ANNUAL REPORT

ON THE

PUNJAB VETERINARY COLLEGE

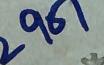
AND OF THE

VIL VETERINARY DEPARTMENT, PUNJAB,

FOR THE YEAR 1908-09.

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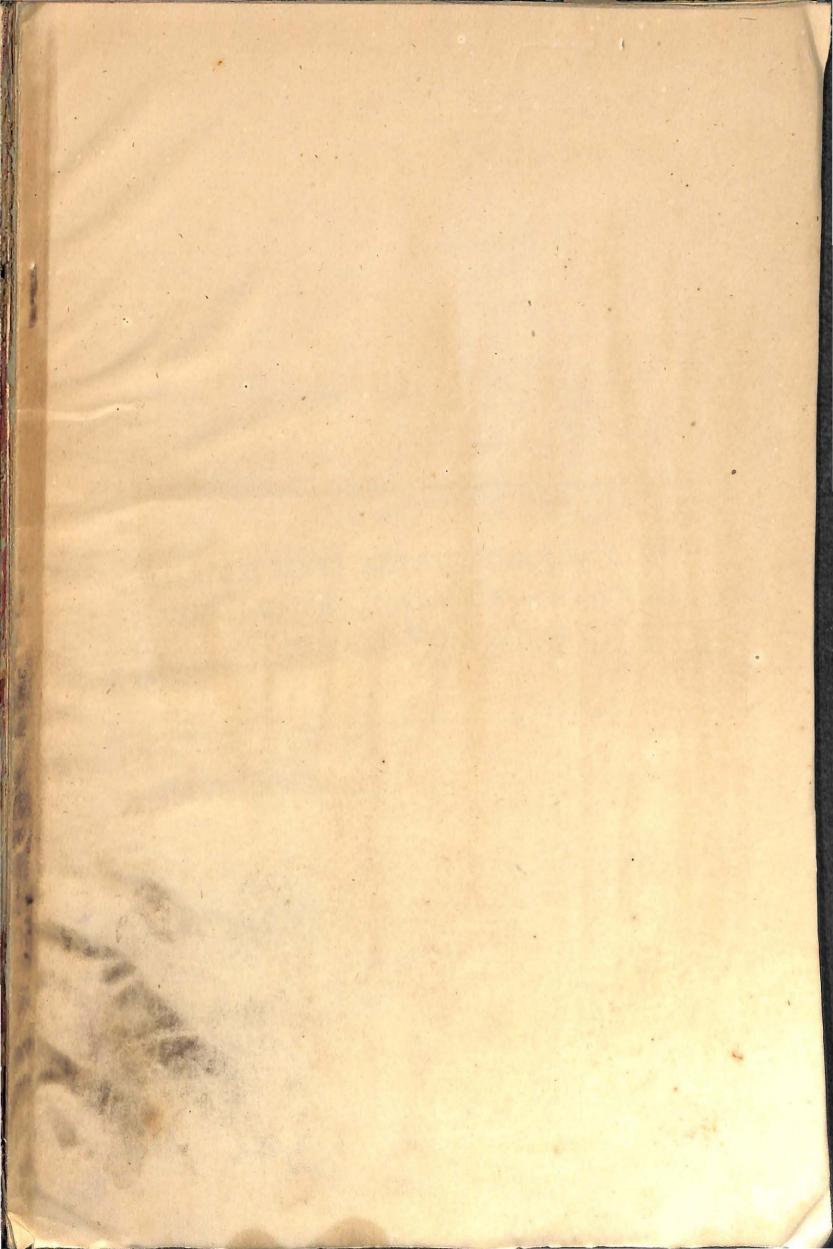
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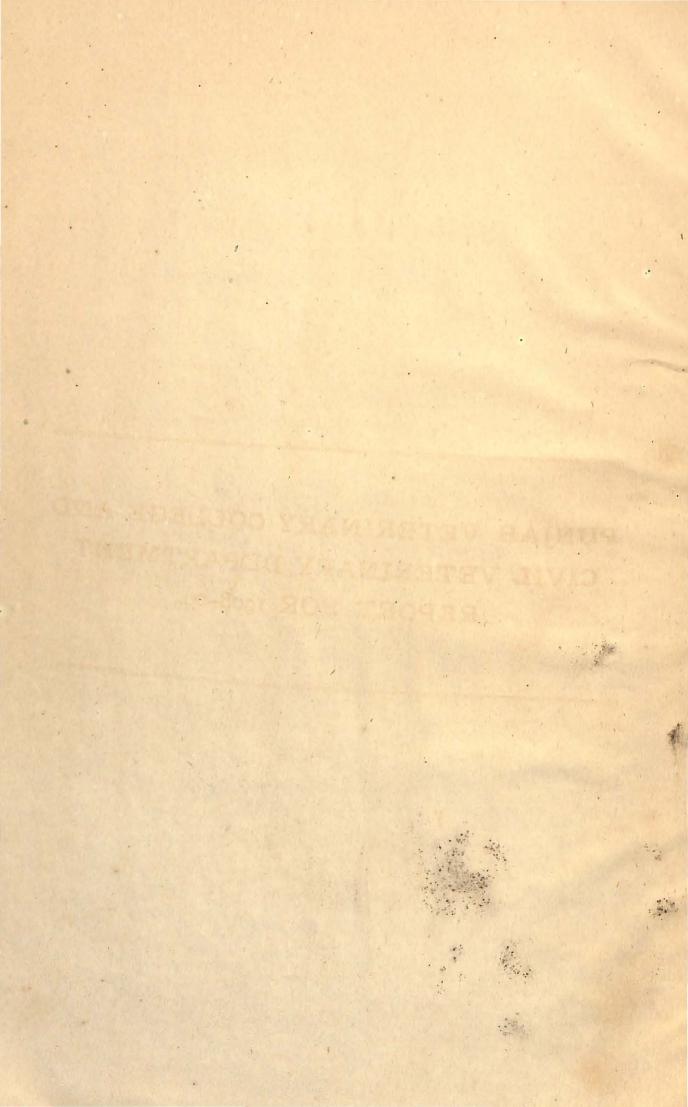
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1909.







PUNJAB VETERINARY COLLEGE AND CIVIL VETERINARY DEPARTMENT REPORT FOR 1908-09.

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AND OF THE

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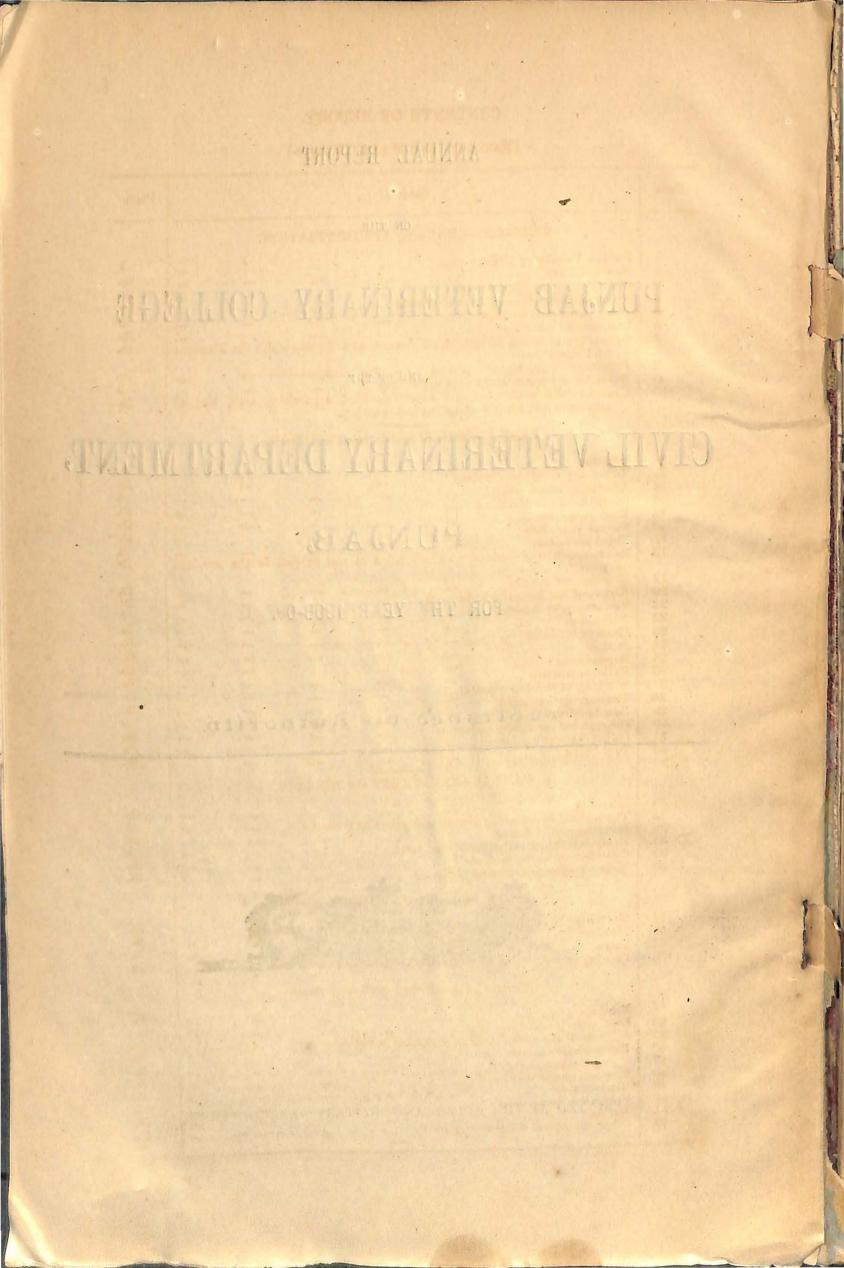
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NO. 1757 S. (Rev. & Agri.-Genl.).

FROM

To

H. P. TOLLINTON, ESQUIRE,

Offg. Secretary to Government, Punjab and its Dependencies,

THE SECRETARY TO THE GOVERNMENT OF INDIA, DEPARTMENT OF REVENUE AND AGRICULTURE,

Dated Simla, 20th August 1909.

File No.

Revenue and Agriculture.

General.

SIR,

I AM directed to submit, for the information of the Government of India a copy of the amalgamated report on the Punjab Veterinary College and the Punjab Civil Veterinary Department for the year 1908-09, and to convey the following remarks.

2. The year has been marked by an increase in the popularity of the Veterinary Hospitals throughout the Province. Increased attention has at the same time been paid to breeding operations and in particular to the standard and quantity of donkey stallions. The Lieutenant-Governor during a recent inspection of the Hissar Farm was much pleased with the young stock being raised there. This should prove of great service in improving the breeding of mules in the Punjab. In spite of some doubtful results in the Miánwáli district it is satisfactory to notice that preventive inoculation is usually attended with success, and is uniformly appreciated. In Sir Louis Dane's opinion the record of the College and of the Department for the year 1908-09 is gratifying, and great credit is due to Majors Smith and Walker and the officers serving under them in their respective spheres.

3. I am to add that Sir Louis Dane has under consideration a small change in the form of the report, which at present is written piecemeal by the Director of Agriculture, the Principal of the Veterinary College, and the Superintendent of the Civil Veterinary Department. The change will have the effect of showing which of these officers is responsible for each portion of the report.

4. The figures showing local expenditure on the Civil Veterinary Department in table XIV A will be reported later.

I have the honour to be,

SIR,

Your most obedient Servant,

H. P. TOLLINTON,

Offg. Secretary to Government, Punjab.

Punjab Government Press, Lahore-8-9-09-1048-350.

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ANNUAL REPORT

ON THE

CIVIL VETERINARY ADMINISTRATION

IN THE

PUNJAB,

For the year 1908-09.

Preface.

GENERAL ADMINISTRATION.

1. Major Smith was Principal of the Punjab Veterinary College The Punjab Veterinary throughout the year. Captain Dawson and Mr. Gaiger College. held the other two Professorships. Mr. Gaiger was transferred to the Muktesar Laboratory during the summer vacation to study and work at various cattle diseases. In accordance with a recommendation of the Weterimary Conference held at Calcutta in February, 1908, a puppend was submitted to improve the pay of the Semiar Assistant Professors at the Veterimary College, placing them on an equality with officers in the grade of Deputy Superintendent. It is understood that this scheme has been sanctioned. The new scale is a well merited reward for the present incumbents, and it will also tend to ensure a higher standard among their successors.

2. Great difficulties are still being experienced in securing land for the extension of the dissecting room, and for the hostel. As regards the dissecting room, acquisition proceedings are in train. The site first selected for the hostel had to be abandoned on account of the prohibitive price which was placed on it. A cheaper site has now been selected behind the office of the Director of Land Records, and, on receipt from the Principal, the necessary papers were forwarded to Government in May, with a view to the issue of a fresh notification under the Acquisition of Land Act. Certain urgently needed buildings which have been sanctioned, these including additions to the present laboratory in the Contagious Diseases Ward, a 'destructor', and some out-houses, are being delayed, as funds are not available. It is to be hoped that it will soon be possible to carry out these extensions, as well as to complete the dissecting room, as delay is occasioning real inconvenience.

3. Captain G. K. Walker held the appointment of Chief Superintendent, Civil Veterinary Depart. Civil Veterinary Department, Punjab, from the 1st to the 23rd April, 1908, and from the 27th October, 1908, to the end of the year, the interval being spent by him on combined leave. During his absence, Mr. Woodley, Superintendent of the North Punjab Circle and North-West Frontier Province, acted in his place, while Mr. Carless, officer under training, officiated for Mr. Woodley. The Southern Punjab Circle was held by Captain Walker until the 23rd April, when it was taken over by Mr. Taylor who had been attached for training since the previous July. Mr. Taylor's head-quarters tave been established at Ferozepore. On reverting from the charge of the North Punjab Circle, Mr. Carles remained attached to the Province for training.

4. Captain Walker was on tour for 59 days and travelled 2,975 miles by Extent and duration of rail and 449 miles by road. Mr. Woodley, as officiating Chief tours of officers. Superintendent, was on tour for 54 days and travelled 2,428 miles by rail and 523 miles by road. As Superintendent, Civil Veterinary Department, North Punjab and North-West Frontier Province, Mr. Woodley spent 95 days on tour, of which 49 were in the Frontier Province. He travelled 3,469 miles by rail and 1,130 by road. Mr. Carless, when officiating for Mr. Woodley, spent 69 days on tour, of which 28 were in the Frontier Province. He travelled 1,594 miles by rail and 1,152 miles by road. Mr. Taylor was 138 days on tour, and travelled 6,035 miles by rail and 1,173 miles by road. Mr. Carless, while under training, was on tour for 47 days, and travelled 1,445 miles by rail and 448 miles by road. The number of days spent in tents on tour were as follows:—Captain Walker, 24; Mr. Taylor, 42; and Mr. Carless, 20.

5. Captain Walker visited the office of the Superintendent, South Punjab, inspected the work of all the veterinary staff in the *Gujranwala* and Lyallpur districts, and interviewed 9 Deputy Commissioners. He attended outbreaks of epidemic disease in 4 and checked inoculation work in 3 districts. He inspected 18 Veterinary Hospitals once or more than once, and judged at 4 cattle shows. He was a member of the 'Board of Examiners' at the Punjab Veterinary College Examination in April, 1908, and assisted in the examination of the Nalband Class in January. He went to the Hissar Cattle Farm twice to select bulls and donkey stallions.

Mr. Woodley, as officiating Chief Superintendent, visited the offices of the North and South Circles, inspected the work of the veterinary staff in 2 districts, judged at one horse and cattle show, and inspected 2 tonga lines. In his capacity as Superintendent, North Punjab, he visited all the districts in his circle and, as far as possible, interviewed District Officers. He inspected 16 Veterinary Hospitals once or more than once, and also 3 tonga lines in his circle. He judged at 4 cattle shows, attended an outbreak of rinderpest in Gujrat, and supervised inoculation work in Rawalpindi.

Mr. Carless, as Superintendent, North Punjab, visited all his districts except Gujrat, and inspected 10 Veterinary Hospitals. He inspected the tongalines in his circle and dealt with an outbreak of glanders on the Rawalpindi-Murree tonga line. He visited an outbreak of rinderpest and checked. inoculation work in Mianwali.

Mr. Taylor visited all the districts in the South Punjab Circle, and interviewed Deputy Commissioners as opportunity offered. He inspected 38 Veterinary Hospitals once or more than once, and judged at 9 horse and cattle shows. He acted as a member of the 'Board of Examiners' for the Nalband Class at Lahore in January. He inspected the Simla tonga line twice. He investigated cutbreaks of epidemic disease in 3 districts. He personally conducted inoculation work in 3, and he checked inoculation work in 15 outbreaks.

Mr. Carless, while under training, judged at 2 horse and cattle shows, and inspected 3 Veterinary Hospitals. He made an extended tour in the Lahore district under canvas and accompaned Captain Walker on some of his tours.

6. Captain Walker was able to carry out a cattle survey of the District cattle surveys. Amritsar District and Mr. Taylor managed to do about half of the Hissar district. Mr. Woodley was unable to undertake a survey, owing to the extent of and the imperfect communications in his charge. It is extremely difficult to find time for these surveys with large circles and a rapidly expanding staff of veterinary assistants. Captain Walker writes that in spite of this, " some cattle survey work should be taken up every "year, if possible, especially by the junior officers, as it gives them a better insight into village conditions." I entirely agree with Captain Walker. A cattle survey is of as great value to a veterinary officer as a settlement to a civilian. It is very satisfactory that a start has been made.

Scheduling of South African horse sickness as a disease under the Glanders and Farcy Act. 7. South African horse sickness has been scheduled as a disease under the Glanders and Farcy Act, and the necessary rules under the Act have been issued by Government.

Enrolment of veterinary assistants as reserve transport daffadars. 8. The majority of the veterinary assistants employed in the Punjab have been enrolled as reserve transport veterinary daffadars for service in emergencies. 9. Draft rules under the District Board and Municipal Acts regulating Rules for the recruit. the employment of compounders and ensuring their efficiment of compounders. ency have been submitted to Government and have been published in the *Punjab Gazette* for the information of the public preliminary to being made final.

Urgent need of a stronger and better qualified supervising staff, and of arrangements for it's education and training.

10.

The perusal of Parts II to IV of this report on the Provincial Veterinary Department brings out the point very strongly that, while the field of work continues to extend, and the staff of veterinary assistants is increasing every year, the supervising staff remains practically the same, and is fast becoming

unequal to the task imposed upon it. The present inspectors are not competent to discharge all the duties which one would legitimately expect from the intermediate grade of supervising officers. The veterinary assistants have to receive continual technical training, and the time of the Superintendents is largely devoted to this instead of being freely available for such important work as the investigation of disease and the supervision of inoculation operations in the field. It is of vital importance to the future of the Department that this matter should be taken up without delay. Captain Walker and I are practically agreed as to what should be done, and our general proposals are now before Government. Briefly, we recommend :—

- (i) An increase in the number of Inspectors and an improvement in their rates of pay;
- (ii) The provision of really adequate arrangements for the education of men to be given direct appointments as Inspectors, and for the post-graduate training of selected veterinary assistants for promotion to inspectorships;
- (iii) The strengthening of the grade of Superintendents and the creation of a few posts of Deputy Superintendents, the Deputy Superintendentships being filled up in course of time by promotion from the grade of Inspectors. These Deputy Superintendents to be of any real assistance would have to be capable of discharging quasi-independent duties.

The success of any scheme of this kind will depend entirely on the efficiency of the educational arrangements referred to in (ii) above. Captain Walker and I are both of the opinion that the establishment of an Imperial Veterinary College would offer the best and perhaps the only solution of the difficulty, the standard of teaching at this College approximating as nearly as possible to that given at similar institutions in England. The incident at Mianwali referred to in paragraph 44 of this report, in which a large number of animals died after inoculation, furnishes a striking example of the need of a number of thoroughly qualified Inspectors for the control of inoculation work. The recurrence of similar mishaps, although they might be in no way due to the serum administered, would conceivably be most disastrous to our work.

Part I.-Veterinary Instruction.

THE PUNJAB VETERINARY COLLEGE. *

11. Sessions.	The sun	omer session on the 30th the 6th Oct	June 190	ed on the 2 98. The wi 8. and close	nter sessi	on commo	anced on
Veterinary course. follows :	Graduates'	12. Durin	g the yea	the three	e been th	ree classe	es under-
T.	1st year						71
	2nd "						81
	3rd "		•••	Sec		1	.14

* Nore .- This report has been submitted by Major A. Smith, Principal of the College.

Admission examination. ment, 1 from Imperial Service Troops, 1 from a Native State, 4 from the Central Provinces and 14 from the United Provinces of Agra and Oudh. The balance is made up of 29 civilian students who were selected from about 200 candidates assembled for the competitive examination on the 20th April, 1908. 14. The educational qualifications of the 67 men admitted Educational qualifications. during the year were as follows :-Entrance passed 10 202.0 ... Middle passed 30 ... Students from Native Cavalry Regiments and Remount Depôts 27 67 Total The first year class was brought up to 71 by the addition of 4 men 15. who had failed at their examination in the previous year. First year class. Of these, 2 men were not allowed to appear in the examination on account of irregular attendance at lectures and 2 absented themselves from the examination before the Board of Examiners, thus leaving the number of examinees for this class, 67 only. The second year class commenced with 81 students. This number 16.Two sowars of at the end of the year was reduced to 73. Second year class. Native Cavalry and 1 from the Kashmir Imperial Service Artillery were found unsuitable and were recalled to their regiments. Four men, through irregular attendance, were not allowed to appear in the examination. One civilian student left the College without assigning any reason. This 17. The third or final year class commenced with 111 students. number by the end of the year was reduced to 109. One Third year class. man was accidentally killed on the railway, and one, through irregular attendance, was not allowed to appear in the examination. During the year, 4 final class students and 30 students of the junior 18.

classes, who had failed in one subject only at the previous Re-examination of stu-dents who had failed in one annual examination, were again examined at the end of June subject in the previous year. in the subjects in which they had failed. Of the 4 final class students 3 succeeded in passing and 1 failed. Of the 30 men of the junior classes,

who were re-examined, 26 passed and 4 again failed. Those who failed were consequently remanded for another year to their respective classes.

The result of the Annual Examination is as Examination results. 19. follows :-

in certa	1944 - A.	Class.	AND AND A	Examined.	Passed.	Percentage.
1st year 2nd year 3rd year	 	··· ···		 67 73 109	59 62 69	88 84 63

Of the 8 failures in the first year class, 3 failed in one subject only and will be re-examined in that subject at the end of June next. Of the 5 remaining failures in this class, one civil student, having failed twice in this class, has been removed from the College Of the having failed twice in this class, 4 been removed from the College. Of the 11 failures in the second year class, 4 failed in one subject only and will be failed in one subject only, and will be re-examined in that subject at the end of June next. Of the 7 remaining failure failure at the end of the 7 remaining failure failure at the end of the 7 remaining failure failure at the end of the 7 remaining failure at the 11 remaining failur June next. Of the 7 remaining failures in this class one military student was, on my advice, removed from the Collogn Official class, 8 on my advice, removed from the College. Of the 40 failures in the final class, 8 will be re-examined in the one subject of the 40 failures in the final class, 8 will be re-examined in the one subject in which they failed at the end of June next. Three men having failed twice were considered unsuitable for the work required of them, and in consequence, have been struck off the rolls of the College. remaining 29, together with any who fail to satisfy the examiner in June, are re-The Report of the Board of

20. The examiners in their report remark-Examiners.

"The technical subjects, contained in the 3rd year's course require far more individual tuition than it is possible to give to such a great number of students. In the circumstances we consider that the results are satisfactory."

The number of students admitted in April, 1908, was 67, including

25 from Indian Cavalry, 2 from the Army Remount Depart-

13.

The results would undoubtedly have been better but for the many compulsory absences of students from malaria last autumn, and the very large size of the final year class.

21. In addition to the ordinary classes held during the year, a class of 62 men from the Transport Department received three The Transport Dressers' months' training as dressers. class.

Sixteen men received a nine months' course of instruction in shoeing. 22.At the examination held in January, 1909, nine men passed Nalbands. successfully. Of the seven failures, four men were examined

by me in April last after four months' further tuition, and passed successfully.

23. The students in the College at the close of the year Caste of students. comprised :-

Brahmans	4 10		dente se	· · · · · ·	2	
Non-Brahman Hindus	10	1	Contra com		34	
Sikhs	·	de L and	ALT STATE	Lunniare .	62	
Muhammadans			n duning a	*	154	
				Sales &	252	

The sum paid into the Government Treasury was Rs. 14,223-2-0, as 24. against Rs. 13,718 during the previous year, or an increase Income.

of Rs. 505 over last year. There is an increase of Rs. 200 in receipts from the canine ward and of Rs. 915 under fees from students. On the other hand there are decreases of Rs. 180 and Rs. 375 in receipts under the headings "examination of horses" and "shoeing," respectively. I attribute the decreases to a change in British infantry regiments in cantonments, and to the fact that, during the year 1907-08, the cantonments were without veterinary officer for the greater portion of the year, which meant that more animals than usual were sent here for examination and shoeing.

The contingent expenditure amounted to Rs. 21,099 as compared 25. with Rs. 15,018 for the previous year. The abnormally large classes were responsible for increases under the heads Expenditure. purchased for dissection ", Rs. 799, and "hospital requisites" " subjects Rs. 559. The above cause and dearness of grain brought about an increase of Rs. 1,109, under the head "diet of college animals". Expenditure on books for the library advanced by Rs. 1,284, and expenditure on apparatus by Rs. 1,707.

Patients treated.

28.

Equine	······································	·		4 9 9 1
Bovine	of the state of the second		•••	4,321
Canine	a the second and see			1,523
Segregation Ward	•••	94 000000		542
00				139
hese figures are a sligh	it increase all round	on those of	Float	_

Th those of last year.

The income realised from the Dog Hospital during the year amounted 27. to Rs. 1,545-12-0, and the expenditure (including Rs. 576 for Working of the Dog Hos-pital. establishment), to Rs. 1,408-6-2. There was thus a profit of Rs. 137-5-10.

Work in the Segregation Ward has greatly increased during the past year. The number of specimens examined was exactly double that of the previous year. Besides the teaching of conta-The Segregation Ward. gious diseases due to micro-organisms, the subject of Parasitology, owing to recent examination requirements, has had to be thoroughly gone into and a course of lectures, adapted for this country, prepared. The students are also trained in the recognition of the parasites from specimens in the museum. In the same way, a course of lectures on contagious diseases has been prepared, entirely adapted to the use of Indian students and containing the newest ideas on the subject. By this means, the student omits a great deal of reading which can never be of By this means, the station of learns the main ideas more thoroughly. An elementary course of Bacteriology has been prepared in a similar way. The teaching of ary course of Bacteriology has been propared in a similar way. The teaching of the theory and practice of rinderpest inoculation work, as carried out in the districts, was formerly taught at the Imperial Bacteriological Laboratory, Mukdistricts, was formerly under the second to the Punjab Veterinary College,

and is taught in the Segregation Ward. In addition, instruction is given in the methods of preparing and using black-quarter vaccine and bæmorrhagic septicæmia serum and in the application of the mallein and tuberculine tests. A separate scientific report is now annually submitted by the officer in charge through the Principal and Director of Agriculture, to the Inspector General, Civil Veterinary Department, on the work done and the contagious diseases met with during the year.

During the year, no progress has been made in certain sanctioned 29. buildings, viz., additions to Dissecting Room and Laboratory,

New buildings. etc. With our large classes, it is easily understandable how we are working at considerable inconvenience for the want of this extra accommodation, and it is hoped that another year will not be allowed to pass before these urgent wants are supplied. The question of a hostel-a much needed addition to this College-is, I understand, still under the consideration of Government.

The demand for the services of veterinary assistants has been considerable during the year. It will be some years before the Demand for veterinary supply can possibly equal the demand. This fact, combined assistants. with the very large number of requests for admission, makes a strong case for the starting of another Veterinary College in Upper India.

31. The monthly Indian Veterinary Journal in Urdu after being allowed to lapse for some time has, during the year, been revived in a Indian Veterinary Jourmuch improved form under the editorship of Captain Dawson nal. and Assistant Professor Ghulam Rasul Khan. The Journal has met with a favorable reception and is undoubtedly of great value in distributing progressive knowledge of this profession to graduates wherever they may be.

During the year, a new vernacular text-book, on therapeutics, by 32. Veterinary Graduate Ghulam Rasul Khan, has been intro-Text-books. duced.

Part II.-Treatment of Disease.*

During the year under report, 145,808 cases of epidemic disease were 33. reported of which 56,111 proved fatal. The figures for the Mortality, Table II. This previous year were 59,938 cases and 15,375 deaths.

large increase is accounted for, to some extent, by the new system of collecting statistics which was brought into force during the previous year. In addition, the year was particularly unhealthy for cattle owing to the excessive rainfall. Wet seasons are forward has the the Wet seasons are favourable to the spread of epidemic disease and, when fodder crops are destroyed by floods, cattle have less resisting power. There is a large increase in the figures under "other contagious disease" which is partly due to natwaris including mean other contagious disease "which is partly due to patwaris including many cases of death from natural causes under this head. This was not done, to the same extent, by veterinary assistants under the old system. It is an open question if these cases should strictly be included or not as will be shown later .- (See paragraph 52).

Wir.

34. The new method of reporting epidemic disease and collecting statistics works well on the whole, and it is probably the best The method of reporting disease and collecting statistics. that can be devised under present conditions, that is, in the

report certain scheduled diseases. At one time there was a good deal of delay in the submission of the monthly returns, but this was brought to notice and there has been some improvement latterly. Even under the present system, many outbreaks are not reported but with the outbreaks are not reported, but with the present veterinary staff, we could deal with no more. As a matter of fact at certain seasons postcards reporting outbreaks are received in such numbers that, if the staff were increased fivefold, it is doubtful if it could deal with them all.

As recorded above, the officers of the department have assiduously 35. visited outbreaks of epidemic disease and supervised inocu-Investigation of disease. investigation, except in a minor degree, is not possible when there is a large amount of inspection work to be got through necessitating long journeys over large areas. The inoculation work of the veterinary assistants is regularly checked by the Inspectors and copies of inoculation returns are sent to District Officers.

Part II to IV have been written by Captain Walker, Chief Superintendent. Civil Veterinary Department, Punjab.

During the year, 77 specimens were submitted for examination and, 36. of these, 52 were examined by officers of the department Examination and collec-

and 25 were sent to the Punjab Veterinary College. Certain tion of specimens. material was called for from the Imperial Bacteriological Laboratory for experimental purposes and this was obtained and submitted. Some specimens of reputed poisonous plants have been received for classification and record.

A certain number of equipments for collecting blood-sucking insects 37. were received from the Imperial Entomologist and a begin-Collection of biting flies, ning has been made towards making a collection. It will etc. be very useful to have the indigenous varieties correctly identified with a view to

determining eventually the particular diseases for the spread of which many are no doubt responsible.

Maps showing the distribution of certain epidemic diseases in the 38. Punjab were prepared and submitted to the Inspector-Gene-Maps showing distribural, Civil Veterinary Department. tion of disease.

SECTION 1 (a) .- EQUINE CONTAGIOUS DISEASE.

224 deaths from equine contagious disease were reported against 39. 107 in the previous year. Patwaris rarely include deaths in

Mortality, Table II. equines in their returns as they do not appreciate their contagious nature. The figures for equines are prepared, therefore, mainly from in-formation received from the veterinary staff. The statistics in the selected districts are not included as equine disease in them is dealt with by the Army Remount Department. Cases dealt with in Labore city, on the Rawalpindi-Murree tonga line, and at veterinary hospitals are, however, included as they concern this department.

During the year, 33 cases of glanders were reported from the Lahore, 40.

Glanders, Table II.

Sialkot and Rawalpindi districts. The cases were destroyed after being certified by a Veterinary Practitioner.

163 deaths from surra were reported against 90 in the previous year. 41. There was a serious outbreak in the Montgomery District. Surra, Table II.

Dourine, Table II.

year.

No cases of dourine were detected during the 42.

SECTION 1 (b) .- BOVINE CONTAGIOUS DISEASE.

During the year, 17,247 cases of rinderpest occurred, of which 8,739 43.

died against 3,531 cases, and 1,714 deaths in the preceding Rinderpest, Table II. The mortality from this disease during the year was not extraordinarily heavy. The year 1907-08, with which a comparison is made, was a particularly healthy one, and the freedom of the Province from rinderpest

44. Contact animals were inoculated against this disease in 270 outbreaks and 60,258 animals were treated. Last year, 14,815 in-Preventive inoculations, oculations were performed in 70 outbreaks. 4,535 unin-Table III. oculated animals died in the course of outbreaks which were dealt with, thus demonstrating the virulence of the disease. 613 animals died after inoculation, 567 being in the Mianwali District alone. The Superintendent, Civil Veterinary Department, North Punjab, who visited some of the villages, reports that the deaths were due to parasitic disease which co-existed with rinderpest. case, it is most unlikely, if the serum were properly given and in sufficiently large doses, that the animals died of rinderpest. The administration of anti-rinderpest serum to cattle exposed to infection from another disease is deprecated, and it is against the standing orders of this department as unsatisfactory results are likely to destroy confidence. In this case, however, the likelihood of the animals being attacked by another disease could not be foretold probably.

Opposition to preventive inoculation work is still met with, in out- f-Attitude of the public towards rinderpest inocula-

the-way places mainly. As the operations of the department expand, this will decline to a minimum as the method is usually attended by most successful results and is uni-

formly appreciated.

tion.

46. Hæmorrhagic septicænia was reported from every district in the Hæmorrhagic septicæ. Province except two. As usual, it was most severe in the irrigated districts of the Central Punjab. The disease is always more prevalent in wet seasons and the year under report was no exception. The total number of deaths reported was 20,822 out of 26,082 animals attacked against 8,133 cases and 7,351 deaths last year. No satisfactory treatment has yet been discovered for this disease. As stated last year, it would be less frequent if cattle were kept under better hygienic conditions.

47. The issue of preventive serum for hæmorrhagic septicæmia was Preventive inoculation, suspended last year by the Inspector-General as it was of doubtful efficacy. A certain amount of serum, however, that was in hand, was utilised, as in many cases the people have faith in it. 6,075 contact animals in 40 outbreaks were inoculated, of which 13 died after inoculation. A few doses of a new vaccine for this disease have been issued from the Laboratory and the method is under trial in the field. A good preventive agent would fulfil a great want as it causes great losses among cattle in this Province. If it could be absolutely proved in what manner and by what agency it was spread a great step in advance would have been made.

48. Foot and mouth disease was reported from every district. 70,606 Foot and mouth disease, cases were reported, of which 1,241 died, against 38,683 and the mortality not excessive. The veterinary staff does good service in treating animals suffering from this disease.

49. Black-quarter was reported from 18 districts. There were 965 cases Black-quarter, Table II. and 721 deaths against 678 cases and 632 deaths last year.

50. 2,606 vaccinations were performed in infected places with most satis-Preventive vaccination, factory results. In future, the vaccine for this disease will be obtained in infected places with most satis-

51. 688 deaths were reported from anthrax in 15 districts. I have previously pointed out that anthrax in cattle is rare in the

appears likely that the local cattle possess a very strong natural immunity.

52. The large number of deaths in bovines under the head of "other con-Other contagions disease, tagious disease," viz. 8,895, is due mainly to the existence of Table II. "gillar" or parasitic disease in the Lahore and Sialkot districts. I was able to give this disease some attention whilst in the Amritsar District. Wet seasons favour the development of internal parasites. In years when fodder parasites and they die in large numbers of semi-starvation complicated with paraease will be specified. The remedy is a liberal and nutritious diet. Consequently, a question if 'gillar' should be regarded as an epidemic disease. It is regarded tion.

SECTION 1 (c).-CONTAGIOUS DISEASE. OTHER ANIMALS.

53. There were 14,781 deaths, mainly amongst goats and sheep, from Contagious disease. Other contagious disease in other animals. Again, the disease and sheep "strangulus contortus" appears to be the causal parasite in the great

SECTION 2.-OTHER DISEASE.

54. During the year, 9,366 villages were visited by veterinary assistants Treatment of disease in on tour and 50,150 animals were treated. Last villages, Table IV. year, 6,774 villages were visited and 38,387 animals treated. It should be remembered that only one veterinary assistant regularly

itinerates in each district and the remainder visit outbreaks of epidemic disease only when called upon. The number of animals treated in villages depends mainly on the incidence of foot and mouth disease during the year as nearly all the cases treated on tour by the men who are normally stationary come under this category.

SECTION 3.-VETERINARY HOSPITALS.

55. During the year under report, there were 86 veterinary hospitals in the province, and the total number of cases treated in Veterinary hospitals, Tathem amounted to 144,882. Last year, the number of cases ble V. was 96,630 in 77 hospitals. This is a very satisfactory increase and demonstrates the popularity of these institutions. The average daily attendance at each hospital works out at 9.8 and the average daily admittance of fresh cases at 4.6. These figures would certainly be larger if many of the smaller hospitals had not to be closed during the temporary absence of the veterinary assistants in charge. As there was an abnormal amount of epidemic disease during the year veterinary hospitals had to be left more than they would be ordinarily and the attendance was consequently less. Where intelligent compounders are employed the temporary absence of the veterinary assistant is not felt so much.

The work of providing suitable accommodation is progressing satis-56. factorily. Out of 86 veterinary hospitals, 54 are built according to the standard plan, though 9 of these are incom-Buildings. plete. Of the remainder, 7 are accommodated in suitable buildings and the others are in temporary quarters. With the help of the Government grant, supplemented in some cases from local funds, it is hoped that suitable accommodation will in time be provided for all. The veterinary hospital at Amritsar is very unsatisfactorily accommodated, and although a scheme for a new hospital was started some years ago and plans have been drawn up, no progress has been made. A new hospital is required at Murree also and, as the present one is very profitable, the Municipality might be expected to provide a suitable place.

The income and expenditure in the respective districts of the veteri-57. nary hospitals is shown in Table VI. Rupees 12,444 were Income and expenditure realised from fees against Rs. 7,198 in the previous year. veterinary hospitals, The fees in the district veterinary hospitals are very small Table VI. and are only levied from income tax-payers.

The statement of the receipts and expenditure of the veterinary hos-58. pital at Simla received from the Municipal Committee shows Simla Veterinary Hosthat the institution pays its way satisfactorily with a marpital. gin of profit. The receipts, excluding the balance carried from last year, amount to Rs. 5,905 and the total expenditure to Rs. 3,093. This leaves a balance of Rs. 2,812 to be credited to provincial funds or Rs. 1,266 more than is required to cover the salary of the verterinary assistant and the interest on the capital cost of the buildings. Some more dog kennels are required at this institution and when the plans, which are awaited from the Executive Engineer, are received sanction will be applied for. The cost of their construction will be justified no doubt by the increased income that they will bring in.

Part III-Breeding operations.

SECTION I, -BOVINES.

At the close of the year under report, there were 437 stud bulls at 59. stad bulls, Table VIII. Work in the districts, against 379 at the end of the previous year. This is very satisfactory increase. There were 117 additions and 59 casualties. All the animals are the property of local bodies. 60. The grant for veterinary improvements enabled districts to buy more bulls than they would otherwise have been able to afford.

Supply and care of bulls. We are fortunate in being able to get good bulls, suitable for a great many districts, from the Government Cattle Farm at Hissar at moderate price. Indents for 81 Hissar bulls were received from 16 districts and these were fully complied with. A number of bulls of the Dhunni breed were obtained privately from the Jhelum District, with the assistance of the Superintendent, Civil Veterinary Department, North Punjab, and a few others were purchased locally. One that had gone astray was recovered. During the year, District Boards were reminded that they are practically in entire charge of cattle breeding and that the arrangements for seeing that studs bulls are properly looked after are purely a district concern. This Department has laid down certain general principles, but local conditions vary and the subject should be very interesting to rural members. In localities where bulls are appreciated and used intelligently, the young stock show signs of great improvement since selected bulls have been more liberally supplied. With the rise of price of bullocks, cattle breeding on intelligent lines requires to be fostered by local interest. The larger questions of provision of grazing grounds and increased production of forage crops will require to be dealt with probably by special measures.

61. The scheme for a bull farm in the Jhelum Colony has not progresssargodha Bull Farm. ed owing to the difficulty experienced in obtaining the necessary grazing rights. If sufficient grazing cannot be obtained the scheme will probably have to be dropped.

SECTION 2.—EQUINES (UNDER LOCAL BODIES.)

62. At the close of the year under report there were 64 horse and pony Number of horse and pony stallions in the non-selected districts, Table X. mals have been purchased locally. Sanction has been asked to increase the standard scale of the Jullundur District by two ponies to enable one animal to be placed in each tahsil.

63. At the end of the year 1907-08, there were 67 donkey stallions at Number of donkey stallions in the non-selected dis. tricts, Table X. more which had become available. In addition, 6 Hissar bred animals were supplied or a total of 13. Ten casualties occurred during the year. The standard scale of donkey stallions is short, therefore, by 4 animals. These will be obtained from the Government Cattle Farm, Hissar, next autumn if possible. The donkeys cases. Mule breeding in the Punjab should improve greatly within the next few years now that the supply of donkey stallions has been placed on a more satisfac-

64. The average number of mares covered by the horse and pony Service of stallions, Table stallions during the year under report was 54 and that for donkey stallions were strictly limited and the average was lower than usual in consequence, though a larger total number of mares was covered.

65. The average cost of feed and keep of stallions for the year was Rs. 382 Feed and keep of stal. per horse, Rs. 374 per pony and Rs. 202 per donkey. This was an all-round increase on the figures for the previous year due to the prevailing prices of grain, and in some places to an increase in the wages of the attendants.

SECTION 3.-FAIRS AND SHOWS.

66. The necessary statistics in regard to fairs and shows as received from Fairs and shows, Tables XIII and XIV. Those for the horse fairs relate to the non-selected districts only.

The horse shows held in the Delhi, Karnal, Ambala, and Gurdaspur 67. districts received grants and medals from Imperial funds. Horse shows, Table XIII. They were all attended by officers of this department.

68. Medals from provincial funds were given at the Gurdaspur, Chakwal, Lyallpur, and Gujrat cattle shows. Most of the shows Cattle shows, Table XIV. were visited by an officer of the department who assisted the Judging Committee. All shows are attended by one or more of the veterinary staff to deal with disease and assist generally.

SECTION 4.—OTHER BREEDING OPERATIONS.

It was not found possible to import the 25 Merino rams sanctioned 69. for the Kangra District as the purchasing agents could Merino rams, not obtain them at the time of the year they were ordered. Arrangements are being made to obtain the rams in the autumn, however.

Part IV .--- Subordinate Establishment.

70. The sanctioned strength of the subordinate Numerical Table VII. strength, establishment as it stood on the 31st March, 1909, was 139 as detailed below :---

	y Inspectors Assistants, do.		 	···· ···	12 24 48	
Do.	do.	3rd grade Reserve	 · · · · · · · · · · · · · · · · · · ·		49 6	
		watera a		3 A -	139	

This is an increase of 11 veterinary assistants over the last year. 22 men are still required to complete the staff of one man for every tabsil and one in addition, for each district. These will be recruited at the rate of 8 a year. An increase in the number of Inspectors to give them smaller charges and to provide for leave vacancies is required, and definite proposals will be submitted shortly. As the number of veterinary assistants increases, it follows that the superior and intermediate staff must be added to.

A proposal to improve the qualifications and position of the Veterin-71. ary Inspectors is under consideration. They are doing Work of the subordinate useful work, but the need for men of superior qualificastaff. tions is indicated in order to give adequate relief to Superintendents. The work of the subordinate veterinary staff in general continues to improve in efficiency.

72. During the year, five veterinary assistants were sent to Muktesar or Bareilly for training in inoculation. The training is now given to students at the local Veterinary Training in inoculation.

College before they qualify. 73.

The new system of working may be said to have proved superior to General remarks on the the old, as under it more work was obtained from the subordinate staff. The rules and forms that were brought in staff and work. have required surprisingly few alterations, and the system works smoothly. It have required surprisingly out very clearly that the present staff is inadequate has, moreover, brought out very creatly that the present stall is inadequate numerically to deal with the work, especially when epidemic disease is rife. The weakness lies in the necessity for closing veterinary hospitals when men The weakness mes in the nearly every man has a hospital. The approach when men have to go on your of according every man has a hospital. The appointment of leave vacancies now that nearly every man has a hospital. The appointment of leave vacancies now that how the source of a source of the temporary absence of intelligent compounders provides to some extent for the temporary absence of the veterinary assistants to attend epidemic disease in the neighbourhood. The the veterinary assistance to account option to the neighbournood. The system should work perfectly well when it is found possible to put two men in the possible and to provide a sufficient reserve.

74. A reference to Director of Agriculture's Circular No. 4, dated 25th May, 1908, is desirable to show that an attempt was made

Director of Agriculture's Circular No. 4. Appoint-ment of visitors for veterinary hospitals.

remarks.

79.

during the year to arouse greater interest on the part of District Officers and members of local bodies in the work of the department. In some districts visitors have been appointed for veterinary hospitals, and they occasionally record their

Part V.-Expenditure of the Department.

This year, the Accountant-General has only supplied figures of expen-75. diture from Imperial and Provincial Funds. He is unable Expenditure, Table XIV A. to supply 'Local' figures as District Fund accounts are no longer received in his office. Imperial expenditure has advanced from Rs. 53,341 to Rs. 65,068. This is mainly due to annual increments. Provincial expenditure now stands at Rs. 167,699 representing an increase of Rs. 10,871 on account of expansion of staff, and heavier expenditure at the Veterinary College College.

Part VI.-General Remarks.

The results of the annual examination show total passes aggregating 76 per cent. compared with 75 per cent. in 1908 and 87 per cent. in 1907 We can still fill the first of 76. 87 per cent. in 1907. We are still feeling the effects of The Punjab Veterinary College. Remarks of the Director of Agriculture. the admission of unmanageably large classes in 1905 and 1906. The College authorities were compelled to do this so as to meet the pressing demand for trained men in Upper India. But it is obvious that the staff have not been able to do themselves justice. The establishment of another Veterinary College in Northern India appears to be an urgent necessity to relieve the pressure. Another aspect of the case is that, under present circum-stances, after providing for military students, and scholars deputed from other stances, after providing for military students, and scholars deputed from other provinces, there are an unduly small number of vacancies left for Punjabis.

The very valuable research work done by Mr. Gaiger, the officer in charge of the Segregation Ward, cannot be adequately 77. dealt with in this report, and is made the subject of a separate communication to the Inspector-General, Civil Veterinary Department. Mr. Gaiger's canable and interacting Mr. Gaiger's capable and interesting report has been submitted to His Honour the Lieutenant-Governor for perusal before transmission. Captain Dawson is to be congratulated on the reception accorded to the Quarterly Indian Veterinary Joarnal in Urdu. The journal supplies a real want in keeping veterinary assistants informed of the latest developments of veterinary science. The quality of the journal is evidenced by the fact that Captain Dawson is now arranging to meet a demand for an English edition. The first number of the English issue will appear on October 1st English issue will appear on October 1st.

Major Smith and his staff have had a very busy and arduous year. 78. The classes have had to be sub-divided for the better teachhandicap quite apart from the unwieldy size of the classes. In addition to As above. teaching, the College is doing a great deal in other ways for the advancement of veterinary science in Northern India, and I consider that it has acquitted itself well in a year of exceptional difficulties.

A large increase is apparent in the number of deaths from contagious disease, this being due partly to the excessive rainfall which The Civil Veterinary Decreated very unfavourable conditions for stock, and partly to the improved system of reporting disease by patwaris. A serious outbreak of glanders on the Kashmir Road, arable anxiety was officing line and the manual of the series of the second states of the sec partment. Remarks of the Director of Agriculture. Treatment of disease.

which caused considerable anxiety, was effectually stamped out. The energetic measures taken against dourine a few years ago have been completely successful, the Province being absolutely free from this disease during the year. The staff was busily occupied in many districts in coping with rinderpest, and as the efficacy of the preventive serum is well established, the inoculation of 60,258 contact animals must represent a great saving of capital to agriculturists. It is regrettable that so many animals died in Mianwali after inoculation, but the case was investigated by the Superintendent, and there is no reasonable doubt but that the mortality was due to a parasitic disease. In spite of the departmental orders that cattle exposed to infection from some other disease should not be inoculated. there must, with a subordinate staff like ours, always be a danger of incidents of this kind. There is, however, no question as regards the growing faith of the people in anti-rinderpest serum. We are still without a reliable vaccine against hæmorrhagic septicæmia, the most deadly of all cattle diseases in the Punjab. The results obtained with the vaccine which is under trial will be awaited with great interest. Black-quarter vaccine is now obtainable from the Imperial Bacteriological Laboratory.

The working of the hospitals is improving, and there is a substantial 80. increase in the number of cases treated. The attendance As above. Veterinary would certainly be much better if veterinary assistants hospitals. were not compelled to leave their hospitals to deal with outbreaks of epidemic disease. It is to be hoped that good buildings in convenient situations will soon be provided at Amritsar and Murree where the existing hospitals are already doing remarkably good work. The accounts of the Simla Hospital show a clear profit of Rs. 1,266 to Government. This is a very creditable result.

The number of bulls in districts has advanced from 379 to 437. 81. The number varies greatly from district to district, but this is due to differences in local condition. It is unfortuabove. Breeding **A**8 operations. nate that the Sargodha bull farm scheme has been delayed for so many years owing to the difficulty in securing Rakhs Drema and Risala which have been selected for the run. Negotiations are still proceeding with the Military Depart-Much more attention is being taken in horse breeding in the non-selectment. ed districts. The recent stock census shows that there has been a marked in-crease under the head "horses and ponies". There is a keener demand for good stallions, which I consider that we should make every endeavour to meet. A general improvement in the number and quality of the horses and ponies in the Province would be a valuable asset to the Military Department, and the breeding of good animals at present prices would be an additional source of profit to the agricultural population. Mule breeding is now on a much sounder basis, as a large number of effete and useless donkey stallions have been cast and replaced by young animals.

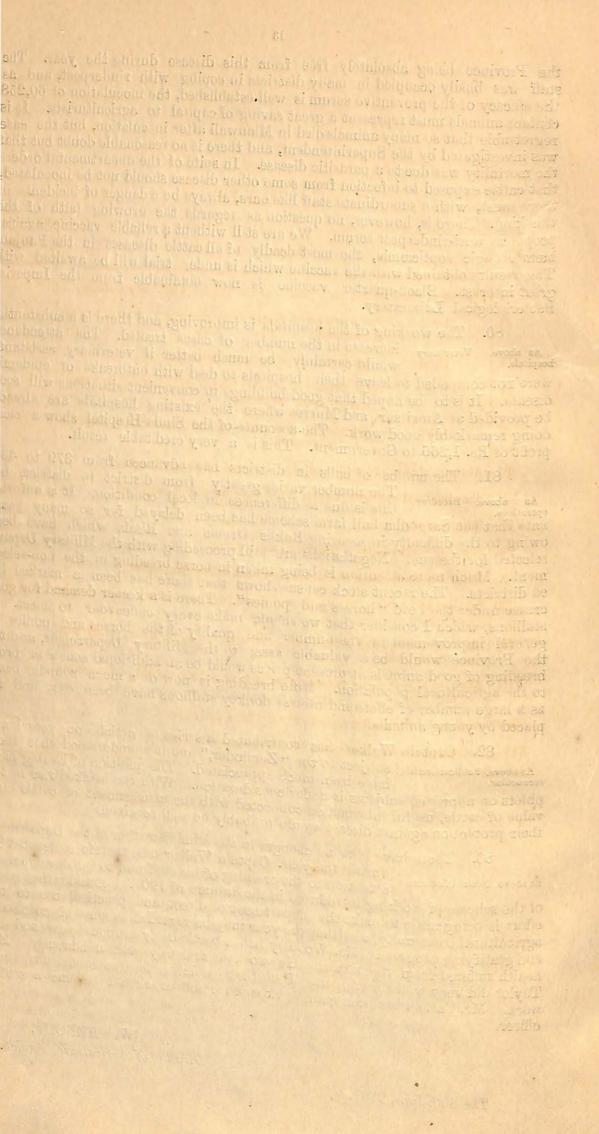
82. Captain Walker has contributed a series of articles on veterinary subject to the "Zemindar," and it is understood that these As above. Publications in As above. Fublications in have been much appreciated. The question of issuing pam-phlets on approved subjects is under consideration. With the marked rise in the value of cattle, useful information connected with the management of cattle and their protection against disease would probably be well received.

83.

There have been no changes in the administration of the Department during the year. Captain Walker has, therefore, devoted his As above. Notice of officers. attention to the training of his staff and to the development of the scheme of working introduced in the autumn of 1907. I consider that every effort is being made to make the department of direct and practical use to the agricultural community, and that the year may be regarded as one of continued and gratifying progress. Mr. Woodley had a particularly arduous year and his and gratifying progress. In the worked zealously and assiduously. Mr. health suffered from the strain. He worked zealously and assiduously. Mr. Taylor did very well throughout. Both these officers deserve credit for their their the strain of the should become the should be work. Mr. Carless has been gaining experience and he should become a useful

The 30th June, 1909.

W. RENOUF, Director of Agriculture, Punjab.



TABLES.

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III '	Ditto the results of preventive inoculation	iii
IV	Ditto the number of animals treated and castrated by veteri- nary assistants on tour	iv
v	Ditto the number of animals treated at veterinary hospitals and dispensaries	v
VI	Abstract showing receipts and expenditure of veterinary hospitals	vi
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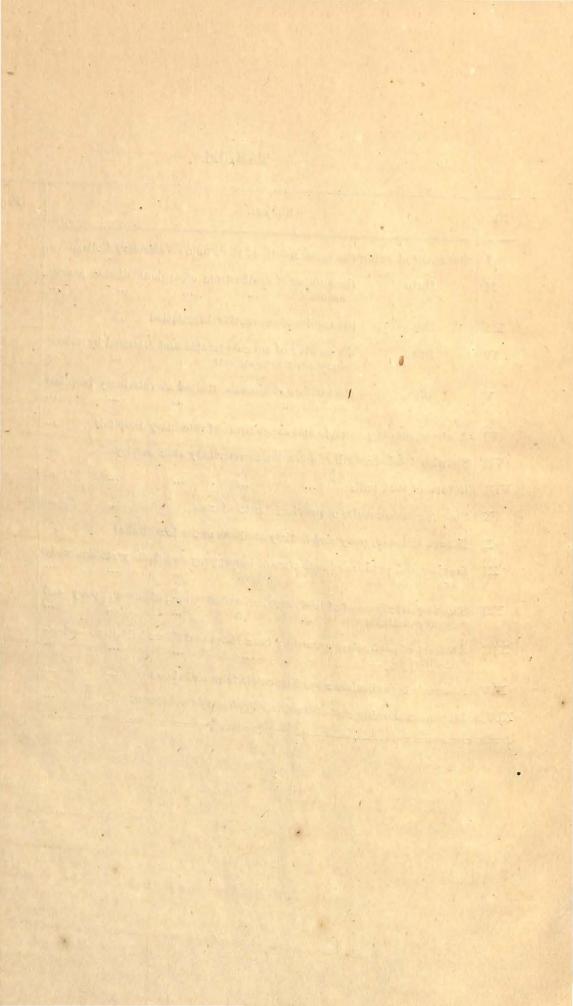


TABLE No. 1.- (SEE PART 1).

STATEMENT SHOWING THE MAIN RESULTS OF THE PUNJAB VETERINARY COLLEGE, LAHORE, FOR THE YEAR 1908-09.

		duri	Non nitted ing the ear.	MBER O	F STUDE	Rem under tion at	aining instruc. the end year.	DURIT CLASSI TIONAL	NTE ADI NG THE ED BY E L QUAL TIONS.	YEAR DUCA-	R	ECEIPTS	5.	Ex	PENDITU	RE.	Emplo Passe	D OUT I YEARS	PRECED	DUATES V THE TH DING.	WHO REE		
Name of the Institution	Name of course of Instruction if more than one course followed.	Scholarship-holders.	Others.	Passed Final Examination during the year.	Failed to pass Final Examination.	In ordinary course.	Instruction prolonged by reason of failure to pass.	Matriculated or with higher qualifications.	E Krowing some English but no Matrica- lated.	Knowing no English or very little English.	From fees.	E From other sources.	F Total.	er Salaries of the Instructing Staff.	91 Other expenses.	41 Total.	Total number passed.	E In service of the Government or Local Bodies.	b In service of other states and Institu- tions.	다 In private practice.	[2] Number unemployed.	Re	MARKS. 23
	2	3	4	5	6	7	8	9															
Punjab Veterinary Control	Diploma or 3 years' course in Urdu. '	12	55	69	∞ 4 0	231	* 21	10	30	27 (This i						Rs [.] 77,889			•		Nil.		lar attendance,

+ Four are known to t

District. Figure 1 Figure 2		SHOWING NUMBER OF DEATHS FROM												D		and the state of the	Andread Concerns	1		0	THERS.				
District. The second seco				-	1		F	COULNES			ļ			BOVINES	•	NO.3		1			THERS.				1 2 3 4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	•	District			landers.	othrax,		1	conta- diseases.	Total.	Rinderpest.	and m ease.	Hæmorrhagic septicæmia.	Black-quarter.	Anthrax.	Other conta- gious diseases.		Rinderpest.	and	æmor1 septic	Black-quarter.	Anthrax.			
1 2 3 3 5 - - 9 284 27 108 61 304 60 21 <th< td=""><td></td><td>The second second</td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14.</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td></td></th<>		The second second				-				7	8	9	10	11	12	13	14.	15	16	17	18	19	20	21	
Histor <t< td=""><td></td><td>1</td><td></td><td></td><td>2</td><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>. 01</td><td></td></t<>		1			2		4																	. 01	
m.t.) 83 5 163 23 224 8,739 1,241 20,022 721 050 0,000 1,100 200	Rohtak Gurgaon Delhi Karnal Ambala Simla Kangra Hoshiarpur Julundur Ludhiana Ferozeporð Montgomery Lahore Amritsar Gurdaspur Sialkot Gujranwala Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali Lyallpur Jhang Multan Muzaffargarh				···· ··· ··· ··· ··· ··· ··· ··· ··· ·	····	······································			 	$\begin{array}{c} 15\\ 357\\ 90\\ 76\\ 104\\ \hline \\ 77\\ 51\\ 13\\ 177\\ 936\\ 169\\ 1,183\\ 54\\ 336\\ 59\\ 1,011\\ 82\\ 129\\ 40\\ 407\\ 32\\ 2,425\\ 74\\ 45\\ 69\\ \end{array}$	38 16 6 20 72 1 65 53 104 102 11 84 6 26 33 17] 14 98 148 148 18 9 1 29 21 13 18	$\begin{array}{c} 341\\ 78\\\\ 916\\ 400\\\\ 291\\ 566\\ 606\\ 682\\ 043\\ 722\\ 2,029\\ 1,547\\ 288\\ 653\\ 2,672\\ 1,228\\ 1,578\\ 210\\ 49\\ 354\\ 1,874\\ 1,411\\ 635\\ 499\\ 303\\ \end{array}$	$ \begin{array}{c} $	 	 	$\begin{array}{r} 394\\ 451\\ 96\\ 600\\ 1,022\\ 600\\ 1\\ 398\\ 644\\ 695\\ 980\\ 1,742\\ 1,938\\ 6,216\\ 2,281\\ 791\\ 3,370\\ 4,655\\ 1,373\\ 1,919\\ 596\\ 546\\ 239\\ 2,841\\ 2,095\\ 1,812\\ 1,124\\ 832\\ 905\end{array}$	··· ··· ··· ··· ··· ··· ··· ···	5 5 1 4 2 1 111 8 3 55 387 4 9 	60 28 16 2 11 9 536 87 23 10 4 149 18 10 125 	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	··· ··· ··· ··· ··· ··· ··· ··· ··· ··	 225 815 63 21 36 10 202 1,623 3,958 202 11 531 596 8 1,503 713 128 241 1,266 28 132 56 111	60 225 5 815 63 7 225 1,652 4,737 289 11 562 729 11 562 729 11 562 729 1,889 1,116 152 261 1,305 172 132 56 111	
			Total		33	5	163		23	224	8,739	1,241	20,822	721											

TABLE II.—(See paragraphs 33, 39, 40, 41, 42, 43, 46, 48, 49, 51, 52-and 53) UMBER OF DEATHS FROM CONTAGIOUS DISEASES AMONGST ANIMALS DURING THE YEAR 1908-09.

Note.—The figures for equines relate only to non-selected districts, the Municipality of Lahore, and the Kawalpindi-Kohala read, except where cases are treated in veterinary hospitals and dispensaries in selected districts.

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TABLE III.

(See Paragraphs 44, 47 and 50)

SHOWING RESULTS OF PREVENTIVE INOCULATION DURING THE YEAR 1008-09.

		4	1					1.18	3.1.1	4			16.1
	against which carried out.	of inoculution fellowed.	ttbreaks in which was undertaken.	WHIC	ER OF A TED IN OUTER	UNIN- COURSH	NUM	BER OF AN NOCULATEI		WHICH	R CF AN DIED A DOULATIO	FTER	
DISTRICT,	Name of disease ag inoculation was c	Method of inoculut	Number of outbreaks inoculation was unde	Equines.	Bovines.	Others	Equines,	Bovines.	Others.	Equines.	Bovines.	Others.	REMARKS.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Hissar Rohtak Gurgaon Delhi Karnal Kangra Hoshiarpur Jullundur Jullundur Ferozepore Montgomery Lahore Gurdaspur Sialkot Gujranwala Gujrat Shabpar Shabpar Shabpar Minwali Lyllpur Jhang Mutan Dera Ghazi Khan	Rinderpest.	Serum alone.	$\begin{array}{c} 5\\ 2\\ 5\\ 4\\ 3\\ 5\\ 1\\ 1\\ 1\\ 8\\ 3\\ 3\\ 1\\ 1\\ 9\\ 4\\ 2\\ 1\\ 2\\ 3\\ 2\\ 1\\ 4\\ 1\\ 4\\ 6\\ 7\\ 5\\ 9\\ 1\\ 7\\ 5\\ 1\end{array}$		$\begin{array}{c} 43\\ 15\\ 78\\ 90\\ 44\\ 96\\ 7\\ 21\\ 12\\ 132\\ 617\\ 45\\ 661\\ 54\\ 308\\ 13\\ 463\\ 9\\ 186\\ 29\\ 1,122\\ 55\\ 66\\ 79\\ 236\\ 30\\ 10\\ \end{array}$			$\begin{array}{c} 744\\ 150\\ 293\\ 531\\ 375\\ 1,010\\ 78\\ 356\\ 104\\ 1,655\\ 7,078\\ .318\\ 6,548\\ 660\\ 497\\ 10\\ 4,695\\ 1,428\\ 2\\ 6,429\\ 1,067\\ 12,671\\ 1,195\\ 2,254\\ 7,952\\ 1,713\\ 445\\ \end{array}$			···· 1 ··· 1 ··· 1 ··· 1 ··· 1 ··· 1 ··· 5 ··· 5 ··· 11 ··· 5 ··· 1 ··· 1 ··· 1 ··· 4		1.9
Total ·			270		4,535			60,258				_	
Hoshiarpur Jullundur Ludhiana Ferozepore Lahore Amritsar Gujranwala Shahpur Jhang	Hæmorrhagie Septicæmia.	Serum alone.	3 3 9 3 4 1 6 1 10		29 33 85 27 51 5 75 10 65			644 547 1,543 396 837 87 1,205 164 652			613 2 1 1 1 8 		
Total			.40	·	380							•••	
Lahore Total	H. S.	Vaccine.	2			: -	•••	6,075 130	•••		13		
1008)			2			•••		130		-		-	1.1
Hissar Ferozepore Jhelum	Black-quar-	Vaccine.	,1 1 14		40 			1,437 19 1,150				1	
Total		1	16		40						900		
GRAND TOTAL			328	998	4,955	-		2,606					
	1.1						[····	69,069			6		
												1	

A The state

TABLE IV .-- (SEE PARAGRAPH 54)

SHOWING THE NUMBER OF ANIMALS TREATED AND CASTRATED BY VETERINARY ASSISTANTS ON TOUR DURING 1908-09.

-		CASTRATIONS PER FORMED.						TED FO	R CONTA	AGIOUS	TR	EATED FAGIOUS	FOR NO DISEAS	N- BES.	l and	-
District.	Number of villages visited.	, Number of Veterinary Assistants ployed.			Others.	Total.	Equines.	Bovines.	Others.	Total.	Equines.	Bovines.	Others.	Total.	Total number of cases treated castrations performed.	REMARKS.
		3	4	5	6	7	8	9.	10	11	12	13	14	15	16	17
HissarRohtakGurgaonDelhiXarnalXambalaXambalaSimlaKangraHoshiarpurJullundurJullundurJullundurGurgaporeMontgomeryGurdasparGujratGujratJhelumAttockMianwali	871 860 255 399	5 5 4 4 4 4 5 4 5 4 5 4 5 4 5 4 4 4 4 5 5 8 8 8 8	6 10 15 32 3 7 40 17 40 79 30 15 14 11 16 18 17 40 79 30 15 14 15 14 15 16 18 17 5 2 13 3 11	11 11 1 65	9 20 7 5 4 13 3 4 13 3 4 13 3 4 13 5 13 5 13 5 13 5 13 5 13 5 13 13 13 14 15 	36 187 25 24 23 47 3 8 106 28 63 172 50 19 27 15 17 68 45 32 12 11 16 12 22	1	1,183 487 651 1,106 165 512 4,444 1,467 1,083 2,094 3,806 900 1,054 299 1,054 299 1,899 542 801 1,664 752 962 751 425 321	37 1 101 5 4 1 82 3 7 61 251 158 25 12 25 81 5 830 211 56 37 221	1,240 518 759 1,112 171 522 4,542 1,479 1,097 2,111 3,896 1,176 1,308 353 1,916 586 901 1,678 1,086 1,174 809 472 543	138 110 212 165 153 104 66 194	236 801 740 672 98 241 977 271 222 249 277 100 371 264 416 247 679 257 192 133 150 144 179	81 10 66 33 6 12 102 11 2 6 34 71 10 5 5 7 386 26 73 886 26 73 886 26 73 886 26 73 886 26 73 886 26 73	347 951 1,010 779 183 308 1,554 395 297 295 445 365 480 476 559 364 1,277 448 418 305 263 364 351	1,623 1,656 1,794 1,915 377 877 3 6,104 1,980 1,422 2,469 4,513 1,591 1,807 856 2,490 967 2,246 2,171 1,536 1,491 1,083 857 906	
Jhang	. 25	2 4	4 27	8		30		816		817		345	13	605	1,444	
Multan			5 22	- 4		26	0	452 751				241	41	405	899	
Muzaffargarh D. G. Khan	Sel		4 14	10	1	25		.01	120			271	163		1,428	
D. G. Khan	. 28	8	4 4			4			1.					361 860	978 2,667	
Total	9,86	36 11	3 545	513	95	1,15:	3 399	31,245	2,367	34,013	4,190	9,304	1,492	14,986	50,150	

TABLE V .- (See paragraph 55).

SHOWING NUMBER OF ANIMALS TREATED AT VETERINARY HOSPITALS AND DISPENSARIES DURING THE YEAR 1908-09.

		Dispen-	Assistants						•	In	-PATIEN	179,					The state	- North			001-	PATIENTS			Тот.	L NUMBI	B OF IN	AND	-	
		and the second second	terinary Assi	oonsaries.	Remain n 1st A			tted du ve year		2	Fotal,		and the second se	arged d e year.	uring		lance st Mar			ber tree		Average	daily att	endance.	OUT-P	ATIENTS T THE		URING	-	
	District,	Number of Veterinary	Number of Veteria	adat	Bovines.	Other animals.	Equines.	Bovines.	Other animals.	Equines.	Bovines.	Other animals.	Equines.	Bovines.	Other animals.	Equines.	Bovinca.	Other animals.	Equines.	Bovines.	Other animals.	Equines.	Bovines.	Other animals.	Equines.	Borines.	Other animals.	Total.	Receipts.	Expenditure.
	1	2	3	4	5	6	7	8	9	10		12	13	14	15	16	17	18	19	20	21	22	23	24	25		27	28	29	30
A A G G Shi Jhe Raw Atta Mian Lyali Jhan Multa	Karnal Ambala Simla Kangra Hosbiarpur Jullundur Ludhiana Forozepore Montgomery Lahore Amritsar Indaspur irat ijrat ahpur yalpindi ock mwali fargarh Chogi Khan	3 3 4 2 3 3 4 4 3 3 9 3 3 9 2 3 8	::::::::::::::::::::::::::::::::::::::	$ \begin{array}{c} $	9 11 4 1 2 7 5 8 4 3	0	91 121 197 197 115 66 88 87 21 03 18 1 5 1 9 8 7 1.1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	30 3 10 66 3 22 18 33 62 5 5 17 24 9 8 8 5 5 7 1 24 9 8 8 5 5 7 1 2 2 2 2 2 2 2 2 2 2 2 2 2	98 127 199 125 69 93 94 21 114 18 1 08 66 66 24 4 59	21 24 148 53 43 31 21 4 17 6	2 3 30 3 10 68 3 24 18 33 62 5 5 17 24 19 9 8 6 2 4 2 2 2 2 2 2 2	25 40 25 78 88 82 15 82 130 245 275 275 275 124 197 124 197 124 197 124 197 124 197 124 59 66 624 59 69	42 31 21 4 17 6	$ \begin{array}{c} 3 \\ 2 \\ 3 \\ 2 \\ 3 \\ 2 \\ 3 \\ 2 \\ 3 \\ 2 \\ 18 \\ 3 \\ 2 \\ 18 \\ 3 \\ 2 \\ 18 \\ 3 \\ 5 \\ 7 \\ 24 \\ 18 \\ 9 \\ 8 \\ 4 \\ 69 \\ 4 \\ 28 \\ \\ 28 \\ \\ 1 \\ 2 28 \\ \\ 1 \\ 2 2 3 3 3 3 3 $	2 3 2 1 ································	····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····4 ·····1 ·····4 ·····1 ·····1 ·····1 ·····1 ·····1 ·····1 ·····1 ·····1 ·····1 ·····2 ·····2 ·····2 ·····2 ·····2 ·····2 ·····2 ····2 ·····2 ····2 ····2 ·····2 ·····2 ····2 ······	$\begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ &$,744 ,485 ,913 848 ,460 ,907 ,384 ,460 ,907 ,384 ,308 ,209 2937 903 999 993 999 990 390 290 1, 997 68 1, 63 1, 27 1, 0 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	2,974 3,573 511 741 488 806 602 619 748 847 534 1, 074	8,710 627 785 476 308 722 349 521 703 737 8207 1,207 319 717 987 469 1,743 961 942 476 540 231 283 947 380 834 402 263	3.53 8.33 7.45 10.22 10.66 8.42 2.20 12.04 10.51 9.86 12.11 14.63 5.15 11.26 10.98 21.79 20.688 13.355 15.75 8.23 10.99 15.95 6.32 3.520 7.51 11.47 10.19 15.48 15.200 7.51 11.47 10.19 15.883	$\begin{array}{c} 10\cdot 23\\ 11\cdot 03\\ 11\cdot 30\\ 6\cdot 64\\ 10\cdot 39\\ 9 15\cdot 23\\ \cdot 36\\ 16\cdot 22\\ 20\cdot 14\\ 23\cdot 96\\ 24\cdot 72\\ 25\cdot 23\\ 3\cdot 54\\ 14\cdot 40\\ 12\cdot 73\\ 23\cdot 38\\ 3\cdot 54\\ 14\cdot 40\\ 12\cdot 73\\ 23\cdot 38\\ 3\cdot 76\\ 5\cdot 93\\ 11\cdot 64\\ 23\cdot 31\\ 46\cdot 77\\ 6\cdot 82\\ 6\cdot 13\\ 3\cdot 76\\ 5\cdot 93\\ 11\cdot 83\\ 5\cdot 39\\ 11\cdot 04\\ 6\cdot 52\\ 7\cdot 94\\ \end{array}$	6.00 3.88 5.85 3.42 3.67 3.57 3.73 6.82 6.31 1.92 3.96 7.71 1.62 8.51 7.70 7.32 4.67 4.84 7.66 3.97 7.14 2.83 1.82 7.53 7.03	1,273 869 1,348 1,070 1,473 320 1,191 2,400 2,188 848 1,651 2,031 5,581 3,432 1,835 2,302 1,028 922 1,111 407 831 2,494 1,163 2,192 2,022 2,096	2,250 1,929 2,181 1,276 3,748 4,658 4,579 4,399 3,777 4,074 717 2,392 7,382 9,357 3,016 3,604 532 7,45 505 312 602 1,669 762 1,930 1,550 1,099	629 788 500 311 732 417 524 755 851 1,266 319 722 992	4,15; 3,58(4,034 2,65; 5,95; 7,42(6,37; 6,37; 7,702(6,35; 7,702(6,35; 7,528 1,884 4,79(5,415) 13,449 14,556	$\begin{array}{c} 5,911\\ 1,967\\ 4,810\\ 4,018\\ 6,887\\ 5,905\\ 9,865\\ 8,115\\ 12,985\\ 4,153\\ 9,075\\ 6,910\\ 5,100\\ 5,100\\ 5,100\\ 5,100\\ 11,156\\ 3,561\\ 10,295\\ 4,931\\ 5,493\\ 5,937\\ 6,322\\ 7,960\\ 6,100\\ 8,795\\ 6,449\\ 2,127\\ 2,361\\ 4,645\\ 4,313\\ \end{array}$	5,911 1,967 4,810 4,018 6,887 3,093 9,865 2,574 11,789 4,153 9,075 6,910 5,100 10,506 3,380 10,167 4,388 4,917 3,398 4,003 3,797 6,088 6,460 4,127 2,127 2,361 4,645 4,313
2002.1	Total 86	86	102	62	28 2	2,675	1,361	449	2,777	1,42	3 477	2,72	1,4	02 461	49	21	16	45,25	59 72,6	308 22,4	124				47,987	74,010	22,000	111,002	182,288	161,971

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TABLE VI.-(See paragraph 57).

No official			R	ECEIPTS	•				U.J.	Expe	NDITUR	.е.		-
DISTRICT.	Last year's balance.	By Local Fund grants.	By Government grants.	By Municipul contribu- tion.	By fees.	By other sources.	Total.	Pay.	Travelling allowances.	Medicines, instruments, etc.	Farniture, etc.	Contingencies.	Total.	Balance.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Hissar Bohtak Gurgaon Delhi Karnal Ambala Simla Kangra Hoshiarpur Jullandur Ladhiana Ferozepore Montgomery Lahore Montgomery Lahore Gurdaspar Sialkot Gurjranwala Gurjranwala Gurjranwala Gurjranwala Gurjranwala Shahpur Jhelum Rawalpindi Attock Mianwali Jbang Mutan Mutan D. G. Khan		Rs. 4,639 777 737 1,548 2,566 1,085 3,493 1,526 7,534 1,520 6,463 1,527 1,527 1,347 9,15 994 8299 1,720 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 918 535 1,001 1,250 1,2	Rs. 6,474 4,966 1,230 1,339 1,191 5,583 6,372 1,556 5,143 2,631 1,912 6,627 3,918 3,815 2,286 1,750 3,392 4,125 4,289 4,862 4,732 5,085 7,949 4,860 1,109 1,609 3,560 3,015			Lt 8. 2 475 17 6 32 	$\begin{array}{c} \text{Rs.} \\ 11,1422 \\ 5,911 \\ 1,967 \\ 4,810 \\ 4,018 \\ 6,887 \\ 5,905 \\ 9,865 \\ 3,115 \\ 12,985 \\ 4,153 \\ 9,075 \\ 6,910 \\ 5,100 \\ 11,156 \\ 3,561 \\ 10,295 \\ 4,931 \\ 5,493 \\ 5,937 \\ 6,322 \\ 7,960 \\ 6,100 \\ 8,795 \\ 6,449 \\ 2,127 \\ 2,361 \\ 4,645 \\ 4,313 \\ \end{array}$	1,676 1,514 1,566 938 1,925 1,286 1,750 1,830 1,305	$\begin{array}{c} 30\\ 31\\ 44\\ 63\\ 90\\ 0\\ \\ \\ 92\\ 63\\ 68\\ 225\\ 92\\ 200\\ 55\\ 146\\ 120\\ 172\\ 62\\ 81\\ 95\\ 58\\ 73\\ 91\\ 170\\ 61\\ 73\\ 77\\ 126\\ \end{array}$	$\begin{array}{c} 527\\ 512\\ 834\\ 490\\ 741\\ 787\\ 778\\ 760\\ 956\\ 890\\ 990\\ 237\\ 723\\ 477\\ 1,005\\ 1,008\\ 825\\ 433\\ 558\\ 787\\ 846\end{array}$	Rs. 2999187 1,103 104 76 34 47 215 150 61 83 355 74 156 51 73 162 84 10 78 120 48 82 424 29 266 84	$\begin{array}{c} 4,156\\ 132\\ 924\\ 1,928\\ 4,679\\ 1,734\\ 7,638\\ 177\\ 9,284\\ 1,473\\ 5,586\\ 2,580\\ 8,319\\ 166\\ 6,638\\ 1,412\\ 2,725\\ 1,078\\ 1,529\\ 1,207\\ 4,324\\ 5,222\\ 1,207\\ 60\end{array}$	Rs. 11,142 5,911 1,967 4,810 4,018 6,887 3,093 9,865 2,574 11,789 4,153 9,075 6,910 5,100 10,506 3,380 10,167 4,388 4,917 3,398 4,003 3,797 6,088 6,480 4,127 2,127 2,361 4,645 4,313	
			1,05,110	1,029	12,444	616	1,82,288	43,3 82	2,745	19,445	3,895	92,504	1,61,971	

ABSTRACT SHOWING RECEIPTS AND EXPENDITURE OF VETERINARY HOSPITALS DURING 1908-09.

TABLE VII.-(See paragraph 70).

SHOWING TOTAL OWNER	(See paragraph 70).	
TOTAL STRENGTH OF SU	UBORDINATE VETERINARY STAFF THE YEAR 1908-09	WIDIOVED
DURING	THE YEAR 1908-09.	EMPLOIED

PROVINCE.	How occupied.	Whether paid from Provin- cial or Local Funds.	Veterinary Inspectors.	Veterinary Assistants.	Lo ii p	Remarks.
1	2			1	Subo teac not co	Line and
			4	5	6	7
- (In Schools and Colleges		No.	No.		
PONJAB {	In Dispensaries	***		7	(a) 6	
l	On other work			85		
	Total		12	*42		
• 29 5			12	127	6	
2 6 Total 42	Reserve Veterinary Assistants on T		2 Le	ofessors. sistant Prof ecturers. monstrator,		

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TABLE VIII.—(See paragraph 59).

RETURN OF STUD BULLS FOR THE YEAR 1908-09.

District. Internet with the second seco		The second	il in		P	ROPEE	TY OF MENT.	GOVI	GRN-		PROPE	RTY OF ODIES,	LOC	AL	1
1 2 3 4 5 8 7 8 0 10 11 13 Hisar 37 10 200 1 45 Rohtak 7 100 200 7 Gargaon 14 5 200 7 Mabala 10 14 45 11 Hoshfarpur. 10 11 45 11 Hoshfarpur. 10 201 1 25 Julindua					April		THE YEAR.		ing on	April			ng the	ing on	
1 2 3 4 5 8 7 8 0 10 11 13 Hisar 37 10 200 1 45 Rohtak 7 100 200 7 Gargaon 14 5 200 7 Mabala 10 14 45 11 Hoshfarpur. 10 11 45 11 Hoshfarpur. 10 201 1 25 Julindua	Dist	TRICT.			on 1st	i.	price	a durin	remain	on 1st	de la	price	a duri	romain arch,	REMARKS.
1 2 3 4 5 8 7 8 0 10 11 13 Hisar 37 10 200 1 45 Rohtak 7 100 200 7 Gargaon 14 5 200 7 Mabala 10 14 45 11 Hoshfarpur. 10 11 45 11 Hoshfarpur. 10 201 1 25 Julindua					nber 908.	nber.	arage aid.	ualtie ear.	ance i lst M	mber 908.	nber.	rage l.	ualtie ear.	ance 1 lst M	
Image														-	
Initial <		1		-	2		4	5	6	7	8	9	10		12
Initial <										25					
Anoma IIII IIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			•••		1	8			Í				1	. 1	
Dubbi <							m. Car						1		
Larend						1236	1. 1. 1					1			
Ambala <					1	15.651									
Kangra <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Sec. St.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							Sec. St.								
Hoshfarpur 22 4 201 1 25 Julnndar 14 4 200 2 16 Ludhiana 15 22 240 201 13 10 Ludhiana <td< td=""><td>Kangra</td><td></td><td></td><td></td><td></td><td>•••</td><td>-</td><td></td><td> </td><td>1</td><td></td><td></td><td></td><td></td><td></td></td<>	Kangra					•••	-			1					
Julindur 1.1 4 200 2 16 Ludhiana 10 6 212 2 14 Ferozepore 33 10 191 5 38 MontgomeTy 33 10 191 5 38 MontgomeTy 33 10 201 11 22 Amritear 10 44 5 9 Guiranwale 10 44 5 9 Guiranwale 11 170 11 15 <t< td=""><td>Hoshíarpur</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>22</td><td></td><td></td><td></td><td></td><td></td></t<>	Hoshíarpur									22					
Ludhiana 10 6 212 2 14 Ferozopore 33 10 191 5 38 Montgomery 33 10 191 5 38 Montgomery 13 10 201 1 22 Amritsar 10 4 5 9 Gurdaspur 10 4 5 9 Gujranvala 17 2 4 15 Jhelum 13 1 170 3 11	Jullundur									14	4	200	1		
Ferozoporo 33 1.0 1.91 5 38 Montgomery 1.5 22 200 1 Lahoro 1.3 1.0 201 1 Amritar 3 1.3 200 44 12 Amritar 1.0 5 9 Guidaspur 1.0 1.0 4 5 9 Guigant 1.0 1.0 1.0 28 1.1 22 44 15 1.1 1.1 1.0 1.1 28 1.1	Ludhiana	•••		••••						10	. 6	212		14	
Montgome:Fy	Ferozepore						I., 8			33	• 10	191	5		
Lahoro 10 10 201 1 22 Amritaar <t< td=""><td>Montgomery</td><td></td><td></td><td>•••</td><td></td><td></td><td></td><td></td><td>•••</td><td>5</td><td>2</td><td>200</td><td>1</td><td></td><td></td></t<>	Montgomery			•••					•••	5	2	200	1		
Amritear	Lahore	•••	•••	•···						13	10	201	1		01111033
Gurdaspur 20 7 200 27 Sialkot 10 4 5 9 Gujratwala 10 4 5 9 Gujrat 10 4 12 Jhelum 17 22 4 15 Attook 11 2 Attook 13 11 170 3 11 Lyallpur 10 8 150 18 Jhang 10	Amritsar						•••			3	13	200	4		
Sialkot 10 4 55 9 Gujranwala 24 4 200 28 Gujrat 17 2 44 15 Jhelum 17 2 44 15 Attock 13 1 170 3 11 2 Attock 13 1 170 3 11 13 1 170 3 11 13 1 170 3 11 13 1 170 3 13 1 170 3 14 35 48 48 5 145 5 48 48 5 145 5 48 48		•••		• •••		•••				20	7	200			
Gujrat 17 2 4 15 Jhelum 17 2 4 15 Rawalpindi 10 3 1 2 Attock 13 1 170 3 11 Mianwali 10 8 150 18 Jhang 10 8 150 18 Jhang 10 8 5 145 5 48 Multan		•••	•••	•••		•••• /				10	4				
Gujrat 17 2 4 15 Jhelnm 3 1 2 Rawalpindi 3 1 2 Attock 5 1 2 Mianwali 13 1 170 3 11 Lyallpar 10 6 18 Jhang 48 5 1445 5 48 Multan <td></td> <td>•••</td> <td></td> <td>•••</td> <td>•••</td> <td>•••</td> <td>•••</td> <td></td> <td>•••</td> <td>24</td> <td>4</td> <td>200</td> <td></td> <td>28</td> <td></td>		•••		•••	•••	•••	•••		•••	24	4	200		28	
Jheinm 3 1 2 Rawalpindi 1 2 Attock <t< td=""><td></td><td></td><td>•••</td><td>•••</td><td>••••</td><td>•••</td><td>•••</td><td></td><td></td><td>17</td><td>2</td><td></td><td></td><td></td><td></td></t<>			•••	•••	••••	•••	•••			17	2				
Rawalpindi			•••				,			3		***			
Attock 13 1 170 3 11 Mianwali 10 8 150 18 Lyallpur 10 8 150 18 Jhang 48 5 145 5 48 Multan 9 7 2 Dera Ghazi Khan 7 7 Total 379 117		•••	***	•••	••••	•••	•••		•••	5			-		
Mianwali 10 8 150 18 Lyallpur 48 5 145 5 48 Jhang 48 5 145 5 48 Multan 6 6 Muzaffargarh 5 7 2 Dera Ghazi Khan 7 7 Total 379 117		•••	•••	•••			•••	•••		13	1				
Lyalipur 48 5 145 5 48 Jhang 48 5 145 5 48 Multan 6 6 Muzaffargarh 5 7 2 Dera Ghazi Khan 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 <td></td> <td>•••</td> <td>•••</td> <td>•••</td> <td>'</td> <td>••• *</td> <td>•••</td> <td></td> <td></td> <td>10</td> <td>8</td> <td></td> <td></td> <td></td> <td>1.121-51.5</td>		•••	•••	•••	'	••• *	•••			10	8				1.121-51.5
Jnang 6 6 Multan 6 6 Muzaffargarh 7 2 Dera Ghazi Khan 7 3 2 Total 7 7		•••	•••	•••	•••				•••	48	5				and the second second
Muzaffargarh	25.11	•••	•••	•••	•••		•••			6					
Indzamiguni			•••	•••	•••	•••	•••			9					
Total		***	•••	•••			•••			5			1		
Total 379 117	Dera Ghazi Khan	•••		•••	•••	•••	•••			7	1			1 1	1
Total 379 117	9													1 2	
3/9 117	Call Hard												1	1	1.1
3/9 117					. 1								-	-	
3/9 117											100	1			
3/9 117		T	ntal	1				-							
		11	nfigr	••• [***	***	•••]	379	117		5	9 43	-

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TABLE IX.

SHOWING THE MAIN RESULTS OF PROVINCIAL CATTLE FARMS DURING THE YEAR 1908-09.

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TABLE X.-(SEE paragraphs 62 AND 63).

RETURN OF HORSE, PONY AND DONKEY STALLIONS UNDER LOCAL BODIES FOR THE YEAR 1908-09.

							Horse	AND P	ONY ST	ALLION	UNDER	E LOCA	L BODI	88.				Donkey	STALL	IONS U	NDER L	OCAL B	ODIES.	
			17 15	1.		Ho	orses.	10-		1		1	Ponies.		1	and				4.1	1	1	1	
	Details.				1	bred.						bred.	1.			orses an			bred.		'n	1	1	
				Arab.	Persian.	Country-bred,	263	- de l	Total.	Arab.	Persian.	Country-bred			Total.	Total Horses & Ponies.	Italian.	Cyprian.	Country-bred	Persian.	Catalonian.	Sicilian.	Arab.	Total
Construction of the second second	1			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Balance on 1st A									5	55		4			59	64	8	15	19	2	15	7	1	67
	(Purchased in India									6					6	6			6				•••	6
Increase	Received from Europ	ро				•••					•••			·							7		• •••	7
		Total		5					5	61		4			65	70	8	15	25	2	22	7	1	80
	Died						•			2					2	2	1		1		1			3
Decronse		••• •••								2 1]			1	1	2	1	1	2			1	7
]							1			.ii.	
	T	otal Decre	ase			+				5		1			6	6		1	2	2	1		1	10
Balance on 31st March	1 1909			5	.		.		5	56		3			59	64	5	14			21	7		- 70

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TABLE XI.-(SEE paragraph 64).

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SERVICES AND PRODUCE OF EACH CLASS OF HORSE, PONY AND DONKEY STALLIONS, UNDER LOCAL BODIES, DURING 1908-09.

Horse, Pony or Donkey.	Frovince,		gister on 31st	ALLY I	DNS ACTU- EMPLOYED STUD.	NUMBER COV	OF MARES ERED.	OF MARES PER ST	NUMBER COVERED ALLION AT STUD.
			Stallions on Register on 31st March, 1909.	Year under report,	Previous year.	Year under report.	Previous year.	Year under report,	Previous year.
	2		3	4	5	6	7	8	9
Hors	Punjab	•••	5	5	5.	272	283	54	56
	Total		5	5	5	272	283	54	56
Pony	Punjab		59	60	60	3,233	3,176	54	52
A Constant of the	Total		59	60	60	3,233	3,176		52
Donkey	Punjab		70	70	47	2,846	2,639	41	56
	Total		70	70	47	2,846	2,639	41	56

TABLE XII.- (SEE paragraph 65).

SHOWING AVERAGE COST OF FEED, KEEP, ATTENDANCE, ETC., OF HORSE, PONY AND DONKEY STALLIONS DURING THE YEAR 1908-09.

				.908-09.		1
District.	Hor		Por	¥Υ.	Don	KEY.
1	co Year under report.	Previous Year.	Year under report,	Previous year.	Year under report,	Previous year.
Hissár	Rs.	3	4	5	6	7
Rohtak		Rs. 	Rs. 452	Rs. 400	Rs. 173	Rs. 233
Gurgáon Delhi	409	· 333	316	188	104	76
Karnál	•••		401	356	289	205
Ambála			283	345	140	192
Kángra	379	313	410	390	214	170
Hoshiárpur		··· ·	379 493	302	251	217
Jullundur	403	311	493	345		
Ludhiána	***	•••	346	362	182	139
Montgomery		•••	384	294	207	100
Gurdáspur		•••	324	326	187	181
Siálkot	***	•••	317	254	176	133
Mianwá ⁿ i	112	•••	396	169	217	101
Muzaffargarh	:20		382	, 385	225	140
1 and the second second second	888	262	882	270	235	172
Total	1,529	1,219		302	234	158
			5,615	4,688		
and the second second					2,834	2,217

TABLE XIII.-(SEE paragraphs 66 and 67).

ABSTRACT OF PARTICULARS REGARDING HORSE FAIRS AND SHOWS HELD IN NON-SELECTED DISTRICTS DURING THE YEAR 1908-09.

		ld shows held.	NU Al	TOTAL MBER O NIMALS RESENT.	F N COM	TOTAL UMBER MPETING 2 PRIZES.	HORSE S INCLUD ED	NUMBER O STOCK (NO ING BRAN MARES) LESENT.	T	REM	UBER O OUNTS DIASE	5	1	RICE FOR MOUN	RE-		UMBE ULES CHAS	PUR-	F	RICE I OR MU GOVI MENT	ERN.	eold.		· 1	PRIZE N	IONEY	PROVID	ED.		Government of fair or show.	
Name of Fair	r,	Number of horse fairs and	Year under report.	Previous year.	Year under report,	Previous year.	Belonging to breeders.	Belonging to dealers.	For Remount Depart-	For Nativa Carrolur	Police.	Total.	Highest price.	Lowest price.	Average price.	By Government.	By others.	Total,	Highest price.	Lowest price.	Average price.	Total number of animals sold	From Imperial Funds.	From Provincial Funds.	From Local Funds.	From other sources.	Total.	Amount actually awarded.	Number of medals awarded.	Amount sanctioned by Go India for next year's fair	Remarks.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	23	29	30	31
	1													-						-											12
Hissár		1	250	200	24	72	200															- 45			275		275	92			
Delhi		ſ	415	306	129	189	412	3														3	300		350		650	503	1		
Karnál		1	280	363	280	363	280		•••]				300		·	20	320	320	1		
Ambála		נ	525	602	191	218	525															28	600		264		864	660	1	•••	
Jallandar		1	981	1,427	20	29											17	17							175		175	175			
Gurdáspur ;		1	958	499	103	141	958										6	6					300			····	300	241	1		•
Muzaffargarh	1	1	359		359		839																		400			374			
					- -		-					_ _											1								
Total	7	3,70	38 3,3	97 1,1	.06 1,0	012 2	2,734	3		.		· [·					23	23] .		76	1,500		1,464	20	2,584	2,365	4		

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TABLE XIV-(SEE paragraph 68).

ABSTRACT OF PARTICULARS REGARDING CATTLE FAIRS AND SHOWS HELD DURING THE YEAR 1908-09.

	and		TOTA	L NUMBER OF	STOCK PRE	SENT.		Aven	AGE PRI	CE OF A	NIMALS	SOLD.	fees.	animals prizes.		Pi	RIZE-MONE	Y PROVI	DED.	ł	awarded.	
Name of Fair.	Number of cattle fuirs a shows held.	lls.	Bullocks,	Cowa. Young stock.	Buffaloes.	Camels.	Othera.	Bulls.	Bullocks.	Cows.	Buffaloès,	Camels.	Amount realized in f	Total number of that competed for	From Imperial Funds.	From Provincial Funds.	From Local Funds.	From other sources.	Total.	Amount actually awarded.	Number of medals	REMARKS.
1 12 1961	In Nat	w Bulls.	ng 4	00 A 6	. 7	8	9	10	11	12	13	14		16	17		.19	20	21	22	23	24
1 Hissár Robtak Gurgáon Delhi Mathála Ambála Jullundur Jullundur Ludhiána Jullundur Jullundur Jullundur Gurdáspur Gujranwala Gujrat Jhelum Attock Jhang	2 6 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 3 4 3 4 3 4 5 7 0 3 5 7 0 3 5 7 0 3 5 7 0 3 5 7 0 3 5 7 0 3 5 7 0 5 7 1 9 5 7 2 4 7 0 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 5 7 1 1 1 1 1 1 1 1 1 1 1 1 1	27,512 81,739 7,344 115 87 59 . 200 1,214 3,688	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 13,214\\ 103\\ 155\\ 10\\ 1\\ 1\\ 5\\ 0\\ 1,089\\ 1,089\\ 2,313\\ 3,023\\ 5\\ 2,313\\ 7,579\\ 2,404\\ 9\\ 2,503\\ 6\\ 1\\ 5\\ 5\\ \dots\\ 2,503\\ 1 \end{array}$			···· ··· ··· ··· ··· ··· ··· ··· ··· ·	 52 46 11 17 28 58, 12 14 60 45 15 	23 12 16 14 18 52 10 10 12 19 16 16 	" 31 10 " " " 10 " " 15 26 " 104 29 22 20 " " " 28 " 18 " "	::19 85 :30 61 :184 :47 50 :: : : : : : : : : : : : : : : : : :	23,899 21,365 667 2,973 1,193 2,949 28,097 648 3,006 1,010 82 38 16 3,148 	71 101			878 900 175 300 155 300 150 175 691 970 2,900 500 306 850 500 198 500 198 500 100 310 950 601 950 00 100 100 100 100 100 100 10	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	878 900 175 300 155 300 175 691 1,639 2,900 500 300 350 500 198 500 100 310 950 500 200	567 772 160 290 142 250 126 175 625 1,581 2,325 306 131 350 500 135 500 100 310 950 250 170	2 1 2 2 	
Total	82	1,328	131,286	64,255	35,788	8,511	7,789						89,091	3,888			12,002	669		10,710		

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TABLE XIV A.-(See paragraph 75).

			• Амс	DUNT.		<u> </u>
Major Heads.		Im perial.	Provincial.	Local.	Total.	Remarks.
1		2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.	
Superintendence		 30,119	31,371		61,490	1
Veterinary Instruction		 34,949	35,751		70,700	
Subordinate Establishment		 ē	86,846	•••	86,846	
Hospitals and Dispensaries		 	10,451	••••	10,451	
Breeding Operations		 	2,274		2,274	
Prizes	•••	 1	•••			
Fairs and Shows		 	1,006	•••	1,006	4
T	OTAL	 65,068	1,67,699		2,32,767	

STATEMENT SHOWING COST OF THE CIVIL VETERINARY DEPARTMENT IN THE PUNJAB IN THE YEAR 1908-09.

