

**AWM4**

**Australian Imperial Force unit war diaries,  
1914-18 War**

Veterinary

**Item number:** 27/10/26

**Title:** Assistant Director Veterinary  
Services, ANZAC Mounted Division

April 1918



AWM4-27/10/26



**CONFIDENTIAL.**

**ORIGINAL.**  
**DUPLICATE.**  
**TRIPLICATE.**

Australian Imperial Force.

**WAR DIARY**

OF

VETERINARY SERVICES A.&.N.Z.MOUNTED DIVISION.

FOR

APRIL. 1918.

Signature of Officer compiling Munday Lt Col

Signature of Officer Commanding MT

*Handwritten:* 1918



# WAR DIARY

Army Form C. 2118

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II. and the Staff Manual respectively. Title Pages will be prepared in manuscript.

April.

## INTELLIGENCE SUMMARY

1918.

(Erase heading not required.)

Veterinary Services.

A. & N. Z. Mounted Division.

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
Jericho.	April	1st.	N.Z.M.R.Bgde and 2nd A.L.H.Bgde move back from Amman to the Jordan Valley. The horses of these Bgdes have suffered greatly from the cold and shortage of fodder but are looking extremely well under the circumstances.	
"	"	2nd.	Several horses are sent back to Richon by the advanced parties from the Mobile Veterinary Sections (2nd N.Z.M.V.S. 48, 7th M.V.S. 65, and 6th M.V.S. 18.) These are sorted out and several evacuated. The distance casualties had to travel was too great and on a very narrow and congested road. Amman-Es-Salt area to Jericho 20 to 25 miles, Jericho to Jerusalem 17 to 18 miles, Jerusalem to Iudd, where the 1st Field Veterinary Detachment took them over for trucking to hospital at Kantara, 33 miles-total 76 miles. This journey generally took four days so that it took the Section men at least seven days to get back to their respective Units. The animals moved off with two days rations and usually further rations were drawn at Latron. On several occasions men rode wounded animals through and returned on the A.S.C. motor lorries resulting in the time being shortened by two days.	<p><i>Richon to Jericho</i></p> <p><i>old maps</i></p> <p><i>Ayem Kara</i></p>
"	"	3rd.	Divisional order no 122 received. I.C.C.Bgde 1 section 60 pounders and 1 section of 4.5 Howitzer guns placed under command of G.O.C.A. & N.Z. Mounted Division for defence of bridgehead over Jordan at Ghoraniye. Large numbers of the carcasses of camels are strewn over the Jordan Valley and from the Intelligence Department it is reported that the enemy lost 45000 animals. Agents make various statements such as, - that these animals died from starvation, and that many died from Surra. One friendly Arab stated that on no account would the natives of the country pass over the river or the valley during the daytime whilst it is very hot, and the Surra biting flies are about during the months of May and June. Major Austin Entomologist of the London Museum and attached to 20th Corps finds the fly about the Wadi Ajja at this time and many are seen about the valley but so far no cases of Surra have appeared. By the end of the month it is found that the flies are not nearly so prevalent and it is suggested that this fact is due to the drying up of the grass, herbage, and the water in the Wadi's, the latter probably due to the large number of animals using it. At this season of the year myriads of small black flies "Simulium" or Buffalo-Gnat irritate the horses and make them particularly sore inside the ears. This is greatly relieved by smearing the inside of the ears with the "stock mangle camel dressing, (oil, sulphur, and cresol.) or dubbin and cresol, also by covering the ears. It is also found that as the area becomes dryer these flies disappear. All animals are kept off the plain and near to bushes as much as possible and all native animals are sent out of the Jericho plains as they may be carriers of Surra. There are still many cases of Biliary fever appearing and smears of blood from these and also native animals show a lot of Eosinophile Leucocytes which points usually to verminous infection of the intestine. It is considered that the activity of the worms during the spring gives rise to small Emboli which cause the Ecchymoses which is a very marked symptom.	<p><i>Appendix 1.</i></p> <p><i>Jabard</i></p>
			N.Z.M.R.Bgde have 18 horses killed and 9 wounded by enemy bombs.	

*J. Hendry Lt Col*



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April.

## INTELLIGENCE SUMMARY.

1918.

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Veterinary Services.

A.&N.Z. Mounted Division.

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
Jericho.	April	4th.	A.D.V.S. returns to Richon and directs the O.C.'s of Mobile Vety Sections to evacuate all unfit animals to No 1 Field Veterinary Detachment Ludd as soon as possible and return all fit animals to their respective Units. A.D.V.S. instructs Veterinary Officers of A.A.V.C. to make the necessary records in their War Diaries, pointing out their "deficiencies" so that the Veterinary Services of A.I.F. in Egypt may take a prominent place in the Australian War History.	
"	"	5th.	From this date no animals except those for evacuation are sent back to Richon or Ludd so that the Sections may clear all except their Unit animals. It is reported by Veterinary Officers of the 60th Division that between 40 and 50 draught animals of that Division were poisoned by eating the Solanum Plant which grows alongside the Wadi's of the Jordan Valley. 10 of these animals died. A.D.V.S. A.&N.Z.Mtd Division arranges with A.D.V.S. 20th Corps under which Corps the Division is, during the operations, to experiment on some captured animals, also some Army animals. A plentiful supply of the plant was obtained and the animals starved for 24 hours. About 3 lbs of the plant was given to each animal (4) along with some tibben in the morning and again in the evening also repeated the next day and each time the animals eat the majority of the plant but mountoward results were noticed.	
"	"	7th.	A.D.V.S. inspects the animals of 18th R.H.A. D.A.C., 6th A.L.H. Regt, N.Z.M.R. Bgde, and 2nd A.L.H. Field Ambulance and finds that except for a few low-conditioned animals in the D.A.C. they are all looking very well and greatly recovered from their recent hardships in the operations around Es-Salt and Amman. Casualties for these operations - 424 sent to M.V.S. 140 Evacuated. ( <del>126</del> ) 126.	
"	"	8th.	Batteries of the 18th R.H.A. Bgde are Brigaded when Division takes over defence of bridgehead and Capt G.C. Page is instructed to look after their animals.	
"	"	9th.	A.D.V.S. arranges with A.D.V.S. 20th Corps to evacuate a truck load of animals by train from Jerusalem.	
"	"	11th.	As it is likely that the Division will remain in their present position for a time, A.D.V.S. leaves the Sections at Richon until operations recommence. Enemy attacks and several horses are wounded. 18 are sent to Mobile Veterinary Sections.	
"	"	12th.	Several wounded cases are sent to the Sections and difficulty is found in handling them without the assistance of Brigades particularly as most of the Section men are on the roads with evacuation cases. 30 wounded cases are admitted from the 1st A.L.H. Bgde. All spare men are sent for. Sergt J.F. Prail clerk to A.D.V.S. leaves D.H.Q. for Moascar to await transport to England on leave.	
"	"	13th.	Capt Stuchbery A.A.V.C. is instructed to attend the animals of the 13th Pontoon Park R.E. whilst they are in the area.	
"	"	14th.	Trooper Randle G.C. of the 7th M.V.S. reports for clerical duties with A.D.V.S. and is appointed Acting Sergt whilst so employed.	

D. D. & L., London, E.C.  
(A8004) Wt W1771/M2031 750,000 5/17 Sch. 52 Forms/C2118/14

*Mendall D Col*



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April.

## INTELLIGENCE SUMMARY.

1918.

(Erase heading not required.)

Veterinary Services

A. & N. Z. Mounted Division.

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
Jericho.	14th.	April	A.D.V.S. inspects horses received by A. & N. Z. Mounted Division from the Yeomanry Mtd Division and reports to the A.A. & Q.M.G. that they are a poor class of animal with a large percentage of old animals. A.D.V.S. reports to A.A. & Q.M.G. on the urgency of obtaining fly veils for the horses.	Appendix No 2
"	16th.	"	Capt D.M. McNicol A.A.V.C. arrives at Jericho from Richon and takes over command of Mobile Section Details (Casualty Clearing Station) from A.D.V.S.	
"	Night	17/18	Divisional order 123 received, reference reconnaissance and demonstration by A. & N. Z. Mounted Division to Es Salt and Shunet Nimrin. Several "Biliary fever" or suspected Surra cases are admitted. Blood tests negative. Membranes very injected, temperatures 103 to 100. Some with diarrhoea and restless.	
"	"	18/19	A. & N. Z. Mounted Division move over to the West bank of the Jordan and commence operations on Shunet Nimrin. Forage scale being issued Barley 5lbs gram 7lbs Indian hay (grass) 6lbs tibbin 1 1/2 lbs Sucraphaille 6lbs " 4lbs " " 4lbs tibbin 6lbs bran 2lbs sucraphaille 2lbs.	
"	"	19/20	1st A.L.H. Bgde relieved by infantry of the 60th Division and cross the river to join the Australian Mounted Division for operations.	
"	"	21st	Animals Casualties Killed 27 Wounded 53. Rations issued Barley 6lbs gram 3lbs maize 2lbs sucra- phaille 3lbs tibbin 4lbs Indian hay 5lbs bran 1lb. General Allenby's Jerusalem despatch dated 15/4/18. Capt Ernest Nomus Wood A.A.V.C. is awarded the Military Cross.	
"	"	22nd	Specimens of the Surra fly are exhibited to V.O's and others, Appendices correspondence. Memo received from A.A. & Q.M.G. with specimen of improvised chaff-cutter to be used by all Units for chaffing Indian hay. A.D.V.S. reports that cutters are useless to Units in the field and recommends that chaff-cutting should be done at the base and compressed into bales like the tibbin.	Appendix copy of sketch.
"	"	23rd.	A.D.V.S. proceeds to Enab for the purpose of choosing a camp site for Mobile Veterinary Sections but finds that the area is very limited and that no forage dump is formed there so reports that as Richon has to be evacuated that the Sections be brought forward to Jericho.	
"	"	24th.	Descorps take over Jericho area from 20th Corps at 1800 25/4/18. The following Units will be attached to Desert Mounted Corps, Imperial Service Cavalry Bgde, (Indian) 20th Indian Infantry Bgde, Imperial Camel Bgde, Dead Sea Flotilla, 10th Heavy Battery R.G.A., 583rd Siege Battery R.G.A..	
"	"	25th.	Yeomanry Mtd Division will be known as 1st Mounted Division. (Indian establishments).	
"	"	26th.	Instructions issued to Mobile Veterinary Sections in reference to move from Richon to Jericho; Sections will move from Richon to Latron on the 28th inst, under the command of Major A.H. Robin who will be responsible for all march discipline and who will make all the necessary arrangements for bivouac sites and rations at Latron and any other bivouac area he may stay at during the rest of the journey. Sections should reach Jericho by 1/5/18. No troops to camp near Jerusalem. Telegram is also sent advising that no vehicles are to travel on the old Roman road to and from Jericho.	

*M. J. Kelly*



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## INTELLIGENCE SUMMARY

1918.

Veterinary Services.

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A.&.N.Z.Mounted Division.

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices																																			
Jericho.	26th.	April	A.D.V.S. proceeds to Talat ed Dum to confer with D.D.V.S. over operations etc, necessary orders are issued later. Order no 124 received and the following troops come under the orders of Descorps 1/1st Worcester Yeomanry, 9th Mountain Artillery Bgde, 60th Division, No 11 L.A.M. Battery, No 12 L.A.M. Battery, Imperial Camel Bgde, 1/1st Staffs Yeomanry, and Corps Bridging Train.R.E.	Appendix No 3.																																			
"	27th.	"	A.D.V.S. inspects the horses of the N.Z.M.R.Bgde and finds them in very good order considering the strenuous time they had during the Amman operations. Mobile Veterinary Sections change camp at Jericho from K27 to K21 Map Jericho XVIII																																				
"Night	28/29.	"	2nd A.L.H.Bgde move over the river to protect bridgehead at Mahadat-Hajla. 1st A.L.H.Bgde, 2nd A.L.H.Bgde, and N.Z.M.R.Bgde move over to west plain for operations on Shunet Nimrin and Es-Salt. Rations carried were 3 days for men and 2 days for animals. (19 lbs.) Extract from <del>Div-Routine</del> A.I.F. order No 19 25/4/18. PARA 4. Administration A.I.F. in Egypt. The following Officer under the G.O.C. A.I.F. in Egypt will administer the personnel in Egypt of the Arm or Service to which he belongs. All transfers to, or from this Arm or Service will be submitted to the Officer Administering for his recommendation before being submitted to the A.A.G.-A.I.F. in Egypt for approval. A.A.V.C. Senior A.D.V.S. A.I.F. in Egypt. This cancels A.&.N.Z.Mtd Div Order No 6 Para 33 of 18/4/1917, and A.I.F. in Egypt Order No 8 Para 8 of 13/6/1917. <del>A.A.V.C. Capt D.N.Mc Nicol ceased to be seconded with 2nd N.Z.M.V.S. and is posted for duty to H.Q. A.&amp;.N.Z.Mtd Div, 27/3/18.</del> Division operating in the field <del>Appendix. (Copy of D.R.O. 125.)</del> The number of animal casualties for the month are as follows:- <table style="margin-left: 40px; border-collapse: collapse;"> <tr> <td>6/4/18.</td> <td>K.D.</td> <td>OR</td> <td>DYD.</td> <td>73.</td> <td>Evacuated</td> <td>40.</td> </tr> <tr> <td>13/4/18.</td> <td>"</td> <td>"</td> <td>"</td> <td>36.</td> <td>"</td> <td>18</td> </tr> <tr> <td>20/4/18.</td> <td>"</td> <td>"</td> <td>"</td> <td>47.</td> <td>"</td> <td>18.</td> </tr> <tr> <td>27/4/18.</td> <td>"</td> <td>"</td> <td>"</td> <td>10.</td> <td>"</td> <td>63.</td> </tr> <tr> <td>Total-</td> <td>"</td> <td>"</td> <td>"</td> <td>166.</td> <td>"</td> <td>139.</td> </tr> </table>	6/4/18.	K.D.	OR	DYD.	73.	Evacuated	40.	13/4/18.	"	"	"	36.	"	18	20/4/18.	"	"	"	47.	"	18.	27/4/18.	"	"	"	10.	"	63.	Total-	"	"	"	166.	"	139.	
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Total-	"	"	"	166.	"	139.																																	
			Note- Richon le Zion is marked on the Map as Ayun-Kara.																																				
			<i>Mendall</i> Lieut-Col. A.D.V.S.																																				



WPA  
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# WAR DIARY

OF

VETERINARY SERVICES A.&.N.Z. MOUNTED DIVISION.

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FOR

APRIL.

1918.

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## LIST OF APPENDICES.

No.	Subject.
1.	SURRA.
2.	FLY VEILS.
3.	INSTRUCTIONS RE OPERATIONS.
4.	DO.
5.	C.T.C. GENERAL INSTRUCTIONS.

*Munday L.C.O.*



APP. No 2.

COPY  
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In the Field.

A.A.&Q.M.G.

A.&N.Z. Mounted Division.

Reference fly veils for the horses of this Division.

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Owing to the flies being in large numbers in this area it is advisable that an issue be made as soon as possible. A small black fly is particularly irritating the animals about the ears but so far is causing no other untoward results. *Amulim*

*McDonald* Major. A.D.V.S.

WAP  
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APP. No 1.

COPY.  
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G.S.O.1.

A.&N.Z. Mtd.Divm.



Reference telegram P.C.Q.T. 374, dated 20th, from 20th Corps on the matter of the "Surra" fly.

It is certainly advisable that the animals of any Units of this Division that are not required in the low-lying ground of this valley, for tactical reasons, should be moved up on the side of the hills away from the Wadi.

*McDall* Major. A.D.V.S.



COPY.

SECRET



In the field.

28.4.18.

56 A.&amp;.N.Z.

Instructions to Veterinary Officers regarding any operations

Mounted Division until otherwise notified.

Advanced Brigade  
Veterinary Parties.

The o.c.'s of the 6th 7th and 2nd N.Z.M.V. Sections will at once detail one N.C.O. and 8 men of their Sections to accompany their respective Brigades for the purpose of conveying sick and wounded animals from Brigades and attached Units to the Sections at Jericho in the first instance.

Rations.

These parties will proceed with 3 days rations for the men and 2 days for their horses.

Mobile Veterinary Sections.

The Mobile Veterinary Sections less details with Brigades will remain in their present camp sites at Jericho K 21 Map XVIII until further notification.

The Sections will be moved forward according to the progress of operations and Brigades will be notified of any alteration of their location.

Major A.H. Robin O.C. 7th M.V.S. will be senior Veterinary Officer of the A.&.N.Z. Divisional Mobile Veterinary Sections, and will arrange for an Officer of the Sections to attend any Units in his area that are attached to A.&.N.Z. Mounted Division.

Veterinary attendance of attached Units.

Veterinary Officers will make any necessary arrangements to attend the animals of Units attached to their respective Brigades during operations.

The D.V.S. hopes to open a Veterinary Detachment for the reception of casualties at Jerusalem in a few days to which, convoys of sick and wounded animals fit to travel will be evacuated from Jericho as opportunity occurs.

Until the Detachment is available all cases will be held and treated in the Mobile Veterinary Sections at Jericho.

Units not attached to Brigades or D.H.Q.

Capt Mc Nicol A.A.V.C. will visit any Units not attached to Brigades, which are under the command of the G.O.C. A.&.N.Z. Mtd Division.

Casualty Returns.

All Veterinary Officers must send their animal casualties daily to A.D.V.S. during operations.

Report.

V.O's will report immediately any matters affecting the health of the animals of their Units.

Copies to-

1st A.L.H. Bgde  
1st A.L.H. Bgde. V.O.  
2nd A.L.H. Bgde.  
2nd A.L.H. Bgde. V.O.  
N.Z.M.R. Bgde.  
N.Z.M.R. Bgde. V.O.  
A.A.&.Q.M.G.  
Divisional Train.

Divisional Troops.  
O.C. 6th M.V.S.  
O.C. 7th M.V.S.  
O.C. 2nd N.Z.M.V.S.  
18th R.H.A. Brigade.  
20th Infantry Brigade.  
9th Mountain Art. Bgde.  
Corps Bridging Train.

G.S.O.1.  
Imp Service Cav Bgde.  
Capt Mc Nicol.  
D.D.V.S.  
Descorps.

*J. Kendall* Major.

A.D.V.S.





W 88  
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APP. 404



In the field.

13.11.17.

Instructions for O.Cs of Mobile Veterinary Sections of  
Anzac. Mtd. Division.

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All will proceed to Mejdal as speedily as possible where Brigades have left any of their knocked-up animals or sick. (at the well near the pumping station.) Mejdal is situated about 16 miles from Gaza on the left side of the Gaza-Jaffa Road. Forage dumps at present 2 miles north east of Gaza are pushing forward to Julis tonight, so that Units may draw their rations from there, (which is 3 miles from Mejdal.) Major Robin will detail a reliable N.C.O. and one man to proceed to Auf, where several horses of the 2nd A.L.H. Bgde are awaiting evacuation. Evacuation centre is now at BeLah but will probably be at Gaza about the 17th inst. Sections will remain at Mejdal till otherwise ordered. They will also take any instructions through D.D.V.S. because communication from Division is only by wireless and D.R.L.S. to Descorps so that it is impossible for me to issue any orders direct. It is likely that an extended advance will be made so that Sections must be prepared to move forward and be prepared with supplies. Water is the great difficulty and it is also difficult to arrange supplies for small parties so that as soon as the opportunity occurs the Sections will be instructed to join their Brigades.

Major Robin. Please repeat to O.C. 6th, and  
N.Z. Mobile Veterinary Sections.

*Wendall* Major. A.D.V.S.



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*APP. 105:*

**CAMEL TRANSPORT CORPS**

**GENERAL  
INSTRUCTIONS.**

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This publication supercedes all  
previous instructions of a similar nature.



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# CAMEL TRANSPORT CORPS

General Instruction.

## GENERAL INSTRUCTIONS.



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This publication supercedes all previous instructions of a similar nature.



## CAMEL TRANSPORT CORPS

### General Instruction.

The camel is a delicate animal, and to obtain any good results from its employment must be handled with the greatest care and consideration. This form of transport has invariably proved a failure with British Troops owing to non observation of the ordinary principles which every private camel owner follows.

Never overload.

Never overtax.

Never neglect.

As far as possible, there should always be 10 per cent. spare camels. To work camels 8-9 hours (many of them very hot) a day, 7 days a week, under excessive loads



spells disaster. 40 hours a week, before 8 a. m., or after 5 p. m., should not be exceeded except in Military necessity.

**A. — Camps,**

1. A camel camp should be not less than a mile from vegetation and water, owing to the presence of flies which spread disease. The ground should be level, free from stones, and, whenever possible, sheltered from the wind in cold weather.

2. **Feeding :** - The proper feeding and watering of the animals is the most important factor in the efficiency of camel transport. Officers Commanding Companies should arrange that all Section Officers, Non-commissioned Officers, and drivers, are present at feeding and watering parades. All other work should, as far as possible, give way to this. Animals not eating or drinking well should be noted and attended to.

10 lbs. of grain and 12 lbs. of tibben is the usual daily ration. The camel should be given half his ration in the morning, and the other half in the evening.

Forage should never be placed on the ground. Some sort of a manger should be provided, or the food placed on a cloth or sack.

3. **Watering :** - It is inadvisable to attempt to lay down fixed rules as to the frequency with which the camel should be watered, as the number of days which he can healthfully remain without water varies according to his state of health, the temperature of the climate, juiciness of the grazing, amount of work he is doing etc. etc. Under some conditions he will only require water every second or third day and at other times he thrives even when watered at longer intervals.

The camel should, if possible, be watered from a trough. It is bad for his feet to make a practice of watering him at the edge of a river or pool.

Camels, when thirsty, require from 15 to 25 gallons each. When they are very thirsty they must not be allowed to drink their fill as soon as they reach the water, but



should be allowed 4 or 5 gallons at first and be brought back at a later hour to drink all they require. They should only be watered some hours after feeding. Camels will not drink until the sun is well up in the morning. Brackish water is not harmful.

No camel should be taken from the water until it is certain that all have finished drinking, as some drink more slowly than others, and will cease drinking when they see their companions leaving the water.

**4. Grazing :** - When morning stables and parades are finished, the camel should at once be sent out to graze. The plants that a camel eats are very numerous and vary in every district many being of the most unlikely appearance and very thorny, but even these are excellent feed if the camel is accustomed to them.

**5. Grooming :** - The camel should, whenever possible, be groomed regularly once a day, particular attention being paid to the grooming of his hind legs, as the camel frequently stales down his legs, and if these

are neglected, troublesome sores are formed. When flies are troublesome, camels should be "buttered" every 15 or 20 days with Mange dressing (this is made up in the Veterinary Stores and issued ready) its main constituents are Sulphur, butter (Senn or oil), it should be applied wherever the skin looks at all unhealthy, The ground used for stables should be frequently changed.

**B. - On the line of march : -**

Subject to Military necessity, the considerations to be borne in mind are : -

1. The animals should not work more than 8 hours a day.
2. They should be allowed to graze as long as possible between 9 a. m. and 5 p. m.
3. The personnel must get sufficient rest at night.
4. With marches of not more than 15 miles the whole may be done at once, but if 20 miles are demanded it is better to do the larger portion in the morning, and the balance in the evening. If more than 20 miles have



to be marched, the extra distance should, if possible be done at night.

5. **Pace of march:** - The pace of baggage camels under favourable conditions is  $2\frac{1}{2}$  miles an hour.

6. If circumstances permit, the camels should be on the road by 2 or 3 a. m. In hot weather, they should not be called upon to march between 8. 30 a. m. and 4 p. m., but in very hot weather it is often advisable to make two marches during the hours of darkness.

7. **Picketing:** - On the line of march camels should generally be hobbled when grazing, and invariably so if active Military operations are in progress. At night camels should be picketed, care being taken that the head rope, when tied to the picketing rope, is left sufficiently long to enable the camel to turn his head and neck freely, and that the head rope is tied with a draw knot which can be quickly and easily undone. Not less than two yards of frontage per camel should be allowed.

8. **Feeding on the march:** - 10 lbs. of grain is the ration on the march. When camels are on full rations, they should be given half their ration (5 lbs.) in the morning, and half in the evening. If on half rations, they should be fed after the evening march only. If very early starts are made, the first feed should be given after arriving in camp, but if time permits of feeding before saddling up, 3 lbs. should be given then, and the remainder with the evening feed, but never more than 7 lbs. at one feed.

When camels are tired (1) they should be allowed to rest for at least an hour before a ration of grain is given them and (2) they should be allowed to rest as long as possible after being fed, for the purpose of ruminating.

9. **Loads:** - The average camel load is 350 lbs. in weight or two fantasses, each containing about  $12\frac{1}{2}$  gallons of water.

Great care should be taken to see that the loads, when on the camel, are properly balanced and securely tied. Generally speaking, animals should not be made to bear their burdens for more than 6 hours at a stretch.



10. **Saddlery :** - The first consideration is a properly fitting saddle, and the greatest care should be taken that the saddlery is in good order. This is all important if efficiency is to be maintained.

**Care should be taken : -**

(1) That nothing be carried on the saddle which rubs against the camel, and that the saddle does not pinch the camel's withers or work back on to the hip bone :

(2) That the saddle does not lie on one side, is properly girthed up, and does not oscillate ;

(3) That the breastplate is worn sufficiently tight ;

(4) After saddling up, before starding, that all camels are made to stand up so that they can stale ;

(5) That saddles are not removed on halting until the back has cooled down ; and

(6) That camels are carefully inspected for saddle galls and no animal suffering from a sore back is worked, but is sent to hospital

if it does not show signs of improvement.

11. **Halts :** - A halt of ten minutes should be made about half way during a march of over 10 miles to allow the animals to urinate.

**VETERINARY NOTES.**

1. **Surra**

is a disease affecting both horses and camels, and is due to a parasite in the blood, called a "TRYPANOSOME". It is the same class of disease as Nagana or Tsotso fly disease. It kills horses in about six weeks, but camels may harbour the parasite for a year or more before it proves fatal to them, if they are not hard worked.

The general symptoms are : - fever and lassitude followed by wasting; yellowness, and red spots on the lining of the eye and nose : swelling of the legs, belly and sheath; but the disease is well established before any symptoms become apparent. In the early



stages it can only be definitely diagnosed by a microscopic examination of the blood. Under favourable conditions treatment is sometimes successful, but practically it may be regarded as a fatal disease.

It is spread by blood sucking flies biting a healthy animal after they have fed on an affected one. The usual class of flies which spread it in this manner are the "Tabanidae"—generally called "horse flies" or "cleggs" in England. They are active from April to September, and infest damp and shady localities. They lay their eggs on the under surface of leaves or blades of grass overhanging fresh water. They only bite during the daylight and are not found more than a mile from their habitat unless carried by animals, or by the wind.

The Eastern edge of the Delta; the Suez Canal Zone; the road from Kantara to Katia; and roughly, all places in the Sinai Peninsula where there is permanent water and vegetation are known to be more or less infested.

In the KATIA district the disease is very

- prevalent, and biting flies are numerous during the summer.

As to the actual period of their activity, evidence is not very accurate: they appear in April or May, and are popularly supposed to disappear after forty days.

The probability is that, as in other districts, they will be found active throughout the summer. This however is not well established, but in any case, due precautions should be observed to avoid them.

The zone they infest is roughly from BIR-EL-GILBAN to BIR-EL-SALMANA.

The northern road to EL-ARISH along the sea shore and BARDAWIL PENINSULA and the country east of BIR-EL-SALMANA is free.

In this country camels are said to be more frequently attacked than horses, but this may be due to the fact that large bodies of horses have not previously been located for any length of time in or near fly infested areas.



Many experiments have been carried out in "dressing" with various materials to keep flies away and none have been practically successful; but although it can hardly be expected that infection will be completely avoided during active operations, the adoption of the following precautions will minimize the risk very considerably.

(1) To camp in the desert and not near cultivation or fresh water canals.

(2) As the prevailing wind is said to be from the north during the summer, to camp to the north of cultivation is possible.

(3) To camp horses and camels far apart.

(4) To destroy all cases which are definitely diagnosed.

(5) To move through known fly zones at night, if practicable.

(6) To keep the neighbourhood of water troughs bare of all vegetation and quite clear of horse dung.

**Symptoms :**

Gradual emaciation, frequent urination,

oedematous swellings (i. e. swellings containing fluid) of limbs, abdomen, chest etc. and fever.

In the latter stages the animal is reduced to a mere skeleton. Some cases grow steadily worse from month to month, others show improvements at intervals, and these cases, if they survive 3 years may recover and be immune to further attacks.

Camels known to be diseased should be destroyed.

**Duration of disease :**

The disease is very chronic in the camel, and might take six to twelve months or more to kill the animal.

Every effort should be made to ascertain whether the grazing area is free from the fly before allowing the animals on it. If possible, animals should not be allowed to graze near places where the fly is known to be.

(a) Camp at least one mile from water,

(b) Do not graze near water.



(c) Water camels at wells which are free from trees and vegetation.

## 2. Coughs :

Are caused by exposure to climatic changes, in winter the changes are very sudden and the wind very cold. Principally seen in young, unacclimatised camels during their first winter and in delicate camels.

### Prevention :

Screens, to protect the animals from the very cold winds, especially in exposed places, will prevent many cases of coughs, pneumonia, and gastric intestinal affections.

### Treatment :

Screens, rug up and good nursing.

## 3. Disease of the digestive apparatus. :

Various diseases occur as in other ruminants, but the conditions most common are colic, constipation and diarrhoea. Diseases of the digestive system require investigation.

## Chief causes of colic, diarrhoea & debility:

- (1) Irregular feeding and watering.
- (2) Dirty food, especially sand in food.
- (3) Watering too soon after feeding.
- (4) Not allowing camels sufficient time for rumination after feeding.
- (5) Camels when first put on convoy work on whole grain ration usually get diarrhoea. This passes off when they become accustomed to the work.

### Treatment :

All such cases should be treated by a purgative and stimulant. Diarrhoea is often an effort of nature to rid the intestinal tract of something injurious, and it is a mistake to stop it at once.

Drench for constipation : - Epsom salts. 1 lb.

Drench for diarrhoea : -

Linseed oil (sem-sem oil). 1 pint.

Turpentine. 1 1/2 oz.

## 4. Bites from other camels :

These require early antiseptic treatment,



otherwise, the wounds become septic and give considerable trouble; they are often punctured wounds and require careful treatment.

**Hospital case.**

Remove scabs, generally septic underneath, dress as ordinary wound; if punctured wounds get antiseptic to the bottom of the wound, and do not allow wound to close on the surface until certain that it is healthy and healed from below.

**5. Foot injuries by thorns, stubs, etc :**

Not troublesome if condition noticed early and foreign body removed; but troublesome if pus forms. In ordinary cases syringe out with antiseptic lotion and apply a pad of tow soaked in antiseptic oil, cover the foot with a boot of sacking or leather.

**Hospital case.**

If pus forms, it is necessary to get drainage, but the opening should not be larger than absolutely necessary, as large wounds are difficult to get healed up and well covered with horn.

**6. Sore feet from hard, rocky ground etc.**

Apply blue stone, one part, powdered and mixed with 8 parts of tar. Also the free use of salt and onions rubbed on to the foot is very efficient.

**7. Chapped hocks :**

Apply ointment made of oxide of zinc, one part : Semn 8 parts : or the following dressing : -

- Acetate of lead ..... 1/4 oz.
- Sulphate & Zinc ..... 1/4 oz.

Dissolve in a half pint of water, then add half pint of sem-sem or linseed oil, and shake to form an emulsion. This forms an excellent



dressing for blistered or chapped surface, cracked heels etc.

**8. Sores on the chest pad from bar-raking on hard ground :**

They heal well if carefully treated anti-septically, if neglected, they become chronic, the sore refuses to heal and the formation of the horny covering is arrested.

**Hospital case :** In chronic cases caustic application of Sulphate of Copper (bluestone) and tar dressing might be tried, and the pad protected by a leather cover.

**9. Injuries to the eyes :**

Caused by grass, thorn, etc. They vary in degree from a simple scratch to severe laceration or puncture of the eye-ball.

**Treatment :**

Keep a shade over the eye (a piece of cloth kept damp is very useful). As a lotion

dissolve two tea spoonfuls of boracic acid in one pint of hot water, and use when cool.

**10. Saddle injuries .**

Usual causes are ill-fitting saddles, badly balance loads etc. Parts which are not meant to bear weight are the principal seats of the injuries : injuries to the various parts of the spinal column from the withers to the lumbar regions, and on the transverse processes posterior to the last rib in the region of the loins.

Injuries vary in degree : saddle galls, followed by abcess formation, loss of tissue, formation of sinuses, and serious deep-seated wounds through extension of suppuration injury to the vertebral bones followed by death of the injured part "Necrosis"

**Hospital case.** Neglected injuries in the region of the withers soon become very serious and require extensive surgical treatment to prevent an incurable condition.



**Hospital case**

Injuries to the prominent processes of the vertebrae in the loin region are likely to develop into an incurable condition if neglected, owing to pus finding its way through abdominal wall setting up internal abscess and death from septic peritonitis.

**Treatment.**

**Local sick Lines.**

(a) **Saddle galls.** Remove the pressure, apply a pad sacking soaked in cold water, and keep wet: in the early stages this will often cause the swelling to disperse.

**Local sick Lines.**

(b) **Saddle-sores.** (SUPERFICIAL): Cleanse, dress with antiseptic powder, and cover with a thin layer of cotton wool: a little Vaseline or Semn round the edges of the wound encourages healing, keeps the edges of the wound soft, and the cotton wool in place.

**Hospital cases.**

(c) **Abcess.** Resulting from injection of the injured tissue by pus organisms. Open abcess at the most dependent part in order to get good drainage, syringe out cavity, and plug with tow soaked in antiseptic oil; keep a look out for any extension of the abcess and secondary abcesses, open them up and treat cleanly with antiseptic.

**Hospital cases/**

(d) **Injury to the bones with death of the part, roughening of the bone or fracture.**

Expose the affected part scrape the roughened surface to remove all dead tissue, see that there is dependent opening for drainage, treat antiseptically, and plug wound so that healing takes place from the bottom.



**Hospital cases**

(e) **Important points in the treatment of saddle injuries.**

- I. Energetic antiseptic treatment in the early stages will prevent serious complications.
- II. A chronic very foetid discharge points to necrosis of bone.
- III. Hair should always be removed from the edges of the wounds.

**11. Antiseptic dressings.**

- (a) **Wet dressings.** - Carbolic acid, one tablespoonful to one quart of water. Jeyes Fluid or disinfecting fluid as supplied by the Supply Department can be used one teaspoonful to one pint of water.
- (b) **Oil dressings.** - Turpentine, 1 oz.; creosote of disinfecting fluid,  $\frac{1}{4}$  oz.; linseed or sem-sem oil 4 ozs. mix together.

**12. Camel pox.**

A contagious disease of camels spread from diseased to healthy by direct contact, watering together or by using infected ground for Camp.

**Symptoms.**

Pustular eruption usually appearing around lips. Eruption may spread or appear on other parts of the body such as belly, sheath and inside of hind legs. Easily mistaken for mange in early stages.

Lesions on belly and legs frequently become infected with dirt and very serious sores result.

**Treatment.**

Isolate affected camels, do not allow them to water with healthy ones.

Mild cases about lips require no treatment, lesions about body must be kept clean.

Washing with mild antiseptic and dust over with wound powder. If sea water is available, bathing is recommended.



**Recovery.**

4 to 8 weeks.

**13. Off feed.**

Not a disease, but a symptom of many diseases especially digestive diseases.

Also occurs when camels are in "must".

Camels frequently off feed when tired or thirsty and also if food is musty or dirty.

**Treatment.**

If long since last watering offer water, see that food is sweet and clean.

If camel is tired, allow him to rest for a few hours then offer feed again.

During "must" Bedouins forcibly feed camels by hand.

If camel is off feed for two consecutive feeds, give a purgative : -

Epsom salts..... 1 to 1 1/2 lbs.

Water ..... 1 quart.

or.

Linseed oil..... 1 litre.

If stable management is good, very few cases of "OFF FEED" will occur.

**14. Mange.**

Camels affected with Mange are to be isolated in working lines.

The treatment is not to interfere with the working of the camels.

The following treatment is to be carried out when possible : -

- (1) Wool around the affected parts to be clipped.
- (2) Scraping of all affected parts to be done thoroughly, this can be done either with a knife, brick or piece of hoop iron.
- (3) Brush affected parts with a hand brush.
- (4) Dressing to be rubbed in well by hand.

The "Dressing" should be put on before noon to allow of sun to melt it and to allow of it penetrating the scales.

On the two following days any parts that appear dry should be dressed and rubbed again.



The first dressing to remain on for seven days when it should be scraped off and new dressing applied.

This to be repeated every seven days until the camel is cured.

Mange dressing is issued ready for use and should be well stirred before application.

**NOTE.** - Deep scraping & rubbing in of the Dressing well are very important for the cure.



The first dressing to remain on for seven days when it should be removed and new dressing applied.

This is to be repeated every seven days until the wound is cured.

Mango dressing is issued ready for use and should be well shaken before application.

**NOTE.** - Deep scrubbing & probing is of the utmost importance and very important for the cure.



Camp  
Army  
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