

THE
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(THE JOURNAL OF THE ALL-INDIA VETERINARY ASSOCIATION)

26, WALLAJAH ROAD, MADRAS-2 (S. INDIA)

Vol. XXX

JANUARY, 1954

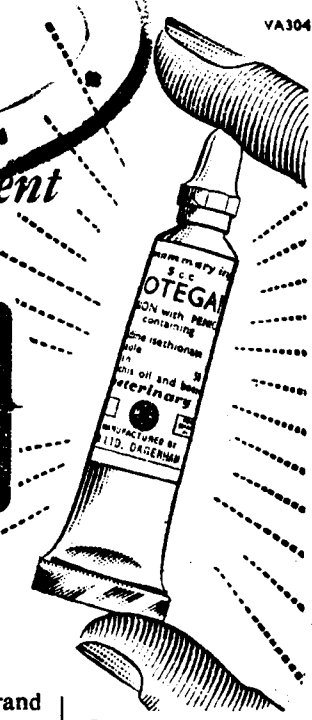
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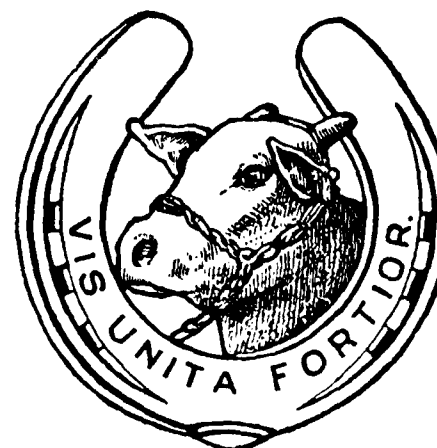
No. 4

THE INDIAN VETERINARY JOURNAL

[THE JOURNAL OF THE ALL-INDIA VETERINARY ASSOCIATION]

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(ESTD. 1924)

EDITOR

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

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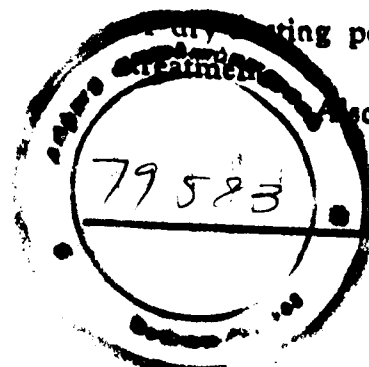
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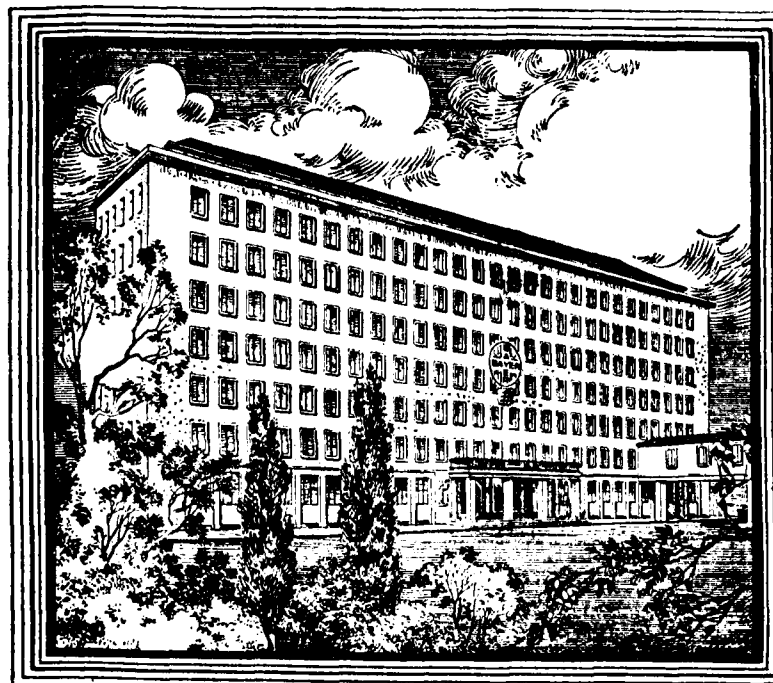
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The Indian Veterinary Journal

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Vol. XXX

JANUARY 1954

No. 4

CONTENTS

	PAGE
I. General Articles	
The Concept of Veterinary Public Health and its application in the world health organisation,—By Martin M. Kaplan	275
Feeding of organic insecticides to chicken and its effect on the control of <i>Argas Persicus</i> (oken).—By P. Balarama Menon, C. M. Sen Gupta and B. C. Basu	283
Use of "Lorexane" cream in the treatment and prevention of Myiasis cases in livestock,—By C. M. Sen Gupta, P. Balarama Menon and B. C. Basu	287
Chronic Bovine Haematuria.—By S. Datta	289
A note on the Chemical composition and the yield per acre per year of nutrients of grasses of the composite livestock farm and research station, Hesserghatta.—By H. S. Lakke Gowda	301
Recent advances in chemical and antibiotic therapy.—By S. F. Scheidy	306
Leiomyoma of the heart of a cow,—K. P. Chandrasekharan Nair and Ganti A. Sastry	313
Anatomical observations.—By P. Srinivasan	315
The economic importance of sheep in India.—By B. B. Buch and S. Jayaraman	317
Improvement of Indian sheep.—By B. B. Buch and S. Jayaraman	320
A survey of animal neoplasms in the Madras State. I Bovine.—By K. P. Chandrasekharan Nair and Ganti A. Sastry	325
Cooperiasis in buffalo calves.—By K. P. Chandrasekharan Nair and M. Anantaraman	334
Observations on histopathology of morbid tissues from a case of natural infection with <i>Schistosoma spindalis</i> in a bovine.—By R. M. Kalapesi and B. L. Purohit	336
II. Editorial	
A Leader's demise	

CONTENTS—(contd.)

IV. Notes and News		PAGE
P. K. Ramachandra, B.Sc., B.V.Sc.	...	350
Post-graduate degrees in Animal Husbandry (By Research)	...	350
Switching of animals	...	351
P. H. T. Degree	...	351
V. Clinical Article		
Use of Dr. Frank's Foetal Extractor in reducing dislocation and overriding fractures in large animals.—By G. B. Singh and M. M. Rao	...	352
VI. Association News		
Madras Veterinary Association—Proceedings of the Annual General Body meeting held on 19-12-53	...	354

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General Articles

THE CONCEPT OF VETERINARY PUBLIC HEALTH AND ITS APPLICATION IN THE WORLD HEALTH ORGANIZATION*

By

MARTIN M. KAPLAN, A.B., V.M.D., M.P.H.,
World Health Organization, Geneva.

In all disciplines the emergence of new concepts is a sign of vitality and a basis for growth. The history of veterinary medicine is rich with scientific discoveries and innovations which have had a beneficent effect on mankind. The opportunity now presents itself to the veterinary profession to make another type of contribution to human society. This opportunity is embodied in a new concept — veterinary public health — which in its present form has existed for less than a decade. Since to some groups in the veterinary profession this concept appears vague and amorphous, it is the purpose of this account to place it in clearer perspective, principally by outlining how it has been and may be applied to specific problems.

have already been referred to. After a sufficient acquaintance with the cultures of the haematuria *Aspergillus* was obtained, it was found that by plating out the cultures one could without difficulty judge correctly whether the cultures were pure or contaminated. The growth characters of the pure colonies were so invariable and typical, and the effect of any extraneous contaminations so clearly manifest that the plating on the standard medium alone, was sufficient for ensuring the purity of cultures. Besides it was found that the main risk of any contamination taking place existed only at the time of the initial plating out, because once the culture was well-established on the medium contaminants had practically no opportunity of settling or thriving on the cultures.

It is however necessary to add that in special cases where critical studies were indicated, or the possibility of any lurking doubts had to be eliminated, the following procedure was adopted. No special apparatus or micromanipulator was used. The procedure approximated well nigh to the ideal of monospore culture. First as little as possible of the conidial 'powder' was transferred on the tip of a platinum needle to a tube of 10 c.c. of sterile water. The tube was then briskly rotated between the palms of the hands with a view to effect the separation of any conidia adherant to each other. A loopful of the dilution was transferred to a tube of melted agar medium, which had been brought down to an optimum temperature judged by the hand. The agar tube was briskly rotated and, after a loopful from this had been transferred to a second tube, it was plated out carefully and rapidly. A loopful from the second agar tube was transferred to a third agar tube, and the second tube plated out. The procedure was repeated with two more tubes, and the original watery dilution was discarded. The plates were kept at the room temperature under an inverted belljar, and observed under the microscope after twenty-four hours. The medium formed a very thin and transparent film, and, on inversion, a commencing colony or a single germinating spore, well-separated from any neighbours, was marked off and carefully removed with a hot platinum loop together with a liberal amount of the surrounding substratum. This was placed on a sterile slide kept ready. Observations were continued with the progress of the growth. A precaution which was found to be important was that the plates were not be incubated, as otherwise the growth was too rapid for any fruitful observations to be conducted at twenty-four hour intervals.

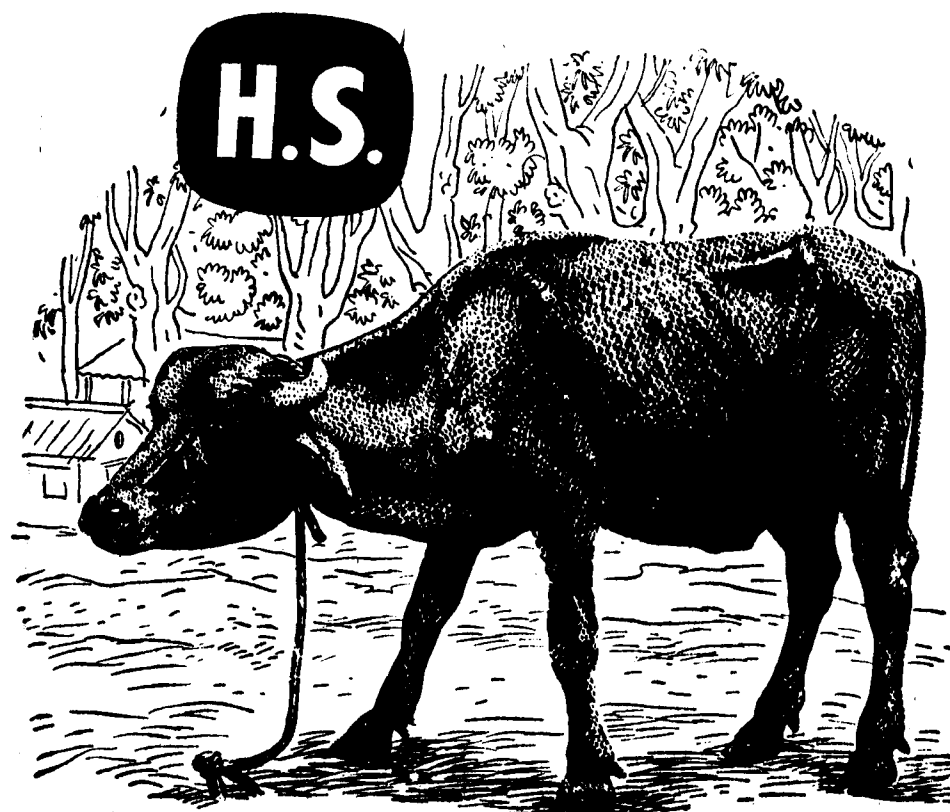
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the different sugars, a series of fermentation reactions were carried out with eight strains. The results are given below:—

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	Glucose	Sucrose	Dulcitol	Mannite	Maltose	Dextrine	Salicine	Date
1. Fern	—	↓	—	—	↓	↓	—	20.6
	—	↓	—	—	↓	↓	—	25.6
	—	↓ S	—	—	↓ S	↓ Tr.	—	29.6
2. "Gaiety"	—	↓	—	—	↓	↓	—	20.6
	—	↓	—	—	↓	↓	—	25.6
	—	↓	—	—	↓	↓	—	29.6
3. Hill Bull 459	—	↓	—	—	↓	↓	—	20.6
	—	↓	—	—	↓	↓	—	25.6
	—	↓ S	—	—	↓	—	—	29.6
4. Cow 4/26	—	↓	—	—	↓	—	—	20.6
	—	↓	—	—	↓	↓	—	25.6
	—	↓ S	—	—	↓	↓ S	—	29.6
5. Rabbit 9	—	—	—	—	+	+	—	20.6
	—	—	—	—	+	+	—	25.6
	—	—	—	—	+	+	—	29.6



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Details of the cases of dislocations and fractures treated—Vide article by G. B. Singh and M. M. Rao

Serial No.	Description of the animal.	Weight in lbs.	Anaesthetic used.	Dose.	Duration of Anaesthesia.	Rate of recovery.	Nature of operation.	Results.	Remarks.
1	2	3	4	5	6	7	8	9	10
1.	Grey C. B. bullock.	500 lbs.	Chloroform by inhalation after premedication with chloral hydras.	$\frac{1}{2}$ oz.	15 Min.	45 min.	For reducing dislocation of shoulder joint.	Reduced immediately: complete recovery ensured; and normal walking after 3 weeks.	Immediately after reduction, the part was blistered with Ung. Hyd. Iod. rubr. (1 in 8).
2.	Grey C. B. bull calf.	120 lbs.	2% Procaine hydrochlor with 1 minim of Adrenaline to each c.c. into the Sacro-Coccygeal articulation.	20 c.c.	1½ hrs.	4 hrs.	For reducing dislocation of hock joint.	Reduced immediately: complete recovery ensured; walked normally after 3 weeks.	Immediately after reduction the joint was supported with an unpadded plaster cast (removed after 3 weeks).
3.	Grey C. B. cow.	420 lbs.	do.	60 c.c.	2 hrs.	4½ hrs.	For reducing overriding fracture of tibia.	Reduced immediately.	The fracture was repaired by intramedullary pinning.
4.	Grey C. B. cow.	450 lbs.	do.	do.	do.	do.	do.	do.	The fracture was repaired by external fixation of bone pinning aided by unpadded plaster cast.
5.	Dark Grey C. B. Heifer.	200 lbs.	do.	25 c.c.	1½ hrs.	4 hrs.	do.	do.	do.
6.	Grey C. B. Female calf.	150 lbs.	do.	20 c.c.	do.	do.	do.	do.	do.
7.	Grey C. B. Heifer.	250 lbs.	do.	30 c.c.	2 hrs.	4½ hrs.	do.	do.	The fracture was repaired by bone plating aided by unpadded plaster cast.
8.	Dark Grey C. B. Cow.	375 lbs.	do.	60 c.c.	2 hrs.	5 hrs.	For reducing dislocation of the hip joint (Photo No. 1).	Reduced immediately; the animal put full weight after 12 hours (Photo No. 3.)	Immediately after reduction the part was blistered with red ointment (1 in 8.)
9.	Grey C. B. bullock.	355 lbs.	Anavenol-K by I/V injection.	95 c.c.	25 min.	45 min.	For reducing overriding fracture of the radius.	Reduced immediately.	As in case No. 4.
10.	Dark grey C. B. cow.	350 lbs.	do.	90 c.c.	20 min.	45 min.	For reducing the dislocation of the shoulder joint.	Reduced immediately; the animal put full weight after 12 hours.	As in case No. 1.
11.	Grey C. B. cow.	425 lbs.	do.	100 c.c.	do.	40 min.	For reducing overriding fracture of the tibia.	Reduced immediately.	As in case No. 3.
12.	Red C. B. cow.	420 lbs.	do.	do.	22 min.	45 min.	For reducing the dislocation of the hip joint.	As in case No. 8.	As in case No. 8.

Treatment.—The animal was fasted for 24 hours and put under Chloral hydrate-chloroform anaesthesia. The usual methods of reduction as described in the books were tried over a protracted period without success. At this time we thought of Dr. Frank's Foetal Extractor and its possible use in effecting the reduction. We immediately got the apparatus and, on using it, we were greatly pleased to find that the dislocation could be reduced within a few minutes and to our entire satisfaction. Both the legs were then found equal on measurement. Immediately the shoulder joint was shaved and washed with hot water and soap. The affected part was then blistered with Ung. Hydrar. Iodi. rubr. (1 in 8). The following day the bullock could put full weight on the affected leg and had an uneventful recovery. After three weeks the animal walked normally and was discharged as cured.

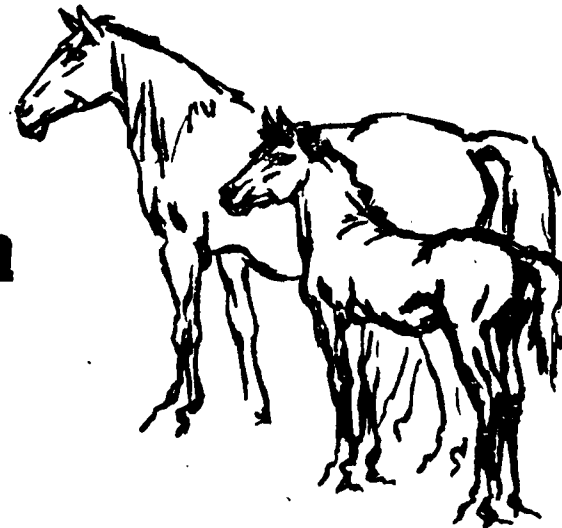
The remaining 11 cases, (4 of dislocations and 7 of ordinary fractures) were all successfully treated by using the apparatus. Reduction of the hip joint in a cow is shown in the following 3 photographs. (Pl. No. 15) Fig. No. 1 shows the cow in the standing position with the dislocation of the left hip joint. The shortening of the leg as is evidenced by the disparity between the points of the two hocks may be seen marked. Fig. No. 2 shows the application of Frank's Foetal Extractor during the reduction of the dislocation of the hip joint of the same cow. The operator is manipulating the affected joint with the hand while the assistant is working on the jack as per the directions of the operator. Fig. No. 3 shows the same cow standing 12 hours after the reduction. The points of the hocks may be compared; they are in one and the same line and the animal is seen placing full weight on the affected limb.

Frank's Foetal Extractor was originally supplied to us for extracting calves in cases of delayed but normal deliveries. In addition to the above use, we are now regularly using the apparatus

1. for reducing dislocations of shoulder and hip joints;
2. for reducing over-riding fractures of the limbs before pinning and plastering.

The accompanying table gives the details of the case reports treated.

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