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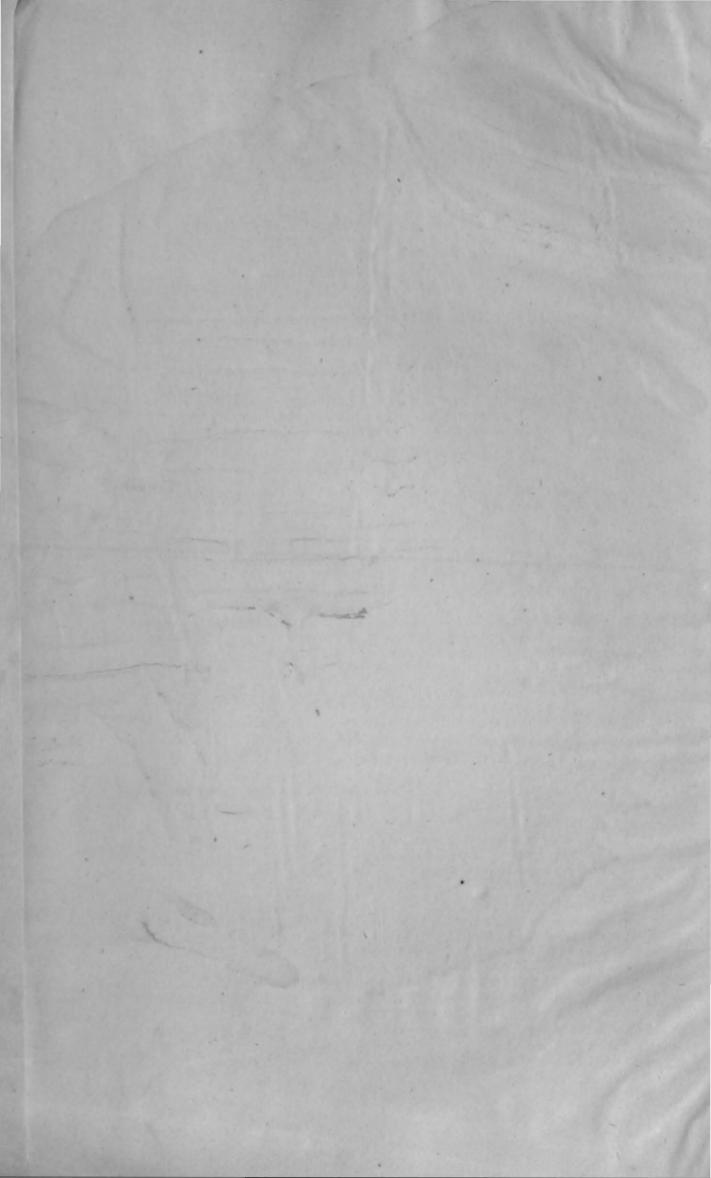
# GOVERNMENT CATTLE FARM AT HISSAR

FOR THE YEAR

1911-12.



Lahoue:
PRINTED AT THE PUNJAB GOVERNMENT PRESS,
1912.



# ANNUAL REPORT

OF THE

# GOVERNMENT CATTLE FARM AT HISSAR

FOR THE YEAR

# 1911-12.

DURING the year under report the farm was in charge of Lieutenant-Colonel Farmer from 1st to 18th April and October 17th to March 31st, and in my charge from April 18th to October 17th, under the administrative control of the late Inspector-General, Civil Veterinary Department.

- 2. The year under report has been a successful one in spite of the shortage of rain and the failure of the hay crop. This loss has been partly compensated for by the outturn of fodder from the cultivation. This portion of the farm has been improved so much that the stock is fed almost solely from its production. To support nearly 5,000 head of stock is no small matter. Before the Civil Veterinary Department took over charge fodder had to be purchased, entailing a large expenditure, especially in years of scarcity when fodder had to be bought at prohibitive prices. The present system of growing the fodder is the result of very hard work. Land has not only had to be levelled, but lowered to bring it under the command of the canal. Watercourses had to be made and walls built to protect crops from being damaged by wild pig and straying cattle. The result of all these improvements is now showing itself. In spite of the grass famine during the year, cattle have been well fed, and the net result of the year's working, as will be seen from the table attached, is good.
- 3. The farm is unfortunately situated at the tail of the canal, and therefore does not always get sufficient water. The Canal Officers always do their best, but if they cannot get sufficient water, they are unable to give the farm its full requirements.
- 4. The breed of cattle has immensely improved, and the casting of misfits greatly reduced. This has been brought about by careful selection. In former years no attempt was made to breed any type. Angole, Mysore, Gujrat, Nagore, Hariana, Sind and Amritsar breeds were all mixed up. Now a fixed type is being produced, much appreciated by those who take stud bulls from here.
- 5. Diseases have as usual given a lot of trouble, and have caused losses, but the careful way in which they were dealt with prevented still further loss. The following were the diseases:—

(1) Hæmorrhagic septicæmia.

(2) Contagious aptha or foot-and-mouth disease.(3) Charbon symptomatique or black-quarter.

(4) Strangles.(5) Navel ill.

Hæmorrhagic septicæmia broke out three times during the year (see table attached) on the Chaoni farm. To find out the source of these outbreaks, the Chaoni Bir was carefully inspected and two lowlying places found, beside the Hissar Major Canal, liable to be swamped by it. These are being cleared of all trees and brushwood and the canal leakage closed. While this is being done, the places have been surrounded by thorns to prevent cattle grazing there.

Epizootic aptha broke out in December, and as usual gave much trouble. Although the number of deaths from this disease is almost nil, it pulls the cattle greatly down in condition and handicaps their development.

Charbon symptomatique was the cause of only 6 deaths against 31 in 1910 11. This I attribute to the careful disinfection of land during previous years, combined with Blacklegoid inoculation. Endeavours are being made to find the sources of infection, and every portion of land in which black-quarter occurs is being disinfected. The table attached shows the places and dates on which this disease occurred.

Strangles (Febra pyogenica) generally occurs among the purchased young stock. This cannot be prevented as the animals get infected at the fairs where purchased. Although the disease is troublesome, treatment and

careful nursing reduce the losses to a minimum.

Navel ill occurs occasionally in spite of every precaution. The number of cases is being yearly reduced which is very creditable, considering the average yearly birth rate for the last three years has been 60 per cent.

6. I will now deal with the different departments of the farm separately:—

Herd bulls.—There were 21 present on 31st March 1912.

Changes during the year are-

Received by transfer from supernumerary bulls Received by transfer from male produce		2 4
Total		6
Decrease— Castrated and transferred to cultivation bullocks Rejected and sold by auction	::	5 1
Total		6

Great care is necessary in selecting these animals. The class of bull now in the herds is of a very high stamp and quality. Four bulls will be taken out of the herds next year, and will be replaced by young and better animals. Very good stock is expected from these animals in the future.

Supernumerary bulls.—There was only one bull present at the end of the year. This was lent to the Commandant, Viceroy's Body Guard, in 1910 for two years and is still there.

Changes during the year-

Received by transfer from male prod	uce			100
Decrease— Supplied to the district boards, Punj Supplied to the Civil Veterinary Dep	artment	United Pro	vinces	72 20
Sold to outsiders for breeding purpose	28	***	***	2
Transferred to herd bulls	***	***	***	2
Retransferred to male produce	***	***	***	. 9
offers. His before any other flash		Total		105

The number issued to district boards is almost double of that in former years. The price paid, Rs. 200, is too little for the class of animals supplied as the same class of animals can be sold for Rs. 400 in the open market. The committee which assembled in January 1907 valued bulls between the ages of 3 and 4 years at Rs. 250. The district boards have been getting them at Rs. 200, which is a loss to the farm. Even if Rs. 300 (a very moderate sum) be sanctioned for the high class stock issued, it would be only fair to the farm. It is hoped that there will be 110 bulls ready for issue next year which will be the largest number on record.

Male produce.—There were 935 males present on 31st March 1912.

Changes during the year-

Born during the year Received from supernumerary bulls	 	 372 9
	Total	 381

-								
-	ec	-	-	-	•	ж.		
	e o	91	ш	n.	æ	РС	_	_

Died	dualing by	a alcheman	-	63
Destroyed		***		4
Rejected and sold			***	8
Supplied for breeding purpos	es			1
Transferred to castrated pro-	duce		***	233
Transferred to supernumerar	y bulls	,	***	100
Transferred to herd bulls			***	4
				-
		Total		413

These have had a bad time during the year. First of all three outbreaks of hæmorrhagic septicæmia occurred which destroyed 32 animals. This was followed by a severe attack of foot-and-mouth disease, which pulled them down. Much extra work is thrown on the establishment through these outbreaks. Foot-and-mouth disease occurs so commonly owing to the fact that there are several roads through the Bir, and when a highly contagious disease, such as foot-and-mouth, is prevalent in the neighbouring village, cattle which are marched through the Bir contaminate the farm stock. Jackals, pariah dogs, birds and flies also play an active part in the dissemination of these diseases. It is only through constant watching and the care exercised that much loss is now prevented. One has to be constantly on the watch. The stock have to be inspected at the different farms as often as possible. Early detection may enable one to nip an outbreak in the bud and save great loss. Although foot-and-mouth disease causes only one per cent. loss, it gives a great deal of trouble in the treatment and nursing, and besides reducing the animals in condition, retards development and causes feet deformities.

Heifers.—There were 921 present on 31st March 1912.

Changes during the year-

$I_2$			

Andronop						
By births	Ste. 1983	103.E011	· ··· ·	(1) ve. 112	***	367
Decrease-						
Died	***	***		***	***	24
Destroyed						3
Rejected an	d sold by a	action		Sec. 2. 1000		15
Transferred	to cows					248
				Total		290

Cows.—There were 1,253 present at the end of the year.

Changes during the year-

#### Increase-

By transfer from femal	le produce	***		 248
ecrease—				
Died				 40
Destroyed				 6
Sold by auction	""	***		 171
			Total	 217

As will be seen a number of old cows have been cast which have been replaced by better and younger animals. This is a very fine herd now, and during the coming year the number be will brought up to nearly 1,450. This will help to meet the increased demand for bulls in the Punjab.

Calves.—Seven hundred and thirty-nine calves were born during the year. They are a promising lot of animals. I give here the number of calves born during the last four years:—

Year.		Number of calves born during the year.	Number of cows in the beginning of the year.	in the	er of cows e end of year.	
1908-09	100		787	1,097		1,199
1909-10	***		663	1,199		1,217
1910-11	***	1	809	1,217		1,222
1911-12			739	1,222	10-10-10-10-10-10-10-10-10-10-10-10-10-1	1,233

Bullocks.—One hundred and fifty siege train bullocks were supplied during the year:—

3rd (Lahore) Division 2nd (Rawalpindi) Division	***			•••	79 50
5th (Mhow) Division	***	10 100	994	100	21
			Total		150

The class supplied from here is first class, and it would be difficult to get animals of a similar stamp in the open market. The farm-bred bullock will hold his own against any in India. For the heavy ploughing that is done here with heavy English ploughs the farm-bred animals are the best. There are a few of the best bullocks procurable in the market on the farm, and farm-bred animals compare most favourably with them. The price of bullocks has considerably increased in the open market during the last few years, and really good animals are scarce. Jails have been purchasing farm bullocks for Rs. 175, and the Military Department for Rs. 150. It seems only right to point out that Rs. 175 should be the average price fixed for farm animals. It is impossible in normal seasons to purchase bullocks similar to those on the farm under Rs. 200.

Cultivation bullocks .- There were 261 present at the end of the year.

Changes during the year-

Increase-						
Received by	transfer f	rom herd bull	ls			5
Received by	transfer f	from castrated	l produce			41
				Total	4.1	46
Decrease-						-
Died			2000			
Destroyed		***	***	***	•••	4
Supplied to j	aile	***	***	***	***	2
Transferred	to Ordner	on bullooks	•••	***		11
Cast and sole	I	ice bullocks	***	•••		16
Onse and both	4	***	***	•••	***	22
				Total		55
Mules.—Ther	e were	133 present	on Slet	March 10	10	
Changes de		Present	on orst	march 19.	12.	
Changes durin	ig the y	ear—				
Born Purchased		***				22
rurenased	***	***		and makes the	***	60
			100		***	00
				Total		82

Decrease— Died			200			3
	-	***	***	-5897 day 540k		0
Destroyed		***	***	***	***	-
Rejected and	i sold	***	***	***	***	5
Supplied to	Rejected and sold Supplied to Military Departm					32
				Total		42

The farm-bred mules are superior to those purchased. This has already been explained in former reports. But occasionally an excellent mule up to Ordnance work is rejected by the Military Department on account of its being perhaps one inch under the standard height. This of course means a great loss, as the price of an Ordnance mule is Rs. 400 (little enough) and for transport Rs. 225; so that an inch means a loss of Rs. 175 per mule to the farm. The percentage of births this year is very good as will be seen by table XVII attached.

Pony mares (for mule-breeding).—There were 59 present at the end of year.

Changes during the year -

Increase-

TIE	By purchase				in the Day		17.
					Total	***	17
Dec	rease-					alau)	810
	Died	10 3 1370	min Kata	ALL DOUBLE	W. HORA		4
-	Destroyed Cast and sold	***	***		***	***	1
	Cast and sold	*** 1/4 1/4	T. PRIOR	and Terrain	7 10 20 10 10 1	- See	2
					Total	nicula de	7

The percentage of foalings was 47.3. Seven of the mares covered should have foaled during the year, but went over time and foaled at the beginning of April 1912. In working out the percentage of foalings the mares purchased in October last have not been counted. (If seven mares had not gone over time, the percentage of foalings would have been 62.3)

Pony stallion.—This is kept for bringing mares into season.

Pony colt.—The pony colt that was born was out of a mare in foal when purchased and was sold by auction as it was useless to the farm.

Pony filly.—There was one pony filly present at the end of year, the produce of a mare in foal when purchased.

Donkey stallions.—There are 5 jacks for mule and donkey breeding.

Changes during the year—

Increase-

	By transfer from donk	ey colts		***	441	1
				Total	1	1
Dec	orease—					-
	Died	***		***	***	1
	Rejected and sold Supplied to the United	Provinces			11.00	1
			701807	Total		3
	Calcutta Hansi Hissar Farmer's Boy		Italian ( Country Farm-bre Farm-bre		ranca).	Sing Cin

Calcutta, Hansi, Hissar and Farmer's Boy are all getting good stock. Harsookh is a very promising jack, and has only lately been taken up as a stallion. These jacks are used for both donkey and mule breeding. One jack, "Lokada," stationed at Gona, died during the year.

... Country-bred.

Donkey colts.—There were 70 present at the end of the year.

Changes during the year—

Increase-					
By births				2.	37
			Total		37
Decrease-					18/0
Died				1	4
Cast and sold					3
Supplied to Civil	Veterinary Der	artment,	Punjab		7
Supplied to Rajpi					1
Transferred to do					1
			Total		16
					-

The remaining young jacks are very good, and it is a lucky thing that the breeding of these was started, as animals like these cannot be purchased in sufficient quantities in the open market. To cope with Government requirements jacks would have to be purchased abroad. This would mean a great expense. It is only fair to point out that Rs. 400 is only allowed for jacks issued. This seems far too little, because even if Rs. 600 was allowed, it would be still a great saving to Government in comparison with foreign prices, shipping, etc. Only 8 jacks were issued during the year. This is accounted for by the losses in 1909 when a severe outbreak of infectious pneumonia destroyed a number.

Donkey mares.—There were 94 present at the end of year. Changes during the year—

Increase -

Decrease

Received	by transfe	r from donk	ey fillies		 10
				Total	 10
Decrease-					7
Died		***	44		 8
Cast and	sold	***			 6
				Total	 9

The management of these animals has been greatly improved, with the result that the percentage of foalings has been greatly increased. Seventy-five have foaled during the year and 60 have been examined and found in foal.

Donkey fillies.—There were 51 present at the end of year. Changes during the year—

Increase-					
By birth			***		31
			Total		31
Decrease-				200	
Died	***				
Cast and sold			***	***	*
Transferred to donkey	***	- ***	***	***	4
	шагев	***	***	•••	10
			Total		18
Camels.—There were s	even prese	ant at the	and of moon	30 100	10
Changes during the yes	ar-	ne at ene	ond of year		
Increase-					
By purchase		-	1		

Sheep breeding.—There were 347 ewes present at the end of the year. We have been more fortunate than usual with the sheep during the year. The sheep have kept healthier, and a larger number of lambs have been born. The flocks are divided up as follows:—

- (1) Three flocks of country-bred ewes with Merino rams.
- (2) One flock of half-bred Merinos with half-bred Merino ram.
- (3) One flock of pure bred Merino ewes with a pure Merino ram.

As it was found that the lambs in flock (2) all had strongly marked country wool, and none with Merino character, the half-bred ram was changed and a pure Merino ram placed with them, the result of which will be reported on next year. It is found that the wool of the half-bred first cross is finer than the wool of the second cross, that is, the second generation. Therefore (after consulting the late Inspector-General, Civil Veterinary Department) the experiment of mating the half-bred ewes with pure bred Merino rams is now being made.

The pure bred imported Merino ewes and rams do not do well here, as they suffer terribly from the heat during the months of April, May, June, July, August and September. With care and trouble they manage to survive.

Also they suffer more from the attacks of flies than the country sheep do. Wolves and wild cats give a deal of trouble. A wild cat (Felix Ornata) was caught and destroyed after it had managed to kill three Merino lambs.

Changes puring the year are-

Ewes.—Present on 1st April 1911 ... 313 (Ten of these are Merinos.)

Increase-

Received by transfer from female lambs ... 103 (Two of them are Merinos.)

Total ... 103

Decrease-

Sold by auction ... ... 48
Died ... 21 (One of these was a Merino.)

Total ... 69

Present on 31st March 1912 ... 347 (Eleven are Merinos.)

Rams.—There were 8 present in the beginning of the year.

Increase-

Received by transfer from male lambs ... 6 (Two are Merinos.)

Decrease-

Present on 31st March 1912 ... 10. (Five of these are Merinos.)

Female lambs.—Present on 1st April 1911 ... 157 (Two of these are Merinos.)

Increase-

Born during the year ... ... 199- (Eleven are Merinos.)

Total ... 199

Decrease -- Sold during the year

Transferred to ewes ... 103 (Two were Merinos.)
Died ... 31 (Two were Merinos.)

Total ... 137

Present on 31st March 1912 ... 219 (Nine are Merinos.)

Male lambs.—Present on 1st April 1911 101 (Two are Merinos.)

Increase-

Births during the year ... 218 (Six are Merinos.)

Total ... 218

Decrease—

Sold by auction ... 131
Transferred to rams ... 6 (Two are Merinos.)
Destroyed ... 2

Died ... 20 (Two were Merinos.)
Supplied for breeding purposes ... 2

Total ... 161

Balance on 31st March 1912 ... 158(Four are Merinos.)

- 7. Cultivation.—The failure of the rains already referred to had especially serious result as regards the cultivation, in that—
  - (1) No hay at all was saved, as grass in the Bir never grew to a sufficient height to cut;
  - (2) The barani crop sown in June was a complete failure;
  - (3) On the other hand, labour was unusually cheap and plentiful, enabling some permanent improvements in the shape of levelling fields, raising bridges, making water-courses, roads, walls and fencing to be carried out.

Approximately 80 acres of land previously impossible to irrigate satisfactorily were levelled and brought under the command of the canal.

Two miles of new water-courses were made, and about three miles of thorn fencing was set up.

Nearly 2,000 young sheesham trees have been planted.

While on the subject of labour, it may not be out of place to point out that although, owing to famine, the year under report has been one in which the labour difficulty has been less acutely felt than usual, still there is no sort of doubt that if the price of labour continues to increase in the future as it has done in the immediate past, some remedy either in the shape of higher wages or in the employment of more labour-saving machinery [will become necessary.

An increase in the wages of the menial establishment is not likely to make so large an actual difference to the expenditure as might at first sight appear, because —

- (1) in times of plenty the establishment is always much under strength, and casual labourers at higher rates of pay have to be entertained to carry on the work;
- (2) at such times the establishment consists mostly of old men and boys, able to carry on the routine work of herding and of the cultivation, but physically incapable of doing various odd jobs of heavy work which keep cropping up much as crushing grain (moving the bags, etc.), taking up young bulls, clearance of heavy jungle, etc., and casual labour again has to be entertained at extra cost.

On the whole the result of the cultivation of the irrigated lands was very successful, although much damage to young jowar was done by the plague of grass-hoppers in July and August.

The amounts of fodder received from the cultivation will be found in the table attached. I think the figures are highly creditable to the Farm Bailiff, Mr. MacCutchan.

An unusually large acreage was prepared and sown with oats, a very fine crop resulting, the figures for which will appear in the next report.

8. Workshop and machinery.—The shops were as usual kept busy with repairs to carts and agricultural implements. The extra carting of rations, due to the scarcity, involve extra wear and tear on the carts and consequently extra repairs.

The machinery generally worked satisfactorily: the combined thresher and straw bruiser is of the utmost utility, oat straw being a valuable food and bhoosa an economical form of feeding straw.

A portable engine for the above machine is badly needed, and would save much time and labour at present expended in carrying crops to the present stationary engine.

- 9. Hospital.—During the year excluding outbreaks of contagious disease mentioned above, the Veterinary Assistants at the hospital have treated on an average 46 cases daily and have performed 264 castrations. It will be obvious from the above figures that at times when contagious diseases, such as foot-and-mouth disease, strangles, or rinderpest, are also requiring attention, that the time of the veterinary staff is very fully occupied; and I am glad to record my appreciation of the hard work done by both Veterinary Assistants Ghulam Hussain and Muhammed Ashfaq.
- 10. The year under report has been of an unusually trying and anxious nature for the whole staff of the farm. Especial credit is due to Lieutenant R. Morris, Farm Overseer, for his unremitting attention to the stock under his charge.

The work of the clerical staff has been satisfactory.

## R. BRANFORD,

TABLE XVI.
RETURN OF ANIMALS FOR THE YEAR 1911-12.

-	-	-	-	-		-								-	-					-		-	-	-		-	,	-	-
	Detail.		Supernumerary bulls.		Male produce.	Female produce.	Castrated produce,	Ordnance bullocks.	Cultivation bullocks.	Mulos.	Pony marcs for M. B.	Pony stallions.	Camels.	Donkey stallions.	Donkey colts.	Donkey marcs.	Donkey fillies.	Rams.	Ewes.	Male Jamba.	Female lambs.	Wethors.	Female goats.	Female kids.	Male goats and kids.	Pony colt,	Pony filly.	Total.	Remarks.
	1	1	3	4	5	6	7	8	9	10	11	12	13	14	-	16	17	-	19	20	21	22	23	24	25	26	27	28	29
Balance	on 1st April 19	11 2	1	3 1,222	967	844	77		270	93	49	1	5	7	49	93	38	8	313	101	157		11	6	2	1	1	4,342	
	(By birth		-	-	372	367	***	***		22		***		***	37		31	***		218	199	***	***	12	9	100		1,267	
Increase	By purchase .			1	***	1		***		60	17	***	2				***			***	***				***	·		79	
	By transfer	-			-	-	233	150	46	***		***	***	1		10		6	103	***	***		3	***	***	***		915	
To	tal	. 27	106	1,470	1,348	1,211	310	150	316	175	66	1	7	8	86	103	69	14	416	319	356	***	14	18	11	1	1	6,603	
	Died			40	63	- 24		***	4	3	4	***	***	1	4	3	4	2	21	20	31		***	2	4	***	***	230	
Decrease 4	Destroyed	1	***	6	4	3	1	***	2	2	1	***		***		***		1		2	***						***	22	
	Sold	1	94	171	9	15	1	150	33	37	2	***	***	2	11	6	4	1	48	133	3	***	***		4	1		726	
(	Transferr e d	5	11		337	248	175		16	***	244	***		***	1		10			6	103	***		3		***		915	2 5, 50
Tota	1	6	105	217	413	290	177	150	55	42	7	***		-	16	9	-	4	69	161	137			5	8	1	***	1,893	
dalance on 1912.	31st March	21	(a)1	1,253	935	921	133	***	261	133	59	1	7	5	70	94	51	10	347	158	219		14	13	3	***	1	4,710	(a) One at Dehra Dun.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs,	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	(Rupees three hun dred and nine thou
Valu	ie	4,150	200	1,20,585	006'69	23,270	11,720	:	30,550	16,873	9,582	80	1,128	1,425	6,240	7,560	2,640	938	923	445	6674		73	90	10	-	40	8,09,0394	sand and thirty- nine, annas eight only.)

The 16th July 1912

R. BRANFORD,

Superintendent, Government Cattle Farm, Hissar.

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TABLE XVII.

## HISSAR FARM.

Results of donkey and mule breeding in the year 1911-12.

	register at close of	EMPLOY	ACTUALLY (ED AT UD.		OF MARES	COVER	OF MARES LED PER EMPLOYED STUD.		F PREVIOUS OVERINGS.	PREVIOU COVERI STA	RESULT OF US YEAR'S NGS PER LLION DYED AT JD.	Remarks.
	Stallions on re	Year under report.	Previous year.	Year under report,	Previous year.	Year under report.	Previous year.	Number of produce.	Number not held.	Average of produce.	Average not held.	
1	2	3	4	5	6	7	8	9	10	11	12	13
							-					
Donkey-breeding	5	6	. 5	87	91	14.49	18.2	(a) 75	16	15	3.2	(a) Includes 7 still born and prematures.
Mule-breeding	5	5	3	52	44	10.4	14*66	22	22	7.33	7:33	

HISSAR:

The 16th July 1912.

R. BRANFORD,

# TABLE XVIII.

# ABSTRACT SHOWING MAIN RESULTS OF THE WORKING OF THE HISSAR FARM DURING THE OFFICIAL YEAR 1911-12.

	Receipts p	aid into trea	sury.			Rs.	A.	P.
Sale of animals (a)						69,793	9	1
Sale of produce		***				14	0	0
Other heads	***					15,733	7	8
				Total		85,541	0	9
	E.	xpenditure.						
Salaries and travelling	g allowances	of officers			***	17,902	6	10
Do. do.	do.	subordinate	staff			82,728	4	1
Cultivation expenses						15,353	11	6
Feed and keep of anim	nals, includin	g reserve fodd	er, Rs. 8	8-6-0		21,245	1	5
Purchase of animals (	b)				***	18,629	2	1
Other heads						7,921	12	6
				Total '		1,13,780	6	5
Valuat	tion of anim	als issued on	book or	redit.				The second
Siege train bullocks						22,500	0	0
Army Transport bullo	ocks					,000		
Bulls								
Mules and donkeys						5,600		0
				Total		28,100	0	0
Faluation of anim	als, grain a	nd fodder &	X					
Valuation of animals	as per Table	XVI attached	1	ina ao ena oj	year.			
Do. grain		zz i z weracuet				3,09,039		
Do, fodder	***				***	1,304		10
	y and dead s	tock articles	***			58,385		
	would b	articles	***	THE STORY		44,726	14	8
				Total		4,13,456	3	1

<sup>(</sup>a) Includes valuation of animals issued on book credit.

Hissan:
The 15th July 1912.

R. BRANDFORD,

<sup>(</sup>b) Includes Rs. 7,514-2-1 being unspent balance refunded.

Month in which the disease broke out.	Class of animals.	Number of animals which died uninoculated in course of outbreak.	Number of animals inoculated.	Number of animals which died after inoculation.	Remarks.
May 1911	Male produce	1			
July 1911	Do	2			
November 1911 to January 1912	. Do	23	340	5	
February 1912	. Do			1	
		A LOSSON			

The 16th July 1912.

R. BRANFORD,

Statement showing number of deaths from black-quarter during the year 1911-12.

Serial No.	Date of death.	Number of the animal.	Class of the animal.	When inoculated.	Interval be- tween inocula- tion and death.	Serum.	Place where the animal died.	Remarks.
1	15th June 1911	326 Н. 4/9	Female produce	4th July 1919	Y. M. D. 0 11 11	Parke Davis	Kherwan.	
2	28th June 1911	100 Н. 2/0	Male produce	6th March 1911	0 3 22	Muktesar Black- legoid pillahs	Chowni.	
3	19th July 1911	181 H. 2/0	Female produce	10th March 1911	0 4 9	No. IV. Ditto	Kherwan.	
	12th October 1911	110 н. 1/1	Female produce	7th October 1911	0 0 5	Ditto	Hospital.	
1	ith January 1912	68 H. 1/1	Male produce	27th September 1911.	0 8 8	Ditto	Chowni,	
2	lst February 1912 2	98 H. 4/0	Male produce	27th June 1911	0 7 24	Ditto	Chowni,	

The 16th July 1912.

R. BRANFORD,

Statement showing the articles received from the cultivation during the year 1911-12.

Month and yes	ir.	Green	grass	-	Greducer			Oats.		Bi	usa.	1	Jowar, gre	een.	Jown	y.	Green	oats.	Ens	ilage.		cen.	G	iuar.		busa.		Pala.	1	Oats		Khi	1
		Md. S	r. Ch.	Me	l. Sr	Ch.	Md.	Sr. (	Ch.	Md. 8	Sr. C	h.	Md. Sr.	Ch.	Md. Sr.	. Ch.	Md. S	r. Ch.	Md. S	Sr. Ch.	Md. S	Sr. Ch,	Md,	Sr. Ch.	Md.	Sr. Ch	. Md	. Sr. C	h. N	Id. Si	c. Ch.	Md. Sr	. Съ.
pril 1911		822 1	0 0	53	14 (	0	100	32	0			-									1						-		-			***	
fay 1911		446 2	0 0	3:	24 (	0	676	22	0	949	24	0									10.		1		100	***	1		1			4 34	0
une 1911	***	733 2	0 0	2	06 (	0 0							3,266 0	0								.,								,			
uly 1914	***	1,109 5	0 0	1	51 20	0 0							6,505 14	0					5,314	4 0										***			
august 1911	***	1,029	0 0	1	46 20	0 0	364	0	0	728	0	0	6,714 23	0					1,641	0 0			3		18		1			***			
September 1911	***	805	0 0		45	0 0		***					758 4	0					E .					***			20	0 (	)				
October 1911	***	627	20 (		11 2	0 0									20 (	0 0					89 2	0 0			1		35	0 (		***			
November 1911		646	20 (		64 1	0 0	4	0	0	82	0	0			4,703 30	0 0				5	12	0 0					113	0 (	,				
December 1911	***	467	0 (				49	5 0	0	990	0	0			1,124 30	0 0	3,137	26 0					23	28 0	65	0 0		***				***	
January 1912	***	342	20 (	) :	277	0 0	8	4 0	0	168	0	0					6,499		1														
February 1912		209	20	1,0	030 1	0 0		***											1								1	***		***			
March 1912	***	316	20	0 7	700	0 0		***							***														6,0	00 0	0		
Total		. 7,055	10	0 3,	270	0 0	1,76	1 14	0	2,917	24	0	17,244 1	0	6,037 2	0 0	9,637	18 0	6,955	4 0	101 2	0 0	23 :	28 0	65	0 0	168	0 0	6,00	0 0	0	4 34	0

The 16th July 1912. 5

R. BRANFORD,

Valuation statement of grain and fodder balance in hand on 1st April 1912.

Quantity.	De	tail.		Amo	unt.		Tot	al.	
Mds. Sr. Ch.	G	ain.		Rs.	Α.	P.	Rs.	A.	P
	SSE		1780		-				
228 14 3	Gram	***	***	527	9	8			
160 3 3	Bran	***	***	330	2	7			
24 28 6	Oats	***		74	2	0	10.73		
0 21 14	Lucerne seed	***	***	10	15	0			
11 0 0	Anjan grass seed		***	22	0	0			
126 5 0	Jowar seed	***	***	315	5	0	ALC: NO		
. 0 7 0	Cotton seed			0	8	7	100		
15 14 0	Salt			23	8	0			
		Total				374	1,304	2	2
	For	dder.							
593 1 8	Bhusa			393	0	7			
23,468 12 0	Kurby jowar			31,291	1	0			
5.115 0 0	Hay			6,820	0	0			
10,089 4 0	Ensilage			10,089	1	7			
26 20 0	Guar bhusa			42	6	5	1000		
6,000 0 0	Oats in straw	***		9,750	0	0	SHE STATE		
		Total		***			58,385	9	

Hissar:
The 16th July 1912.

R. BRANFORD,

Superintendent, Government Cattle Farm, Hissar-

Valuation statement of stock articles including surgical instrument balance in hand on 1st April 1912.

	Rs, A. P.	Rs. A. P.
		11,268 9 2 20,346 3 10
	5,443 10 9	5,443 10 9 6,461 11 11
	B 500 0 0	643 9 0 563 2 0
		11,268 9 2 20,346 3 10 5,443 10 9 6,461 11 11 643 9 0

HISSAR:

The 16th July 1912.

R. BRANFORD,

