

ANNUAL REPORT

2-15

OF THE

PUNJAB VETERINARY COLLEGE

AND OF THE

CIVIL VETERINARY DEPARTMENT,

PUNJAB,

FOR THE YEAR

1901-1902.

Published by Authority.

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1902.















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**PUNJAB VETERINARY COLLEGE REPORT  
FOR 1901-1902.**

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READ—

Letter No. 1741, dated the 14th July 1902, from the Director of Land Records and Agriculture, submitting the Annual Report on the Punjab Veterinary College and the Civil Veterinary Department for the year 1901-02.

REMARKS—

*THE PUNJAB VETERINARY COLLEGE.*

The new three years' course was introduced into the Punjab Veterinary College in 1900, and consequently during the year under report no final examination was held. The result of the examinations in both the first year's and second year's class was distinctly good, 44 out of 54 candidates passing in the former and 24 out of 29 in the latter, and in spite of the fact that the College staff was handicapped by the absence of the European Professor, a high standard appears to have been reached in the various subjects taught. Now that the Civil Veterinary Department is being recruited from home, the Lieutenant-Governor hopes with the Director that there will be a sufficient number of extra officers to relieve those proceeding on furlough. The necessity for the Professor having a good knowledge of the Vernacular is obvious, and it is equally desirable that he should be permanently attached to the College. The good work done by the Native Professors in editing Vernacular text-books has recently been brought to the Lieutenant-Governor's notice, and His Honour desires to take this opportunity of expressing his appreciation of it.

2. There was a slight decrease in the number of candidates for the Entrance Examination as compared with the previous year, but the numbers on the College roll have reached the high figure of 130, and the popularity of the College continues unabated. The Lieutenant-Governor agrees with the Principal that paying students should not be taken unless they possess the same educational qualifications as free students.

3. The demand for trained *Nalbands* continues, and at the examination of the Shoeing Smiths' Class all candidates passed. The Lieutenant-Governor will be glad to consider proposals for improved arrangements for the teaching of this class.

4. There was a decrease of income amounting to Rs. 630 as compared with last year's figures which is satisfactorily accounted for. The increase in expenditure was mainly due to increments of pay given to the Native teaching staff and calls for no remark.

5. Sir Charles Rivaz has noticed with pleasure the excellent work done in the College Hospital, and he hopes that the new Contagious Diseases Ward which has lately been sanctioned will be completed during the year. His Honour is also glad to see that the demand for Veterinary Assistants continues and that the graduates of the College are generally well reported on. The decision to issue the Vernacular Veterinary Journal monthly instead of quarterly is an excellent one. The College continues to well maintain its reputation, and the thanks of Government are due to Veterinary-Captain Pease and the members of the College staff for the cheerful performance of their work during the past year, which has been an unusually arduous one for them.

*THE CIVIL VETERINARY DEPARTMENT.*

6. In the year under report a third Superintendent was appointed to the Civil Veterinary Department and the reorganisation of the Subordinate Veterinary Service of the Province into a Provincial Service was also carried out. The two Superintendents hitherto attached to the Province are in future to devote their attention solely to matters connected with horse and mule breeding, and the new Superintendent will confine himself to the investigation and treatment of cattle disease, which has up to now not received the attention it demands. Paucity of



officers prevented this scheme from being got into full working order during the year and threw extra work on Veterinary-Lieutenant Smith, Superintendent of the South Punjab Circle, but arrangements are now on a satisfactory footing. The Superintendent of the North Punjab Circle still retains charges as Civil Veterinary Officer of the districts in the new Frontier Province, but the statistics attached to this report relate only to the Punjab as now constituted.

7. The Lieutenant-Governor is glad to see that the results of District pony and mule breeding are considered to have been attended with most favourable results. His Honour, however, doubts if the proposal of Veterinary-Lieutenant Smith that pony stallions should be supplied to District Boards free of cost will commend itself to the Imperial Government. The attention of the District Board of Sialkot will no doubt be invited by the Deputy Commissioner to the remarks made by the Superintendent, North Punjab, regarding the necessity for providing pony stallions in that district.

8. Sir Charles Rivaz has read with much interest the remarks of Veterinary-Lieutenant Walker given in Sections III—V of the report. As stated by that officer, the scope for work in connection with the treatment of cattle disease is enormous, and it may in time be possible to have a Veterinary Assistant in every tahsil, but for the present we must content ourselves with our staff as lately reorganised. The Superintendent, Simla Hill States, will, however, be asked to consider the suggestion for the appointment of a Veterinary Assistant in these States. The increase in the number of animals attacked by foot-and-mouth disease was considerable, but the decreased percentage of deaths is satisfactory and reflects credit on the Veterinary Assistants. The Lieutenant-Governor agrees with Mr. Walker that great caution should be exercised in applying the "simultaneous" method of treatment for protection from rinderpest: the proposal to write a pamphlet on the subject is a good one, but the Director of Public Instruction should be consulted as to its distribution in village schools. The "serum alone" method was, His Honour observes, readily accepted in the Jhelum and Rawalpindi Districts, with most satisfactory results.

9. The remarks made in Sections IV and V of the report merit the attention of District Officers and Local Bodies.

10. The proposal to give Veterinary Assistants in certain cases a post-graduate course seems to the Lieutenant-Governor to be a good one. As regards the equipment of Veterinary Assistants with proper medicines and instruments, the Director of Land Records and Agriculture should fix on a definite scale in consultation with the Veterinary Superintendents, and Local Bodies should then be addressed on the subject. The Lieutenant-Governor believes that they will readily supply the requisite equipment. The question of the appointment of Senior Veterinary Assistants is at present under the consideration of Government. The establishment of Veterinary Hospitals is a measure that must be left to Local Bodies.

11. The Lieutenant-Governor desires to express his appreciation of the services rendered by Veterinary-Lieutenant Smith and Veterinary-Lieutenant Walker during the year, and agrees with the Director that both officers deserve credit for good work done. His Honour's thanks are also due to Mr. Sykes for a report of much interest.

ORDER.—Ordered, that a copy of the Report and the above Remarks be submitted to the Government of India in the Revenue and Agricultural Department and the Inspector-General, Civil Veterinary Department, in India; also that the Remarks be published in the *Punjab Government Gazette* and communicated to the Director of Land Records and Agriculture, Punjab.

By order of the Hon'ble the Lieutenant-Governor,  
J. F. CONNOLLY,  
*Offg. Revenue and Finl. Secy. to Govt., Punjab.*



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## PART I.

### ANNUAL REPORT OF THE PUNJAB VETERINARY COLLEGE, LAHORE, FOR THE OFFICIAL YEAR 1901-02.

I have the honor to submit the following Annual Report on the working of the Punjab Veterinary College for the year 1901-02, which is a record of the continued success of the Institution.

During the year under report there were only two classes of the new three Curriculum of instructions. years' course studying, the final year of the old two years' course having been completed last year. Consequently no Veterinary Assistants received diplomas this year.

The Summer Session commenced on the 16th April, the number of new students admitted was 65 against 39 in the previous year. Of these 24 were military men, 16 from districts, 9 paying, 15 free, and one specially nominated student, who did not join.

I do not again intend to take specially nominated or paying students unless they have the same educational qualifications as free students, as I find they do not make good students being either idle or lacking in intelligence.

The Winter Session began on the 1st October 1901.

The Second Year Class numbered 29 (including 2 military men who, on return from Field Service in China, were allowed to join this class after the first year's examination last year) all of whom completed the year and presented themselves for examination.

The Junior or first Year's Class numbered 65, but this was reduced to 54, one District student absenting himself from the examination; one paying and 9 free students leaving shortly after entering the College.

The Examining Board composed as under, assembled on the 3rd April 1902.

1. Veterinary Lieutenant A. Smith, Superintendent, Civil Veterinary Department, South Punjab.
2. Veterinary-Lieutenant F. S. H. Baldrey, Assistant to Inspector-General, Civil Veterinary Department.
3. Veterinary Lieutenant G. K. Walker, Superintendent, Civil Veterinary Department, Provincial Circle, Punjab.

At this examination 29 students presented themselves for the Second year's examination, and of these 24 passed and 5 failed, of whom one military student having done very badly in the examination was sent back to his regiment as unfit, and 4 men allowed to remain another year in the same class. The percentage of passes is 83 which is satisfactory.

The First Year's students were also examined by the Board of Examiners, and out of 54 candidates 44 passed, 10 failing to satisfy the examiners. Of these 2 military, 2 paying and 2 free students, having done very badly in all subjects, were dismissed from the College; and 4 allowed to continue the same course for another year. I am glad to be able to report that there was marked improvement in this class over last year, due to improved system in teaching and text-books having been made available.

The report of the Board of Examiners is given as Appendix I, from which it will be seen that the results are distinctly satisfactory. The percentage of marks obtained shows that 8 men obtained over 500 marks out of 600, in A Class, against *nil* last year;



the first man getting 545 and 30 men obtained over 400 marks against 13 last year. Four men obtained over 400 out of 500 marks in B Class, and 12 over 350.

It is satisfactory to note that our students have showed an improvement on last year in Materia Medica and Pharmacy, and also in the handling of animals. In fact there has been an all-round improvement in every subject. Special attention has been given to the above subjects and every effort made to ensure a thorough knowledge of them, so year by year we seem to be improving in our means and methods of teaching and obtaining more satisfactory results, and this notwithstanding the fact that our subjects have been enormously increased and we have dealt with 10 of these subjects during the year against five last year with no extra staff, and in fact, for a great part of the busiest time of the year, without the assistance of the European Professor. It will, of course, be impossible for us to now teach the five extra subjects, especially without the services of a qualified and hard-working Professor, who has a good knowledge of the language, permanently appointed to the College. A knowledge of the language is necessary as otherwise one of the native teaching staff has to be constantly employed in interpreting and this causes much loss of time and is unsatisfactory. I find it impossible to carry on the work properly without the assistance of the Professor.

The Entrance Examination was held on the 15th April 1902. The competition for entrance was ordinary, there being 125 candidates for admission against 134 last year. This year only one Entrance passed man presented himself against 13 last year, and he was admitted. Three paying men were admitted.

The students now at the College comprise the following:—

Sikhs	...	...	...	...	...	...	...	...	...	29
Hindús	...	...	...	...	...	...	...	...	...	17
Muhammadans	...	...	...	...	...	...	...	...	...	84

Appendix II shows the scholarships and stipends awarded under the new rules and as proposed last year. The system of granting scholarships to the students in the order in which they pass their examinations has had an excellent result. No scholarship-holder failed in either of the classes, as all scholarships under my control are given in this way, men are stimulated to compete for them and work much more satisfactorily.

There being only one candidate available for the Junior House Scholarship under the rules, for the first six months one of the 16 rupees scholarships was not awarded until November 1901, after which both the 16 rupees scholarships continued for the remaining half year.

The number of horses shod in the forge was 809 against 892 last year, or a decrease of 83. This is about normal. The examination in the Shoeing Smiths' Class was held on the 4th January last, 7 men appeared and all passed as farriers. There is a great demand for trained *Nálbands*. Notwithstanding that the means and conveniences for training are only limited I have taken 20 men this year. But if good men in any numbers are required some change in the arrangements for the improvement of the means of teaching of this class must be made.

The in-door equine patients show a decrease of 19 over last year. The out-door equine patients show a decrease of 35 over last year. The equine practice has been about normal. The College has been for years worked at high pressure and we now seem to have reached our level. The in-door cattle and other patients show a decrease of 14. The out-door cattle and other patients show an increase of 24 over last year. The number of daily attendances of all classes of patients during the year is 14,452 giving a daily average of 39.59. Seven hundred and ten Surgical operations were performed against 790 last year. Nineteen Volunteer chargers were treated free during the year. Government stallions have also been treated free. The number of examinations for soundness during the year was 64 or the same as last year. Punjab Light Horse chargers and Police remounts were examined free of charge.



The practice derived from the treatment of the diseases from which equine "In" and "Out-door" patients were suffering is a varied one and affords fair facilities for teaching. Contagious diseases were brought in fair numbers. The students had an opportunity of seeing cases of Surra in camels, dogs, cattle and the horse, Cattle plague, Foot and mouth disease, Glanders, Tetanus and Rabies.

Appendix IV shows receipts and the amount outstanding at close of the year. \* The amount paid into the Treasury was Rs. 3,852-15-0, against Rs. 4,483-8-0 last year, or a decrease of Rs. 630-9-0. There has been an all round slight decrease in the receipts from all sources. The chief loss has been in fees from paying students from other provinces which accounts for Rs. 405, out of Rs. 630-9-0 decrease. This class of students is discouraged as before mentioned. The Rs. 114 decrease in practice fees was due partly to the fact that we were short-handed and that the Principal was unable single-handed to devote sufficient attention to the matter in addition to his other duties. The Professor is in charge of this department and was removed at the beginning of the busy season. It was possibly also partially due to the fact that for the first time, for many years, an Army Veterinary Department man has been actively engaged in private practice, in Meeán Meer, so that taking this into consideration and also the fact, that for part of the year regiments, who sent ponies to the College, have been absent from the station, the amount realized in fees is satisfactory.

The comparison of departmental and treasury receipts on account of income from Veterinary College, Punjab, has been carried out in my office, and that the two sets of figures have been found to agree.

The total amount of outstandings on the 31st of March 1902 was Rs. 230-4-0 against Rs. 213 on the corresponding date last year. This is owed by various persons and is now being realized. The amount booked is Rs. 3,882-3-0 against Rs. 4,547-2-0 last year or a decrease of Rs. 664-15-0.

Appendix V is a statement of the establishment and contingent expenditure showing a slight increase of Rs. 395 in the Imperial Revenue owing to the Professor having been on half pay for a part of last year. There was also an increase of Rs. 1,088 in the Provincial Revenue owing to the increments given to the native teaching staff. In regard to the item "Hospital requisites" it is to be explained that owing to the introduction of the three year's course, some special devices were introduced for more practical training which accounts for the increased expenditure under this head. The same explanation may be accepted as to the item "Country medicines" as more samples for the teaching of Botany and Materia Medica to the two classes, under the new rules, had to be purchased. The item "Forge Maintenance" also exhibits a slight increase which is due to the fact that for training the Nálband Class more charcoal and iron, with some rise in the rates, was necessary.

The demand for Veterinary Assistants still remains very great, applications from all sources being numerous. The men sent to Africa have generally been very well reported on. I am sorry to record that two of them are reported to have been killed in the action at Klipdrift. One Veterinary Assistant also died in Uganda. Volunteers for service in foreign countries are plentiful always when the services of men are available. Men in private practice are doing well and I think that more of them will start soon, as they are encouraged by the success of those who have already done so. I am sorry to find that the terms offered in the Punjab Provincial Service are so bad, worse even than those in the Transport and in the United Provinces of Agra and Oudh Subordinate Veterinary Department, and I am afraid the Government cannot expect to secure the services of the best men which seems a pity considering that they spend money on training them. The market value must be paid for the services of good men otherwise they would not accept service, and if the best men be not encouraged to join the subordinate department the results will not be good.

The Vernacular Veterinary Journal has been kept up and is now issued monthly instead of quarterly. This was done as the result of constant appeals



from Veterinary Assistants, although it entails increase of work. In order to secure its advantages to all Veterinary Assistants in the Province, an offer has been made to the Government to supply one hundred copies to the various Veterinary subordinates at a cost of two hundred and fifty rupees or at a reduction of Rs. 5 per copy. This of course represents a great loss of profit being less by Rs. 50 than the sum we already obtain from this source, but in the interest of Veterinary science in India it seems advisable.

The following text-books have been published during the year to meet the requirements of the Conference:—

1. Text-book of Equine Surgery illustrated by Captain Pease.
2. Text-book on Veterinary Physiology by Syad Mahtáb Shah, Khan Sáhib.

I am glad to hear that the site for the new Contagious Disease Ward has been sanctioned and an estimate and plans for the necessary buildings have been prepared for sanction.

During the year under report a new lecture room has been built and two *pacca* stalls added to the hospital.

I can again testify to the excellent work done by the members of the teaching staff who have cheerfully undertaken the enormous amount of extra work which has been thrown upon us by the increase in subjects laid down by the Conference at Umballa. The clerical establishment has also worked very hard especially the Translator who has been kept hard at work in whatever spare time he had.



## PART II.

### CIVIL VETERINARY DEPARTMENT PROVINCIAL REPORT.

The two Circles, known as the North and South Punjab Circles, have not been altered in consequence of the separation of the North-West Frontier Province. The Superintendent of the North Punjab Circle still retains charge as Civil Veterinary Officer of the districts included in the Frontier Province under the direction, as far as that province is concerned, of the Revenue Commissioner. The statistics included in this report both as regards horse and mule breeding and cattle relate only to the Punjab as newly constituted. The Punjab has at length been fortunate in obtaining the services of a third Superintendent of the Civil Veterinary Department, able to give his whole time to the investigation and treatment of cattle disease. The new Circle which has been constituted, embraces the whole of the Punjab, and is officially styled the Provincial Circle. Superintendents of the other two Circles, North and South Punjab, are thus able to devote themselves exclusively as far as the Punjab is concerned, to the duties connected with horse and mule breeding. As it happened indeed, Veterinary Lieutenant Trydell, the Superintendent of the North Punjab, was absent on furlough throughout the year. Veterinary Lieutenant Smith, the Superintendent of the South Punjab, was in charge of both North and South Circles during the year, and Veterinary Lieutenant Walker, who has been placed in charge of the Provincial Circle, did not join the province until October. For the greater part of the year, therefore, Veterinary Lieutenant Smith had to work single-handed. The arrangements for the re-organisation of the Subordinate Veterinary Establishment were completed in time for Mr. Walker to take charge on his arrival, of the establishment of Veterinary Assistants who were formerly in the employment of District Boards, and who have now been organised as a Provincial Service. Sections III, IV and V of this report are abstracted from a very interesting report received from Mr. Walker. The sections dealing with horse and mule breeding are collated from the reports received from the Superintendents of the North and South Punjab.

#### I.—HORSE-BREEDING.

At the commencement of the year under report, District Boards owned 3 horse stallions and 91 pony stallions. No casualties occurred among the horse stallions. The Shahpur District Board purchased a country-bred horse stallion during the year, thus raising the total number of horse stallions on the register at the close of the year to four. Six new Arab pony stallions were purchased during the year by District Boards, *viz.*, two by Dera Gházi Khan, two by Muzaffargarh, one by Kángra and one by Jhang. Six pony stallions were removed from the register on account of animals that have died or were destroyed or sold. The number on the register at the close of the year, therefore, remains unchanged, *viz.*, 91. The only pony stallion owned by Courts of Wards has been sold during the year. The number owned by private persons has been increased from 2 to 3 in consequence of the purchase of a country-bred pony stallion by Malik Umar Hayát Khan of Kálra in the Shahpur District. All the stallions owned by the District Boards except one country-bred horse stallion and one country-bred pony stallion, are Arabs. Veterinary Lieutenant Smith who, as above noted, was in charge of the North and South Punjab Circles, during the year, considers that the results of District pony and mule breeding may be considered to have been attended during the year under report with most favourable results. As regards the effect of the Arab strain he writes as follows:—

“The effect of these pony stallions being made available has been most marked in the District Board produce seen at the various horse fairs, and as many of these pony stallions are high caste racing Arabs, the Arab type is distinctly stamped in the produce, making it difficult at times to distinguish”



“between the Arabi country-bred and an Arab. Besides several instances have”  
 “occurred this year of the pony stallion produce being bought for native”  
 “cavalry remounts. I consider it would be an improvement on the present”  
 “system if pony stallions were supplied by the Imperial Government and their”  
 “distribution left to me, the District Board only paying for their feed and keep.”  
 “I suggest this as at present in many districts where pony stallions are greatly”  
 “needed, it is often the case that the District Board is not in a sufficiently”  
 “flourishing condition financially to buy a pony.”

The Superintendent, Civil Veterinary Department, North Punjab, suggests that the District Board of Siálkot should purchase a couple of pony stallions as there are really very few mares in the district other than pony mares. The number of foals dropped as the result of the previous year's covering was 1,316, the number not held, 2,205 and the number not known 1,375, the average per stallion being 15.9, 26.6 and 16.6 respectively.

## II.—MULE-BREEDING.

Of the 13 donkey stallions on the register at the close of the year 5 were employed on mule breeding in the South Punjab and 5 in the North Punjab were employed on donkey breeding. Eight donkey stallions were supplied by the Civil Veterinary Department during the year. <sup>ALL</sup> were received in August 1901 after the covering season was over and were distributed to the following districts :—

Ráwalpindi	...	...	...	...	...	...	...	...	3
Siálkot	...	...	...	...	...	...	...	...	1
Lahore	...	...	...	...	...	...	...	...	3
Jhang	...	...	...	...	...	...	...	...	1

The average number of pony mares covered per stallion is 44.40 against 28 in last year, and the average number of donkey mares covered per stallion is 10. The decrease in the average number of donkey mares covered per stallion is attributed by the Superintendent, North Punjab, to the fact that the stallions were allotted to stud work after the covering season was over, and that the fact of their having been allotted for donkey breeding was not sufficiently known to the breeders.

## III.—CATTLE DISEASE INVESTIGATION AND PREVENTION.

Veterinary Lieutenant Walker, the Superintendent in charge of the Provincial Circle, submits the following interesting report :—

“It may be said that the scope for work is enormous. Owing probably”  
 “to last year being a very dry year, and it may be also to some considerable”  
 “lessening of the total number of cattle owing to recent famines, losses”  
 “from the two diseases Anthrax and Rinderpest, which caused heavy”  
 “mortality, show a very great reduction from last year. The figures are at”  
 “present unreliable as the Veterinary Assistants from whom the information”  
 “is mainly obtained are too widely scattered to allow of complete statistics”  
 “being obtained. Moreover, the number of Veterinary Assistants has been”  
 “somewhat reduced, and some districts have no Veterinary Assistant even.”  
 “Rinderpest is, as a rule, very prevalent in the Simla Hill States, but there is”  
 “no man belonging to this Department on duty there and no reports of”  
 “disease have been received. I am strongly of opinion that a Veterinary”  
 “Assistant is required for every tahsil to enable the work to be dealt with”  
 “thoroughly. By getting telegraphic information of serious outbreaks from”  
 “tahsils I have derived great benefit as I have been able to personally visit”  
 “outbreaks before they died out and institute preventive and suppressive”  
 “measures.”

“Foot-and-mouth disease was very widespread throughout the”  
 “province, especially during the cold weather and no”  
 “district escaped. This is not a serious disease in so far”  
 “as mortality is concerned. The total number of reported cases was 30,231”  
 “against 12,519 last year. The mortality was only 0.66 per cent. against 2.90”  
 “per cent. last year. The disease seriously incommodes agricultural operations”  
 “as it throws animals out of work for a time. It is extremely contagious and”



“repeated attacks in the same animal are frequent. Veterinary Assistants”  
 “are able to render very great assistance by treating affected animals. Rules”  
 “for prevention of intercommunication between infected and healthy villages”  
 “are required to be enforced.”

“Rinderpest is, as a rule, the scourge of the province in so far as it”  
 “is the cause of great mortality amongst cattle, buffaloes”  
 Rinderpest. “and occasionally sheep and goats. The past year has”  
 “been quite exceptional. Only 528 cases were reported during the year”  
 “under report against 13,511 last year, and the mortality was 43·3 per cent.”  
 “against 60·1 per cent. last year. I have visited outbreaks in Jhelum and”  
 “Ráwalpindi Districts, the only places where they have been at all severe so”  
 “far as I have received information since I joined this appointment. I was”  
 “able in both these districts to personally initiate preventive inoculation.”  
 “Some slight opposition was experienced at first, but the people soon”  
 “recognised the merits of the method and finally asked for it in both places.”  
 “A statement is attached showing the results, and I venture to think they”  
 “are most satisfactory. One thousand two hundred and seventy-nine animals”  
 “were inoculated, of which only 2 died after inoculation and the disease was”  
 “stayed. The two animals that died in Jhelum District died of rinderpest”  
 “within 6 days of inoculation. As the method used was that called the “”  
 “serum alone” method by which it is impossible to communicate the disease”  
 “these animals must have been suffering when inoculated though it was not”  
 “apparent. In this method all contact cattle are inoculated if not suffering at”  
 Method used “serum “the time from the disease. Cattle that have recovered”  
 alone.” “from the disease are not inoculated. The animals are not”  
 “incommoded, and there is no danger if done by experienced hands. No”  
 “segregative measures re required, as inoculated animals can be mixed with”  
 “diseased ones with impunity. The immunity conferred is of fleeting”  
 “duration, but in my opinion if simultaneous measures are taken to destroy”  
 “the virus of the disease in the cowsheds, &c., it is sufficient to tide over”  
 “an outbreak. These concomitant measures are necessary to prevent danger”  
 “of re-infection when the immunity has passed off. The method is specially”  
 “applicable to India as the sun is a great factor in destroying the virus.”

“I am of opinion that the time is not yet ripe for the general appli-”  
 The “simultaneous “cation of the “simultaneous method” in India, and”  
 method.” “that is why I have not used it. It requires constant”  
 “and close personal supervision and that with my present staff I am not”  
 “able to give. It is perhaps not necessary for me to go into details, but this”  
 “method entails the use of the blood of a diseased animal which has gener-”  
 “ally to be obtained on the spot. To be effectual the animal has to”  
 “go through an attack of fever which throws him temporarily out of work”  
 “and it is not without its dangers. The slightest error will cause mor-”  
 “tality. From a scientific point of view the method is ideal as when suc-”  
 “cessfully carried out it should protect for life. It is essentially a preventive”  
 “inoculation, and if it could be practised on all the cattle of the province”  
 “rinderpest might be stamped out. This method is from the zamíndár’s point”  
 “of view very much more objectionable than the other, and I doubt if he will”  
 “accept it at present. In actual outbreaks he may accept inoculation and”  
 “then the “serum alone method” suffices. A cordon of animals round an”  
 “infected area inoculated by the “simultaneous method” would be an excellent”  
 “thing, but here again the personal supervision of an officer is required and”  
 “even then losses may occur.”

“Preventive inoculation has now received a start in the Punjab; Ve-”  
 Preventive measures. “terinary Assistants are being trained at Muktesar, and”  
 “when they are equipped, I believe, we can deal satisfac-”  
 “torily with this disease. Help is required from District Officers to start the”  
 “work as in some cases villagers are against it. Good results will soon”  
 “overcome their prejudices. I propose, as soon as possible, writing a pamph-”  
 Preparation of a pamph- “let on the subject for village schools and for distribu-”  
 let for village schools. “tion generally to the agricultural population.”

“Veterinary Assistants Kotu Rám, Ahmad Bakhsh and Tálib Khan”  
 “have done good work in preventive inoculation.”



“I have not been able to hear of any outbreaks of black-quarter since”  
 Charbon symptomatique (black-quarter). “I joined this appointment though I have specially asked”  
 “for early information as the Imperial Bacteriologist is”  
 “anxious to obtain it. No doubt it occurs, but probably it is more common”  
 “in the rainy season.”

“Anthrax is fairly commonly reported. Six hundred and twenty-eight”  
 Anthrax. “cases occurred during the year with a mortality of 76·1”  
 “per cent. Last year's figures show 1,816 with a mort-”  
 “ality of 91·30.”

“I have visited outbreaks for the purpose of preventive inoculation”  
 “and investigation. In the first outbreak near Lahore I was unable to make”  
 “a diagnosis except from hearsay, there being no sick animals present. The”  
 “people (Sikhs) objected to inoculation, but six animals were done belonging”  
 “to the headman.”

“In the second outbreak in Siálkot District I was able to see the”  
 Malignant sore throat. “disease. It was that called malignant sore throat”  
 “(ghotwa galghotu), and it is usually classified as anthrax”  
 “by Veterinary Assistants. Twenty animals had died including five donkeys.”  
 “The principal animals attacked are buffaloes, and from the first appearance”  
 “of the symptoms in fatal cases death usually occurs in 24 hours. Very few”  
 “animals recover as a rule. The clinical symptoms simulate closely a form”  
 “of anthrax and the clinical history is also somewhat similar. The disease”  
 “is an important one and requires early attention. I strongly recommend it”  
 Investigation. “to the notice of the Imperial Bacteriologist. I was my-”  
 “self, though much pressed for time, able to do some-”  
 “thing towards investigating the disease. I had very little apparatus as it”  
 “has not yet arrived from England, but the Principal, Punjab Veterinary Col-”  
 “lege, kindly allowed me to do some work there. I was unable to complete”  
 “my work owing to the necessity of leaving head-quarters. I hope at a”  
 “future date to be able to continue my investigations. So far as I have gone”  
 “I am led to the conclusion that the disease is not anthrax and although”  
 “the symptoms coincide with those described by Veterinary Captain Pease in”  
 “his note on *ghotwa*, my inoculation experiments did not agree with those there-”  
 “in described. It is possible of course the disease may be due to a vegetable”  
 “poisoning.”

“No cases were reported during the year. I have not yet seen the”  
 Pleuropneumonia. “specific contagious pleuropneumonia in this country”  
 “which was at one time so prevalent in Great Britain,”  
 “but I believe it occurs. It is possibly not common in the Punjab. Last”  
 “year 154 cases were shown, but they may not have been specific.”

“Two cases of glanders were discovered by Veterinary Assistant”  
 Glanders. “Sazawár on duty at Amritsar during the autumn cattle”  
 “fair among hackney carriage ponies. The diagnosis”  
 “was confirmed by me and the animals were destroyed in my presence. A”  
 “full report was made by me at the time and the Military authorities inform-”  
 “ed. I also made arrangements for inspection of horses leaving Amritsar”  
 “Fair by rail.”

#### IV.—CATTLE-BREEDING.

“During the period which embraces this report I was able to visit”  
 “every district in the Punjab except two. I made a point of seeing as much”  
 “of the typical cattle of the province as possible in the short time at my dis-”  
 “posal by having collections made which were kindly arranged for by District”  
 “Officers. I also held conversations with many leading natives in order to”  
 “discover their views on the subject and made notes accordingly with regard”  
 “to the kind of bulls most in favour.”

“In many districts bulls hitherto supplied from the Hissár Cattle Farm”  
 Supply of bulls. “have not been appreciated. I understand the Farm is”  
 “being re-organised and bulls will not be supplied from”  
 “there for some time to come.”



“ In the meantime the supply of bulls must be kept up and this will probably have to be done locally. I have not at present much knowledge of the state of local breeding but what information I have is not encouraging. Weedy miniature bulls are often used and castrated as soon as they are old enough to work. The best breeding stock of the districts is in many cases allowed to leave it, and the cows are too often regarded as mere milking machines.”

Local breeding. “ A great factor for the encouragement of local breeding is the giving of substantial prizes for breeding stock, and these prizes should be given every year. The zamíndár, as a rule, takes good care of his bullocks, but I cannot say the same for his breeding stock. The zamíndárs of Chakwál and Talagang Tahsils of Jhelum District are a distinct exception to this in so far as their bulls are concerned.”

Grant of prizes for breeding stock at fairs. “ When prizes are given by local bodies I recommend in future that the most valuable prizes be set apart for breeding stock, *i.e.*, bulls, cows, and heifers. I anticipate good results from the five shows which are now established for which prize money has been given by the Imperial Government.”

#### V. — DISPENSARIES.

“ Since my appointment I have been able to inspect all the dispensaries, and I consider they are doing good work. They are institutions which confer much benefit in their immediate locality, and there should be a Veterinary Hospital at the head-quarters of every district.”

Improvement in registers and books. “ I am arranging for some improvement in the registers and books kept at the dispensaries that are under me, so that in future they will work on similar lines. The dispensaries at Amritsar and Jalálabad are not in charge of men in this department, but are entirely kept up by the Municipality and Court of Wards respectively.”

Buildings, Veterinary Hospitals. “ The buildings at Hoshiárpur, Gujránwála and Ferozepore are the best. There is considerable room for improvement in the others. Dispensaries where in-patients are received require the constant attendance of one man and they should be termed Veterinary Hospitals. This would serve to distinguish them from dispensaries such as Rohtak and the Branch Dispensaries at Daska and Raya in the Siálkot District.”

“ These are run by itinerating men and only consist of a room at headquarters where the man in charge of the circle can keep his medicines and treat out-door patients when he is not on tour. I hope eventually that accommodation of this kind will be given to every itinerating man at his head-quarters, and it should be called dispensary in contradistinction to the Veterinary Hospital at the sadar station.”

Animals treated at Dispensaries. “ A statement is attached showing the number of animals treated by Veterinary Assistants at dispensaries during the year. No figures are available showing receipts and expenditure at dispensaries. In the case of those under me the Veterinary Assistants are paid from Provincial Funds, and medicines, &c., are supplied by District Boards. There are no receipts except that at Ferozepore certain fees are charged for medicines which are credited to the District Board.”

#### VI. — SUBORDINATE ESTABLISHMENT.

“ A statement is attached on the form required by the Imperial Government, showing the strength as it stood on 31st March. The half-yearly statements giving more detail have already been submitted to you.”

Training in inoculation. “ Up to 31st March 29 men have been through a course of instruction in rinderpest inoculation at Muktesar.”



“ Having obtained your permission I propose, when the College staff regains its normal strength, to send as many men as possible whom I have discovered are backward in professional knowledge to the College in batches for periods of three months. They will be able to attend lectures and demonstrations, and I shall, as far as possible, give some attention to them myself when in Lahore. I think this post-graduate course should be of great benefit to many of the men as owing to lack of professional supervision they have forgotten a good deal of their professional work.”

Training of inefficient Veterinary Assistants at the Punjab Veterinary College.  
(Post-graduate course).

“ A statement is attached showing the number of animals treated and castrations performed during the year. Animals treated at dispensaries have not been included in these figures. There is much useful work in front of these District Veterinary Assistants in connection with disease and breeding among domestic animals. At present they tour regularly in their circles and give advice which is not always taken. Some have medicines which they are able to use with advantage, but many are very imperfectly equipped both with medicines and instruments. I am of opinion that contributions from Local Bodies on a fixed scale are required for the purpose of equipment, and some arrangement is necessary to enable the men to carry their medicines, &c., with them when on tour. Sufficient I think can be taken in saddle bags on a riding pony, provided a room for dispensing at head-quarters is given. Each should spend about 20 days on tour in his circle and ten days at his head-quarters where he can do any serious operations requiring consecutive attendance and attend to animals brought in. He would of course be always available for urgent duty anywhere in his circle.”

Equipment and carriage of medicines.

“ These men are now being equipped by me with necessary registers and forms to enable me to check their work, and they will all work in future on similar lines. In addition to supplying me with information concerning disease, they will now be required to send me certain information in connection with cattle breeding.”

#### VII.—TOURS OF SUPERINTENDENTS.

During the year under report Veterinary Lieutenant Smith was in charge of both the North and South Punjab Circles. He visited the following districts:—Shahpur, Lahore, Jhang and Miánwáli in the North Circle, and Ferozepore, Amritsar, Umballa, Muzaffargarh, Gurdáspur, Jullundur, Dera Gházi Khan, Ludhiána and Rohtak in the South Circle. He also attended horse shows held at Jhang, Gujránwála, Ráwalpindi, Hánsi, Amritsar, Jalálabad, Delhi, Karnál, Dera Gházi Khan and Umballa. Mr. Smith also inspected Dalhousie and Dharmśála; and the Veterinary Dispensaries at Amritsar, Rohtak, Ferozepore, Ludhiána, Umballa and Jalálabad.

Veterinary Lieutenant Walker inspected every dispensary in the Punjab, and visited every district except Kángra and Simla. He visited outbreaks of disease in Lahore, Jhelum, Ráwalpindi and Siálkot Districts to initiate inoculation work and make investigations. He also visited the fairs at Hánsi, Amritsar, Jalálabad and Hissár. Both these officers deserve credit for good work done during the year.

#### VIII.—GENERAL.

The formation of the provincial service of Veterinary Assistants and the appointment of a Superintendent of the Civil Veterinary Department to supervise these men, and to initiate and supervise measures for the prevention and cure of disease among cattle, has been a great advance. I venture to think that the above report of half a year's work under a new regime does credit to Veterinary Lieutenant Walker, and also that it will justify the Local Government in completing the measures necessary to make the scheme a subordinate veterinary service a complete success. The experience of a sub-establishment of a Veterinary Hospital at the head-quarters of every district, establishment of a Veterinary Hospital at the head-quarters of every district,

F-55.  
1901-02



which shall be in charge of a Veterinary Assistant on somewhat higher pay than the present rates ; (2) an increase in the number of Veterinary Assistants, so as to provide one itinerating Veterinary Assistant for each tahsil in the province as well as one for each Veterinary Hospital at the head-quarters of the district. Each tahsil should also have its Veterinary Dispensary in subordination to the Veterinary Hospital at the head-quarters of the district ; (3) the appointment of a higher grade of Veterinary Inspector on much higher pay ; one such Inspector is required for each division, and one as Assistant to the Superintendent. The appointment of the senior grade of Veterinary Inspectors seems to be a matter that is urgently required, as at present the Superintendent single-handed has to supervise the work of over 70 men spread over the Punjab.



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## APPENDIX I.

Report of the Board of Examiners appointed to conduct the annual examination of students at the Punjab Veterinary College for 1902.

The Board composed of the undermentioned Veterinary Officers, assembled at the College on 31st March 1902 and the five following days.

PRESIDENT :

Vety. Lieut. A. SMITH, *Supdt., C. V. D., South Punjab.*

MEMBERS :

Vety. Lieut. F. S. H. BALDREY, *Assistant to Inspector-General, C. V. D.*

Vety. Lieut. G. K. WALKER, *Supdt., C. V. D., Provincial Circle, Punjab.*

Owing to the enforcement of the rules laid down by the Umballa Conference there were this year only two classes, the Third Year Class "C" not yet having completed the three years' course.

In Class "A" 54 students were examined and 44 passed.

In Class "B" 29 students examined and 24 passed.

The percentage of passes is distinctly satisfactory.

The standard for Physiology is elementary, but the general knowledge is distinctly higher and creditable, considering they have not yet received full instruction in Anatomy.

The Examiners think that a practical course in fodder and poisonous plants would be more desirable than the Elementary Theoretical Botany which is at present in vogue. This subject might be combined with hygiene and dietetics.

In the handling of animals and Materia Medica and Pharmacy the students showed an improvement on last year.

(Sd.) A. SMITH, VETY. LIEUT.,

*Supdt., C. V. D., South Punjab.*

(Sd.) F. S. H. BALDREY, VETY. LIEUT.,

*Asst. to Inspector General, C. V. D.*

(Sd.) G. K. WALKER, VETY. LIEUT.,

*Supdt., C.V.D., Provincial Circle, Punjab.*



## APPENDIX II.

Statement showing the Scholarships and Stipends for the official year 1901-02.

FROM		1900-01.	1901-02.	Increase.	Decrease.
		Rs.	Rs.	Rs.	Rs.
Provincial Revenues	...	168	168	...	...
District Funds	...	1,908	1,708	...	200
Municipal Funds	...	480	360	...	120
Other sources—					
Lord Lawrence Memorial Fund	...	600	600	...	...
Wace Memorial Fund	...	672	576	...	96
State and Foreign Stipends	...	528	600	72	...
Total		4,356	4,012	72	416
Government Open Scholarships					
Lord Lawrence Scholarships	...	2	2	...	...
Wace Scholarships	...	5	5	...	...
State and Foreign Stipends	...	4	3½	...	½
Stipends from District and Municipal Funds	...	7	8	1	...
Total		25	21	...	4
Total		43	39½	1	4½

## APPENDIX III.

Statement showing the number of Patients treated in the Hospital of the Punjab Veterinary College during the year 1901-02.

Name of animal.	In-door or out-door.	Number of patients.	Paying.	Treated free.	Treated free and fed by the College.	Deaths.	REMARKS.
Equine ...	In-door	899	110	789	5	17	
	Out-door	1,967	23	1,944	...	26	
Cattle and other patients.	In-door	24	...	...	7	1	
	Out-door	1,607	...	...	...	22	







APPENDIX VI.

Statement showing the main result of the Punjab Veterinary College, Lahore, for the year 1901-02.

VETERINARY COLLEGE AND SCHOOLS.	Name of course of instruction if more than one course followed.	NUMBER OF STUDENTS.				STUDENTS ADMITTED DURING THE YEAR CLASSIFIED BY EDUCATIONAL QUALIFICATION.			RECEIPTS			EXPENDITURE.			EMPLOYMENT OF STUDENTS WHO PASSED OUT DURING THE THREE YEARS PRECEDING.							
		Scholarship-holders.	Paying students.	Passed out during the year.	Failed to pass out.	In ordinary course.	Instruction prolonged by reason of failure to pass.	Remaining under instruction at end of years.	Matriculates or with higher qualification.	Knowing some English but not matriculated.	Knowing no English or very little English.	From fees.	Others.	Total.	Salaries of instructing staff.	Others.	Total.	Total number passed.	In service of Government or Local Boards.	In service of other Local Committees or Institutions.	In private practice.	Unemployed in Veterinary work.
Punjab Veterinary College	3 years' Urdn.	...	11	* Nil.	* Nil.	83	Nil.	13	12	20	1,119	2,763	3,882	8,370	11,377	19,747	135	129	Not known.	Not known.	Not known.	Nil.

\* No final examination owing to introduction of three years' course.



**PROVINCIAL TABLES.**  
APPENDIX VII.—PROVINCIAL TABLE A.

*Return of Horse, Pony and Donkey Stallions, the property of District Boards, Courts of Wards, and Private Persons, for the official year 1901-02.*

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	28	29	30	31	32	33				
DETAIL.	HORSE AND PONY STALLIONS.																									DONKEY STALLIONS.										
	HORSES.															PONIES.										DISTRICT BOARDS.		COURTS OF WARDS.		PRIVATE PERSONS.						
	District Boards.				Courts of Wards.				Private Persons.			District Boards.				Courts of Wards.			Private Persons.																	
	Arab.	Persian.	Country-bred.	Total.	Arab.	Persian.	Total.	Arab.	Persian.	Total.	Arab.	Persian.	Country-bred.	Total.	Arab.	Persian.	Total.	Arab.	Persian.	Country-bred.	Total.	Home-bred.	Persian.	Italian.	Italian.	Persian.	Italian.	Persian.	Total.							
Balance on 1st April 1901	3			3										90		1	91	1			1	2			2	1	2	2					5			
INCREASE ...	Purchased in India						1	1						6			6								1	1										
	By transfer from Civil Veterinary Department.																											8						8		
	Lent by Civil Veterinary Department, North Punjab.																																			
Total	3		1	4										96		1	97	1			1	2			3	1	2	10					13			
DECREASE ...	Died													2			2																			
	Destroyed														1			1																		
	Transferred to head ponies																																			
	Sold														3			3	1			1														
Total														6			6	1			1															
Balance on 31st March 1902	3		1	4										90		1	91				2			1	3	1	2	10					13			



## APPENDIX VII.—PROVINCIAL TABLE B.

*Casualty Roll of District Horse and Pony Stallions during 1901-02.*

1	2	3	4	5	6	7
Brand No.	Name.	Class.	Horse or Pony.	Description of casualty.	Nature of casualty.	REMARKS.

## SOUTH PUNJAB.

Hercules	...	Arab	...	Pony	...	Died	...	Colic.
Rasul	...	Do.	...	Do.	...	Do.	...	Rupture of stomach.

## NORTH PUNJAB.

Paimana	...	Arab	...	Pony	...	Destroyed	...	Paralysis.
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## APPENDIX VII.—PROVINCIAL TABLE C.

*District Horse and Pony Stallions sold during 1901-02.*

1	2	3	4	5	6	7
Brand No.	Name.	Class.	Horse or Pony.	Name of Purchaser.	Amount sold for.	Remarks showing cause of rejection.

## SOUTH PUNJAB.

Pot Boy	...	Arab	...	Pony	...	Gaur Bun	...	Rs. Gratis	...	Unfit for stud work.
Sir Frank	...	Do.	...	Do.	...	Mamdote Estate	...	Do.	...	Old and worn out.
.....	...	Do.	...	Do.	...	The District Superintendent of Police, Montgomery.	...	360	...	Refused to cover.
Framurz	...	Do.	...	Do.	...	His Highness the Nawab of Bahawalpur.	...	800	...	Sent to Nawab Sahib with other marriage presents.

## NORTH PUNJAB.

Nil.







## APPENDIX VII.—PROVINCIAL TABLE E.

*Cost of feed, keep, attendants, &c., of District Horse and Pony Stallions during 1901-02.*

1 DISTRICT.	2 NUMBER OF STALLIONS OR DAYS.		4 TOTAL ANNUAL COST.		6 AVERAGE COST PER STALLION.	
	3 Horse.	Pony.	Horse.	Pony.	Horse.	Pony.
	South Punjab.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Amritsar ... ..	...	1,095	...	752 3 10	...	250 11 11
Gurdáspur ... ..	...	1,095	...	766 5 8	...	255 7 3
Moolten ... ..	...	1,002	...	795 7 3	...	289 12 2
Montgomery ... ..	...	730	...	430 7 4	...	215 3 8
Hoshiárpur ... ..	...	730	...	556 10 8	...	278 5 4
Ludhiána ... ..	...	365	...	257 10 3	...	257 10 3
Ferozepore ... ..	...	1,460	...	1,114 15 9	...	278 12 0
Kángra ... ..	...	1,460	...	1,096 2 6	...	274 0 7
Hissár ... ..	...	365	...	186 12 4	...	186 12 4
Rohtak ... ..	...	2,555	...	2,070 0 0	...	295 11 5
Gurgáon ... ..	...	1,095	...	579 6 6	...	193 2 2
Delhi ... ..	...	1,095	...	703 1 3	...	234 5 9
Karnál ... ..	...	730	...	521 3 10	...	260 9 11
Umballa ... ..	...	1,095	...	839 0 10	...	279 10 11
Dera Gházi Khan ... ..	...	2,190	...	1,263 2 8	...	210 8 6
Muzaffargarh ... ..	...	1,095	...	722 0 0	...	240 10 8
	...	1,460	...	1,118 0 0	...	279 8 0
	North Punjab.					
Ráwalpindi ... ..	...	3,231	...	2,388 15 7	...	269 14 0
Jhelum ... ..	730	730	500 3 1	429 2 7	250 1 6	214 9 3
Gujrát ... ..	...	1,095	...	763 14 0	...	254 10 0
Gujránwála ... ..	365	1,095	238 14 4	575 12 7	...	191 14 10
Shahpur ... ..	134	1,095	120 0 0	929 9 0	238 14 4	309 13 8
Siálkot ... ..	...	730	...	501 4 8	...	250 10 4
Lahore ... ..	...	1,460	...	947 10 6	...	236 14 7
Jhang ... ..	...	1,858	...	1,333 9 11	...	261 15 9
Miánwáli ... ..	...	365	...	197 1 3	...	197 1 3
Total ... ..	1,229	31,276	859 1 5	21,839 10 9	255 4 4	254 14 10

Provincial Table F showing the casualty roll of donkey stallions, the property of District Boards, Courts of Wards and private persons, and Provincial Table G showing details of such donkey stallions sold during the year are blank.



APPENDIX VII.—PROVINCIAL TABLE H.

Services and produce of each class of Donkey Stallions, the property of District Boards, Courts of Wards, and Private Persons, during 1901-02.

CLASS OF DONKEY STALLIONS.	DISTRICT BOARDS.												COURTS OF WARDS.												PRIVATE PERSONS.											
	Stallions on register, on 31st March 1902.				Year under report.				Previous year.				Year under report.				Previous year.				Year under report.				Previous year.											
	For mule breeding.		For donkey breeding.		Pony mares.		Donkey mares.		Pony mares.		Donkey mares.		Pony mares.		Donkey mares.		Pony mares.		Donkey mares.		Pony mares.		Donkey mares.													
	Donkey stallions actually employed at stud.	Number of mares covered.	Average of mares employed at stud.	Result of previous year's coverings.	Average result of previous year's coverings per stallion employed at stud.	Donkey stallions actually employed at stud.	Number of mares covered.	Average of mares covered per stallion employed at stud.	Result of previous year's coverings.	Average result of previous year's coverings per stallion employed at stud.	Donkey stallions actually employed at stud.	Number of mares covered.	Average of mares covered per stallion employed at stud.	Result of previous year's coverings.	Average result of previous year's coverings per stallion employed at stud.	Donkey stallions actually employed at stud.	Number of mares covered.	Average of mares covered per stallion employed at stud.	Result of previous year's coverings.	Average result of previous year's coverings per stallion employed at stud.	Donkey stallions actually employed at stud.	Number of mares covered.	Average of mares covered per stallion employed at stud.	Result of previous year's coverings.	Average result of previous year's coverings per stallion employed at stud.											
Italian	10	2	2	36	2150	18	10510	2	11	8	10	55	40	40	130	40	40	40	40	40	40	40	40	40	40	40										
Persian	2	2	2	50	51	40	255	8	26	17	40	130	85	85	85	85	85	85	85	85	85	85	85	85	85	85										
Home-bred	1	1	1	106	68	106	680	16	46	6	160	4606	60	60	60	60	60	60	60	60	60	60	60	60	60	60										
Country-bred	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...									
Total	13	5	5	222	14050	444	28910	26	83	31	52	166	62	62	62	62	62	62	62	62	62	62	62	62	62	62										



APPENDIX VII.—PROVINCIAL TABLE I.

Cost of feed, keep, attendance, &c., of District Donkey Stallions in 1901-02.

1	2	3	4	5	6
Province.	District.	Number of donkey stallions or days.	Total annual cost.	Average per donkey stallion.	REMARKS.
PUNJAB	SOUTH PUNJAB.			Rs. a. p.	Rs. a. p.
	Gurgáon	...	730	303 0 8	151 8 4
	Mooltan	...	334	117 13 4	128 12 4
	Delhi	...	365	142 8 5	142 8 5
	Hissár	...	365	143 14 0	143 14 0
		Total	1,794	707 4 5	143 14 4
	NORTH PUNJAB.				
	Ráwalpindi	...	585	215 0 10	134 2 10
	Jhang	...	189	62 8 9	120 12 8
	Lahore	...	585	248 10 0	155 2 0
	Siálkot	...	187	73 0 7	142 8 11
		Total	1,546	599 4 2	141 7 8
	GRAND TOTAL	3,340	1,306 8 7	142 12 5	

APPENDIX VII.—PROVINCIAL TABLE J.

Animals castrated by Veterinary Assistants in the Punjab during the year 1901-1902.

District.	HORSES.		MULES.		BULLS.		OTHER ANIMALS.		REMARKS.
	Number castrated.	Number death.	Number castrated.	Number death.	Number castrated.	Number death.	Number castrated.	Number death.	
Amritsar	14	...	...	...	...	...	...	...	
Gurdáspur	8	...	...	...	7	...	...	...	
Mooltan	122	...	15	...	...	...	...	...	
Montgomery	2	...	...	...	29	...	...	...	
Hoshiárpur	14	...	2	...	11	...	1	5	
Jullundur	...	...	...	...	...	...	...	...	
Ludhiána	16	...	2	...	0	...	...	...	
Ferozepore	40	...	3	...	1	...	...	...	
Kángra	8	...	8	...	1	...	...	...	
Rohtak	6	...	4	...	1	...	...	...	
Hissár	7	...	...	...	...	...	...	...	
Gurgáon	15	...	1	...	...	...	...	...	
Delhi	13	...	1	...	...	...	...	...	
Karnál	29	...	...	...	1	...	...	...	
Umballa	14	...	7	...	...	...	...	...	
Muzaffargarh	5	...	...	...	1	...	...	...	
Dera Gbázi Khan	284	...	...	...	...	...	...	...	
Ráwalpindi	18	...	26	...	...	...	...	...	
Jhelum	21	...	2	...	31	...	...	...	
Cujrát	53	...	11	...	...	...	...	...	
Shahpur	183	...	9	...	4	...	...	...	
Lahore	93	...	10	...	56	...	...	...	
Gujránwála	15	...	1	...	43	...	...	...	
Siálkot	16	...	...	...	3	...	...	...	
Jhang	36	...	2	...	9	...	2	...	
Miánwáli	10	...	2	...	11	...	...	...	
	...	...	...	...	11	...	...	...	
Total	1,042	...	106	...	219	...	10	...	



APPENDIX VII.—PROVINCIAL TABLE K.

Statement showing number of animals treated by Veterinary Assistants at Dispensaries, during 1901-02.

DISPENSARIES.	IN-PATIENTS.							OUT-PATIENTS.							REMARKS.		
	Remaining on 1st April 1901.	Admitted during the year.	TOTAL.	Number cured.	Number relieved.	Number died.	Result not known.	Remaining on 31st March 1902.	Remaining on 1st April 1901.	Admitted during the year.	TOTAL.	Number cured.	Number relieved.	Number died.		Result not known.	Remaining on 31st March 1902.
Siálkot ... ..	...	68	68	50	4	12	2	...	16	3,353	3,369	2,592	107	14	649	7	7
Raya Branch Dispensary ... ..	...	...	...	...	...	...	..	...	25	1,279	1,304	972	212	15	93	12	12
Pasrúr do. ... ..	...	...	...	...	...	...	...	...	19	1,907	1,926	1,435	162	19	288	22	22
Daska do. ... ..	...	...	...	...	...	...	...	...	...	632	632	160	140	4	322	...	...
Amritsar Municipal Dispensary ... ..	8	671	679	614	4	34	20	7	22	2,300	2,322	1,715	26	32	531	18	25
Hoshiárpur ... ..	...	129	129	115	8	5	...	1	1	3,214	3,245	2,826	197	1	218	3	4
Amballa ... ..	1	70	71	63	3	4	...	1	6	1,972	1,978	1,898	62	9	...	9	10
Ferozepore ... ..	...	12	12	9	2	1	...	...	8	1,276	1,284	1,172	34	28	38	12	12
Jalalabad Mamdote Estate ... ..	3	106	109	97	...	...	10	2	2	373	375	22	...	1	349	3	5
Ludhána ... ..	...	69	69	44	16	6	3	...	...	1,076	1,076	556	31	9	480	...	...
Rohtak ... ..	...	67	67	48	7	8	...	4	...	1,158	1,158	1,154	...	3	...	1	5
Gujránwála ... ..	...	28	28	25	1	2	...	...	...	1,294	1,294	948	61	31	245	9	9
TOTAL ... ..	12	1,220	1,232	1,065	45	72	35	15	99	19,864	19,963	15,450	1,038	166	3,213	96	111



APPENDIX VII.--PROVINCIAL TABLE L.

Statement showing mortality from Cattle Diseases during 1901-02.

1 DISTRICT.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	RINDERPEST.			ANTHRAX.			FOOT AND MOUTH DISEASE.			PLEURO-PNEUMONIA.			CHARBON SYMPTOMATIQUE.			OTHER DISEASE.			TOTAL.		
	Number attacked.	Number died.	Percentage deaths.	Number attacked.	Number died.	Percentage deaths.	Number attacked.	Number died.	Percentage deaths.	Number attacked.	Number died.	Percentage deaths.	Number attacked.	Number died.	Percentage deaths.	Number attacked.	Number died.	Percentage deaths.	Number attacked.	Number died.	Percentage deaths.
Hissar	...	...	...	...	...	...	...	...	140	...	...	...	...	...	...	1,076	6	...	1,216	6	...
Rohtak	...	...	...	...	...	...	...	...	90	...	...	...	...	...	...	813	2	...	903	2	...
Gurgaon	...	...	...	...	...	...	...	...	218	...	...	...	...	...	...	1,407	14	...	1,626	15	...
Delhi	...	...	...	...	...	...	...	...	109	...	8	...	...	...	...	585	4	...	694	12	...
Umballa	...	...	...	...	...	...	...	...	300	...	...	...	...	...	...	498	1	...	798	1	...
Karnal	...	...	...	...	...	...	...	...	618	...	...	...	...	...	...	387	20	...	1,006	21	...
Kangra	...	...	...	...	...	...	...	...	16,916	...	67	...	...	...	...	491	17	...	17,627	198	...
Hoshiarpur	...	...	...	...	...	...	...	...	2,901	...	3	...	...	...	...	1,276	...	...	4,201	3	...
Jullundur	...	...	...	...	...	...	...	...	783	...	8	...	...	...	...	665	10	...	1,686	204	...
Ludhiana	...	...	...	...	...	...	...	...	1,590	...	...	...	...	...	...	1,613	17	...	3,212	26	...
Ferozepore	...	...	...	...	...	...	...	...	580	...	...	...	...	...	...	1,995	52	...	2,594	71	...
Mooltan	...	...	...	...	...	...	...	...	427	...	6	...	...	...	...	573	12	...	1,000	18	...
Jhang	...	...	...	...	...	...	...	...	171	...	15	...	...	...	...	622	41	...	793	56	...
Lahore	...	...	...	...	...	...	...	...	1,174	...	39	...	...	...	...	1,248	63	...	2,570	172	...
Amritsar	...	...	...	...	...	...	...	...	471	...	9	...	...	...	...	806	10	...	1,313	34	...
Gurdaspur	...	...	...	...	...	...	...	...	254	...	7	...	...	...	...	1,101	18	...	1,376	30	...
Sialkot	...	...	...	...	...	...	...	...	1,256	...	...	...	...	...	...	3,750	19	...	5,012	23	...
Gujranwala	...	...	...	...	...	...	...	...	288	...	...	...	...	...	...	870	21	...	1,314	150	...
Gejrat	...	...	...	...	...	...	...	...	113	...	1	...	...	...	...	428	4	...	584	48	...
Shahpur	...	...	...	...	...	...	...	...	478	...	1	...	...	...	...	1,094	16	...	1,622	62	...
Jhelum	...	...	...	...	...	...	...	...	321	...	20	...	...	...	...	783	22	...	1,224	94	...
Rawalpindi	...	...	...	...	...	...	...	...	658	...	17	...	...	...	...	523	1	...	1,238	25	...
Dera Ghazi Khan	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	857	...	...	861	...	...
Mianwali	...	...	...	...	...	...	...	...	13	...	...	...	...	...	...	222	...	...	235	...	...
Muzaffargarh	...	...	...	...	...	...	...	...	70	...	...	...	...	...	...	166	...	...	243	7	...
Montgomery	...	...	...	...	...	...	...	...	288	...	1	...	...	...	...	365	11	...	653	12	...
Total	528	229	43.3	628	478	76.1	30,231	202	0.66	...	...	...	...	...	...	24,214	381	1.5	55,601	1,200	2.32



APPENDIX VII.—PROVINCIAL TABLE M.

Statement showing results of preventive inoculation against Rinderpest and Anthrax, during 1901-02.

1	2	3	4	5	6	7	8	9	10	11	12	13
Districts.	Names of villages.	AGAINST RINDERPEST.					AGAINST ANTHRAX.					REMARKS.
		Number of outbreaks in which inoculation was undertaken.	Number of animals which died uninoculated in course of outbreak.	Method of inoculation followed.	Number of animals inoculated.	Number which died after inoculation.	Number of outbreaks in which inoculation was undertaken.	Number of animals which died uninoculated in course of outbreak.	Method of inoculation followed.	Number of animals inoculated.	Number which died after inoculation.	
Jhelum ... ..	Tuna Ajaib ... ..	1	24	Serum alone.	106	...	...	...	...	...	...	These animals died within 6 days showing that they were suffering at the time of inoculation.
Do. ... ..	Muftián ... ..	1	12		132	2	...	...	...	...	...	
Do. ... ..	Chak Dadoo ... ..	1	34		40	...	...	...	...	...	...	
Do. ... ..	Chak Dirya ... ..	1	22		50	...	...	...	...	...	...	
Do. ... ..	Syad Hussain ... ..	1	4		60	...	...	...	...	...	...	
Do. ... ..	Khána Boki ... ..	1	7		47	...	...	...	...	...	...	
Do. ... ..	Maddo Kalia ... ..	1	3		28	...	...	...	...	...	...	
Do. ... ..	Tial ... ..	1	8		167	...	...	...	...	...	...	
Ráwalpindi ... ..	Sumbal Kark ... ..	1	27		107	...	...	...	...	...	...	
Do. ... ..	Barh Khan Záda ... ..	1	57		94	...	...	...	...	...	...	
Do. ... ..	Rubbar ... ..	1	24		133	...	...	...	...	...	...	
Do. ... ..	City ... ..	1	4		25	...	...	...	...	...	...	
Do. ... ..	Meda Halim ... ..	1	81		87	...	...	...	...	...	...	
Do. ... ..	Málpur ... ..	1	48		176	...	...	...	...	...	...	
Lahore ... ..	Sootar Mandi and Punjab Veterinary College ... ..	1	2		24	...	...	...	...	...	...	
Do. ... ..	Núr Street ... ..	1	1	3	...	...	...	...	...	...		
Do. ... ..	Kamálian ... ..	...	...	...	...	...	1	30	Serum alone. {	6	...	
Do. ... ..	Jourián Kalán ... ..	...	...	...	...	...	1	25		21	...	
Siáلكot ... ..	Jourián Kalán ... ..	...	...	...	...	...	...	...	...	...	...	...
	Total ... ..	16	358	...	1,279	2	2	55	...	27	...	...



## APPENDIX VII.—PROVINCIAL TABLE N.

*Showing the number of animals treated by Veterinary Assistants in villages, during the year 1901-02.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NAMES OF DISTRICTS.	Number of villages visited.	NUMBER OF ANIMALS TREATED AND CLASSED ACCORDING TO PRINCIPAL DISEASES.														Grand Total.
		Horses and Ponies.				Cattle.					Other animals.					
		Anthrax.	Surra.	Other diseases.	Total.	Rinderpest.	Foot and mouth.	Other diseases.	Anthrax.	Total.	Rinderpest.	Foot and mouth.	Anthrax.	Other diseases.	Total.	
				341	341		140	576		716				159	159	1,216
				338	338		90	424		514				51	51	903
				361	361		218	1,009		1,228				37	37	1,626
				179	179		109	338		447				68	68	694
				350	350		300	121		421				27	27	798
				229	237		618	102		720				49	49	1,006
				195	196		157	222		49				74	74	3,117
				225	225		19	2,857		904				44		4,201
				373	373		118	783		247				45	45	1,686
				623	623		1,590	807		9				183	183	3,212
				902	910		2	473		818				275	382	2,594
				393	393		427	83		510				97	97	1,000
				403	403		171	202		373				17	17	793
				546	546		24	956		564				138	368	2,570
				342	343		6	457		395				69	83	1,313
				629	629		207	382		21				90	137	1,376
				1,162	1,162		1,244	2,347		5				241	254	5,012
				401	405		20	239		341				128	209	1,314
				178	178		113	224		43				26	26	584
				505	506		478	360		50				228	228	1,622
				343	343		57	319		303				137	180	1,224
				280	280		57	425		104				139	372	1,238
				704	704		4	83		87				70	70	861
				94	94		13	123		...				5	5	235
				123	123		70	37		7				6	6	243
				127	127		225	172		397				66	129	653
Total	11,275	15	8	10,346	10,369	460	26,412	11,288	582	38,742	68	3,819	31	2,572	6,490	55,601



## APPENDIX VII.—PROVINCIAL TABLE O.

Showing total strength of Subordinate Veterinary Staff employed during 1901-02.

PROVINCE.	Provincial Funds.	Veterinary Inspectors.	NUMBER OF VETERINARY ASSISTANTS.					Total.
			Employed in Dispensaries.	Employed in work connected with horse and mule-breeding.	Employed in work connected with cattle-breeding and cattle disease.	*Non-effective.		
Punjab (Provincial) ... ..	Provincial ...	Nil.	7	Nil.	60	4	71	
North Punjab ... ..	Do. ...	...	...	12	...	...	12	
South Punjab ... ..	Do. ...	...	...	19	...	...	19	
Total ...	...	...	7	31	60	4	102	

\* i.e., on deputation or suspended and includes all not on full pay.











