## WAR DEPARTMENT, OFFICE OF THE QUARTERMASTER-GENERAL; MANUAL OF PACK TRANSPORTATION, QUARTERMASTER CORPS

Published @ 2017 Trieste Publishing Pty Ltd

#### ISBN 9780649100910

War department, Office of the quarter master-general; Manual of pack transportation, quarter master corps by  $\,$  H. W. Daly

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

## H. W. DALY

## WAR DEPARTMENT, OFFICE OF THE QUARTERMASTER-GENERAL; MANUAL OF PACK TRANSPORTATION, QUARTERMASTER CORPS



# WAR DEPARTMENT OFFICE OF THE QUARTERMASTER-GENERAL

# MANUAL OF PACK TRANSPORTATION

QUARTERMASTER CORPS

BY

MR, H. W. DALY

Chief Packer

UNDER DIRECTION OF THE QUARTERMASTER-GENERAL U. S. ARMY



WASHINGTON GOVERNMENT PRINTING OFFICE 1917

NC303 AS 1917

WAR DEPARTMENT,
Document No. 565.
OFFICE OF THE QUARTERMASTER-GENERAL.

2

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF STAFF,
Washington, December 21, 1916.

The following Manual of Pack Transportion, revised 1916, is published for the information and guidance of all concerned.

By order of the Secretary of War:

H. L. Scott, Major General, Chief of Staff.

3



### CONTENTS.

	tion.	Page.
Preface		11
General history	0000-0	15
Evolution of the aparejo		18
Evolution of the diamond hitch		25
CHAPTER 1.		
Pack saddles, description and uses:		
The aparejo	1	26
Accessories of the aparejo	1	28
Crosstree or sawbuck	2	29
Moore pack saddle	3	29
CHAPTER II.		
Assembling and care of the aparejo:		
Selection of sticks suitable for ribbing aparejos.	4	33
Selection of hay suitable as padding for aparejos	5	33
Setting up the apareio.	6	33
Setting up the aparejo. Setting up the Daly aparejo for use.	7	37
Care of the apareio	8	40
Care of the aparejo.  Causes of body and belly "bunches" and sore tails, sore withers and loins or kidney sores on pack mules and directions for their preven-		88
tion and cure	9	40
CHAPTER III.		
Instruction of the individual packer in preparation for his duties in the pack train:		
1. Securing and coiling ropes—		
How to prepare lash, sling, and lair ropes	10	44
How to do up a lash rope	11	45
How to do up a sling rope	12	45
How to do up a lair rope	13	45
2. Lairing up the packs—	4.0	.0000
How to square ends of packs and tie before lairing up	14	45
How to lair up side packs	15	46
or manfa	16	47
How to lair up an aparejo and riding saddle for storage or shipment	Wester.	00000
3. Putting the aparejo on the mule—	17	47
How to fold an aparejo blanket	18	48
How to place blanket on aparejo preparatory to putting on the	200	9486
aparejo	19 20	48 48
How to blind a pack mule	21	48
How to prace corona, branket, and aparejo on the mule	22	51
How to turn the crupper		-
How to cinch an aparejo	23 24	51 54

Instruction of the individual packer in preparation for his duties in the pack train—Continued.  4. Slinging the load—  Sec	ton	Page.
4. Singing the load—		
How to place the sling rope on the aparejo	25	54
How to lift side packs and place them on the aparejo	26	55
How to sling the load and tie the square knot	27	55
How to brake a side pack	28	58
How to brake a side pack.  How to double sling the side packs when length of packs	20	ÐĎ
now to double sting the side packs when length of packs		
requires it	29	60
How to cross sling side packs when top packs are necessary	30	60
How to double cross sling side packs when length of packs		
roquires if	31	61
requires it	91	01
<ol> <li>Lashing the load→</li> </ol>	20	- 12
How to form the diamond hitch	32	61
How to form the double diamond	33	90
How to form the double hitch	34	91
How to form the double hitch How to form the diamond hitch when the cinch hook is lost or		2.50
backen	0=	0.0
broken.  How one packer can sling the load and form the diamond	35	96
How one packer can sling the load and form the diamond		
hitch	36	96
How to form the pole hitch.	37	97
How to form the Orogon diamond hitch	38	100
hitch  How to form the pole hitch  How to form the Oregon diamond hitch.	00	100
6. How to sing the load and form the crosstree fitch on crosstree or		
sawbuck—		
How to sling the load on crosstree	39	100
How to form the crosstree hitch	40	105
How to form the stirrup hitch	41	110
	-41	1.10
7. Taking off the load and aparejo—		
How to take off the lash rope and the load	42	110
How to uncinch an aparejo and turn the crupper	43	117
How to take off an aparejo.		117
8. Miscellaneous—		3.5
	100	944
How to form two half hitches, the pole (clove) hitch	40	117
How to form a bowline knot	46	118
How to form a bowline knot. How to form a bowline and bight.	47	118
How to form a short splice on rope	48	118
How to form a love option or note	40	119
How to form a long splice on rope	43	
How to construct a travois.	50	125
How to improvise a stretcher	51	125
CHAPTER IV.		
Instruction in the service of a pack train:		
Instruction in the service of a pack train;	- mar	100
1. Summary of duties in loading and unloading a train	92	130
2. Loading a pack train—		
How to form cargo preparatory to loading the mules	53	130
How to place the rigging.  How to teach animals to come properly to rigging	54	131
How to teach animals to come preparly to rigging	55	131
The total annials to come property to rigging	20	
How to tie animals at rigging How to do up halter shank before tying animal to his load	56	132
How to do up halter shank before tying animal to his load	57	135
How to tie an animal to his load How to load a pack train for the day's march in the most ex-	58	135
How to load a pack train for the day's march in the most ex-		
peditious manner	59	135
D. C.	11/2/21	
Putting on the aparejos	60	136
Putting on the cargo	61	136
Leaving the park or camp ground	62	137
2 Duties of package on the march		
In open country	63	137
In open country. On bad and narrow trails.	64	137
On bad and narrow dans	09	
Up and down a mountain	65	138
In crossing streams, either fording or swimming	66	138
How to catch a pack animal when his load needs attention	67	138
How to tighten a load and indicate it has been tightened	68	138
How to teach saddle mules to stand		139
Signal gods	70	139
Signal code	10	100

### CONTENTS.

Instruction in the service of a pack train—Continued.		-220000
4 How to park (unload) a pack train————————————————————————————————————		Page.
Outline of duties	71	140
How pack animals should be led to cargador for convenience		
in taking off the rigging	72	140
How to cover cargo and tie down	73	140
How to cover rigging and tie down	74	141
How to stretch a picket line	75	141
How to clean coronas	76	142
How to fold pack covers	77	143
How to fold rigging covers	78	143
How to fold cargo covers	79	143
How to fold feed covers	80	143
Chapter V.		
Marches and loads:		
<ol> <li>What may be required of the pack mule under ordinary conditions.</li> </ol>	81	144
Mountainous country	82	144
Forced marches	83	144
2. Gaits	84	145
<ol> <li>Gaits.</li> <li>Table showing loads and rates of travel considered practicable for a</li> </ol>	95	145
well-organized and seasoned pack train	85 86	146
	- 00	1.10
CHAPTER VI.		
Organization:	642	20.00
1. Usual organization and equipment of a pack train	87	148
<ol><li>Table showing size and quantity of rope and canvas required for one nack train</li></ol>	88	148
pack train		
Mess or kitchen boxes	89	149
Packer's field stove, with kit	90	149
Cooking outfit, without stove		149
Pack-train mess kit		149
Clothes or war bags	93	149
Packer's wardrobe	94	150
Packer's wall tent	95	150
Tool sacks.	96	150
Grass or hay pads	97	150
Pack covers	- 98	150
Rigging covers		150
Cargo covers		151
Feed covers	101	151
Cargador's box		151
Cargador's kit.		151
Blacksmith's boxes		152
Blacksmith's kit		152
4. How to organize a pack train. 5. The essential conditions in the selection of the packer.	100	152 154
The drilled parker	100	154
The skilled packer	100	155
Instructions to pack masters		156
fi Duties of individuals:		
The chief packer	111	156
The assistant chief packer	112	157
The pack master	1113	157
The cargador or assistant pack master.	114	158
The blacksmith	115	159
The packer	116	159
The cook.  What packers are not permitted to do	117	159
What packers are not permitted to do	118	160
Feeding		161
Watering		161
Grooming		161
Traveling		162
Camping Use of blinds		162 163
Kindness to animals		163
Precautions.		163
Glossary.		164
Associate a second contract and a second con	141	101