appalling spectre that had overtaken their economic structure. Thanks to the never-ending and foresighted thinking of Mr. Shahi, the sponsor of many a beneficial scheme and the unrivalled espousal of Mr. Sundaram in Berar, an oasis in the shape of this show presented itself.

Departments, such as Veterinary, Agriculture, Public Health, Animal Husbandry, Rural Industries, Red Cross etc., representing Sciences and Arts, that had existed and prospered in the most inhospitable environments and which had solidly contributed to the growth and constructive activities of the human race

many new veterinary problems have cropped up. Veterinary Science has acquired more and more importance in the economy of public life and ample possibilities of development exist. International collaborations are strengthened a great deal by social contacts and there are great possibilities for the propaganda of a true international friendship by means of social-gathering at the Congresses.

The technical side of the Congress organization strives, of course, for a greater perfection in order to be able to solve all new questions.

ACKNOWLEDGMENT OF THE CONGRESS WORK.

The work of the Congresses for the solution of problems of general importance cannot but draw the attention and acknowledgement of all interested circles.

To the 2nd Congress held in Vienna 1865 two years after the successful first international meeting, many European states sent official representatives who were entrusted with the task of following the discussions and bringing official reports. Since that time delegates of more states have attended and at the last Congress nearly all states have been officially represented and their delegates have participated in the work of Congresses. Some local administrations which are especially interested in the solution of questions of Veterinary Police send their delegates too. Since the 5th Congress, 1889, in Paris, there were more and more representatives of home and foreign towns. Occasionally special representatives of important agricultural societies from the different parts of the world have attended.

Since the 4th Congress in Brussels 1883, all following Congresses have been held under the protectorate of the sovereign or of the highest dignitaries of the State where the meeting has been held. The Governments of the respective States have also facilitated the transactions of the Congress by financial assistance.

These meetings attract representatives of cognate science as well as those persons who come directly under our profession. Numerous physicians, agronomists, scientists, chemists, great landed proprietors, industrialists, members of Parliament and high State functionaries participate as extraordinary members in the meetings and follow the work of the Congresses.

Jointly with that interest goes the acknowledgement. This acknowledgement of the efforts and aims of International veterinary Congresses is to be greatly valued and appreciated because the decisions of the Congresses are taken into consideration and their principles followed when new legislative measures are introduced.

Governments could not overlook the resolutions of the leading international representatives of the Veterinary Science as they are founded on a solid scientific base.

THE CONGRESS—A NECESSITY OF THE PRESENT EPOCH.

The epoch we live in is an epoch of international collaboration and the international congresses are means to this end. They are a fundamental and exacting necessity of this epoch.

We are indebted for this first degree of International co-operation to the improvements in communications with the most remote continents. Manifold connections have been thus initiated among the different nations. The fact that the nations have got nearer to each other on the political, cultural and especially on the economical field has raised the necessity to take uniform measures in the different branches of the human activity and therefore also on the veterinary field. The extension of the Veterinary Congresses which encircled in a comparatively very short time the whole world after a development of about 40 years (the 9th Congress at Hague, 1909) proves that the Veterinarians have understood the necessity and usefulness of the Congress work.

In as much as this general and fundamental necessity is satisfied, people become aware of the usefulness of the Congress work for the development of all veterinary science, for the public health and for the general economic progress. Its special advantage to the Veterinary Science, lies in the fact that the Congresses give them the best opportunity to exchange the results of the scientific researches and the most recent achievements of the science in the most direct and immediate way and to spread them all the world over. There the people give and get the impulse for the scientific researches and their practical applications. The resolutions adopted at the Congresses clarify many a difficult problem. Such an activity creates the basis for an international progress and for the development of the whole veterinary science.

The numerous relations—social, scientific and technical—formed during the Congress are of the greatest advantage. The personal contact with prominent representatives has in many cases an important influence on the improvement of professional consciousness and friendship. Most of the veterinarians remain in correspondence with each other and keep up friendly relations in the spirit of good fellowship of the Congress days.

Public Health also benefits from the activity of the Veterinary Congresses. The scientific discussions of the Congresses are impressed with the conviction that Public Health ought to be ruled only by laws which guarantee the possibility of fighting diseases of the animals by able veterinarians. The decisions which have already been taken in such sense have a favourable influence on the general Public Health.

all through the ages, participated in the show, imbibing with advanced modern ideas, the raw as well as the refined minds that were assembled there. The rich and the poor vied, displaying some of the finest breeds that form the manna and machinery of the India's crores.

With this panorama in view the stage for the opening ceremony of the show was set. Mr. S. Rajan, I.C.S., the Deputy Commissioner, Yeotmal was received at the entrance and conducted to the dais by the Chairman of the Reception Committee. The Office-bearers and the members of the Committee were then introduced to him.

H. H. the Aga Khan Boy Scout band was in attendance playing the tunes of the pathani March.

In a solemn and patriotic song the gathering was welcomed by a concert of little girls.

Rao Bahadur D. K. Deshmukh, the Chairman of the Reception Committee welcoming the gathering in Marathi reviewed the condition of the starving millions and referred to the post-war development schemes that would ameliorate their lot. However, he averred that Western ideas could not be ingrafted on to the East overnight and the dependence of the peasantry on livestock and development of livestock should occupy the first place on the agenda of the schemes. Asserting that cattle shows were an indispensable corollary, he exhorted the audience to emulate in their own spheres, the principles and the practices enunciated by the various Departments at the show. After referring to Mr. Shahi who, marching ahead on the crest of the public enthusiasm, laboured unflinchingly in getting the establishment of a Veterinary College sanctioned, he concluded with the request to the Deputy Commissioner to declare the show open.

Opening ceremony:—Responding Mr. S. Rajan I.C.S., rose and delivered his eloquent inaugural speech (Appendix 'A') in tones emotional, that excited universal appeal.

Concluding, he declared the show open.

Saturday the 9th February 46. Milk yield test:—Famous strains of the milch cows and buffaloes took part in the milk-competition. Given the necessary impetus the milk industry in India which holds a third of the world's cattle population is sure to assume national importance and compete in foreign lands.

Chakada races:—From time immemorial, in every country and in every clime, either as amusement, or trial of chivalrous nature, the best formed part of the sportive life of man, attended with all its refined as well as revolting tendencies. The relic of that spirit even to-day manifests itself in races like "Shankarpat" which provides an index of the bullock-power the mainstay of

the peasantry for some generations to come. Scores of "Chakadas" competed and hundreds of enthusiasts witnessed without tasting the prick of the goad, many a bullock demonstrated the power of his progression.

Judging of exhibits:—This offered an opportunity, to many a stock owner, to observe the characteristic peculiar features of different types of species, which would be a guidance while improving their stocks. A panel of experienced non-officials assisted by Drs. Azeem and Bhawe conducted the judging.

Practical demonstrations:—Demonstrations, educative and instructive in their scope and extent were held in various stalls which were thronged with eager crowds.

The Cottage Industries stall of Mr. Mankar of Wair was the centre of much interest. Weaving of different varieties of textiles such as Niwar, Galicha, Carpets etc., manufacture of paper, making of combs, buttons etc. out of animal produce, bee keeping and a host of other crafts were demonstrated.

At a time, when machine made articles appeal to the artistic taste of man the "Wastu Kalashala", under the direction of Baba Ramchand, has done a great service in establishing a training school of handicrafts at Shideshwar, which if subsidized and organised properly, promises to be a flourishing institution to which thousands would flock for the acquisition of knowledge.

Sunday the 10th February 46. Ploughing Competition:—A hotly contested ploughing competition with improved types of implements was held to demonstrate the scientific way of ploughing for making the soil fertile and healthy.

The evening saw the concluding phases of the show. In a well decorated "Shamiana" the elite of the town were assembled.

Speeches, on the activities of the various departments, that minister to the welfare of the masses, were delivered by their respective officers. Dr. Katiyar's masterly exposition of the virtues of the livestock and its products, whether in life or in death, that had been contributing so much to the civilised way of life, was received with approbation.

Dr. A. Karim, the Secretary of the Association read out his well balanced report on the previous show held at Pusad and dwelt on the activities which he and the members of the Association put up.

Prize Distribution:—Prizes worth Rs. 1300/- besides 21 rolling trophies and shields were awarded to the successful competitors at the hands of the Deputy Commissioner.

Mr. S. Rajan, I.C.S., in his concluding speech (Appendix "B") appealed passionately for alround improvement of the livestock.

R.B.D.K. Deshmukh, winding up the proceedings extended his and his Committee's thanks to all for making the show a success. Special mention was

It is a matter of fact that the general welfare is a great deal dependent on the wealth resulting from the keeping of domestic animals. Nearly all the items on the agenda of a Veterinary Congress refer to the study how to keep up and improve the stock of domestic animals. By this work the Congress becomes the foundation-stone for the advancement of economic progress.

THE NECESSITY TO KEEP UP AND TO DEEPEN THE INTERNATIONAL CO-OPERATION.

On account of the general development of the International Veterinary Congresses as hitherto observed, and of the extension of their influence all the world over, in consideration furthermore of the importance of their work and development, and considering the circumstances that they are necessary and useful, and acknowledged as such by Governments, we come to the following conclusions.—

"This International collaboration of the Veterinarians must necessarily be kept up and strengthened."

The "Permanent Committee of the Veterinary Congresses" which was elected at the 13th meeting in Zurich, 1938, should urgently fix the next place of meeting and the date of the future Congress. If difficulties occur, support should be requested from the 'United Nations'.

By a speedy convocation of the Congress the idea of International co-operation will be kept up; and, in order to deepen that idea too an "International Veterinary Union" should be instituted at the next Congress.

This Union would link together the Veterinarians of the whole world to a strong unity which would *permanently* and not periodically (like the Congresses) advance the veterinary science and its practical application.

This work will be done by the "International Veterinary Office" and the managing organ of the Union. This office should have, beside a Secretariat office, a department for scientific matters, a department for an exchange department, a social department and a propaganda department.

The Department of Scientific matters would take care of all questions concerning the general advancement of Veterinary Science and its practical applications. It would institute international Committees and Com-missary organisations for special important questions. It would organise different special inquiries. It would take care that, at Congresses where questions concerning the sphere of activity of veterinarians are discussed, representatives of veterinary science also participate with their competent reports.

That department should publish editions of the works of veterinary specialists and arrange lectures by prominent experts in different States.

The Exchange Department should organise a far reaching exchange of young veterinarians between all States in order to offer those young people the chance to study the conditions abroad during their stay in the respective countries, and to work in scientific institutions and with prominent practitioners.

The Social Department should take measures for improving general social contact and personal intercourse. It should promote permanent correspondence among the veterinarians as well as exchange of thoughts on all special and extra professional interests. This department should also take care of the improvement of professional conditions. Along with this, excursion abroad should be organised.

The Propaganda Department has a far reaching task to fulfil. It should publish popular scientific veterinary books, organise popular veterinary lectures and broadcast talks, take care that instructive films on veterinary medicine are produced and that propaganda exhibitions are organized. A special Press office should put, at the disposal of the world press, veterinary news, short popular scientific articles and illustrative materials.

All that work could be reflected by a newspaper, possibly a weekly, which should bring all its news in several universal languages.

"The International Veterinary Union" and its business managing Office would give a new technical form and frame of international collaboration which therefore will rise from its first and initial phase of periodical, and irregular congresses to a higher phase characterised by a permanent and uninterrupted activity.

The international Veterinary Congresses will then represent a plenary meeting of the Union and the activity of the Union will bestow on them an augmented importance.

We have to point out that the work of the Union with regard to the advancement of the International friendship and understanding as well as the raising of general welfare, would conform to the principles and ideals of the "United Nations" which were decided in San Francisco.

Therefore a close collaboration between the "International Veterinary Union" and the Organisation of the United Nations is necessary, for mutual utility and prosperity.

By the accomplishment of this extensive work in the spirit of democracy, the Veterinarians of the Free Nations of the whole world will solve the problem which the present epoch has imposed on them and fulfill their duty to the profession as well as to the International and National economy.

AN OUTBREAK OF SALMONELLOSIS IN HORSES AND MULES*

BY

MAJOR DONALD R. CORDY, V. C., AND CAPTAIN ROBERT
W. DAVIS V. C.

Because of the apparent infrequency of salmonellosis in mature horses and mules, this outbreak of the disease in military animals is reported. *Salmonella abortivo.equinus* and occasionally *Salmonella typhimurium* *Salmonella aertrycke* have been incriminated in septicemia, joint ill, and colitis of foals. However, enzootics, with high mortality have occurred infrequently in adult horses and mules in Europe and the United States, particularly when resistance has been lowered by rail or sea transport.⁴ It is thought that sporadic and enzootic cases may occur with much greater frequency than is usually believed, and that many clinically diagnosed cases of enteritis and forage poisoning may be salmonellosis.

EPIZOOTIOLOGY

This outbreak occurred in India during the dry season in the middle of November 1944, in a group of nearly 300 horses and mules belonging to the American quartermaster pack unit. There was an approximately equal number of horses and mules and mares and geldings, ranging in age from 5 to 15 years. The mules had been shipped directly from the United States; the horses had come from the South Pacific. There was a sketchy history of enteritis among military animals in the latter place at some prior date.

From the Indian port of debarkation the animals had made a rail trip of about one week, without delay in route. After arrival, the group had been placed in an old corral a few miles from the rail road. The fence enclosed a tract of jungly riverbottom about a quarter of a square mile in area, including a stream with a number of sluggish backwaters. The corral had been used off and on for eighteen months for animals of the Chinese Army. Upon occupation of the area, the animals were fed from the ground with barley, gram, and rather poor Indian hay.

Three weeks after arrival the first case appeared. During a period of seven days a total of 8 cases was observed. Seven animals (2 mules and 5 horses) died or were destroyed *in extremis*, and 1 horse recovered. Only the latter animal received Sulfaguanidine treatment. Untreated fatal cases showed symptoms for periods of two to thirty-six hours, usually less than twenty-four hours, before death. The surviving case was sick about twenty-four hours before the five day Sulfaguanidine treatment was begun and was clinically recovered at the completion of the treatment.

*Journal of A.V.M.A. January 1946

SYMPTOMATOLOGY

Symptoms shown were fairly uniform throughout the group. Most cases showed anxiety and distress. One case that terminated fatally displayed symptoms similar to those observed in the somnolent type of encephalomyelitis, such as depression, stupor, and leaning the head, against the stall. All animals showed marked weakness, and those which lived longer showed posterior incoordination. Many went down and made feeble and unsuccessful attempts to rise. Temperatures were elevated, usually to 103.0-105.6 F. Conjunctivitis was noted in 4 animals. Pharyngeal paralysis was not seen. Pulse and respiration were somewhat accelerated. Diarrhoea was irregular in occurrence and never prominent.

GROSS LESIONS

Five cases (2 mules and 3 horses) were examined shortly after death. All had died of the disease, except 1 horse which was destroyed *in extremis* after thirty-six hours of illness.

Severe gastroenteritis was present in all five animals. The 2 mules, sick only a few hours, showed more inflammation of the stomach than of the intestine. In the horses, two of which were sick about thirty-six hours, the most severe lesions were in the cecum and colon. The earliest cases showed marked hyperemia, some edema, and scattered petechial and ecchymotic hemorrhages in the mucosa. Cases of greater duration showed patchy areas of grayish-red superficial necrosis in the mucosa of the cecum and colon.

The spleens were slightly swollen or normal in size, and usually the pulp was somewhat softened and dark red. These splenic changes were most marked in the peracute cases in the 2 mules.

The livers were lighter coloured than normal, somewhat soft, slightly enlarged, and greasy on the cut surfaces. Visceral lymph nodes were reddish, juicy and often hemorrhagic. Lesions in other organs were less uniform. Small hemorrhages were seen in the endocardium of the right atrioventricular valves in 1 animal. Mucosal petechiae occurred in the bladder in 1 case. Hyperemia and some edema of the mucosa were present in this and another bladder. In one case, there were petechiae in the kidney cortex. The only brain examined was that of the "sleepy" case. Grossly, the only abnormality was a few petechiae in the walls of the lateral ventricles.

HISTOPATHOLOGY

Microscopically, the intestine showed marked hyperemia, small hemorrhages, marked mononuclear infiltration of the mucosa and about the vessels of the adjacent muscularis, and superficial coagulation necrosis of the

made of the services rendered by the officers of the Veterinary, Revenue and Forest Departments and concluded by referring in glowing terms to Messrs. H B Shahi and P. S. Sundaram for holding such shows which were doing immense good by way of propaganda.

Mr. P. S. Sundaram, A.D.V.S., Berar, on behalf of his Department acknowledged with grateful thanks, the unstinted help and co-operation he had been receiving every where in Berar enabling him—to the amazement of the cynic—to constitute the District and Taluq livestock associations on firm foundations and to successfully organize the annual shows during these 4 or 5 years under the inspiration and guidance of Mr. Shahi. In moving allocations, he declared that the spirit that had been animating their professions and actions—of which these shows were a visible manifestation—continued to be nurtured with fostering care, the dawn heralding India's cultural renaissance would be high.

Concluding, he expressed gratitude to S. Rajan, I.C.S., for the keen interest and active sympathy he had evinced in the show in the midst of his duties and thoughts of impending departure from this District, and further was convinced, that any one who cherishes the love for his Nation is bound conscientiously to serve the dumb creatures which form the back-bone of its rural economy.

Messrs Pathak and Gadre, Veterinary Assistant Surgeons played their part well in making the show a success.

Sardar Kisan Singh Izardar was "at Home" to a select number of guests in honour of the Deputy Commissioner.

Late in the evening "this most pleasant function"—in the words of Mr. S. Rajan—came to a close and became the talk of the town for some time to come.

(Appendix "A")

SPEECH DELIVERED

BY

S. RAJAN ESQR., I.C.S.,

Deputy Commissioner, Yeotmal, on the 8th February '46, on the occasion of opening the Fourth District Cattle Show at Pandharkawada.

Ladies and Gentlemen,

First of all, I wish to thank the members of the Reception Committee for giving me this honour of opening the District Cattle Show to-day. I wish to be excused for not speaking in Hindi as I think that I will not be able to express myself sufficiently well in Hindi. So I will speak in English. I have requested Mr. Joshi, your Sub-Divisional Officer to tell you the gist of my speech

in Marathi, and he has kindly accepted to do so. I do not know the names of all the organisers of this Show but I thank Mr. P. S. Sundaram, Asstt. Director of Veterinary Services—the moving spirit in Berar—and Rao Bahadur D. K. Deshmukh for the keen interest taken by them in this District Cattle Show. This idea of having District Cattle Show regularly every year in all districts is due to Mr Sundaram.

Now I turn to the subject of the day. The improvement of cattle is a subject of national importance. Every one of you knows that more than 90% of the population of India live in the villages and more than 90% of the persons living in villages are connected either directly or indirectly with agriculture. I may say that agriculture is the most important industry of India if you may call agriculture an industry, and there is no reason why we should not call it an industry. You have to devote a great deal of energy and hard work in order to produce more grain from mother Earth. For this important industry of India what is the machinery needed? Cattle and bulls form the machinery of this most important industry of India which feeds the crores of people living in India. Now you will all realise the importance of improving the cattle. It is elementary common sense that in order that your factory can work in a very efficient manner, your machinery should be very efficient. If your machinery is not efficient you cannot produce as much as you ought to produce. Let me review the condition of cattle in India. When I went to England and to Europe I saw some cattle in the farms and what struck me most after seeing those cattle in England and in Europe was that every bull and every cow appeared to be well built. The cattle appeared as if they were specially handpicked. If you go to a village in India you find that the cattle are not quite healthy. Many of the cattle are in a deplorable condition. Many of them are only mere bones. I think that it would be a very good thing if our cattle also reach that peak of excellence and my prayer to God would be that in the near future our cattle should also reach that peak of excellence. That excellence is not a mere accident. It has for its foundation great industry, love for the cattle, and looking to the welfare of the dumb millions. We have plenty of love to our cattle. I do not say that the farmers of this country are lacking in that. To the Hindus the cow is an object of divine worship. We all do love our cattle, but the point that we ought to learn from the West is this: We ought to improve our knowledge of veterinary sides. It is not sufficient if only a few graduates from the Veterinary College know the principles of veterinary science. Every cultivator, every farmer should be something of a veterinary doctor himself. I do not want that every one should be expert. It is impossible, but every one should have those basic elementary principles of veterinary science well embedded in his mind. Having acquired all this knowledge if you take care of the cattle there is no doubt that that our cattle will also become quite good.

One more point which I would like to stress in this connection is this. We should not adopt a penny wise and a pound foolish policy. Agriculturists

mucosa over large areas. The splenic sinuses and pulp were engorged with blood, and actual hemorrhage may have occurred in one of the more acute cases. There was no evidence of any marked proliferation of mononuclear elements.

The hepatic cells contained large fat droplets. Nearly all liver cells were affected but in a few areas it could be seen that the lesion was initially centrolobular. The liver was markedly hyperemic, and showed accumulations of mononuclear cells in the interlobular tissues. No hepatic necrosis was noted.

Kidney sections from 1 case showed marked hyperemia, small cortical and medullary hemorrhages, and some cloudy swelling of the convoluted tubules. Another case showed hyperemia, a few interstitial mononuclear foci, tubular fatty degenerations and a few small areas of tubular necrosis.

Section of the brain from the 1 case showed one small hemorrhage in the cerebral cortex. There was no evidence of other brain damage, the cerebrum, cerebellum, and brain stem all having been examined.

ETIOLOGY

A pooled specimen of intestinal content from the 2 mules which died the first day of the outbreak was rushed to the laboratory. No toxic metals were found. Suggestive colonies developed on Salmonella-Shigella agar. Three colonies were picked and put through differential mediums. All gave similar results. The organism was a small, aerobic, gram-negative, motile and glucose, maltose, arabinose, xylose, rhamnose, mannitol, dulcitol were fermented with formation of acid and gas. Lactose, sucrose, and raffinose were not attacked. Hydrogensulfide was produced. Gelatin was not liquefied. Indol was not formed. Nitrates were reduced to nitrites. No growth occurred on Simmons citrate medium. Acid was formed in phenol red tartarate agar.

An identical organism was isolated from the intestinal contents and urine of the third case, a horse.

These strains were all typed serologically by First Lieut. C. D. Cox, Sn. C., as having the antigenic structure (VI, VIII...; r; 1, 3, 5...). This identifies the organism as *Salmonella morbificans* (Bergey *et al.*) which is a member of group C, according to the Kaufmann-White scheme as conducted by Edwards and Brunner.⁵ This species was originally isolated from a case of septicemia in a cow, and subsequently from cases of gastroenteritis in man⁶.

TREATMENT

The illness was too brief in most cases for much of any treatment to be instituted. As soon as the first death occurred, bunkers were built, and

the animals were no longer fed off the ground. After the 2 mules died the first day, all sick animals were evacuated to a nearby remount dispensary. Three died here so rapidly that treatment was hardly begun. A fourth lived thirty-six hours but was destroyed because moribund. The "sleepy" case was supported in a sling for twenty four hours but died. By this time, the laboratory diagnosis of salmonellosis was definite, so the remaining sick horse was put on sulfaguanidine treatment. At 6 p. m., 600 gr. were given by capsule and at 10 p. m., 600 gr. more were administered. During the next five days, 250 gr. were given three times daily. Upon completion of this treatment the animal was regarded as clinically recovered. The pack unit, having had no more new cases, had departed, during this period of treatment, on a hundred-mile road march lasting five days. When visited at the end of this march, no further cases of this type were observed.

DISCUSSION AND CONCLUSIONS.

The initial focus of this outbreak could not be determined. The corral may have been contaminated by previously infected animals, or the South Pacific horses, with the history of enteritis in that area, may have included carriers. No opportunity was presented for a fecal survey of the group for carriers.

A specimen of river water from the corral showed algae, bacteria, and much debris, but no enteric pathogens were isolated. A quantity of the worst of the hay issued was fed to healthy animals without ill effects.

It seems very likely that the long rail trip may have been an important predisposing factor.

The incubation period presumably could have been anything up to three weeks, as the source of the infection could not be determined.

Because of the extremely rapid course, distinct symptoms of diagnostic value did not appear. The consistent observation of anxiety, weakness, wobbly gait, going down, and fever are suggestive.

While blood and organs were not cultured, the finding of the organisms in the urine taken at autopsy strongly suggests septicemia rather than the action of bloodborne bacterial toxins from a strictly enteric focus of infection. The brevity of the course would support this supposition.

While all cases were not examined bacteriologically, nor were Koch's postulates completely fulfilled, there seems little doubt of the etiologic relationship of *S. morbificans*.

Routine sanitary control measures instituted by Capt. Kenneth I. Gumaer, V. C., presumably helped greatly to limit the extent of the outbreak. The apparent success of sulfaguanidine in a single case is

think that by underfeeding their cattle, and that by not looking to them in a proper manner they can get more income and that they can save more. They are mistaken. That would be wrong economy. I would tell my agricultural brethren that if they spend more in looking to their cattle the increase in income would be much more than the increase in expenses. On the whole they would not find themselves losers. On the otherhand they will surely get very great profit. This is mere common sense. If you feed your cattle properly they can live for a longer period. They can work for longer hours. They can plough deeper. They can drag your cart for longer distances. On the otherhand if your cattle are weak they serve no useful purpose. After a little exertion they get fatigued. They will not live long. Considering all this I would advise you to spend more for the welfare of cattle and I am quite sure you will never regret for having spent more on cattle.

I place very great importance on this cattle Show. My reasons are these: Every one brings his cattle, bulls and bullocks. Here the spirit of competition is aroused. I do not mean to say that big land lords care much for the monetary value of the prizes. They can give many more prizes themselves. But what is more important is the honour that they get. Every real lover of cattle and every real farmer will feel very glad and he would feel very proud if other people after having a look at the cattle tell him that his cattle are good ones. I think one cannot mention a greater joy to an agriculturist than when he hears some one praising his bulls and bullocks. So cultivators and big land lords are spurred to greater efforts. If this year they do not get any prizes they hope to get them next year. The ordinary cultivators have come to see the show though they have not got their own exhibits, when they see all these fine cattle, these bulls, they also feel that they should also do something to improve the lot of their cattle. I am quite sure that these District Cattle Shows have done much good to the cattle of this district. I suppose all of you are very eager to see the cattle. I think it would be a sin if I keep you waiting any longer. I am really very glad to find such a big audience. This shows that there are so many people who are interested in cattle welfare. My only wish is that this enthusiasm may swell from day to day, from year to year so that it would be impracticable and impossible to have a District Cattle Show because of the large number of people that would attend. I would wish that you have a Tahsil Cattle Show in each tahsil in which the audience would be just as we have to-day. This is only means to an end. This is a means to spur people to greater efforts concerning the welfare of their cattle.

I thank you (all of you) gentlemen for giving me this patient hearing.

(Appendix "B")

SPEECH DELIVERED

By

S. RAJAN ESQR., I.C.S.

Deputy Commissioner, Yeotmal on the 10th February on the occasion of the Prize Distribution in the District Cattle Show at Pandharkawada.

I congratulate all the winners of the various shields and cups and other prizes. Those persons who have not got any recognition should not feel disheartened. They should all try to emulate the example of Rao Bahadur D. K. Deshmukh who has monopolised the receipt of the prizes and shields at this function. If one takes sufficient pains there is no reason why one should not get recognition in the District Cattle Shows to come. In this connection I want to speak a few words before closing this. What I want to tell you is this: You should all realise the value of having good breeding bulls. As some one remarked some time ago the better the parents the better the progeny. This is just ordinary common sense. Take the case of human beings. If the parents are quite good and clever and robust their children will also make their mark in the world. Same is the case with cattle—You cannot expect to have very fine cattle if the parents are not good. Much argument is not necessary to drive home this truth. Almost every one of you, every farmer knows the value of this. There are many things which people do know, but which they do not put into actual practice. What I want you to-day to do is to put those ideas of yours into actual practice. As I was telling you every one of you knows that a good breeding bull will have good calves. But how many of you are using that knowledge? In this connection I want to say one thing. We cannot expect the poor cultivators to buy fine breeding bulls as they are very costly. It is the duty of the rich agriculturists; it is the duty of the rich land lords to purchase such breeding bulls and keep them in the village. By doing so they are benefitting themselves and they are benefitting the community of agriculturists. I hope you will realise this. The rich men should realise that by purchasing a good breeding bull, they will get good calves and that they are also helping their poor brethren. So I take this occasion to appeal to the rich land lords and to the rich agriculturists of this district to purchase as many good breeding bulls as possible. If this is done there will be all round improvement all over the district. One other point which I want to stress to-day and which I forgot to tell you the other day is this. Doctors all over the world are of opinion that there is no better food for the human system than cow's milk. Look at any nation which makes a large use of milk. You will find them quite robust and quite strong. Take the case of Punjab. I had never been to that place, but I hear that there are very fine cows in Punjab and that every Punjabi

has the habit of drinking large quantities of milk. As a result of this you find that the Punjabis have a fine physique. If you want other examples, go to the West. Take any nation you like in Europe or in America. They do take large quantities of milk either directly as milk or indirectly as butter or as cheese. That is responsible for the fine physique that they possess. So if the people of this country are to have fine bodies, if the people of this country are to have a fine physique, well, the solution is quite obvious. Improve your cows. Give them better diets. By doing so you can get larger quantities of milk. In the course of time if this policy is followed there will be lots of fine cows throughout the country. Naturally there will be plenty of milk that would be drunk, and as a result of that policy the general physique, the average physique of people would improve. Some people are probably of the opinion that they will have to spend quite a lot for the improvement of cows. That is not quite correct. The first method is to have good breeding bulls. As a corollary it follows that the second-rate and third-rate bulls should be castrated. They should not be used for the purposes of service.

We should make a proper use of the fodder. You can feed more economically. One thing I would recommend to the land lords and agriculturists is the fodder cutting machine. If you put some grass or some kind of fodder before the cattle they eat only half of that and the other half they reject. They put dung, urine over them and thus the fodder becomes unfit for consumption. On the other hand by using the fodder cutting machine you can cut your kadbi or grass into some bits and you can put all those pieces in a basket. This way there will be no waste. Two days ago when I was having a walk I had a look at all the cattle. The officer in charge of this dairy department told me this. He said that the mistake which most farmers do commit is that they give rather too much to the cows. Probably he is quite correct. If you give too much well it is not going to give more milk. There is a limit to everything. If you give more than the quantity which is really necessary it only means that it will be excreted out of the system. So it is highly important for every man who has cows and the person who has a dairy to know the correct quantity of feeding. There is no point in just giving only one kind of food. It should be properly balanced. Just as for the human system you want proteins, you want mineral, salts, carbo-hydrates and some other chemicals which are necessary for the system, similarly for the cows and cattle also there should be a judicious mixture of so many things. It will be a very good idea if you just consult the Veterinary Assistant Surgeons and request them to give you the necessary advice in that connection, and I am quite sure they will very gladly help you in this matter.

As I promised in the beginning I am not going to inflict a long speech on you, and thanking every one of you for gracing this occasion and showing such keen interest in the Show I conclude this speech of mine.

THE FOURTH MORSI TALUQ CATTLE SHOW

From the 1st to 3rd March 1946.

The Taluq Livestock Improvement Association Morsi organised this show under its auspices at Salbardi the place of historic events in commemoration of which, thousands increased with religious fervour flock from the confines of the Satpura and beyond, thus offering opportunity to these untaught forest maidens and men to realise the benefits of the livestock improvement movement. An unusual number of typical specimens of gaolao breed which is noted for its milk and muscle capacity was displayed. The agricultural stall with its improved varieties of seeds, cereals, fruits, vegetables, manures etc and the Public Health Section, with its educative charts and posters, added their might to make the picture complete.

Chakada races as usual attracted large crowds. The gaolao pairs, with their majestic bearing demonstrated the power of their brawn, without inviting the attention of the goad on their soft and silvery coat.

Judging of Exhibits :—A non-official committee assisted by Messrs. P. N. Puranik and Abdul Azeem, Veterinary Assistant Surgeons adjudicated the best exhibits for the award of prizes.

Prize distribution Ceremony :—Prominent officials, non-officials, and a large number of people were assembled to witness the function, Mr. J. H. Thaker, Sub-Divisional Officer, presiding.

Mr. Ram Rao Patil Gadegaonkar, the Chairman of the Reception Committee, in a short speech welcomed the gathering and recalled the achievements of the Taluq Association in the field of the Livestock Improvement.

Mr. V. N. Andhare, Agricultural Assistant in an impressive speech, prescribed remedies for improving the fertility of soil for raising edible crops to meet the impending food crisis.

Mr. K. N. Katiyar, Veterinary Assistant Surgeon, in his usual forceful style impressed upon the audience that the happiness and comfort of the society largely depended upon the health and quality of the cattle which could be ensured by a balanced system of Animal Husbandry which in its final analysis meant ample supplies of animal food products and high state of fertility of soil so essential to neutralise the threat of famine.

After a few more speeches by the representatives of the other departments, the prize distribution was gone through.

Prizes worth Rs. 300/- besides 12 rolling shields and trophies were given away to successful competitors at the hands of Mrs. J. H. Thaker.

promising but not conclusive. Because of the probable septicemic nature of the disease, it would appear reasonable to try the more easily absorbed members of the sulfonamide group.

Shortly after this outbreak, a remount unit in another part of India reported six deaths in mules which showed symptoms and gross lesions very similar to those reported herein. These deaths occurred in some 300 mules from another South Pacific Area. Unfortunately, no cultural or histopathologic work was done. A fecal survey which was made on 43 mules from the group, a few weeks after the losses, showed no enteric bacterial pathogens. This absence of carriers in a random sample proves nothing but is reported as general information.

SUMMARY.

1. An outbreak of eight cases of salmonellosis among 300 horses and mules after sea and rail shipment, is reported,
2. Weakness, posterior incoordination, and fever were the most consistent symptoms.
3. Severe gastroenteritis with hemorrhage and superficial necrosis of the gut mucosa was the most marked lesion. The Cecum and colon were chiefly affected; the liver showed extreme fatty changes, and the spleen was engorged with blood.
4. *Salmonella morbificans* was isolated from the intestinal contents and urine.

REFERENCES

1. Mott, L. O., Shahan, M. S., Giltner, L. T., and Frank, A. H. Year book of Agriculture 1942, p. 430. U. S. Govt. Printing Office.
2. Henning and Clark—cited by Higgins, W. A., Christiansen, J. B., and Shroeder C. H. Poultry science, 23, (1944): 340.
3. Kelser, R. A. Manual of Veterinary Bacteriology, 3rd Edition, p. 233
4. Hutylra, F., Marek, J. and Manninger, R. Special Pathology and Therapeutics of the Diseases of domestic animals, 4th English Edition Vol. 1 pp. 161 and 186.
5. Edwards, P. R. and Bruner, D. W. Kentucky Agricultural Experimental Station Cir, 54 Dec. 1942.
6. Bergey, D. H. et al. Bergey's Manual of Determinative Bacteriology, 5th Edition, p. 447.

THE Indian Veterinary Journal

(The Journal of The All-India Veterinary Association)

Vol. XXIII

JULY, 1946

No. 1

Editorial

DISEASE CONTROL OR ERADICATION?

In our last issue, we outlined in brief the nature of the work that should be undertaken in the Post-war period under Veterinary and Animal Husbandry Sections of the Government. By far, the most important item of work that should be taken on hand immediately is in regard to the incidence of Contagious diseases of livestock. On this, hinges the successful development of Animal Husbandry. If the ryot is at present loath to go in for improved livestock, it is because of the ravages of Contagious diseases. If he is averse to limit his livestock to his actual requirements, it is again because the excess number is an insurance against the onslaughts of Contagious diseases which may break out at any time and decimate his stock. And therefore, the incidence of Contagious diseases plays a large and vital part in this country in the development of livestock industry.

Among the many Contagious diseases prevalent in this land, Rinderpest, Hæmorrhagic Septicæmia, Black-quarter and Anthrax are the most important. Even amongst these, Rinderpest takes the foremost rank as, by itself, it is responsible for more than fifty percent of the total cattle mortality. By way of illustration, taking Madras Presidency, for which figures are readily available, the average annual mortality for the past ten years from Rinderpest alone is over 15,000. Knowing very well how inaccurate the reporting of cattle diseases is, we will not be

far wrong if we were to put down the actual mortality at 30,000 a year. Calculating at a very modest rate of Rs 100/- as the value of each animal, the financial loss from this disease for Madras Province alone is *Thirty lakhs of Rupees a year*. This is not all. There is the further economic loss from the diminished or totally suppressed milk yield, lowered vitality and working capacity of recovered animals and dislocation of agricultural work consequent on the incidence of this disease. If the epidemic were to break out at the commencement of the agricultural operations, then these operations are either at a standstill, or, are very imperfectly and inefficiently carried out with the available cattle-power. The loss resulting therefrom is quite incalculable and, even if we compute it at a crore, we would still be under-estimating. Thus, the disease entails a two-fold loss—loss from the actual mortality it causes and the loss from its sequelæ, which is far more serious. It is these losses that have contributed materially to the poverty and perpetual indebtedness of the Indian ryot. Such then is the nature of the main cattle disease which has been aptly described as the scourge of the cattle of this land. Now, what should be our policy with regard to this disease? Should it be '*Control*' or should it be '*Eradication*'? Should the present policy of 'ringing out' the disease whenever it breaks out be continued or should it be replaced by one of mass protection? These are questions that are often discussed in Veterinary and Animal Husbandry circles. The balance of opinion has favoured total eradication as the policy to be enunciated and adopted. We are therefore very pleased to hear that the Imperial Council of Agricultural Research, with its vast resources, has drawn up a bold scheme for the *eradication* of Rinderpest from this country and have approached the Provincial Governments for co-operation and help in working out the scheme on a fifty-fifty basis.

The scheme is to be worked by a special staff of limited number of Veterinary personnel together with a team of trained Inoculators (somewhat similar to the Vaccinators in the Public Health). Each unit will have its own equipment including a Motor Van to enable it to move quickly from place to place and cover large areas in as short a time as possible. The team will

visit village after village and inoculate all the cattle in the locality; and, what is most important, mark the animals so protected so that they may be easily identified at a future date. In this way the entire area allotted to a team is to be covered up within a period of three years. This intensive mass inoculation is to be followed up by periodical protection of the growing young calves year after year. The scheme, is therefore, a well conceived one worth a trial, and should prove a success if worked out earnestly. Naturally, almost all the Provincial Governments have welcomed it and have assured their hearty co-operation and help. This is not surprising because it is for the good of the Province in particular and the country in general.

We hope that the scheme will soon be adopted by all the Provincial administrations and worked by their technical advisers with the necessary co-operation and enthusiasm to make it a success. Madras province should lead the other provinces in this scheme also, as she has done in many other Veterinary activities. She has a great advantage over other provinces in being surrounded on three sides by the sea.

BENGAL AND BIHAR

We draw the attention of the Governments of Bengal and Bihar to the representations made to them by their Veterinary Subordinates and earnestly plead with them to improve the service conditions of these hard-working essential services immediately without any further delay. "We are the most poorly paid officers under Government, although we form members of one of the most useful Development Departments", say the memorialists. It is nothing short of a scandal that the members of a scientific profession should be so shabbily treated in spite of repeated representations and it is astonishing that the Heads of the Departments in these provinces should have tolerated the existence of such a state of affairs so long. Now that "popular" Ministries are in power, we expect the Veterinary profession will be given its due status and rank and the members of that profession treated honourably and

Mr. Thaker, Sub-Divisional Officer in his concluding speech after thanking all for their whole hearted co-operation for making the show a success, said that the Veterinary and Agriculture departments which were interdependent, were like two main pillars on which the whole structure of India's life rested, and alluded to the part the livestock was playing for the uplift of the economic life of the people.

Admiring Messrs. H. B. Shahi and P. S. Sundaram, for their singleness of purpose in rousing the mass conscience towards livestock potential by holding such shows, concluded his speech.

Mr. P. S. Sundaram, Assistant Director of Veterinary Services, Berar Division, with his usual captivating eloquence gave a resume of the activities of the livestock improvement movement and the fruits thereof throughout Berar and gratefully acknowledged the co-operation and help he received from all quarters towards that end.

Mr. Ram Rao Patil Gadegaonkar, Chairman of the Reception Committee, winding up the function extended his heartfelt thanks to Mr. and Mrs J. H. Thaker, the officials and the gathering at large for the interest shown in making the show a success.

Special mention was made of the services rendered by Messrs. W. R. Deshpande, Tashildar and K. N. Katiyar, Veterinary Assistant Surgeon, Morshi.

The function closed amidst scenes of enthusiasm.

WANTED

A Young and Energetic B. V. Sc. Veterinary Graduate, on Rs. 100/- to start with and increase after a probationary period of 3 months according to ability. Good opportunity for young graduates.

The Proprietor

WESTERN INDIA STUD FARM,
PIMPRI, P.O. CHINCHWAD, (POONA).

Correspondence

The views expressed in letters addressed to the Editor represent the personal views of the writer and must not be taken as expressing the opinion or having received the approval of the A.I.V.A.

Dear Sir,

Please publish the following copy of the memorial of the Veterinary Assistant Surgeons of Bengal, submitted to the Director of Veterinary Services, Bengal, in the columns of the journal.

Calcutta, }
25-4-46. }

Yours faithfully,

K. A. KHAN,

*Retired Assistant Director, Civil Veterinary Dept.,
Bengal (On behalf of the Veterinary Assistant
Surgeons of C.V.D., Bengal).*

Sir

I have the honour to bring to your kind notice the grievances under which we the Veterinary Assistant Surgeons of Bengal, have so long been suffering.

The Veterinary Surgeons are really the back-bone of the Department but are the most neglected. We are all discontented with our poor pay and T. A. etc. Our scale of pay is Rs. 50- $\frac{5}{2}$ -80- $\frac{5}{2}$ -115 and we are the most poorly paid officers under the Bengal Govt. although the Veterinary Department is one of the most useful development Department, as the Government is working hard to help the Agriculturists and protect their Cattle. With this paltry sum of Rs. 50/- we are quite unable to meet our daily necessities of food and clothing, not to speak of giving education to our children or making any future provision for our families. It will be an unpleasant truth to confess here that to day most of the *vets* are head and ears in debt and are groaning under poverty.

The *vets* have to attend to the outbreaks of contagious diseases, perform inoculations, inspect slaughter houses, visit fairs and markets, make propaganda work, sometimes attend to other public works, attend to correspondence, maintain Registers and files and do every sort of work right from a scientific *vet* down to a clerk and dresser—all these for a ridiculous "wage" of Rs. 50/-. Owing to this poor pay we are also looked down upon and ignored by the illiterate village folk amongst whom we are to work with all the inconveniences of village life.

So, our dire necessity, the nature of our work and the field in which we are to work demands in the interest of the service itself that our pay should

well in conformity with their noble calling. We are sure the Governments realise that an efficient Veterinary Service is a *sine qua non* for the regeneration and rehabilitation of rural life.

WELL DONE, CEYLON!

In the midst of the wail of depressing conditions of Veterinarians in some of the Provinces of India, it is cheering news, indeed, that comes from the small island of Ceylon where the Government has substantially increased the salaries of their Veterinary Surgeons. Ever since the Ceylon Veterinary Association was formed, the members of that Association have been representing to the Government the need for adequate salaries, but not with much of a success. The recent outbreak of Rinderpest in the island in a severe epidemic form brought forth in bold relief the defects of the existing organisation and it is a matter for satisfaction that the Government, instead of resorting to half-hearted measures, remedied the defects boldly by going to the root cause of the trouble and improved the salaries of Veterinary Officers.

We congratulate the Ceylon Veterinary Association and its energetic Secretary "Hector C. Perera" on the success of their efforts. Our correspondent says, "the two people who were really responsible and deserve all the credit are the Hon. Mr. D. S. Senanayake, (the Leader of the House and the Minister for Agriculture and Land) and the very energetic, sympathetic and progressive Mr. L. J. de Seneviratne, c.c.s., the Director of Agriculture. It would be no untruth to say that since his appointment as Director of Agriculture, Mr. Seneviratne has done his best to improve the Veterinary Services. This shows what a sympathetic head can do". Yes: it is quite true that a sympathetic Head can do a lot and work wonders. But, then, how many such "Heads" do we get in this country!

THE ALL-INDIA VETERINARY ASSOCIATION

(MADRAS BRANCH).

As will be seen from the proceedings of the All-India Veterinary Association, Madras Branch, published elsewhere in this *issue*, the Annual Provincial Veterinary Conference will be held in Madras during the ensuing Michaelmas holidays. The Conference is held at a very opportune time when the popular Ministry has just taken charge of the administration and it is up to the profession to keep the Government informed of the various ways and means of advancing the profession and of developing the livestock industry of the country. We are therefore sure that the members of the profession will muster strong as usual and make the conference a success.

MADRAS VETERINARY COLLEGE

RETIREMENTS.

The beginning of the official year 1946 saw the retirements of two great Lecturers of the Madras Veterinary College, viz, Rao Sahib H. N. Chelva Iyengar, G.M.V.C., P.G. (Edin.), and Sri M. A. Rangaswamy Ayyar, B.A., G.M.V.C., P.G. (Edin.). Both are *alumni* of that College.

Rao Sahib H. N. Chelva Iyengar, Lecturer in Anatomy and author of the Anatomy of the Ox, took his diploma in 1911 at the Madras Veterinary College and served for a short term in the mofussil districts of the Madras Presidency before joining the staff of the Madras Veterinary College. He had an innate love for the subject of Anatomy which, for many, has been a subject "as dry as bones". Consequently he developed his Section in an extraordinary way with his preserved Specimens and Deviations. The models of his dissections which adorn the Madras Veterinary College have been the objects of admiration to many an interested visitor. Unlike all other Colleges in India and elsewhere, the Madras Veterinary College has the Ox as the "type" for teaching Anatomy to the students and it is to the lasting credit of Rao Sahib H.N. Chelva Iyengar that, without any text book to follow and

be on a time scale basis of Rs. 100—10—250 as suggested in the *Indian Veterinary Journal*, March 1946 (Page 391).

In this Connection, your kind attention is invited to the proceedings of the fifth Annual Conference of the Bombay Veterinary Medical Association Published in the *Indian Veterinary Journal* of March 1946 page 369 to 386, and also to the correspondence under the heading "Mend it or end it" appearing on page 389 of same *Journal*.

The present rate of our T. A. is too poor to meet the expenses of the Journeys. So the rate of our T. A. should be as follows :—

- (a) For River Districts :—At Rs. 8/- per day with a maximum of Rs. 120/- p.m. for 15 days tour and Rs. 12/- per day to a maximum of Rs 120/- p.m. for 10 days during the rainy season.
- (b) For dry Districts :—At Rs. 4/- per day with a maximum of Rs. 80/- for 20 days tour and Rs. 6/- per day during the rainy season to a maximum of Rs. 90/- for 15 days tour.
- (c) For Hilly Districts :—At Rs. 6/- per day with a maximum of Rs. 90/- for 15 days tour and Rs. 9/- per day in rainy season, to a maximum of Rs. 90/- for 10 days tour.

Again we are to maintain our office including Government furniture, records, medicines, instruments, Pharmacy requisites etc. and a separate room is indispensibly necessary for accomodation of these Government articles and the office. But even in these days of scarcity when rented house is an acute problem, we have been forced to maintain suitable houses for accomodation of Government articles at our own cost. The house rent thus takes away about 1strd of our poor pay and it has become impossible for us to bear this forced taxation any longer.

I therefore pray to grant us immediately an office allowance of Rs. 25/- per month.

Under the above circumstances, I further pray that our pitiable plight which has so long gone unheeded will draw your kind and sympathetic attention and the Government be kindly moved to bring our miseries to an end.

I have the honour to be,

Sir,

Your most obedient servant

Sd.

Ity/Sty Veterinary Asstt. Surgeon.

"Scandals of Bihar Veterinary Service"

Sir,

The necessity of improving the deplorable conditions of the Veterinary Assistant Surgeons of Bihar with regard to their pay and prospects have been stressed time without number but to no effect. To add fuel to fire, all the retired hands have been given temporary reappointment to the higher posts and thus the promotions of the junior officers have been blocked. After 20 to 25 years of hard touring work everybody hoped to get some relief from constant touring by getting posted to the hospitals but they all have been filled up by the retired hands. Even the two posts of Assistant Directors have been occupied by the retired officers.

In spite of the reappointment of the retired hands, there are about 50 posts lying vacant besides the hands required for operating the post-war and animal husbandry schemes. Many of the existing hospitals and dispensaries are closed or are in nominal charge of other Veterinary Assistant Surgeons. It is not known as to how long the services of these retired peoples will continue as there is no likelihood of so many posts being filled up even in 5 years' time as only 2 to 5 Biharee students pass out every year from the Bihar Veterinary College, and they too run away to other Provinces where they are assured of better pay and prospects. It is sheer disgrace that the Province which is maintaining a Veterinary College of its own should feel shortage of hands. I should like to say that this shortage of hands is not due to war condition as only 3 people had joined the war services from the Bihar Veterinary Department. It is solely due to the mistake of the Government in not allowing an attractive pay to the young boys of the province. I feel it shame to mention here that the existing scale of pay is Rs. 50-5/4-60-5/3-70 with 10% on Rs. 85/- and 2% on Rs. 100/-. According to the present scale only 2 people in the whole of the Department will be lucky enough to retire on Rs. 100/-, 12 to 15 people on Rs. 85/- and the rest on Rs. 70/-. The service conditions also are bad. For every increment of Rs. 5/- which is given at the end of 4 years and 3 years, there is a bar and nobody can get any increment without any hitch. For the first two increments of Rs. 5/- one has to pass two departmental examinations at the end of the 4th and 8th year of service and for the remaining increment his satisfactory work has to be reported. If there is a fall in the comparative statement of works or his work is either reported unsatisfactory his increment is stopped.

Now coming to the Inspector's post, I should like to state that there are 14 posts of Inspectors and their scale is a graded one. According to present scale only 2 Inspectors will get Rs. 170/- 2 Rs. 135/- and the rest Rs. 100/- only. Many of the Inspectors have to retire on Rs. 100/- only.

adopt he taught that subject very ably, guided only by his own dissections. Fortunately, these dissections and guides, are not allowed to be lost and we are glad the Imperial Council of Agricultural Research had utilised the services of the Rao Sahib for writing a monograph on the Anatomy of the Ox. The Rao Sahib has been a Lecturer of Anatomy continuously for over two decades, except for a short period in 1930 when he went to the United Kingdom for Post-Graduate study.

A very stern disciplinarian and extremely reserved—he could be very free and animated when drawn out. His subject has been his hobby and he had a great capacity for lecturing for long hours without any effort. His great ambition has been to put his subject of Anatomy in its proper place and we are sure he succeeded very well in it.

Sri M. A. Rangaswamy Ayyar, Lecturer in Physiology, hails from the village of Managalam in Malabar. He had his early education in the Victoria College, Palghat and St. Joseph's College, Trichinopoly and took his degree of Bachelor of Arts in 1912. He then joined the Madras Veterinary College, which, in itself, was a unique step. He was the very first University Graduate to take to Veterinary Education in India and it was a matter of great surprise to many of his friends. Needless to say, he passed his veterinary examinations easily and took his Diploma of the college in December 1915. He then joined the Civil Veterinary Department Madras and served for a time in the districts. In 1931, he went to Edinburgh to take a Post-Graduate course in the subject of Physiology. On return, he was appointed as a Lecturer in Physiology and has continued in that post until his retirement on 31st March 1946.

Of a very quiet and unostentatious disposition, he has been a great teacher and very popular with his students. He had his Laboratory, especially of the section of Experimental Physiology, equipped excellently well and, though the equipments were on a small scale, drew the attention and admiration of every one interested in the subject.

Both the above gentlemen have done yeoman service to the Madras Veterinary College and have contributed not a little to the high standard of efficiency for which this College is justly famous.

We wish them both many, many happy years of well earned rest in their retirement.

PERSONAL

We are very glad to announce that Mr. S. Ganapathier G.M.V.C. has been appointed to act as Officer-in-charge, Poultry Research Section, Imperial Veterinary Research Institute, Izatnagar in addition to his own duties. This is just recognition of the merits of this officer which, though belated, must be a source of great encouragement to him.

We are also glad that Mr. P. S. Kuppuswamy, G.M.V.C., has been appointed as the Director of Veterinary Services, Orissa. This promotion comes practically on the eve of his retirement but, all the same, it is a matter for gratification that the Government have recognised his worth.

We congratulate both the above Officers on their promotion and we hope, they will continue to win more laurels. Incidentally, we note that both of them are *alumni* of the Madras Veterinary College, who had put in years of service in the Civil Veterinary Department, Madras. They had gone away from their own province in search of an outlet for their talents and we note with pleasure that they had not gone in vain. A loss to the Madras Province has been a distinct gain to other places!

The Veterinary Assistant Surgeons attached to the College as teaching staff in the college laboratory and college hospitals and Dairy Farm get nothing except an allowance varying from Rs. 10 to 20/- per month and they have to forego the facilities of having rent free quarters while attached to the hospital or dispensary and also the other facilities of the hospitals and dispensaries.

Something may be mentioned about the people who are deputed for further training either at Mukteswar, Bangalore or at similar places. They are simply given an extra allowance of only 20% of their actual pay. That is, if a man is getting Rs. 50/- as his pay, he will get an extra 20% e.g. Rs. 60/- only. Any sane man can very well realise whether this Rs. 60/- can be sufficient for 2 meals per day and other expenses in a place like Mukteswar and Bangalore even in normal days, leaving aside the family and children at home at the mercy of others.

These are the prospects of the Bihar Veterinary Services. I leave it for the readers to judge if this department is fit for its existence under these prevailing circumstances. It is high time that the Bihar Government should think of two alternatives. One is to mend this department and the other is to end it altogether. There is no use of keeping this department as an "appendage of the Provincial Government" as remarked by a local newspaper. If the ryots are to derive real benefit from this department it must expand and flourish. If it is to expand and flourish the following suggestions must be carried out with immediate effect; otherwise it will have its end very soon.

1. That the scale of pay of the Veterinary Assistant Surgeons be raised to Rs. 100-10.300 with further prospects to attract the young boys of the province.

2. That the College be affiliated to the University.

3. That more number of hospitals and dispensaries be opened, preferably one in each thana.

4. That the system of touring be modified. Veterinary Assistant Surgeons should not be asked to run aimlessly for propaganda works and treating cases of general diseases in the villages. Stockmen and trained compounders should be employed for such purposes and also to carry on inoculation and castration works.

If the above suggestions are given effect to, then there is hope of the department being improved, otherwise it will collapse in no time if the things are allowed to go on as it is.

"ONE AGGRIEVED"

THE REFUND OF Rs. 35 LACS OF COLLECTIVE FINE IN U. P.

A Suggestion for its beneficial use.

Sir,

It is certainly a delightful augury that the Peoples' Government in the United Provinces are contemplating to refund Rs. 35 lakhs of collective fines to the villagers. It is undoubtedly an unique resolution. In my opinion this amount can very well be utilised for a great collective benefit to the villagers themselves—in time this measure, if adopted, might spread throughout the length and breadth of India as a constructive measure for the well-being of the villagers as a body and for the cattle they rear. Since Dr. Katju holds the portfolio of Animal Husbandry, I feel emboldened to humbly place before him a proposal, which I feel sure will prove a veritable boon to all the villagers.

The ravages of cattle diseases like, Rinderpest, Black-quarter and Haemorrhagic Septicaemia amongst the village cattle have been a prominent feature of the present existing rural conditions. The Veterinary Department ever since its inception in this country with all its prophylactic measures has not been able to root out the pests. This is no discredit to the organisation as the inherent causes have all been against possible effective measures. The mortality of cattle from the abovementioned epidemics is one of the root-causes of perpetual indebtedness of villagers.

The villagers, as a rule, skin all dead cattle just outside the village and leave the carcass behind for the benefit of the jackals, dogs and vultures. This is a prolific source of the spread of the contagion. The soil and the water courses get easily polluted and perpetuate the infection. The obvious remedy is to restrict the flaying and have it done in a hygienic way. To achieve this a plot of land, say roughly, 80' x 60' should be allocated outside the village habitation for the purpose of skinning all dead cattle in the village. It should be made unapproachable to jackals, dogs &c. by proper fencing. Mud walls covered with thorny bush may serve the purpose, but to give it a lasting feature brick wall about 6' high is desirable. The enclosed area should be provided with a well, a shed, a paved surface 8' x 8' for skinning, a few bamboo stretchers for drying the skin, a rope, a bucket and a spade. The villagers should be enjoined to skin all dead cattle within this area, bury the remains together with bones in smaller divisions there, salt and dry the skin for at least 48 hours at the place and keep the whole place thoroughly clean and neat.

If the Hon'ble Minister can be persuaded to utilise this amount of Rs. 35 lakhs in this way, a lasting and far-reaching benefit to the villages will truly accrue with commendable credit to all concerned.

Benares, }
31-5-46. }

J. CHOUDHURY,
Retired State Veterinary Officer,
Jaipur State, Pitamberpura, Benares.

Alum in the treatment of Piroplasmosis in cattle.

Dear Sir,

Having read the articles by Dr. Ramiah, Dr. M. H. Rahman and Dr. B. M. Prashad in your *journal* regarding the successful treatment of Bovine Piroplasmosis by Alum, I crave your hospitality in publishing the following few lines in your esteemed *journal* in confirmation of the experiences of the above mentioned writers.

I would also request the Veterinary Disease Investigation Officers to investigate into the matter and try to find out scientifically how alum acts thereapeutically in Bovine Piroplasmosis.

On 22-5-46 I was called in to attend on a Montgomery cow, age about seven years.

History and symptoms of the case:—The cow has been dull and off feed and rumination for five days and has been passing dark blood coloured urine for the previous three days. On examination the animal was found to be dull and depressed with plenty of ticks on its body. The temperature was 105.4°, and the respiration was laboured. The pulse was weak and rapid 110 per minute. The coat was harsh and staring. Blood smears were examined and found positive for *Babesia Bigemina*.

Treatment:—The ticks were removed manually and destroyed. Two ounces of Alum and one ounce of acid Boric dissolved in one pint of water and divided in eight doses were given to the owner with the direction that one dose was to be given twice a day with one pint of water.

Next day i.e. on 23-5-46 there was no improvement. On 24-5-46 the temperature was 102.6° F. (evening), the urine had changed from dark to light red in colour, and the animal appeared a bit better. It also took some food—about 3 seers of green grass and 1 seer of wheat bran.

On 25-5-46 the temperature was normal and the animal began to eat and ruminate fairly well. The urine became clear and normal in colour.

* Another cow in the same place was noticed to pass bloody urine. On examination this animal also was found suffering from *B. Bigemina*. The same treatment was adopted for this animal also and it got alright with eight doses of alum and boric acid.

I would request my professional brothers to use this cheap drug in cases of bovine piroplasmosis and let all of us know the results of their experiences through our most esteemed Journal—the *Indian Veterinary Journal*.

Q. HODA, G.V.Sc.,
I/C City Veterinary Hospital, Allahabad, U. P.

An Interesting Case of Post-mortem on a Giraffe,

Regarding the above article published under Mail Bag in the last issue of the *Journal*, the author writes "My object in bringing this postmortem case is to bring to prominence the following two peculiarities which will be of interest to all the Veterinarians, viz.—

- (a) The absence of gall bladder in the liver though Giraffe is a ruminant.
- (b) The moveable and shaky nature of both the horns which is not common in all ruminants. [EDITOR, I.V.J.]

Extract

VETERINARY SERVICE IN CEYLON

A section of the Public Service whose importance in the Island's economy has been recognized by the Salaries Committee is the Veterinary Department and the allied animal husbandry branch of the Department of Agriculture. With regard to Assistant Veterinary Surgeons, the Committee's Report states: "These officers are now graded in the Instructor Staff. Their present salaries are, however, too low and an improvement is necessary to induce men to take up veterinary training." The recommended improvement represents substantial increase on the salaries drawn at present by these officers. Two scales are assigned. One, rising from Rs. 5,160 to Rs. 7,680 per annum in seven years, is intended only for officers who have successfully completed a postgraduate course at an approved Veterinary College. The salary scale for the second grade rises from Rs. 3,000 to Rs. 5,040 per annum in thirteen years. The highest salary for new entrants in the special class at present is Rs. 3,960 and in lowest class only Rs. 960. The result has been a serious attenuation of staff from which the department is suffering at present. Young men were not encouraged to qualify themselves in veterinary science, and not only could the staff not be enlarged as the need arose but there was difficulty in replacing superannuated members.

The plight of the existing organisation was thrown into relief by the outbreak of the rinderpest epidemic almost simultaneously with the expansion of animal husbandry undertakings. The situation is being met by the award of scholarships in veterinary science and animal husbandry, and a number of Ceylonese are now under training in India. It will be some time, however, before the services of these officers are available. In the meantime, to meet present

Clinical Articles

EARLY SEPTICAEMIA IN ANTHRAX

By

C. V. NARASIMHAM, G.M.V.C.,

Veterinary Assistant Surgeon, Parvatipur.

Veterinary literature and general experiences both support the opinion that *Bacillus anthracis* invades the blood stream only just before death and that it is rare to find the organisms in the blood smears taken while the animal is alive. Exceptions occur now and then. A case was reported in the *Veterinary Record* Vol. 52, No. 4 of 5-2-40 in which the organisms, *B. anthracis*, were present in the peripheral blood 30 hours before death.

In the following case, the organisms were found in the blood smears eight hours before death and hence it is thought worthy of record.

The subject, a cross bred ongole bullock, aged 6 years, in fair condition, was noticed to be sick on 13-3-46. It was brought to the hospital on 15-3-46 at 8-30 a.m. On examination, it was found to be listless, off-feed and rumination. The bowels were costive and the temperature was 104.6°. Blood smears were taken immediately and sent for examination. At 11 a.m. the animal had fits, fell down in convulsions and died at about 5 p.m. There were no discharges from the natural orifice.

The blood smears were kindly examined by the Veterinary Assistant Surgeon, Bobbili and he reported them to be *Positive* for Anthrax.

'PROPAMIDINE' IN VETERINARY PRACTICE

By

P. C. TRIPATHI, B.Sc., G.B.V.C., P.G. (Lah.)

Veterinary Assistant Surgeon, Pawayan. Shahjahanpur, U.P.

'Propamide', a May and Baker proprietary preparation is 4-4-diamidino-di-phenoxypropane di-(*B*-hydroxyethane sulphonate), one of the diamidine drugs found efficacious in protozoal and bacterial infections due to its chemotherapeutic action. Unlike the Sulphonamides, its action is not inhibited in the presence of pus and tissue fluids and it has proved very effective as a local application in open wound, sepsis, and burns, where most other drugs either fail, or retard leucocytic activity.

The drug, both in its jelly and cream form, has been used extensively by the author in cattle, horses, dogs and cats and the result obtained have been so encouraging as to inspire this clinical note for the interest of others

concerned since chronic wounds and burns are such an anxiety to the average practitioner in his every day encounters. Some of the cases treated by the author at the Veterinary Hospital, Nainital are detailed below :

CASE NO. 1

A working bullock, aged about 12 years, with an extensive chronic septic wound in the region of the loin, six inches long and about three inches deep, discharging daily large amount of pus with no tendency to heal.

Treatment:—A counter-opening was made and the wound irrigated several times with saline solution, a seton soaked well in Propamide Jelly introduced inside the cavity with more jelly filled in from both the openings to ensure a thorough covering of the whole of the septic area. Both the open ends were sealed with Propamide Cream.

This treatment was repeated every alternate day till four applications were complete at the end of which granulations at the open ends were clearly visible and pus formation had all been checked. Further applications of Propamide were stopped and a dressing with Euflavine lotion and Boro-zinco ointment applied about three or four days by which period the wound practically healed up.

CASE NO. 2

An Alsatian dog, aged about four years, with deep punctured and lacerated wounds in the region of the neck due to panther bites with extensive swelling. Patient in extreme discomfort with high temperature, brought for treatment about 12 hours after the incident.

Treatment:—The wounds were irrigated thoroughly and cleaned with saline solution, dead tissues removed and effective drainage provided. The cavities were then packed with Propamide Jelly and covered with gauze and cotton wool and bandaged. The superficial lacerated areas were covered with Propamide Cream and bandaged likewise.

This was repeated every alternate day after thorough cleansing with Saline solution and removing the stale Jelly and Cream before fresh dressings were applied for about a week by which time all swellings had subsided, pus formation checked, temperature almost normal and granulations appeared on the surface of the wounds. The Sulphonamide powder was dusted over the surface and daily routine dressings with Boro-zinco ointment, etc., continued for another week resulted in complete recovery.

CASE NO. 3

A young stud-bred mare, with fresh broken-knees and other extensive lacerated wounds over the chest, face and neck, ranging from superficial to a depth of about $\frac{1}{2}$ "—result of an accident in the race course.

Treatment:—The wounds were all cleaned well with saline and dressed with Propamide Jelly. The knees and other places which could be bandaged

commitments, applications have been called, we learn, from qualified Indian veterinarians by advertisement in India. Three or four posts will probably be filled by these applicants and with the return of qualified Ceylonese officers serving in the Indian army the staff will be rendered fairly adequate. The programme of development in animal husbandry, however, will require corresponding additions to the staff which the system of having officers trained in India will not satisfy. Hence the proposal to open a Veterinary School in Ceylon.

"Ceylon Observer" 25-5-46.

Review.

Index of Diagnosis—Clinical and Radiological—By Hamilton Kirk 1945, 2nd Edition, Publishers—Bailliere, Tindall & Cox, London.

This Second Edition of the Index of Diagnosis is a great improvement on the first Edition—not only in the size of the volume but also in its contents.

Agreeable to the modern trend in the conception of the etiology of diseases, great stress is laid on dietetic aspects of diseases and avitaminosis. The arrangements of the subject matter follow the lines of the previous edition with the special feature of Tables of Differential Diagnosis. These tables should make even the expert clinician to pause before pronouncing his diagnosis. Stuttgart disease and Black tongue have been considered as identical in this country also and, even after going through the table, it would be found that the line of demarcation between the two diseases is very thin indeed.

Diseases of obscure nature like calcified intervertebral discs, cramp, and rickettsia have been clearly dealt with and the Radiography, which are found in abundance, greatly enhance the value of the book. A book of great value to the practitioner and student alike.

The publishers have done their part excellently, considering that the publication was a war-time one.

Obituary.

THE LATE MR. G. M. MUKHERJ, G.B.V.C.

It is with deep regret we have to record the sad and untimely demise of one of our colleagues, Mr. G. M. Mukherjee, G.B.V.C., Veterinary Assistant Surgeon, Incharge Veterinary Dispensary, Gazipur, United Provinces, on the 30th March 1946 from heart failure. He leaves behind a widow, a son and a daughter and a number of relations to mourn his loss.

We tender our heartfelt condolences to the members of the bereaved family.

P. MADHAVA MENON, B.V.Sc.

We are sorry to record the untimely and premature death of Sri Madhava Menon, G.M.V.C., B.V.Sc. which happened two months ago at the Perundurai Sanatorium.

The late Mr. Mahadeva Menon was one of the early batch of Bachelor of Veterinary Science of the Madras University and his early death removes from the ranks of the profession a young intelligent officer with promise of a great future! He leaves behind a wife and two children and we extend our sincere condolences to the members of the bereaved family.

R. NARASINGA RAO, G.B.V.C.

As we go to the press, we deeply regret to hear of the sad demise of Sri R. Narasinga Rao, G.B.V.C., which took place on the 19th July 1946 after a very short period of illness.

The late Mr. Narasinga Rao, retired in November 1935 after having served in the Civil Veterinary Department, Madras, in varying capacities as Deputy Superintendent, District Veterinary Officer and as Superintendent, Serum Institute, Madras. A gentleman with a very genial disposition and a kind warm heart, he endeared himself very well to his colleagues and the public. His death removes from our midst one of the pioneer workers who popularised the Veterinary Department in this presidency and we extend our heartfelt condolences to the members of the bereaved family.

were covered with gauze and cotton-wool and bandaged. Propamidine Cream was applied at places where the jelly could not stay.

This was repeated every other day till five applications were over. At the end of this period, all the lesions were almost healed. Healing was completed with dressings of Sulphonamide ointment for four or five days.

CASE NO. 4

A Tom Cat, aged about two years, with a huge abscess in the cerebral region.

Treatment :—Abscess was opened, cleaned well with saline irrigation and the cavity filled with Propamidine Jelly, covered with Boro gauze and cotton-wool and bandaged. This was repeated only twice every alternate day when healing was apparent. Further dressings were continued for a few days more with Lotio Acriflavine resulting in complete relief.

CASE NO. 5

Cow, aged five years, with fresh burns on both the fore legs, brought for treatment at the Veterinary Hospital, Ranikhet.

Treatment :—Propamidine Cream was applied over the burns after thorough cleaning of the part and covered over with sterile gauze and bandaged. The dressings were changed every other day for just over a week, then followed by local dusting with Sulphadiazine powder for about four days and finally completing the case with dressings of Lotio Acriflavine. The whole course took just over a fortnight to effect a complete repair.

SO-CALLED "SKIN TUBERCULOSIS"

BY

JOHN F. BRADLEY, M.R.C.V.S.,

Fishguard.

The following case may prove of interest as a contribution to the slender chain of evidence concerning the condition of nodular subcutaneous lesions in cattle.

History :—I was asked to attend a Cross Jersey Cow, belonging to a tuberculin-tested dairy herd. Upon examination, I found that the right hind leg, upon which the animal was markedly lame, bore, from the coronet to two-thirds of the way up the external aspect of the leg, a chain of nodular swellings, varying in size from that of a pea to that of half a finger and appearing to follow the course of a lymphatic vessel. The cow herself showed a rather staring coat; the temperature was 103.5 °F. The owner explained that the swellings had made their appearance only about three weeks before; the lameness had been

insidious in onset and only became definite within the past week. Two months had elapsed since the cow had calved and two months prior to this again she had been classified by the Ministry as negative after retest as a doubtful reactor to the tuberculin test.

Diagnosis :—The swellings varied in consistency, presumably on account of different degrees of inspissation of the contents. A sample withdrawn from one of the softer nodules and revealing thick, creamy pus, was despatched for examination to Dr. D. R. Allen, M.R.C.V.S., of the Veterinary Investigation Department, University College, Cardiff. He replied, stating that the sample showed acid-fast bacilli and expressed his interest in the case. At a second visit he accompanied me, noted the clinical evidence and took another sample for examination, which gave a result identical with the first, showing acid-fast bacilli alone. A sample was then sent to Weybridge for biological examination. The preliminary microscopical examination again confirmed the existence of acid-fast bacilli and intimation was made to me that, should the case be, in fact, one of "skin tuberculosis" it was not anticipated that lesions would be produced in laboratory animals. Three months later I received notification from the laboratory that the biological examinations had been completed and that, at *post-mortem* examination, the guinea-pigs concerned had proved perfectly normal. *Post-mortem* examination of the subject itself at this time was not considered likely to be of benefit nor, in the economic interests of the client, practicable, but an effort is being made to follow the case until the cow is finally slaughtered in order that it may be possible to examine the carcass.

Conclusion :—The earliest investigations on this subject appear to have been done by American workers who have revealed a condition, officially termed "skin tuberculosis" the chief feature of which is thickening, in the form of nodules or cords, of the subcutaneous lymphatic vessels in the region of the shoulder, the tarsus and the fetlocks. The thickenings contain acid fast rods which seem to cause reaction to tuberculin. Mohler has reported that "a number of so-called skin lesions have been obtained from various sections of the United States in an attempt to culture the organism causing this condition and to transmit it to laboratory animals. All attempts gave negative results." According to Hastings, "the preponderance of evidence collected by a number of workers is against the skin lesions being tuberculous." Hole and Hulse in this country, while not necessarily committing themselves to the view that the acid-fast rods cause tuberculin sensitization, have arrived at similar conclusions.

The distinctive feature about the case recorded as compared with the work previously reported, is the marked clinical symptoms accompanying the lesions, viz. elevated temperature, lameness and loss of condition. The last two signs attracted the attention of the client subsequent to the appearance of the nodules. Both Mr. Allen and myself made a thorough clinical examination of

the affected animal and were unable to avoid the conclusion that the clinical signs manifested were associated with the nodular swellings.

I should like to state my indebtedness to the encouragement and very able assistance provided by Mr. D. R. Allen and also to the staff of the Veterinary Laboratory, Weybridge.

REFERENCES.

- Hastings, E. G., Beach, B. A. and Thompson, I (1930).—The sensitization of cattle to tuberculin by other than tubercle bacilli." *Am. rev. Tuberc.* 22, 218.
- Hole and Hulse (1939). *J. Comp. Path.* 52, 501
- Mohler, J. *An. Rep. of Chief, U. S. B. A. I.* 1931: 1937, p. 6

A MALIGNANT VAGINAL NEOPLASM IN A COW CURED BY STILBOESTROL IMPLANTATION

By

R. D. FRANKLIN, M.R.C.V.S.,

Wolverhampton.

Subject:—This was a 3½ year-old Shorthorn cow.

History:—As a yearling, a tumour was removed from the wall of the vagina with apparent success. Later, she was served and held to the bull.

At the time of calving the tumour was found to have reappeared, with the appearance of malignancy, being diffuse and covering the whole of the vaginal wall, and part protruded through the vulva. It was considered to be inoperable, and the owner was advised to get rid of the animal at the end of the lactation.

Procedure:—A 1 gramme tablet of Stilboestrol dipropionate was implanted into the subcutaneous muscle of the neck. This was carried out merely with a hope of keeping the cow in lactation for a longer period, and with no thought of anti-carcinogenic action.

This implantation resulted in no alteration in the sexual cycle, and she came in oestrus at normal intervals. Nothing could be felt of the tablet five months after implantation, so presumably it was then almost absorbed.

After three months the part of the tumour protruding from the vulva had disappeared, and the part inside the vagina was definitely regressing. Previously it was almost impossible to get one's arm right inside.

After five months a lump, the size of an orange, on a well defined pedicle, was all that remained. This was removed with an excisor under epidural anaesthesia.

This specimen was sent to the Edinburgh College for pathological examination, and the following was the report: "Microscopical examination

Veterinary Record, Vol. 58, No. 15.

of the above tumour showed it to be a typical cellular fibro-sarcoma, and definitely had the appearance of being capable of rapid growth".

The cow was served two weeks afterwards, and is now safely in calf. Incidentally, 15 months after calving she is giving one gallon of milk per day.

CHRONIC TYMPANY OF THE RUMEN

By

E. W. ASCOTT, B.Sc., M.R.C.V.S.

Five cases of chronic tympany of the rumen in bovines are recorded below, each being due to a different cause.

1. Tuberculosis of the Posterior Mediastinal glands.

The subject was an aged cow and symptoms were as follows:—Chronic cough, intermittent tympany and progressive loss of weight. Rumination was normal.

Post-mortem examination showed lesions of tuberculosis in the lungs and elsewhere. The posterior mediastinal glands formed a caseous mass, eight inches by five, pressing on the dorsal aspect of the oesophagus. The method of examination, namely, removal of the fore-limb and ribs of one side, enabled the relationship of the gland to the oesophagus, and of the mechanism of the obstruction, to be clearly seen while the thoracic viscera were still in position.

2. Tuberculosis of the Posterior Mediastinal Glands and -of the Oesophagus.

The subject was again a cow. Symptoms were more severe than in case 1, tympany being continuous, rumination absent, and the faces being fluid and showing undigested food. A probang introduced into the oesophagus was arrested in the thorax, and when withdrawn caseous material was seen clinging to it.

Post-mortem examination, showed tuberculosis of the lungs and other viscera. The posterior mediastinal glands were greatly enlarged and completely encircled the oesophagus, through the wall of which the disease had penetrated to cause ulceration of its mucous membrane. The lumen, being reduced to half an inch at the narrowest, was completely blocked by fragments of ingesta. (Case seen with D. R. T. Davies, M.R.C.V.S.)

3. Carcinoma of the rumen.

The subject was a young cow suffering from chronic cough (ascribed to tuberculosis), continuous tympany of the rumen, and progressive loss of weight.

Veterinary Record, Vol. 58, No. 4.

Errata.

Vol. XXII, No. 6, (May 1946).

Page 439, para 1, line 8 :—Instead of "He further states that deaths are due to hydrocyanic acid", please read "He further states that deaths due to this occur in Sind and Ajmer Merwara. Kehar (1943) describes it under poisonous plants causing death due to their hydrocyanic acid contents".

Page 439, para 3, line 2.—Instead of "J. L. F", please read "G. L. F (Government Livestock Farm)".

Page 439, para 4, lines 1 and 2.—Instead of "convulsions with intervals", please read "convulsion at intervals".

Page 439, para 4, line 4.—Instead of "Bagche and Ganguli 1936", please read "Bagche and Ganguli 1939".

Page 444, para 2, line 1.—Instead of "It was the start of the grazing during the previous months", please read "It was the start of the grazing season and animals had very little grazing during the previous months".

WE ANNOUNCE THE INTRODUCTION OF UREA SULPHAZIDE OINTMENT

5%

For topical use in infected wounds, ulcers, burns etc. Urea Sulphazide ointment contains Sulphanilamide, Urea and Azo dye chemical compound. The combination is therefore most suited to give a therapeutic effect of each ingredient enhanced by synergism.

NOT FOR EYE AFFECTIONS

Obtainable in one ounce containers ready for immediate use.

UNION DRUG CO. LTD. CALCUTTA.

285, BOWBAZAR STREET
CALCUTTA

T'phones:
Cal. 1159.
Cal. 4975.

T'Gram
"Benzolo"
Cal.

TENALINE

The Wholly Efficient Taenifuge

For DOGS

Manufactured by:—

Willows, Francis, Butler & Thompson, Ltd.,
73/75, Shacklewell Lane, London, E. 8
ENGLAND

Phone:
Glissold 6361 (8 Lines)

Grams:
"Forty, Hack, London."

When writing to advertisers please mention this Journal.

FOR VETERINARY INSTRUMENTS, DRUGS, PATENT MEDICINES,

Repairs to Instruments A Speciality.

Apply to:—

R. N. PARANJAPÉ & SONS.
P. B. NO. 2230
BOMBAY 2.

STANES MINERAL MIXTURE

Stanes Sterilised Fine Bonemeal for Cattle

The only Tonic at low prices with high tonic value. Prevents diseases due to deficiency in CALCIUM and PHOSPHORUS. Largely used by all the Agricultural Research Stations in Madras, and by the Veterinary Departments.

Sold in bags of 14 lbs., 28 lbs. and 56 lbs. for supply in the Madras Presidency.

For further particulars Apply to:—

T. STANES & CO., LTD.,
COIMBATORE.

Post-mortem examination showed a minor degree of tuberculosis of the lungs and associated glands. Close to the oesophageal orifice was found a massive tumour, about 9 in. by 6 in. originating on the rumen. Histological Examination (at the Royal Veterinary College) showed it to be a squamous-celled carcinoma.

4. Papilloma of the reticulum.

The subject was a nine months old calf which for a considerable time had shown an extraordinary degree of tympany and abdominal distension.

Post-mortem examination showed a large papilloma in the reticulum and chronic dilatation of the rumen. (case previously recorded in *Vet. Rec.* 1937, p. 1264).

5. Open Safety-pin in the Reticulum.

The subject was a yearling heifer which for a period of six months had shown continuous tympany, cessation of rumination diminished appetite and unthriftiness.

Post-mortem examination showed an open safety-pin free in the reticulum, and a local fibrous thickening of the anterior wall of the reticulum.

PERICARDIOTOMY IN THE BOVINE*

By

J. CASSELLS, M.R.C.V.S.,
Rotherham.

Subject:—Twelve months old pedigree Friesian heifer.

Symptoms:—The animal was observed over the half-door of a loose-box. She appeared to be lying in a more crouched position than normal and her general demeanour was best described as "miserable". The heifer was loth to get to her feet and turning to either side caused difficulty and evidently pain. Temperature was 102.5°F; pulse and respiration were slightly more rapid than normal. Pressure on the xyphoid cartilage elicited pain. Slight tympany was also present.

Diagnosis:—Gastritis, possibly of traumatic origin.

Treatment:— $\frac{3}{4}$ pint of linseed oil was first administered followed by R/.

Pulv. nuc. vom., 10 gr; Sod. bic. 2 drachms; Pulv. ammon. carb. $\frac{1}{2}$ drachm; Pulv. Zingiber, $\frac{1}{2}$ drachm; one powder, t. i. d.

The animal was placed on an inclined plane and she was much improved in five days time. After two weeks, however, the appetite became capricious, and the owner once more requested assistance. On this occasion the oedematous condition of the dewlap, with the oedema extending up the neck, with

Veterinary Record, Vol. 58 No. 5.

engorgement of the jugular and other superficial veins, pointed to a cardiac affection. On auscultation of the heart, very little could be heard, and tentative percussion showed the heart to be enlarged. The diagnosis now was, necessarily, traumatic pericarditis. Treatment was deemed out of the question and the possibility of performing a successful pericardiotomy was considered.

Operation:—The anaesthetic used was a 1:8 solution of chloral hydrate, 6 oz. of which were injected intravenously. No pressure was required to raise the vein, since it was sufficiently engorged already. It was found necessary to administer $\frac{1}{2}$ oz. of chloroform in an open mask during the operation.

The operation site was chosen by auscultation over a rib. A T-shaped incision was made. The vertical incision, directly over the rib, was 6 in. long. The horizontal incision was also .6 in. long. The triangular flaps so formed were reflected from the thoracic wall and 3 in. of the exposed rib were removed with a hacksaw blade. The costal vessels were secured at both ends of the opening into the thorax. The heart was thus directly exposed, and, apart from enlargement of the heart itself, and increase of pericardial fluid, there were no gross pathological changes such as are seen at most autopsies of traumatic pericarditis. The pericardium was incised and reflected from the heart. No wire could be discovered as far as the hand could reach. The operation was completed by stitching the intercostal muscles together with catgut and the skin with silk. The wound was dressed with sulphanilamide powder.

Sequelae:—When seen next day it was learnt that the heifer stood up unassisted two hours after the operation and had eaten some hay. Temperature was normal, the cardiac sounds were much more evident, and the engorgement of the veins was lessened. There was no significant rise in temperature at any time. During the following week the appetite improved, and in two weeks the oedema had almost disappeared. The heart sounds were quite distinct and normal, and it was hoped a cure would result, but in four weeks' time the oedema returned, and in seven weeks after the operation the animal was slaughtered as hopeless.

Post-mortem examination:—Unfortunately it was not possible to attend the *post-mortem* examination, but from the knacker it was learnt that there was wire "near" the heart and a "sackful" in the reticulum.

Discussion:—Several remarkable factors emerge from this operation.—

1. The macroscopic heart-lesions were not commensurate with the extent of the oedema.
2. From the short period of improved health, it is apparent that some benefit was derived from the operation.
3. The anaesthetic proved to be highly satisfactory, since it was expected that the heart, over-burdened as it was, would not withstand the depressing effect of chloral hydrate.

Reliable Veterinary Products

FOR PASSIVE IMMUNISATION
TETANUS ANTITOXIN SERUM
2000 and 6000 I. U.

FOR ACTIVE IMMUNISATION
TETANUS ANATOXIN
in 25 c.c. and 50 c.c. phials

FOR ACTIVE LEUCOCYTOSIS
NUCLEIN
10% solution of nucleic acid in 5 c.c. ampoules

BENGAL CHEMICAL
CALCUTTA : : BOMBAY

When writing to advertisers, please mention this Journal.

THE JOURNAL OF THE ROYAL ARMY VETERINARY CORPS

The Journal of the Royal Army Veterinary Corps is a Quarterly Periodical which will appear on February 1st, May 1st, August 1st and November 1st of each year. It is published at the Royal Army Veterinary School Aldershot.

The Journal is sold at the price of 3s. per copy or 10s. 6d. per annum post paid to any part of the world. Reduced rates are available to the undermentioned:

Serving other ranks, R. V. A. C., Annual Subscription 7s. 6d.
Single copy 2s. each

Personnel of the Indian Army Veterinary Corps. Annual Subscription Rs. 5. Single copy, Re 1-4.

A discount of 10 per cent is admissible in respect of accredited commercial agencies.

All communications and enquiries should be addressed to:

THE EDITOR,
The Journal of the Royal Army Veterinary Corps,
ROYAL ARMY VETERINARY SCHOOL
Thornhill, ALDERSHOT

When writing to advertisers, please mention this Journal.

GLYCOSOL

SPECIFIC FOR FOOT & MOUTH DISEASE

Director of Dairy Research, Imperial Dairy Department,
Govt. of India, Bangalore writes:

"Trials were again undertaken during the present outbreak of Foot and Mouth' among the Dairy herd here. Glycosol tried as a mouth wash has been found to be efficacious."

TICKSOL

A WONDERFUL TICK DESTROYER

"The Tick destroyer sample is of great use and a successful cure. I have found and there is great demand from my clients for the same."

Veterinary Dispensary, Vyara, (Dt. Navsari)

A product of

The Chemicals & Fertilizers Mfg. Co., Ltd.
POONA 2.

Manufacturers of Chemotone for more milk, Cattle Food, Horse Condition Powder, Dog Pills, Ointments for Yoke-galls, Tumours, Hoof ailments, Livingall for Rinderpest and for all diseases of Cattle, Horse, Dogs and Poultry.

(Distributors all over India.)

WANTED

A well qualified VETERINARY SURGEON for a Stud Farm in Poona District. Applicants must have good experience in equine practice and clinical laboratory work. Some experience of Stud work is essential. Good prospects for right man. Apply stating age, qualifications, and minimum salary expected to—

The Manager,
THE POONA STUD FARM LTD.,
283, Main Street, POONA.



in Canine Practice

PRODUCT

* **STOVARSOL**
Brand
Acetarsol

* **ACETYLARSAN**
Brand
Diethylarsine Acetarsol
Solution

* **M & B 693**

* **COLUSEPTASINE**
Brand
No. 1000

* **TRISOL**

INDICATION

Nervous sequelae of distemper, anaemia, chronic skin affections, emaciation following helminthiasis, and as a general tonic.

General tonic for parenteral administration in debility, malnutrition, anaemia, helminthiasis, chronic skin affections and nervous disorders: well tolerated by subcutaneous injections.

Chemotherapy of streptococcal, pneumococcal, staphylococcal and many other bacterial infections. Useful in Canine distemper.

For the treatment of hemolytic, streptococcal and other pyogenic infections, by parenteral administration. Well tolerated subcutaneously.

PACKING

Containers of:
50 x gr. 4 tablets.
250 x gr. 4 tablets.

Boxes of 6 x 2 c.c.
ampoules.
(9.40 percent solution)

50 x 0.5 gm. tablets.
250 x 0.5 gm. "
1000 x 0.5 gm. "

20% solution
Bottles of 30 c.c.
" 500 c.c.
10% solution
Boxes of 10 x 3 c.c.
ampoules.



MAY & BAKER LIMITED

DISTRICT MANAGERS: MAY & BAKER (INDIA) LIMITED

Considering paragraphs 1 and 2 it is possible that only selected cases will prove amenable to operation. Without further experience, however, these cases cannot be recognised, so it would be interesting to hear the experiences of others in this field.

HOVEN - AN EXPRESSION OF ALLERGY?

By

W. K. KERR AND H. G. LAMOUNT.

Kerr and Robertson (1943), in their paper on a study of the antibody response of cattle *Trichomonas foetus*, refer to the general constitutional symptoms produced in sensitised cows by introducing antigen prepared from the Trichomonad parasite into the animal body, *e. g.* into the uterus.

Among the general symptoms noted was acute tympany of the rumen, such as one finds in animals which have fed on young wet clover, green corn, etc. This condition has been produced experimentally on many occasions and exhibited to experienced veterinary surgeons who have invariably started that this tympanitic condition is indistinguishable from hoven.

Gas is produced in the rumen and eructation occurs at regular intervals in the normal bovine. In the cow suffering from allergic shock it is suspected that spasm of the unstriped muscle in the oesophageal opening into the rumen occurs and the gas produced being unable to get away, accumulates in the rumen and leads to acute tympany.

Acting on this assumption, adrenalin—which, as is well known, relieves symptoms of allergy, *e.g.* in asthma—was injected into these animals. The results were in accord with expectation and the condition was relieved without further treatment. The dose varied from 3 to 5 c. c. subcutaneously, usually one dose was sufficient and the animal was apparently normal in one hour. Atropine sulphate in $\frac{1}{2}$ grain doses has also been used with satisfactory results.

The success of this treatment has prompted us to try it in the field in those cases of hoven or bloat following a feed of clover or green corn or even on occasion young wet grass. The results have been most satisfactory and many cases have required no further treatment. In cases where very marked tympany has occurred and it is obvious that the animal is in immediate danger of asphyxiation, it may be necessary to insert a trochar and cannula to relieve some of the pressure at the same time as one injects the adrenalin.

Mr. S. R. Bolton, M.R.C.V.S., Cookstown Co., Tyrone, has used this treatment for several years with marked success.

REFERENCE.

Kerr, W. R., and Robertson, M. (1943) A study of the antibody response of cattle to *Trichomonas foetus*, *J. Comp. Path.* 53, No. 4.

*Veterinary Record Vol. 58, No. 1.

Association News

A.I.V.A. MADRAS BRANCH

Proceedings of the Meeting of the Managing Committee held
At the Madras Veterinary College Library on Friday
the 31st May 1946, at 4.30 p.m.

Members present:—

1. Rao Sahib K. Kylasamier
2. Sri K. S. Nair
3. „ M. R. Subramaniya Sastri
4. „ C. V. Padmanabhan
5. „ Thulasi Ram Singh
6. „ V. S. Alwar
7. „ D. Krishnamurti
8. „ R. Swaminathan

1. Read the minutes of the previous meeting held on the 4th January 1946 and confirmed.
2. Resolved to hold the Annual Veterinary Conference during the ensuing Michaelmas Holidays.
3. In pursuance of the above Resolution, resolved
 - (a) that the Hon'ble Minister for Development, Government of Madras, be requested to open the Conference,
 - (b) that Rao Sahib Sri K. Kylasamier G.B.V.C. be requested to be the President of the Conference,
 - (c) that a Reception Committee for the Conference be formed with the Managing Committee as the nucleus with Rao Bahadur Sri R. Swaminathan as the Chairman of the Reception Committee and Sri D. Krishnamurthi as the Treasurer,
 - (d) that a minimum of Rs. 5/- be the subscription for a R.C. Member and Rs. 3/- for a Delegate,
 - (e) that the Principal of the Madras Veterinary College be requested to be so good as to offer all facilities for the holding of the Conference and for arranging an Exhibition at the Conference,
 - (f) that Messrs. M. Y. Mangrulkar, S. Vaidyanatha Mudaliar and I. Md. Azizuddin be requested to be in charge of the arrangements for the Exhibition, and

(g) that the programme of the Conference be on lines similar to those of the last Conference.

4. Resolved to hold the next meeting of the Managing Committee on Saturday the 29th June 1946 at 4 p. m.

R. SWAMINATHAN,
Secretary.

**Minutes of the Meeting of the Madras Veterinary Assistant Surgeons' Service Association, West Godavary Branch,
Held in Ellore on 9—6—'46.**

Members present:—Messrs. Sivaramasubrahmanyam, S. K. Natarajan N. Venkataratnam, J. Suryanarayana-murthy, L. Mothisingh and P. S. Swaminathan.

Sri M. Lakshmana Raju, G.M.V.C., P.G. (Edin.) District Veterinary Officer, West Godavari District, Ellore, presided on the occasion.

The President in his opening remarks exhorted the members to cultivate a team spirit and read professional papers on such occasions as this. He read a paper on 'Bovine Sterility' on which a lively discussion entered.

Sri Lakshmana Raju commenced his paper with a short introductory note about the various factors concerning the etiology of Sterility in Cattle and gave a brief note of six cases of sterility—5 cows and one she-buffalo—successfully treated by him with the urine of pregnant cow. The first case treated in May 1940 was a cow aged six years in good condition which had never conceived in spite of repeated "services". On the first day, the uterus was douched with one percent Lysol solution. The same evening, 50 c.c. of urine from a healthy pregnant cow was injected into the uterus. This was repeated for 5 days. From the 6th day, the uterus was douched with a saturated solution of Sodii Bicarb for about ten days. In addition to this treatment, the cow was given a weekly subcutaneous injection of 10 c. c. of urine from a pregnant cow. The urine was collected fresh, preferably in the morning, and filtered before injection. Four such injections were given. The result of this treatment was satisfactory and the cow became pregnant.

The office bearers were then elected for the year 1946. Sri P. S. Swaminathan was elected Secretary and Sri N. Venkataratnam and Sri Sivaramasubrahmanyam were elected members unanimously.

The following resolutions were then discussed and passed unanimously:—

1. Resolved to request the Director of Veterinary Services Madras to grant a remuneration, whenever a Veterinary Assistant Surgeon is in additional charge, and when his jurisdiction is extended. Proposed by Sri S. Sivaramasubrahmanyam and seconded by Sri P. S. Swaminathan.

2. Resolved to request the Director of Veterinary Services, Madras, to grant a house rent allowance for the Touring Veterinary Assistant Surgeons wherever there is no office accommodation.

3. Resolved to request the Director of Veterinary Services, Madras, to empower the District Veterinary Officers concerned to fix the pay of the attendants working in the Veterinary Institutions in the concerned district on an uniform and adequate basis.

With a vote of thanks to the President, the meeting terminated.

P. S. SWAMINATHAN,
Secretary.

College News

BOMBAY VETERINARY COLLEGE

Diamond Jubilee Celebrations

1946

APPEAL TO GENEROUS-MINDED MEMBERS OF THE PUBLIC

The Bombay Veterinary College completes its 60th year of existence on August 2, 1946. It is the pioneer institute of Veterinary Science in India and its graduates are scattered over all parts of India and abroad. The College which was founded as the first in India by the Government of Bombay in the year 1886, under the then Principal, Col. Steel, will now complete its 60th year as an institution affiliated to the University of Bombay. It is proposed to celebrate the Diamond Jubilee of the College to commemorate the event.

This occasion provides a unique opportunity to the generous-minded members of the public to perpetuate the memory of their relatives and friends by founding Research Scholarships tenable in India and abroad in different branches of Veterinary Science and by subscribing munificently to the College Gymnasium.

The health and prosperity of a country generally depends on its livestock resources. Animal food is important to sections of the population for their diet. Animals are also an essential working capital in agriculture and are indispensable in irrigation and in the transport of agricultural produce from the producer's home to the markets. Prosperous countries in the West give a high priority to the maintenance and improvement of livestock. The Veterinary profession plays a valuable part not only in the prevention and control of livestock diseases, but also in the development of

stock-breeding, dairying and in the production, distribution, transport and marketing of food stuffs. Veterinary science also comprehends domestic pets which are to be found in many households and are as much cared for and tenderly looked after as the members of household themselves.

Kindness towards animals has been emphasised by institutions like the Royal Society for the Prevention of Cruelty to Animals and the public is no longer indifferent to the well being of animals. Animals will also play a dominant role in the Post-war development of the country. But any ambitious scheme of development needs adequate finance. Recently the Centenary Celebrations of the J. J. Hospital witnessed the magnanimity and munificence of donors in this country and it is hoped the Diamond Jubilee of the Veterinary College will attract donors no less numerous and generous.

Subscriptions and donations may, please, be sent to Dr. K. R. S. Aiyar, Honorary Treasurer, Veterinary College, Parel, Bombay. All donations received will be gratefully acknowledged and published in the *Indian Veterinary Journal*.

22nd June, 1946, }
Parel, Bombay 12 }

S. R. CHADHA, B.Sc., M.R.C.V.S.,
Chairman.

PROCEEDINGS OF THE MEETING OF THE DIAMOND JUBILEE COMMITTEE

Diamond Jubilee Celebrations Committee met at 4 p.m. in the College Library on 8-4-1946. Dr. M. Mohey Deen, Director of Veterinary Services, Bombay Province presided. Twenty members were present. The following transactions were carried out.

Dr. R. N. Naik, Hon. Secretary read the minutes of the previous meeting and informed that the following gentlemen from native States have been nominated by State Authorities to the Diamond Jubilee Celebrations Committee:—

Maj. General (Dr.) Sadekar Powar	}	Representatives of Baroda State.
Dr. B. B. Mundhe		
Major (Dr.) W. V. Soman		
Dr. L. V. Rishi		
Lt. Col. (Dr.) M. S. Apte	}	do of Gwalior State.
Lt. Col. (Dr.) Mehra		
Dr. C. Nanjundiah	}	do of Mysore State.
Dr. K. Srikanthiah		
Dr. N. C. Chikmath	}	do of Kolhapur State.
Dr. B. H. Nirokhekar		

The following persons have accepted our invitation to serve on our Committee:—

Dr. Jalal Shah, Principal, Grant Medical College; Bombay.

Dr. Dhyagude, Dean, Gordhandas Sunderdas Medical College, Bombay.

Dr. J. N. Karande, Principal, National Medical College, Bombay.

Dr. M. S. Shastri, Secretary, All India Veterinary Medical Association.

Dr. Mata Prasad, Principal, Royal Institute of Science, Bombay.

Dr. M. S. Shastri's letter requesting to allot two days for holding the Veterinary Medical Association Meeting during the Diamond Jubilee Session was read out and the house agreed to the same.

It was also agreed that the Diamond Jubilee Celebrations Committee should also help holding the general body meeting of the Bombay Veterinary Medical Association during the Jubilee Session.

The following resolutions were passed:—

1. A managing Committee be formed of the following members with powers to co-opt more members if necessary.

Dr. S. R. Chadha, *Chairman*.

Khan Saheb N. D. Dhakmarwala.

Rao Bahadur V. R. Phadke.

Dr. R. N. Naik } *Joint Secretaries.*

„ K. B. Nair }

„ K. R. S. Aiyar-*Treasurer*.

„ D. S. Laud.

„ V. N. Kulkarni.

„ M. D. Vaishnav.

„ S. B. Hanchlikar.

„ P. G. Date.

One student representing all students

2. Sjt B. G. Kher, Prime Minister, Government of Bombay be requested to inaugurate the Diamond Jubilee Celebrations.

3. Dr. Gharewal, M.R.C.V.S., I.V.S. be requested to preside over the meeting when scientific papers will be read.

4. Secretary, All India Veterinary Medical Association be asked to propose and fix up the person who will inaugurate the All India Session.

5. A Sub-Committee consisting of the following members be formed for collecting funds through donations arranging the performance of Cinemas and Races etc.

Dr. M. Mohey Deen.
 „ S. R. Chadha, *Chairman*.
 „ R. N. Naik, *Secretary*.
 „ K. R. S. Aiyar, *Treasurer*.
 „ T. G. Desai.
 „ J. P. Damri.
 „ N. C. Nathani.
 „ V. N. Vaishnav.

All Divisional Veterinary Officers, Bombay Province.

6. Drs. Hardikar and Khambete be elected to arrange receptions of the guests.

7. A Sub-Committee for arranging exhibition be formed of the following members:—

Dr. R. N. Naik.
 „ V. N. Kulkarni.
 „ G. G. Chebbi.
 „ S. R. Rao.

Khan Bahadur (Dr.) A. H. Khan.

8. Those who pay a sum of Rs. 25/- or above in addition to their subscription are eligible to the membership for the Reception Committee, Diamond Jubilee Celebrations.

9. Secretaries should arrange lectures and entertainments.

10. Secretaries are authorised to appoint a part time clerk on a pay of Rs. 25/- p. m. from 8.4.1946.

11. A medal should be struck for Diamond Jubilee function, for being worn by members and be given to each member of the Veterinary Profession who pays his subscription to the Jubilee fund.

12. The Committee views in favour of arranging the founding of the following in commemoration of the Diamond Jubilee of the College with the help of public donations.

- i. Research scholarships tenable in India.
- ii. do abroad.
- iii. One horse operating table.
- iv. Two cattle operating tables.
- v. One X-Ray apparatus.
- vi. One post mortem room attached with a cold room for keeping dead bodies.

13. Dr. Naik R. N. may submit a scheme with approximate cost on the following item for reconsideration.

Founding an "Animal Products (food, medicinal and industrial) Research Fund".

19th June, 1946, }
 Parel, Bombay 12 }

R. N. NAIK,
 Hon. Secretary.

Following subscriptions and donations have been gratefully acknowledged.

	Rs.		Rs.
Dr. M. M. Murgod	20 0 0	Dr. Y. V. Limaye	20 0 0
Madam Goose	30 0 0	„ A. B. Agte	7 0 0
Dr. G. A. Hardikar	25 0 0	„ P. C. Bapat	20 0 0
„ K. R. S. Aiyar	35 0 0	„ S. V. Khare	5 0 0
„ S. R. Rao	25 0 0	„ N. G. Bhide	20 0 0
Khan Bahadur		Maj. General Sadekar	
Dr. A. H. Khan	60 0 0	Powar	125 0 0
„ Chandiramani B. T.	2 0 0	Dr. K. S. Parwani	2 0 0
„ S. H. Chawla	2 0 0	Major W. V. Soman	40 0 0
„ S. R. Kulkarni	2 0 0	Dr. D. D. Tamhankar	15 0 0
„ V. D. Jatkari	2 0 0	Lt. N. A. Acharya	10 0 0
„ A. C. Malkani	2 0 0	Dr. S. G. Apte	5 0 0
„ A. P. Asopa	2 0 0	„ B. V. Nagnur	22 0 0
„ M. S. Shastry	10 0 0	„ S. B. Supekar	5 0 0
„ Fanindralal Muzum-		„ B. R. Kodgalli	15 0 0
dar, Bengal	2 0 0	„ L. G. Amone	14 0 0
„ M. V. Moulvi	2 0 0	„ S. V. Deshpande	15 0 0
„ C. F. Mataney	15 0 0	„ N. B. Kotbagi	20 0 0
„ N. S. Kolte	9 8 0	„ S. G. Shurpali	15 0 0
„ N. V. Bhagwat	2 0 0	„ B. L. Varma, C. P.	5 0 0
„ K. B. Yadu	10 0 0	„ V. M. Hegdekatti	10 0 0
„ M. Mohey Deen	100 0 0	Lt. M. V. G. Rao	20 0 0
„ H. R. Chandrashe-		Dr. L. H. Nagamia	6 0 0
kharaya	8 0 0	„ C. V. Divekar	8 0 0
„ N. V. Tamankar	15 0 0	„ J. J. Doshi	101 0 0
„ N. H. Laxmeshwar	8 0 0	„ J. J. Sinha, Udaipur	15 0 0
„ D. G. Handigol	10 0 0	„ A. Y. Shete	8 0 0
„ V. R. Natu	8 0 0	„ S. S. Patkar	17 0 0
„ J. Z. Kalal	13 0 0	„ G. S. Balekundri	22 0 0
„ V. N. Navangule	10 0 0		

Total Rs. 1075 8 0

19th June, 1946 }
 Parel, Bombay 12 }

R. N. NAIK,
 Hon. Secretary.

DIAMOND JUBILEE CELEBRATIONS OF THE GENERAL VETERINARY HOSPITAL BARODA.

The present Baroda State is entirely the creation of one of the most enlightened Indian Princes, the late Sir Sayajirao Gaekwar who ruled the State for a period of over 60 years. During the long range of his benign rule, he tried to improve and modernise every branch of administration. The Veterinary Department also had its share of attention.

It was in the year 1873 that he had some Salotris trained in the use of indigenous drugs; then started the Veterinary section, which was attached to the State Medical Department. Along with the indigenous drugs they started using foreign medicines also.

In the year 1885 he had one of his Salotris trained at the Army Veterinary School, Poona and on his return to Baroda, the foundation stone of the present Veterinary Hospital was laid.

The present General Veterinary Hospital is the first Veterinary Hospital which started functioning independently from the 15th March 1886. It is now 60 years old to-day and the Diamond Jubilee of this institute was celebrated on the 15th March 1946 under the Presidentship of Major General A. G. Sadekar Powar.

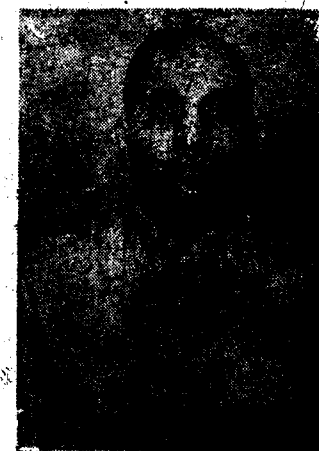
The present Chief Veterinary Surgeon, Major W. V. Soman, in his welcome address traced the history of the progress of the Veterinary Hospital for the last 60 years. He said that this institute was primarily meant for the State Military Department but has its branches for the use of the General public also. As Veterinary Graduates become available they were entertained and were sent to the various places in the district. The department gradually increased in its volume and it was about 1914 that the two departments i.e. Military and Civil were separated. Even to-day the General Veterinary Hospital though attached to the Military Department works for the Royal Household, the Mounted Police, the Barkhali and the Palace Zoo departments and even admits some private cases. It has its own Laboratory where Microscopical diagnosis is immediately available. X ray aid is obtained from the State General Hospital and the institute is worked on the most modern and up-to date lines.

Major Soman also pointed out that the classes for training officers, Salotris and farriers are being conducted since 1901 and very recently the curriculum has been changed and is brought up-to-date.

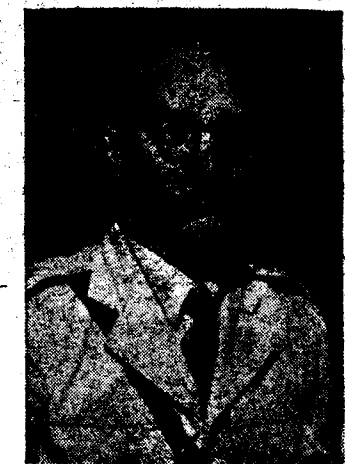
Furthermore he explained to the audience the difficulties experienced by the Veterinarians in the successful working of the profession such as the opposition from quakery, the low pay of the Veterinarians want of private



Group Photo taken at the time of the Diamond Jubilee Celebrations of the General Veterinary Hospital, Baroda.



Major General A. G. SADEKAR POWAR,
G.B.V.C. (Bom)
B.H.S., N.S.E. (Cav.) S.F.E. (Inf.) & Q.
Who presided over the Diamond Jubilee
Celebrations.

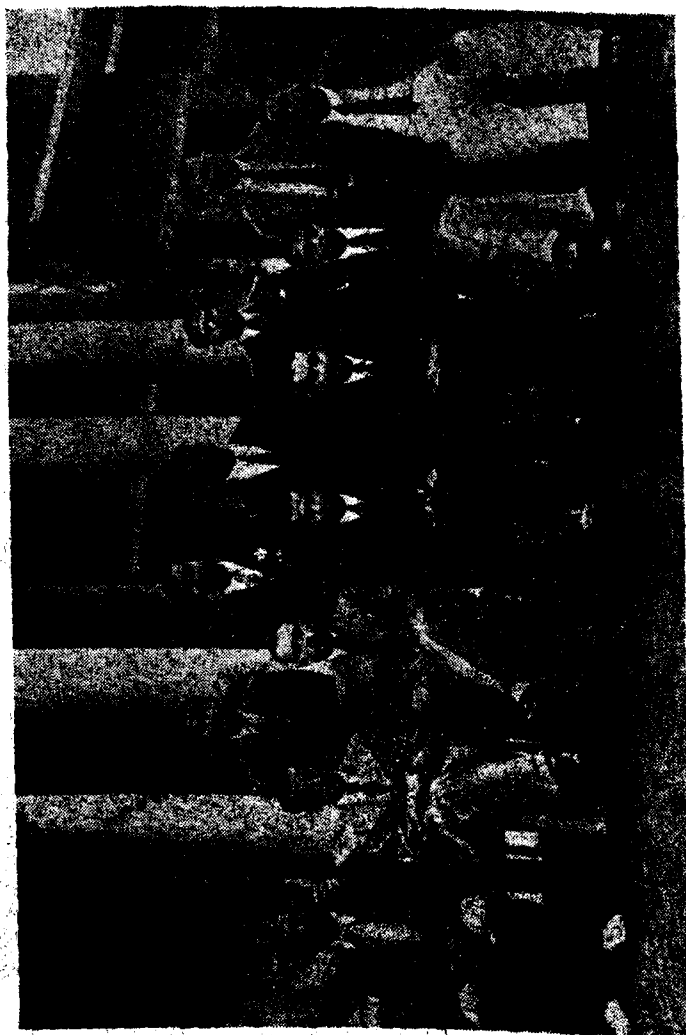


Major W. V. SOMAN, G.B.V.C.,
P.G. (Edin.) M.R.S.I.,
Chief Veterinary Surgeon,
General Veterinary Hospital, Baroda.

Plate No. 2

Vol. XXIII, No. 1

IMPERIAL VETERINARY RESEARCH INSTITUTE, IZATNAGAR.
First Batch of Artificial Insemination Training Class, 1946.



Sitting L to R:— Mr. Guha (B.A.), Mr. Mukherjee (A.R.O.), Mr. Kohli (A.R.O.), Dr. Bhattacharya (O.C.),
Mr. Gosh (A.R.O.), Mr. Luktuke (R.A.), Mr. V. Sivasubramanian (Rewa State).
Standing L to R:— Mr. C. B. Singh (Cawnpore), Mr. A. I. Banerjee (Nadia), Mr. A. Qudooos (Dacca),
Mr. S. V. More (Gwalior State), Mr. S. D. Bhatnagar (Ajajgarh State).

practice etc. He rightly explained the most important qualification required for Veterinarian is that of keen observation which should, he further stated, "must be of a trained order and akin to that of a housewife".

In conclusion, he thanked the audience for joining the celebration and wished the Hospital a prosperous future.

Major General Sadekar Powar in tracing the history of this hospital, explained his personal association with this institute and praised the working of Late Sir Sayajirao Gaekwar who started taking interest in this profession as far back as 1873.

General Sadekar complimented Major Soman for having raised the Hospital to the present standard and the harmonious relations he maintains with the commanding officers of the different units

General Sadekar said he realised the difficulties felt to-day at the hospital and hoped that they would be redressed in the near future. He thanked His Highness the Maharaja Saheb of Baroda for taking interest in general and in the working of this hospital in particular. He explained also how the hospital has been provided with the modern equipment mainly due to H. H. 's courtesy. In the end he wished Major Soman and the hospital staff and the institute a bright future.

Baroda.

MAJOR W. V. SOMAN.

King's Birthday Honours

(June 13, 1946).

We heartily congratulate the following gentlemen on the distinctions conferred on them on the occasion of the King's Birthday :—

"C. I. E." on Captain U. W. Ferrier Walker, M.C., M.R.C.V.S., I.V.S., Director, Veterinary Department, Punjab, Lahore.

"Rao Sahib" on Mr. P. P. Aippuru, B.A., Personal Assistant to the Director of Veterinary Services, Madras.

Cattle Shows

ALL-INDIA CATTLE SHOW

A note on the auction sale of pedigree cattle sponsored by the All-India Cattle Show Committee.

India possesses the largest cattle population in the world—nearly a third of the world's total cattle population. But as we all know a large population of this consists of inefficient and diminutive cattle, which rather imposes a serious strain on the fodder resources of this country in which the supply in certain parts and in certain seasons is already scarce. We could conveniently with proper management and selection reduce the present estimated number of about 15 million bulls to about two hundred and fifty thousand superior bulls that will suffice: In spite of this large number of cattle we cannot produce economically more than half the milk which is essential for the health of our people at this low standard of nutrition even. Therefore, the problem that faces India is not only to increase the milk supply but to do it at a price which an ordinary consumer can afford. This can be done only by improved breeding. To help this an All-India Cattle Show Committee was started in 1938 with H. E. the Viceroy as Patron-in-Chief. The object of starting this Society was not to confine itself to the organisation and establishment of cattle Shows alone, but to take its full share in promoting the knowledge of animal husbandry in the country. The Society held All-India Cattle Shows in the years 1938 to 1940 and the All-India Cattle Show along with 3 regional shows in years 1941—42. These shows became very popular and were responsible not only in stimulating general interest in the breeding and care of live stock, but provided an opportunity to breeders of meeting each other and discussing common problems. These cattle shows also had an important commercial aspect.

Due to transport difficulties created by war the All-India Cattle Show Committee decided in the year 1942 to hold a number of small shows instead of the All-India and regional shows, where the cattle breeders can travel by road alone. These small shows have been greatly appreciated by all the Provinces and States concerned and in fact these small shows have given an opportunity to the All-India Cattle Show Committee to come in contact with the breeders in distant parts of the country. After the termination of war the All-India Cattle Show Committee have again decided to revive the All-India Cattle Shows and the regional shows.

The Society realising that the strongest incentive to encourage breeding of pedigree stock is by providing a paying market for such breeders, undertook to start an auction sale of pedigree cattle for the first time this year. The first auction sale was held at Delhi on 21st of March at the

THE ALL-INDIA CATTLE SHOW Auction Sale of Pedigree Cattle.



H. E. Sir EVAM JENKINS, Governor of the Punjab,
Photographed with R. S. Mahid Singh, whose Ravi Buffalo cow was sold for Rs. 900/-
and won the Walker Challenge Cup.