MILITARY SYSTEM OF THE SIKHS

During the Period 1799—1849

FAUJA SINGH BAJWA
M.A., PH.D.

MOTILAL BANARSIDASS DELHI :: VARANASI :: PATNA

M O T I L A L B A N A R S I D A S S Bungalow Road, Jawahar Nagar, Delhi-6. Nepali Khapra, Varanasi-1. Bankipur, Patna-4.

1964

Price Rs. 20.00

TO THE REVERED MEMORY OF MY DEAR MOTHER

FOREWORD

History of India has witnessed frequent and numerous wars from very early times, and it may be pertinent to state that often political and social trends have been radically altered as a consequence of some wars. The frontiers of India have been not infrequently violated by foreign armies and even alien dynasties have appropriated government of parts of the country. The Macedonian forces under Alexander entered the northwestern region, and though they failed to push their intrusion further into the country, militarily they remained unvanguished. The Kushanas, the Sakas, the Hunas, the Arabs, and the Turks from Afghanistan, all entered India at one time or another and registered their mark on the social and political life of the Indian community. Later, Timur marched from Central Asia and devastated a large tract of north-western India, right upto the confines of Delhi. His descendant Babar defeated the vast horde of Ibrahim Lodi on the field of Panipat and subsequently dissipated the vast army of the Rajputs and laid the foundation of the mighty Mughal Empire in India. The eighteenth century suffered from a series of wars in which the Europeans, the English and the French, assumed the role of participants on one side or the other and generally exhibited their superiority of arms and techniques of warfare. Apart from the wars in which foreigners participated, Indian rulers, big or small, had in every age continued to fight amongst themselves. state wars have been a prominent feature of the history of India. Conquest or waging wars for territorial possessions, has been a distinguishing element of the code of conduct of Indian rulers. History books have taken note of this fact and many of them have given prominence to such events. Yet there has been an awful lack of books on the subject of military history, and very few historians have so far cared to analyse the factors underlying the military inferiority of Indian states or to examine the character of warfare and the organisation or technique which

has determined it. The military background of political developments and changes has been largely ignored. In the West military history has been developed as a science and considerable emphasis is laid on this discipline. In India this subject has suffered from inattention both from the universities and the state as well as scholars, The attempt made by Dr. Fauja Singh is, therefore, a desirable step in the promotion of the study of military history in India.

The decline of the central authority of the Mughals in Delhi led to the emergence of a number of contending sovereignties in India, each struggling to establish its sway over the others and acquiring territories and revenues at the expense of the Mughal Empire or some local chief. The Marathas produced some daring leadership and by their skill in a particular technique of warfare over-ran vast tracts of the country pillaging the people and enforcing their demands for money and share in the revenues. For a time their arms seemed invincible and they struck terror in the hearts of their victims. But the Marathas failed to develop a stable political system or evolve a strategy of war or develop new weapons, which were the prerequisites of success as the predominent political power in the country. Their lack of political sagacity, internal divisions and factious fightings, and their inability to keep pace with technological developments in the matter of weapons or in the field of strategy and tactics of war, made the prospects of their establishing a strong central government, in place of the Mughal Empire, absolutely dim. Their experiments, particularly those of Mahadji Sindhia, in military organisation, however, deserve attention and mark a departure from the traditional mode which had brought disaster to them in many engagements. Sindhia and Tipu both recognised the value of the change which was occurring in the nature of European army organisation, military equipment and the mode of warfare. They employed French adventurers to impart training to their forces so as to bring them into line with the troops of the British East India Company. The new technological development in the 18th century in Europe had affected the military system there; and it was this that the Sındhia and other Indian rulers were keen to imbibe in their military system. It was a development in the right direction, though by the nature of it, scarcely commensurate with the requirement of the time to stem the tide of British domination over the country.

The Panjab had passed through a crisis in the eighteenth century and had suffered from the recurring ravages by Nadir Shah and his successor Ahmed Shah Abdali. Government was unable to afford protection to the people, and Mughal Governor in Lahore was either incompetent or subject to factious intrigues and always without support from the central authority, so that he was unable to maintain peace or political stability in that province. The Sikhs had changed from a purely religious sect to a political group at the end of the previous century. In the anarchical conditions of eighteenth century, they developed a political identity while resisting opposition to their creed. But this political consciousness and the realisation of their military strength made them seek territorial acquisitions under leaders who developed into chiefs. A landed aristocracy grew which soon led to the disruption of the Sikh community and its division into various groups or Misals. The ambition of freedom from Mughal or Afghan control and the desire to exercise sway over their land contributed to the establishment of Sikh domination over the Panjab; but not till the rise of Ranjit Singh at the beginning of the 19th century was there any prospect of united government of strength enough to resist encroachments from Ranjit Singh brought the country to the west of the Sutlej under his rule and in that process created a military force which was distinct in its organisation and equipment from the rabble which his rivals entertained and which could ensure security of his possessions and continuance of his political power. reorganisation of the chief weapon of political stability, followed the direction previously adopted by Mahadji Sindhia and others and which, it may be said, was the fashion with the Indian rulers at the time. It must have been evident to Ranjit Singh that for the expansion of his kingdom he required a military machine different from that of his victims, who were still in possession of archaic weapons and could not rise above the tribal or feudal organisation of the army. On Ranjit Singh naturally the realisation must have dawned that ultimately

he would have to contest sovereignty with the British whose aggressive expansionism was rolling westwards to attain the natural frontiers of India. An army modelled on ancient lines was no match to the forces of the British; hence it was essential to organise it on the western methods, and for this purpose he utilised the services of some European adventurers who were only too willing to assist him against the British.

The army organisation of Ranjit Singh was a mixture of the two systems, the old and the new, with the predominance of the latter. His military machine grew into a mighty weapon against his Indian rivals, but it will be difficult to assume that it was intrinsically superior to the British forces whom the Panjab army must fight sooner or later. There was little difference in the quality of men, for the British army was largely composed of Indian soldiers, whose physique was, if anything, inferior to those of the Panjab and the frontier areas. was little to choose in the matter of morale, for on both sides the mercenary element was predominant. The Khalsa had, however, a strong attachment to their faith and a patriotic sentiment also lurked in the back of their emotional build-up. Training was also not very unequal. Then what distinguished the two armies was the difference in the organisation and the technological development on which the two forces were based. The British advance factories were producing new arms, and they could freely borrow from the scientific progress then being made in England. British weapons of war were also available to them in India. Ranjit Singh suffered from this handicap, which became more perceptible after his death. The military organisation, however, was the weakest point of the Sikh army. The local command was neither efficient nor could inspire the confidence and loyalty of the soldiers. And the semi-feudal leadership was seldom reliable. The British officers fought for a cause, which was not always true of the Panjab officers class. And that may account for the ultimate destruction of the Khalsa army and the decay and extinction of the Panjab state.

Dr. Fauja Singh's study is a first scientific attempt to examine the character of the military system of the Sikh rulers

of the Panjab, and in that context to shed light on the military organisation prevailing in the country which, among other things, hastened the end of India's independence and the establishment of alien rule. Military inequality between the Indian states and the British in the last two centuries was a very powerful factor in the success of the British to weave their empire in this country.

(BISHESHWAR PRASAD)
Prof. & Head of the Department of History,
University of Delhi.

PREFACE

The military factor like other factors, economic, social and political, has played a decisive role in the rise and fall of civilisations. Military decay has led to the overthrow of old civilisations in the same way as military progress has resulted in the rise of new ones. In India the march of our history has been very largely influenced by this important factor. For instance, the transition from the ancient to the medieval period, as also the advance from the latter to the modern period, was in the main due to this, for the victory of the Turks over the Rajputs, of the Mughals over the Turks, of the Marathas over the Mughals, of the Sikhs over the Afghans and of the British over the Marathas was largely the result of the superiority of each over the other in the art of fighting. This shows how important is the study of military history of our country.

This work aims at a systematic, critical and comparative study of the military system of the Sikhs during the period The Sikhs, after passing through a series of vicissitudes, first established themselves as a political power in the Panjab in 1765. But their mode of fighting then was desultory and hardly suited to the requirements of a well-settled state. However, fortunately for them towards the end of the 18th century a strong man of genius and commanding personality was born among them, who, taking a lesson from the deplorable situation prevailing in the community and the country at the time, built up a strong, centralised and effectively controlled military system by amalgamating the best elements in the foreign with the best elements found in the indigenous fighting mechanisms. Our study begins with a brief appraisal of the military heritage of Ranjit Singh, the chief architect of the Sikh system of Warfare and then proceeds to the analysis of the various phases of the growth and development of this system. Chapters from III to VII deal with the salient characteristics which it finally developed in the course of the prolonged process of its evolution. Since a military system does not merely consist of army organisation and administration, but also includes tactics and strategy, two independent chapters have been devoted to the study of these aspects.

The attempt herein made may be said to have tried to cover a little fresh ground in Indian History, for never before has a systematic study been made of the subject. What is more, the work may bridge a small, though an important, gap in our military history, because whereas some useful research has been done on the Ancient Hindu, the Mughal and the Maratha military systems, nothing of the kind is available so far as the Sikhs are concerned. At the same time, the subject has been treated not in isolation, but in the perspective of history. With this end in view, an effort has been made to indicate how far the Sikh system was a continuation of the earlier Indian systems and how far an improvement upon them or an adaptation from the west.

This work has been built up mainly on original sources found in various languages such as English, Persian and Panjabi, the most valuable of which are Khalsa Darbar Records, Foreign Secret and Political Proceedings and Consultations preserved in the National Archives of India, accounts of the contemporary travellers, writings of some of the officers of the Lahore Darbar, some important Persian Diaries, particularly 'Umdat-ul-Tawarikh' by Lala Sohan Lal, 'Events at the Court of Lahore' by Syed Azim Ullah and 'News of Ranjit Singh's Court for 1825.' I however, regret that I had no access to many valuable documents in the British Museum, the India Office Library and the Public Records Office, London.

I take this opportunity of expressing my deep gratitude to Dr. Bisheshwar Prasad, D. Litt, Professor and Head of the Department of History, University of Delhi, without whose encouragement, guidance and help this work may not have been completed and published. My heart-felt thanks are also due to him for writing a scholarly foreword to this book. I shall be failing in my duty, if I do not acknowledge my deep

sense of gratitude to the Directors, National Archives of India, Shri V. S. Suri, Director of the Panjab Government Records and Dr. Ganda Singh, Director Panjab Historical Studies, Panjabi University, Patiala, who so kindly allowed me access to their valuable records and libraries. I must also thank my wife Surjit for the help she rendered me in the course of my studies.

15th March, 1964 Delhi. F. S. Bajwa

ABBREVIATIONS

A.A.R.		Asiatic Annual Register.
Adventurer		Some Passages in the Life of An
		Adventurer in the Panjab.
Amar Nath		Zafarnama-i-Ranjit Singh
Archer		Commentaries on the Panjab
		Campaign
Barr		Journal of a March from Delhi to
		Peshawar.
Broadfoot		Career of MajGen. Broadfoot.
Burnes		Travels into Bokhara etc.
Burton		1st and 2nd Sikh Wars.
Cavalry Officer		Journal of A Cavalry Officer.
•		(Humbley)
Catalogue		Catalogue of Khalsa Darbar
3		Records.
Cunningham		A History of the Sikhs by J. D.
3		Cunningham.
C. V.		Centenary Volume.
Durand		
		Marion Durand.
Earle		Makers of Modern Strategy
Emily		
Fane		Five Years in India.
Forster		A Journey from Bengal to England.
For : Cons.		
For: Progs.		Foreign Proceedings.
Gordon		The Sikhs
Gough & Innes	•	The Sikhs and Sikh Wars.
Grey		European Adventurers in Northern
•		India.
Griffin	-	Ranjit Singh.
Gupta		History of the Sikhs.
Henty		
Honigberger		The state of the s
Baron Hugel		Travels into Kashmir and the
•		Dominh

Panjab.

I. H. R. C.		Indian Historical Records
		Commission.
Irvine		Army of the Mughals.
Jacquemont		Letters from India.
J.A. S.B.		
J. I. H.		
J. P. U. H. S.		Journal of the Panjab University
J. 2		Historical Society.
Kanhaya Lal		
K. D. R.		
Kiernan		
Lawrence		
220.772.022.00		Service of Ranjit Singh.
L. A. R.		Ludhiana Agency Records.
Latif		
Liddell Hart		
L. P. D.		
Mac Munn		Lure of the Indus.
Malcolm		A Sketch of the Sikhs.
Malleson		Decisive Battles of India.
Masson		Narrative of Various Journeys in
171005011		Baluchistan, Afghanistan and the
		Panjab.
Massy		Chiefs and Families of Note in the
TT TO THE TOTAL THE TENT TO THE TENT THE TENT TO THE T		Delhi etc. Divisions of the Panjab.
Mc Gregor		History of the Sikhs.
Monograph 18		Panjab A Hundred Years Ago.
Mohan Lal		
TVEOTIMIT LAM		etc.
Mouton		Rapport.
Newall		A Quarter of a Century in the
Newall		Panjab.
News		News of Ranjit Singh's Court for
IACMS		1825.
Orlich	_	Travels in India.
Osborne		
OSPOTTIC	-	The Court and Camp of Ranjit
D. 11.		Singh.

Essentials of Military Knowledge. Papers Relating to the Panjab (1847-49).

Palit

Panjab Papers

xvii

		NOLL				
Pearse	- Transition	Military Memoirs of Alexander Gardener.				
P. G. R.		Panjab Government Records.				
P. I. H. C.		Proceedings of the Indian History				
		Congress				
Prinsep		Origin of the Sikh Power in the				
•		Panjab.				
Rait		Life and Campaigns of Lord Gough.				
Sajun Lal		Side Lights on the Foreign Policy				
		of Lord Auckland.				
Sen, S. N.		Military System of the Marathas.				
Steinbach		The Panjab.				
Shahamat		The Sikhs and the Afghans.				
Sinha, N. K.		Ranjit Sıngh.				
Skinner		Military Memoirs of James Skinner				
		by Frazer.				
Smyth		A History of the Reigning Family				
		of Lahore.				
Sohan Lal		Umdat-ul-Tawarikh.				
Subaltern		Leaves from the Journal of A				
		Subaltern.				
Suri		Some Original Sources of Panjab				
		History. Edited by V. S. Suri.				
Thackwell		Narrative of the Second Sikh War.				
Thornburn		The Panjab in Peace and War.				
Thornton		A Gazetteer of the Countries				
		adjacent to India on the North West.				
Vigne		Travels in Kashmir, Ladakh,				
		Iskardo etc.				

CONTENTS

CHAPT	TER .	Page
I.	Heritage	1
II.	Growth and Development	35
III.	Constitution of the Army	107
IV.	Recruitment, Composition, Discipline, Morale and Leave Rules	131
V.	Pay and Allowances, Honours and Rewards, Promotions and Welfare	165
VI.	Cantonments, Camps, Marches, Transport, Supplies and Equipment	194
VII.	Arms, Ammunition and Training	231
VIII.	Tactics	261
IX.	Strategy	297
x.	In Retrospect	346
Glossar	у	355
Bibliog	caphy	363
Index		379
ADDEX	INIV	

APPENDIX

- I. Comparative Statement of the Yearly Military Expenditure under various Sikh Administrations
- Return of Sikh Guns in the City of Lahore under II. charge of the troops of the British Government.

MAPS AND GRAPHS

	Facing	Page
1.	Graph Showing the Growth of Regular Army.	75
2.	Graph Showing the Growth of Irregular Army.	75
3.	Map Illustrating the Battle of Chuch (1813).	264
4.	Map Illustrating the Battle of Sobraon (1846)	283
5.	Map Illustrating the Battle of Gujrat (1849)	291
6.	Map Illustrating Strategy of the 1st Sikh War	325
7.	Map Illustrating Strategy of the 2nd Sikh War	340
	PLATES	
1.	The Star of the Panjab's Prosperity	182
2.	A Collection of Sikh Arms	231
3.	A Manufacturer of Arms at Work	234
4.	Regular Infantry of Maharaja Ranjit Singh at the Falling-in Position	243
5.	Soldiers at Drill with Arms	246
6	Soldiers at Drill with Arms	248

CHAPTER I

HERITAGE

To understand the military system of the Sikhs in the period from 1799 to 1849 in the perspective of history, it may be necessary to have some knowledge of the military organisation and the art of warfare in vogue in the country during the one hundred years or so preceding the Sikh rule. Broadly speaking, there were two kinds of military systems in India during the 18th century, namely, indigenous and European. The indigenous system, further, had several varieties, such as the Mughal, the Maratha, and the Sikh, but whatever their nomenclature might be, these varieties differed from one another merely in details, and not in the basic principles under-The European systems were not introduced into this land till about the middle of the century, but once introduced, their superior and better-organised character made such a deep impression on the Indian mind that soon after there was a craze, almost a race, among the princes of our country for taking to them in preference to their own which. from now onward, fell more and more into discredit.

The indigenous military system, in whatever form, was not based on any scientific theory of warfare. that the entire range of military history of India from the earliest times down to the time of her conquest by the British in the 18th century, furnishes no evidence that the simple principle that men formed into a unit, supporting mutually and functioning as a unit, are many times stronger than mere numbers, a principle on which all scientific warfare developed, was ever explicitly known to her. The failure to realise the value of this fundamental truth constituted the chief element of weakness in the Indian mode of fighting. An Indian battle was a disorderly and tumultuous affair in which men fought very much as they liked, caring more for their individual gain and personal display than for mutual collaboration and support in the common task of winning a collective victory over the enemy. In such circumstances as these, the qualities specially looked for in the soldiers, as the basis of a strong and efficient army, were their bodily strength, adventurous spirit, and accomplishment in the use of weapons and animals of war rather than their ability and skill in the execution of any combined manoeuvres.

From the ancient times, sanguinary battles were fought on the soil of India. Some of them such as the battle of the Ten Kings described in the Rig Veda and that of Kurukshetra were indeed decisive in many respects to the development of Indian history. But even these celebrated battles and many others like them do prove to us two things: - (i) that they were not between regular armies trained to warfare, but between tribes under tribal leaders or between champions representing the two sides; (ii) that they were conspicuous for absence of any fighting formations. We do not find here any thing like the Greek phalanx or the Roman legion. The Indian armies, till the advent of the Turks in the 12th century, were composed of war elephants, cavalry and infantry. Out of them, elephants alone constituted the real bulwark of defence, because the weapons available then were ineffective against them, provided they were carefully protected against arrows by mail. Neither of the other two arms, cavalry and infantry, was of much significance in warfare. They were not organised into any specific units for tactical purposes, so that they did not conduct themselves in a methodical manner on the day of fighting. Moreover, they had to contend against some serious shortcomings. The masses of infantry carried all sorts of weapons, which prevented the growth of uniform tactics among them. Absence of effective discipline and training offered a further hinderance in this matter. Horsemen fared little better, as in the absence of stirrups, they found it most difficult to manage their horses in the course of fighting. War elephants, though a formidable weapon, were, however, heavy and slow-moving. This made a war of manoeuvres an impossibility. A battle had, therefore, to be conducted on a carefully chosen ground, which placed a serious limitation on the scope of strategy. Further limitations in this respect resulted from the strict enforcement of certain conventions or rules of war which forbade action against a fleeing, fallen or unarmed enemy.

So long as the pre-eminence of the elephant remained, Indian military methods were adequate for India's own defence. The situation, however, underwent a change to the disadvantage of India, when the invention of the stirrup by the Central Asian nomads produced a revolution in military strategy, comparable to the invention of the internal combustion engine in our own times. Before this invention, the horse was mainly useful for drawing a chariot in war or for transporting the warrior. It gave the rider great mobility. But it was not as effective as the elephant, for the rider of the elephant could easily shoot his arrows or throw his javelin from his seat on the elephant. With the coming of the stirrup, the situation was entirely changed. The rider could now, with his feet firmly in the stirrup, stand up while riding and shoot his arrow. From the time the stirrup came into wide use, cavalry became the major arm of war with almost incomparable possibilities for manoeuvrability.

It was the mastery of the horse facilitated by the use of the stirrup that enabled the Turks of Central Asia in the 12th century to conquer India. The heroism of the individual Rajput warriors and the training of war elephants were of no avail before the rapid manoeuvres and impetuous charges of the Turkish horsemen. With the advent of the Muslims, a new mode of fighting came into vogue. The Muslim armies which held the Panjab, the Gangetic Valley, Malwa and Bengal and raided the kingdoms of South India under Allau-ud-din Khilji, consisted mainly of cavalry. For lightening raids over long distances, this was the ideal arm. With the Mughals, a new factor entered the scene. Babar who conquered Delhi and Agra, had brought with him some pieces of artillery, which is the first appearance of cannon in land warfare in India.

With the introduction of these two arms-cavalry and artillery, warfare may be said to have entered a new stage in India. The two arms together constituted a formidable instrument of offence as well as defence. It was with the help of this instrument that the Mughals were able to conquer and hold their vast empire of India. But it is significant that no military tradition developed in India even under them. No effort was made to develop the art of war as such.

Warfare remained a tumultuous and desultory affair that it used to be in the past.

In the 18th or the century immediately preceding the period of Sikh rule, the situation suffered a positive deterioration. This was the period of the Mughal breakdown and the rise of numerous semi-independent 'country' powers, owing little more than a vague allegiance to the enfeebled descendants of the Great Mughals at Delhi. Their mutual rivalries ushered in an era of political instability and anarchy, which adversely affected the prevalent military organisation and methods of war. The armies became veritable rabbles and remained so until towards the end of the century, some improvements were made by some Indian princes under the pressure of circumstances. The organised elements in them, howsoever few, suffered a heavy setback, while the shortcomings, already present, assumed a threatening appearance. All military activities, in fact, became notorious for confusion.

The Indian armies of the 18th century consisted of cavalry, infantry and artillery. All Indian rulers, particularly the Mughals, also possessed a large number of elephants. But these animals had no longer any great utility as part of the fighting machine. The introduction of fire-arms had reduced them to the position of "beasts of burden or means of display and their role in the day of battle was comparatively insignificant".1 Of the three arms mentioned above. cavalry was the major component element of the army, the other two occupying a very subordinate position.2 respectable Indians preferred to fight on horse-back only. Infantry they despised and in artillery they never became proficient.

The despicable position of the infantry may well be gathered from what Orme has said about the Mughal infantry:— "a multitude of people assembled together without regard to rank or file; some with swords and targets who could never stand the shock of a body of horse; some bearing matchlocks, which, in the best of order, can produce but a very uncertain fire; some armed with lances too long or too weak to be of any

^{1.} Irvine, p. 175.

^{2.} Dr. Horn, page 11; Irvine, p. 57.

service, even if ranged with the utmost regularity of discipline. Little reliance could be placed on them. To keep night watches and to plunder defenceless people was their greatest service, except there being a perquisite to their commanders who received a fixed sum for every man and hired every man at a more or less price. In short, infantry was more a rabble of half-armed men than anything else, being chiefly levies brought into the field by petty Zamindars or men belonging to the jungle tribes." Known as Ahsham in the military parlance of those days, it consisted mainly of non-combatants such as darbans, khidmatgars, pahlwans, kahars, carpenters, blacksmiths, beldars, stone-masons, leather workers, atishbaz, sawyers, miners, axe-men, ferriers and many other categories of people.2 Of them the beldars constituted the sappers of the Mughal army and were used to remove barriers on roads and improve pathways and to throw up field works to protect the guns. The only combatant groups in the infantry were (i) Aligols³ (equivalent to Ghazis) who constituted "a sort of chosen light infantry of the Rohilla Pathans", (ii) Najibs4 who formed irregular infantry but who disdained uniform and carrying musket, their arms being matchlock or blunderbuss and sword. They also despised the task of standing sentry or doing any fatiguing duty and considered their business only to fight and protect the person of their prince; (iii) matchlockmen called barg-andaz; and (iv) archers, carrying bows and arrows.

What is true of the Mughal infantry is also largely true of the Maratha and the Sikh arms of infantry. Like the Mughals, the Marathas and the Sikhs also had a contemptuous attitude towards foot soldiers. Under Shivaji, no doubt, infantry was organised as the major arm under a well-graded hierarchy headed by a sar-i-naubat, but as the boundaries of the Maratha empire widened, its importance declined and cavalry replaced it as the foremost arm. When this happened,

- 1. Orme, Historical Fragments, p. 417.
- 2. Irvine, p. 174. Ahsham is defined in the dictionary as servants, domestics, followers, attendants, retainers, a kind of militia or armed police, Irvine, p. 161; Steingass, 21-A.
 - 3. Fraser-Skinner, iii, pp 75-76.
 - 4. Blacker, War, p. 22.

the role and composition of the Maratha infantry was not much different from those of the Mughal infantry. As regards the Sikh infantry, the position has been beautifully summed up by Griffin in the following words:—"The infantry soldier was considered altogether inferior to the cavalry and was in time of war left behind to garrison forts, to look after the women or to follow, as best he could, the fighting force, until he in his turn could afford to change his status and buy or steal a horse for his own use". The only infantry which enjoyed any respect was that of the Akalis.

The Indian infantry of the 18th century, on the whole, then stood very low—the lowest, it may be said—among the various arms of warfare. It made little positive contribution to the attainment of military objectives; rather, on the contrary, its unorganised and ill-disciplined masses rendered the fighting mechanism cumbersome and in no small degree added to the confusion that was even otherwise found in plenty.

Like infantry, artillery too was an arm of very limited utility and consideration, though all the Indian princes were fond of having as impressive a park of guns as possible. Mughals maintained a large establishment of four departments for the purpose. Two of these departments, manufacturing and ordnance, were under the Imperial Khansama (Lord Steward), whereas the other two, field artillery and seige guns, were supervised by Mir-i-Atish or Darogha-i-Topkhana who was some times assisted by another Darogha who looked after the light artillery attached to the Emperor. All these officers held Mansabs granted by the state, while the men on the establishment under them were paid directly from the state funds. The Mughals were very fond of heavy guns.² and gave them pompous names, but these pieces were really more for show than for use. They made more noise than they did harm. They could not be fired many times in a day and were liable to burst and destroy the men in charge. The art of founding the gun was not much advanced and all European observers like De La Flotte, Fitzclarence Cambridge are agreed that Indian guns during the 18th cen-

^{1.} Griffin, p. 133.

^{2.} Fitzclarenee, p 243.

tury were not founded, but built up of iron bars bound together and held in place from distance to distance by thick rings of the same metal. To a large extent, for the supply of their cannon, the Mughals depended upon foreigners, though their gun-powder was completely home-made. The carriages of their guns were of clumsy and primitive construction.2 The light artillery of the Mughals was somewhat That portion of it which always accompanied the Emperor and was known as the artillery of the stirrup, was mounted on well-made and handsomely painted carriages drawn by horses, while the ordinary portion was not so well kept and for this oxen and camels instead of horses were used as draft. These light guns were variously known³ as gainal, hathnal, shutarnal, zamburak, shahin, dhamaka, ramjanki, rahkula, and were built of cast brass with iron cylinders and were between 3 and 6 pounders. Rockets called bans arrows were an invaluable part of the light artillery of the Mughals. Very little effort was made by the Mughals to acquire skill in the use of artillery or even matchlocks. firing was both inaccurate and slow. Mostly they depended upon foreigners who worked the guns and imparted working knowledge to the gola-andaz. The Mughals tried hard to make the most of whatever skill they had in the use of cannon by dragging the less heavy of them to their battles. The action in the battle invariably commenced with a gun and rocket duel. The guns were not only protected by earthworks but were also bound together by chains or hide straps to prevent the enemy horse from riding through the line and cutting down the gunners. In case the guns were few, it was often the practice to post them behind the clay walls of the houses in some village or to take up a commanding position on the top of an old brick-kiln. Their fire, however, never became rapid, the rate of fire being not more than one shot in fifteen minutes- even slower. Owing to the inability of the draught oxen to keep up with the movements of the cavalry, the guns could not be taken forward in case attack was launched or

^{1.} Irvine, p. 118.

^{2.} Mustapha-Seir, 1, 443.

^{3.} Irvine, p. 135.

backward in case of retreat, when they had to be spiked and left behind. Buckle says that artillery was indeed an encumbrance for the Mughals.

Like the Mughals, the Marathas also had an artillery establishment, called Topkhana or Barudkhana. collected a large number of guns, but like other Indians of those days, they never excelled in their use. Their guns founded within the country were notoriously crude and clumsy and of no precise calibre, as suitable arrangements for the manufacture of guns were lacking in India. Hence like the Mughals, they were also largely dependent upon foreigners for their supply and because the imported material was generally a third-rate stuff, their artillery never became an effective weapon. Their carriages were even worse than their guns. They had no field artillery until Balaji Baji Rao started organising it as part of The Marathas were more interested his trained battalions. in cavalry than in artillery which had consequently to be manned by the Portugese and Indian Christians. So defective was the Maratha gunnery that Buckle holds it as the main cause of their defeat by the British.3

As far as the Sikhs are concerned, artillery was almost a negligible branch of their army. They had a few guns which were mostly of small size, known as Zamburks. They had no field guns and very few heavy guns. Such was the shortage that many of their important forts were left without any guns. According to Forster,⁴ the artillery of the Sikhs was "awkwardly managed and its uses ill-understood". The result was that they could not stand against any artillery and a few field pieces were sufficient to keep in check their most numerous hordes.⁵

Because both infantry and artillery were ineffective arms, the indigenous warfare prior to the British conquest was preeminently a cavalry affair, cavalry being the predominant arm and the mainstay of the Indian armies then. As compared with the other two arms, it was far better both in the

- 1. Blacker, War, p. 128.
- 2. Calcutta Review, Vol XII, 1849.
- 3. Calcutta Review, Vol : XII, 1849, p. 329.
- Forster, p. 331.
- 5. W. Franklin-Reign of Shah Alam II, p. 74.

quality of men, and their weapons and equipment. A large number of the warriors were clad in mail and their were carefully trained in the tactics of the battle-field. vital military functions were performed by horsemen whose role was decisive to the success of all manoeuvres, skirmishes, and charges and counter-charges in the main battle. the opening gun-duel of a battle was over its fate was decided by the cavalries of the opposing forces. Strategical tasks both before and between battles also had to be carried out by the swift-footed horsemen. The Maratha and the Sikh of horse were particularly fitted for the execution of quick manoeuvres, both tactical and strategical, the reason their quicker pace and their capacity and endurance for much longer marches. The Mughals were rather slow-marchers and hence were always out-marched and out-manoeuvred by the Marathas. The Sikhs perhaps excelled all other Indians in respect of celerity of movement. Franklin writes in his Memoirs of George Thomas that the marches of the Sikhs "must appear almost incredible to those who are accustomed to European warfare''. But although caval y was the best of all the arms, it suffered from certain serious In the absence of any effective means of verification, the quality of both men and animals was on the way to deterioration. Elphinstone regarded it as "not capable of any long exertion and still less of any continuance of fatigue and hardship."'2

The military organisation which, to a great extent, determined the nature of the 18th century warfare suffered from several serious flaws. The worst of them were the ones related to the lack of orderliness and cohesion. There was order in none of the military activities carried out by the Indians, whether it be camps or marches or fighting in the battle field. According to Wilkes, 3 the Mughal camp was "a motley collection of cover, from superb tents down to ragged blankets; tents and animals all intertwined; the only mark of order being the flags set up by each chief, the only regularly laid-

^{1.} P. 107, also see Calcutta Review, Vol. IX, 1875, pp. 28/29.

^{2.} Elphinstone, p. 579.

^{3.} Wilkes, i, p. 292.

out lines being those of the traders' booths or shops''. The Mughals encamped at random without proper pickets, so that it was not difficult to surprise them. 1 In the earlier period, adequate arrangements were made for 'shabgard' patrols), advanced posts or pickets, watchmen with their cries of 'khabardar', and kotwals and mohitsibs to check crime, but in the 18th century, the Mughals had become extremely lax and negligent. Further, the Mughal camps were huge and unwieldy things spreading out over several miles. Emperor had his square enclosure of superb red tents, protected on all sides by artillery, both heavy and light, and a deep ditch, somewhere in the centre, while his chiefs and nobles encamped as they wished anywhere and in any order, sometimes several miles away from the centre. The unwieldiness of a Mughal camp also sprang from the three-fold impediment with which it was weighted, an army, a court and a civil executive. The life in the camp was far from being conducive to the success and efficiency of a military campaign. The presence of a large number of women who were taken by the Emperor and the chiefs along with them, not only vitiated the whole atmosphere at the camp, but also was a great liability and a source of weakness at the time of fighting. Merrymaking kept the camp people awake till late at night, so that they could not get up early in the morning. Orme affirms significantly that on account of the custom of the east to make the great meal at night, the Indian camps fell into deep sleep immediately after it, so that a handful of resolute men could beat up a camp of many thousands.2

The Maratha camps, particularly in the latter part of the century, closely resembled those of the Mughals. They were put up in the same disorderly manner for which the Mughal camps were notorious. Likewise, there were large numbers of women and children, including wives, concubines and prostitutes amongst the inmates of the Maratha camps. Wine was easily available in the bazars.³ In respect of size, every camp resembled a huge city where commercial transactions

^{1.} Orme, p. 417.

^{2.} Orme, p. 417.

^{3.} Sen, p. 150.

of considerable volume were daily contracted. Though the number of camp attendants was much smaller than under the Mughals, yet the number of animals of all sorts in the Maratha camp ran into hundreds of thousands. Their feeding was not the only problem. They created highly insanitary conditions which led sometimes to the outbreak of epidemics. Both Elphinstone and Broughton¹ affirm that the Maratha camps presented a most disreputable spectacle. But in one respect, Maratha camps were superior to those of the Mughals They were not easy to surprise, because their pickets were ever alert and on duty day and night.

The Sikh camps were very humble affairs as compared with those of the Mughals and the Marathas. They had none of the comforts and luxuries of their Indian contemporaries. Life at their camps was noted for frugality, simplicity and austerity.² There were no women in their camps. It was indeed most difficult to surprise the Sikhs. But, otherwise, their camps were as disorderly as those of the other Indians.

In point of disorderliness, the marches of the Indian armies were little better than their camps. Regarding the Mughals, Bernier³ has written:- ".....they moved without order with the irregularity of a herd of animals". Broadly speaking, the Mughal army observed the following procedure for marching:- in front of all, pioneers with spades to smooth the roads, then heavy artillery, then baggage, then cavalry, then Emperor followed by his seraglio (imperial guard being on both the wings of the Emperor), then light artillery, and at the end, rear-guard swollen by prodigious number of people always at the court and innumerable servants. Standards were carried on an elephant, entrusted to an officer, called Qurbegi. These standards and emblems were surrounded by a large number of players on cymbals and trumpets, military music having an important role to play in the Mughal army. But generally abiding by the above-mentioned order of marching, the men forming the various divisions of the army

^{1.} Sen, p. 63

^{2.} Malcolm—64-65; Memoirs of George Thomas, page, 107; Forster, Vol: I, p. 332; Williams, Calcutta Review, 1875.

^{3.} Bernier, p. 182.

under march, kept little order and discipline, wending their way pell mell like cattle. The Marathas excelled the Mugh Is in the exhibition of disorderliness. Though having a vanguard (Aghadi), a centre (Bich Laskar) and a rear guard like the Mughals, they did not march in an orderly manner in columns along roads and "inundated the face of the earth for many miles on either side, here and there a few horses with a flag and a drum mixed with a loose and straggling mass of camels, elephants, bullocks, nautch girls, buffoons, troops and followers, matchlockmen and lancemen, banias and mutsaddis''. The marches of the Sikhs were characterised by the same lack of order, if not worse. They marched like a mob. The only consideration borne in mind was that the followers marched alongside of their immediate commanders, each group keeping a little distinct from the other.

One inference that may be reasonably drawn from the above account is that very little value was attached, then, to the need of discipline in the Indian armies. In the Mughal army, discipline was extremely lax, if not entirely absent. Bernier² tells us that when once the Mughal army was thrown into confusion, it was impossible to restore discipline. According to Cambridge, 3 they never understood the advantage of discipline. There were, no doubt, elaborate rules punish breaches of discipline such as absenteeism, insubordination and desertion etc.; fine being the usual punishment, and desertion being punishable by blowing from the mouth of a gun. Inspite of these rules, however, the general tone of discipline in the army was far from satisfactory. The case of the Marathas was even more serious. The salutary rules of discipline enforced by Shivaji had been conveniently forgotten.4 They caused havoc wherever they went. this lack of discipline which rendered even their overwhelming numbers helpless against the British. The Sikh Misals were "thoroughly republican" in character and so were their armies. Forster, a keen observer of their institutions, has

^{1.} Sen, page 63.

^{2.} Bernier, p. 182.

^{3.} Cambridge, War, Introduction VIII.

^{4.} David, p. 22.

^{5.} Griffin, p. 132.

remarked:1 "Though orders are issued in a Sicque army and a species of obedience observed, punishments are rarely inflicted; and chiefs who often command parties of not more than 50 men, being numerous, its motives are tumultuous and irregular. An equality of rank is maintained in their civil society, which no class of men, however wealthy or powerful, At the periods when is suffered to break down. councils of the nation were convened, which consisted of the army at large, every member had the privilege of delivering his opinion and the majority, it is said, decided the subject debate." The Sikh theocracy which had and fraternity for its foundations, thus hindered the growth of discipline amongst them. The result was that there were frequent transfers of allegiance or desertions. Discipline in such a republican army could be maintained not by any rod of iron but by promoting friendly and intimate relations with the soldiers, and by holding out better pecuniary prospects. The tie of blood binding men of the various units and subunits also tended to keep them together, but it was not always a very dependable guarantee, as it sometimes failed to check family feuds. During war, lack of discipline was somewhat compensated for by courage and enthusiasm. However, on the whole, absence of discipline remained a very weak point of the Sikh military organisation.

The lack of discipline may be explained partly by the absence of proper training and partly by the weakness of control and command. The notion that discipline can best be imparted to the soldiers through a carefully thought-out and strictly enforced programme of training was then unknown to Indians. Irvine² has written that there was no drill for the soldiers as such in the Mughal army. This is true of the other Indian armies as well. There were no parades held to discipline the troops. Training, whatever there was, was a personal and individual concern. The entire approach towards discipline, at the time, was negative rather than positive. While nothing was done with a view to disciplining men, serious breaches of discipline were often penalised. The underlying

^{1.} Forster, p. 329.

^{2.} Irvine, p. 189.

logic seems to be that discipline was understood to mean only avoidance of committing certain crimes such as theft, murder, desertion, absenteeism, etc., and not the regulated conduct needed in the execution of common movements.

Perhaps the greatest cause of indiscipline in the Indian armies was the weakness of control and command. state control in the armed forces of India had, indeed, never been extensive. The Mughal Emperors had only a small standing army composed of a small body of cavalry, called Ahdıs, Dakhlis or Yasawals, some artillery and some infantry. This army was, of course, recruited, enlisted and paid directly by the state, and may be said to be well-controlled. the rest of the army which constituted the bulk, was organised on the Mansabdari lines. All Mansabdars, ranging from Dahbashi (commander of 10) to Haft Hazari (commander of 7000) and arranged in as many as 33 grades, were appointed by the state and assigned quotas of troops for whose recruitment, payment, management, mobilisation and command they were made responsible. The state maintained a separate department under a minister called Bakshi-ul-Mumalik or Bakshi, which arranged for the inspection of the Mansabdars' recruits, their enlistment after the Emperor's approval of them, preparation of descriptive rolls of both men and horses, branding of horses and holding of musters later on at frequent intervals with the object of verification. The devices of descriptive rolls and branding or 'dag' and 'chehra' as they were called, were extremely useful, in so far as they helped the government to check up whether its chiefs conformed to the regulations or not and to punish the defaulters. The state paid the mansabdars for the men who were to receive their pay from their masters. In the event of any chief indulging in unfair practices, in regard to disbursement of pay, complaints could be made to the government and redress obtained. all this pre-supposes a strong government at the centre. may be said that so long as the Great Mughals were on the throne, the state was able to exercise a fair amount of control over the organisation of the army as a whole. But when after Aurangzeb, a long series of monarchs, possessing neither ability nor strength of character, occupied the throne, all the useful checking devices mentioned above fell into disuse.

The influence of the local officers i.e. mansabdars, replaced that of the Emperor. They now became almost all powerful and enlisted, dismissed and paid their soldiers as they pleased. The result was that for all practical purposes, loyalty to the immediate boss became the main motive of the men and the sentiment of loyalty to the head of the state above received a severe set-back, and with that, the forces of unity and cohesion which had made for efficiency in the functioning of the armed forces, greatly weakened, Moreover, the progressive decline of the central government gave rise to jealousies and rivalries among the mansabdars, which dealt a further blow to the cohesion of the army.

For the same reason, there was now a growing deterioration in the functioning of command. The various mansabdars. owing to their selfish and petty motives and mutual rivalries, ceased pulling their weights together. Internecine became the order of the day. The most powerful of them even went to the extent of breaking away from the centre. In such a state of affairs, it was but natural that the shortcomings of the fighting mechanism should be accentuated, with disastrous consequences to the very existence of the Mughal state But the mansabdars were not merely selfish and petty-minded, they were also mostly incompetent, on account of the hereditary principle having replaced merit as the basis appointment. No doubt, this principle, in one form or another, had always been present in the Muslim armies. But it was only in the 18th century, the period of the Mughal breakdown, that it was applied extensively. It seems the feeble Emperors, failing to dominate the mansabdars with their Imperial power, had started placating them through a policy of favours and temptations. The incompetence and low calibre of the commanders had the effect of making confusion worse confounded.

As regards the state of control and command under the Marathas, things were bad enough, though not so bad as under the Mughals. Shivaji, the founder of the Maratha State, had organised a strong standing army, free from most of the defects of the Mughal army. It was an army in which both officers and men were directly recruited and paid by the state. In each of the important wings, cavalry and infantry,

command was organised on the basis of a single heirarchy graded vertically on the principle of each one of the officers, with the exception of the highest and the lowest, being subordinate to those above him and superior to the ones below him. The Raja was assisted by a senapati who both advised him and carried out his orders in military matters. The four Peshwas were also strong men and exercised effective control over the army and its functioning. But they were at the same time responsible for the revival of saranjams, a sort of feudalism which, in due course of time, greatly undermined the supremacy of the Peshwa's government. saranjam-holders became more and more powerful and raised and controlled their forces, as they liked, quite independently of the central government. In their own respective territories, these Maratha chiefs as well encouraged similar feudalistic elements which further hampered the cohesive forces¹ of the Maratha army. In such circumstances, no regular musters could be held and the few musters which were held were far from true, because like the Mughals of the 18th century, the Marathas too had no arrangements for branding, descriptive rolls and verification. Full quotas of troops were seldom kept in peace. Levies started being engaged only when the war began. This resulted in a great deal of difficulty and delay in the mobilisation of the army in time of need. Moreover, not only that, in the absence of any effective control' from above, the quality of men and horses brought to the battle-field was poor but also the men thus engaged cared more for their immediate masters than for the head of the state -a factor which ultimately hollowed the foundation of the state. The deterioration in the exercise of control by the state led to deterioration in the functioning of command. The sound arrangements of Shivaji, under which every officer, in the infantry as well as the cavalry, had his duties carefully defined, were conveniently abandoned under the Peshwas. First, infantry, the major arm of Shivaji's time, was relegated into the background in favour of cavalry; then, some time later, cavalry, too was thrown into the back ground in favour of the trained battalions raised under European commanders,

^{1.} Sen. p. 73.

and thus in the end both the important wings suffered irreparably, with the result that the entire Maratha officer corps was demoralised. Moreover, most of these officers, under the vicious influence of ever growing jagirdari system, developed centrifugal tendencies which created conditions most conducive to the rise of mutual rivalries and intrigues.

So far as the Sikhs are concerned, they failed to evolve any organisation or agency of overall control. Their republicanism proved the main hinderance. Gough and Innes have rightly said about them: "Any fighting machine must have a single controlling head, whereas the Sikh doctrines of brotherhood and equality made every chief kick at the idea of subordination". The democratic institution of the Sarbat Khalsa² which used to exercise supreme control over the army in the days of struggle against the Mughals and Afghans, was later, in the absence of any threat to their existence, nearly discarded. Its meetings were seldom held, and when held, its decisions were practically unheeded. The various chiefs were interested in their own principalities, called misals, and did not brook any interference from outside. The result was that the army of each misal became an independent unit. The internecine wars of the misals carried the process of disintegration still further, so much so that Mr. Forster was led to predict the rise of some ambitious chief from the ruins of the Sikh common-wealth.3 Towards the end of this period, even when Zaman Shah of Kabul threatened invasion of their territories, though they all rose to a man against the enemy and fought gallantly, they failed to evolve, even temporarily, a united front. A similar lack of unity and cohesion marked the army of each of the misals, which, being confedarate in character, was a loosely organised body composed mainly of volunteers and equal partners with the option to leave it any time they liked, and held together by ties of communal

^{1.} Sikhs and Sikh wars, p. 28.

^{2.} Sarbat Khalsa literally means the entire Sikh community, but as a political institution it refers to the Khalsa assembled in a regular meeting at a central place like Amritsar. It represented the supreme will of the community. Its decisions were called "Gurmattas" from the belief that they were sanctified by the presence of the Guru in the meeting.

^{3.} Forster, pp. 331 and 335.

and clannish affinity rather than by the control exercised by the head of the misal, who was, besides, the nominal commander of the misal forces. The general quality of command was not bad, for the commanders on the whole were possessed of enterprise, talent and courage, but this was set at naught by the chaos and anarchy created by the absence of any arrangement of well-organised control.

The factors discussed above, that is, lack of order in camps and marches, absence of proper discipline and weakness of control and command, seriously affected the conduct of fighting by the Indians. Tumultuousness and desultoriness are the fittest epithets for such a mode of fighting. True, the Mughals arranged their field in the manner prescribed in Taimur's ordinances. The skirmishers were in front. hind them was a line of artillery with supporting columns, on either side. The Commander-in-Chief took his position in the centre and to the right and left there were reserves which could be thrown into the battle. Behind the Commanderin-Chief was the rear guard having in its charge the baggage and women. Some armed men called Nasagchis were stationed in the rear to enforce order. Actually, though the armies were arranged in this formal fashion, once the battle started, it was usually bypassed, so that the battle proceeded irregularly and haphazardly in the form of skirmishes. This type of fighting was of no use against the methodical mode of fighting of the trained and disciplined forces of the British. It is true that there were some brilliant aspects as well, such as great feats of personal heroism in single battles or even otherwise, amazingly long marches which gave them mobility and power for surprise. But fighting as a technique was a dismal affair. The main reliance of the Indians was on overwhelming numbers and not on any superior strategy or tactics of theirs. This was because there was no training in formation or combined movements of any sort.2 The individual, no doubt, paid the minutest attention to the training of his body and

^{1.} Dr. Horn, pp. 136-151—The battle array was known as Saff Arastan or Parrah Bastan. The names of the different parts of this array were: Skirmishers—Qarawal; vanguard-Harawal; centre-Ghol; rear-guard Chandawal; right wing-Dast Rast-i-Ghol; left wing-Dast chap-1-Ghol.

^{2.} Irvine. p. 189; Dr. Horn, p. 69.

exercising himself with all his weapons. For this purpose, there were a series of movements practised daily, known as Kasrat, like exercises with dump-bells or heavy pieces of wood, called 'Mudgars' and the chain-bow (lezem), single-stick play, called Gatka, Yak-angbazi (play with one stick or sword), Do-ang-bazi (play with sword and shield or two swords), wrestling bouts, tent-pegging and shooting at bottles. The archers had their daily shooting at an earthen mound used as the target. The swordsmen were exceedingly skilful and active. Their attack and defence were accompanied by wildest gestures, the most extraordinary leaps and elaborate feints of every sort. The cavalry had their horses trained to a sort of manege, where the horse was bound to stand on its hind legs and then advance by bounds for a considerable distance a manoeuvre for attacking a man on an elephant. this entire training was only an individual achievement, and so far as collective training is concerned, there was nothing of it. The nearest approach to army manoeuvres was when the army or a division was ordered out to take part in a royal There were no parades except occasionally when the officers paraded their troops at the palace or on the march for the Emperor's inspection or review. The results of the absence of any combined training were indeed very sad. The army was at all times more of a mob than an organised force and all its movements of offence or defence in the battlefield were conducted in a crude and clumsy manner.

The tumultuous and irregular character of fighting was also due to the propensity for loot and plunder, so common in the soldiers of the 18th century. The element of predatoriness vastly added to the confusion that was already there in ample measure. So powerful was the temptation for booty that while in the thick of a battle, men would often break off to plunder the dead and the wounded, thereby causing enormous damage to the side to which they belonged. It was not rare that the strategical advantage involved in pursuing a fleeing army was sacrificed at the altar of the prospect of looting the disabled people, not all of them belonging to the other side. Predatory activities were not only ruinous to

^{1.} Erskin (11), p. 286; Badayuni (111), p. 92.

success in the battle, but also were a great menace to the political, social and economic life of the country. Why this extraordinary and abnormal weakness for brigandage? The reasons responsible for this were manifold. The state's unwillingness to undertake the responsibility of supplying, free of charge, the necessaries of war to the men created a climate most favourable for foraging and plundering. The men were required, in the case of all the indigenous armies of India, to find their own horses, their own weapons, their own equipment, their own tents and their own transport-in short, almost every thing that was needed for a military career. Perhaps the reason was that the state did not want to assume such a heavy responsibility or perhaps it was thought that men would look after their own articles much better than they would do, in case they were supplied by the government. Though there is some weight in the latter reason, yet it is sufficiently clear now that the disadvantages of the system far outweighed its advantages.

Nor did the state make any satisfactory arrangement for the supply of food and fodder to the personnel of the armed forces. The head of the state and the other commanders accompanying the army made arrangements for their immediate entourage only. The rest of the army were supposed to solve their food problem themselves. Of course, there were always there the bazars of the numerous authorised dealers, called bunyas or banjaras, who with their long trains of bullocks laden with grain, followed the army and, on payment of a tax, sold their goods to the officers as well as the men. Any quantity of food material could be had from the bazars of these dealers, provided there was money enough.

But most of the soldiers had no money. They were paid irregularly, for much less than a period of twelve months, and always kept in arrears, as a matter of policy, "to prevent them (i.e. soldiers) from transferring their services to some other chiefs as readily as they might have done, if they were nothing owing.¹ Besides, there was the practice of making heavy deductions from the salary at the time of payment, as

^{1.} Haji Mustapha, Seir (iii), p 35 says that "the troops were wretchedly paid, twenty or thirty months of arrears being no rarity".

for example, kasar-i-do dami (a discount of 5%), kharch-isikkah (expenses of minting), ayam-i-halali (deduction of one day's pay in every month except Ramzan, and deduction of fines levied on account of breaches of discipline. The case of Marathas was no better. Like the Mughals, they also withheld the pay of a month or two in a year. "Every Maratha soldier was familiar with Baramahi Chakri, and Dahamahi Chakri or Akramahi pay''.1 The Mughal practices of making deductions and keeping men in arrears were follwed by the Marathas. Among the Sikhs, the popular method of payment was the 'fasalandari' system, under which soldiers were paid every six months at the time of harvest.2 In such circumstances, it is rather too much to expect people to behave normally. Burdened with the responsibility of making provision for their own arms, equipment and food grains as they were, they could hardly over-ride the temptation of indulgnig in plunder, whenever and wherever they found an opportunity. Therefore, no wonder that foraging was developed into a fine art and was freely indulged in by soldiers, whether they were in camp or marching or in the battle-The course of an army's march was marked by desola-Compensation, called paemali (foot treading) was sometimes paid to the cultivators whose crops were damaged by the army people, but it was too inadequate to cover the loss. The worst effect, however, was produced on the mode of fighting which, on that account, deteriorated into a nonserious, disorderly and haphazard affair.

Another factor which encouraged the tendency towards pillage, was the bargir-silahdar system in vogue in most of the Indian armies. A man with many horses and a lot of equipment was at a great advantage. In the first place, to be a better horseman than his colleagues a soldier needed to have more than one horse. There were thus many do-aspa (possessor of two horses) and se-aspa (possessor of three horses) soldiers. The spare horse was not only useful in the event of an emergency like the death of the first horse but also was of great practical use for carrying away booty. Secondly,

^{1.} Sen, p 636 -- The Administrative system of the Marathas.

^{2.} Franklin-Memoirs of George Thomas, p. 113.

if a man had more horses and equipment, he could lend them to such of the people as had not the means to have their own horses. The riders of borrowed horses called bargirs had to pay to their creditors the major portion of their emoluments. The loan of horses being, thus, a profitable business, every soldier, a bargir or a silahdar (owner of one's horse) or even a foot soldier at all times had a powerful temptation to acquire by means fair or foul, horses as well as equipment.

The presence of mercena ies, fortune-seekers, and marauders in large numbers in the Indian armies, reinforced the inclination to loot and plunder, as the one object of their joining an army was to make money. they were an undesirable element goes without saying. degree of reliance which a prince could have on his army (composed mostly of them) was proportioned to the treasures of which he was possessed, joined to his inclination to disburse them.''1 This observation of Orme made in reference to the Mughal army is applicable to other Indian armies of the day as well. As a safe-guard against such people, "Commanders were in the habit of getting together, as the kernal of their force, a body of personal dependents or slaves (chelas) who had no one to look to except their masters".2 But all the same, the mercenaries, because they were accomplished horsemen, continued to constitute the bulk of the Indian armies.

The Marathas and the Sikhs gave direct encouragement to predatory activities. Pindaries who were the worst of the free-booters, were openly patronised by the Maratha chiefs. They were encouraged in their nefarious activities because they were the suppliers of food materials to the Maratha camps at rates far cheaper than the market. The Sikhs went a step further and made loot and plunder a sort of joint business, the profits of which were shared out at the end of each expedition. Prinsep³ has explained how after every compaign, the fruits of victory, including the new territories, were portioned out by the Sikhs according to the amount of service

^{1.} History of Indostan, Vol I, p. 49

^{2.} Irvine, p. 11; J. A. S. Bengal, Part I, 1878, p 340.

^{3.} Prinsep, p. 32.

rendered. "The Sardaree or the chief's portion being first divided off, the remainder was separated into patties or parcels for each surkund and these were again sub-divided and parcelled out to inferior leaders, according to the number of horses they brought into the field. Each took his portion as a co-sharer and held it in absolute independence." beneficial to the individual fighters, this system, apart from affording a powerful impetus to the love of plunder, resulted in the perilous co-parcenary system1 which went a long way in hollowing the very foundation of their power. However, it is significant to remember that though the Sikhs were plunderers, yet they did not plunder like Pindaries of Central India or dacoits of Bengal. "They fought and plundered", says Griffin.² "like men and not demons. There were few stories in Sikh history of outrage to women and torture to men such as stain the pages of South Indian history with cruelty and blood". They considered themselves as guardians of dharma and Indian womanhood and several times rescued ladies from the clutches of tyrants. Their excellent moral character has elicited tributes even from their bitterest foes, the Afghans.3

It has been remarked earlier in this survey that the fighting men were required to find their own horses and equipment, if they wanted to pursue a military career. had far reaching consequences. The private ownership of the horse and the equipment had a determining effect on the character of the Indian warfare. Horse was the chief means of a soldier's living. Therefore, he was not willing to risk its life by plunging into the thick of the battle and taking a firm stand against the enemy. The result was that there was no pitched or well-contested fighting in the real sense of the term and the battle was converted into a series of skirmishes. of horsemen made attacks one after another, but before their attacks could develop into full-fledged actions, they would retreat, and if the enemy happened to be possessed of some determination and steadfastness, the skirmishers were most

^{1.} Gupta, Vol: II, p. 17. This was a system of parcelling out every village into numerous tracts held by different people.

² Griffin, p 85.

^{3.} Qazi Nur Mohammad's Jangnama p. 158, (edited by Ganda Singh).

likely to take to flight. The situation being as this, the tactics of harassment by making raids on the vanguard, the rear guard, the right flank or the left flank, convoys of supply or treasurecarrying parties etc. were given great preference. the pattern of fighting that emerged was not much different from the guerilla mode of warfare. Some of the Indian powers like the Sikhs because of their weakness in artillery carried on a hundred per cent guerilla warfare and developed it almost to a fine art. The important devices usually employed by them were hanging on flanks, obstructing passage of rivers, cutting off supplies, destroying messengers, attacking foraging parties and isolated detachments, hitting and running away, getting into the rear, and racapturing conquered places, infesting camps, plundering baggage trains, complete evacuation of places in the immediate neighbourhood of the enemy's route of march, pursuing the fleeing troops, reprisals or threats of retribution afterwards against the deputies and the friends of the enemy and sweeping over the whole 'country immediately after his withdrawal. However, it is their running or continued skirmish which excited the greatest admiration of the contemporaries. Both Forster² and George Thomas³ have given a graphic account of this. For example, the former's account reads thus: "The predilection of the Sicques for the matchlock-musquet and the constant use they make of it, causes a difference in their manner of attack from that of any other Indian cavalry; a party from forty to fifty, advance in a quick pace to a distance of carbine shot from the enemy and then, that the fire may be given with the greatest certainty, the horses are drawn up and their pieces discharged, when speedily, retiring about a 100 paces, they load and repeat the same mode of annoying the enemy. Their horses have been so expertly trained to a performance of this that on receiving a stroke of hand, they stop from a full career."

Other Indian powers did not follow the mode of guerilla fighting to the same extent as was done by the Sikhs.

^{1.} See invasions of Ahmed Shah Abdali and Zaman Shah—for 71n invasion of Abdali, see Jangnama by Qazı Nur Mohammad edited by Ganda Singh.

^{2.} Forster, Vol : I, p. 332.

^{3.} Memoirs of George Thomas, p. 107.

Nevertheless, there was a considerable measure of it in their methods which, from being of the nature of skirmishes, indicated essentially the behaviour of guerillas. These guerillas, no doubt, acted with much greater confidence born of greater numbers and a heavier park of artillery, but all the same they were guerillas. In favour of this method of fighting, it may be urged that it was based on the principles of surprise mobility and as such gave a certain strategical advantage to the troops practising it. But after carefully and critically going into the ins and outs of the matter, one is led to draw the conclusion that in spite of the few tactical or strategical gains offered by it, the whole system of fighting by skirmishes as practised in our country, suffered from an inherent weakness. It was alright as a supplementary technique, but as the pivot or the central plank of the whole body of strategical and tactical thought and practice, which was the case in India, it was inadquate and deficient. So far as fighting was confined to the 'country' powers themselves, the weak points of the system were not sufficiently realised, because all of them were following a more or less the same pattern of warfare. shortcomings came to the surface only when in the latter part of the 18th century, the advent of the superior European methods created a great stir in the country.

Our survey of the 18th century warfare in India will remain imcomplete unless we have some idea of the over-all strategical objectives which guided our rulers period was characterised by the absence of any idea of keeping up a balance of power, unlike the contemporary Europe where all operations were directed towards the maintenance India, on the contrary, the certain balance. In endeavour was always to fill up the political vacuum created by the break-up of the Mughal empire. A number of states had consequently sprung into existence and were engaged, day and night, in the task of aggrandising themselves and carving out empires as vast as possible. However, outright annexation involving a complete stamping out of the previous rulers was usually not attempted, for, on grounds of administrative convenience and political expediency, the conquerors preferred to reduce them to submission and render them tributaries. The uppermost objective, therefore, in the

minds of the Indian commanders was to get, somehow or other, at the rival leader. In the battlefield, the fiercest fighting took place near the elephant of the opponent chief commander, for the reason that if he was caught or killed, it became so easy for the conqueror to dictate his terms. There is also another explanation why attention was, all the time, focussed on the rival commander. The morale of the soldiers was not high. Though there was no lack of personal heroism. yet there was no high ideal which inspired them, mercenaries as they were. They "no sooner see their chief destroyed than they take to flight'', says Orme.1 It was a well-established fact that if the leader fell or was wounded or was captured, the army immediately fled away. Greater numbers, accidents and treacherous desertions were also decisive factors in a battle, but none of them was comparable with the death, disappearance, disablement or capture of the leader. The first action, that is, the gun and rocket duel, was followed by successive charges delivered from the wings, turn by turn. But actually all these manoeuvres were only the preliminaries necessary to paving the way for an approach to the centre where the chief leader was generally positioned.

Another great strategical objective was to capture forts and fortresses in which the country abounded. They were huge structures of tremendous strength and constituted what may be termed the second line of defence—sometimes the very basis of defence. Because there were few effective battering guns available then, a great degree of reliance was placed on these forts and fortresses. After a reverse in the open, his fort was the last resort of a fugitive leader. From there he could continue the fight as long as he had sufficient supplies with him, and he could not be considered to have been subjugated, until his fort or fortress had been, one way or the other, seized, because the enemy's hold on the country around the fort was all but precarious, so long as the defiant chief was holding out; for left to himself, it was open to him at any time to overawe and bring it back under his sway. But the forts were not merely strong posts of defence. They also provided shelters for royal palaces and government offices and further

served as repositories of treasure and war material. Therefore they were the much-coveted objectives of all strategical planning.

Consequently, siegecraft formed a vital part of the Indian warfare, and continued to do so until effective siege cannon came into wide use in the 19th century. But it was not a highly developed art. A siege was a long and tedious affair. Strong places were most commonly reduced by strict investment and starving out the garrison.1 There were few captures by a coup-de-main (Sar-i-Sawari) for want of effective heavy cannon, the walls were not often breached and rarely escaladed Treachery within the walls was as frequent a cause of surrender as any other factor. down before a fortress, an Indian army tried to surround it completely so as to prevent any ingress or egress. works (murchal) were thrown up, in which the siege guns were placed. The system of digging approaches and laying mines (nagb) was known and practised at any rate in Northern India, but the trenches, being open, were very risky. There was nothing like the system of parallels that was in use in the contemporary Europe. There was also a plan to which recourse was sometimes had, of building high towers with the branches of trees and when they were of a height to command the interior of the fort, guns were mounted on them. were called 'Siba'. Scaling ladders (nardban) were not unknown, and were occasionally brought into use. Elephants were frequently brought up to batter the wooden gates of a fort and in case the gates were studded with spikes, the elephants were provided with iron frontlets.2 Therefore by way of safeguard, some times the gates were bricked. Indians, in the defence of their forts, behaved with the greatest gallantry and courage. There was no surrender when a practicable breach was made, but on the contrary the hardest manto-man fighting took place at the breach. They used heavy siege guns and wall pieces called 'gingals', which sent a ball of two or more ounces to a very considerable distance. Having no shells or hand-grenades, they cast bags of gunpowder

^{1.} Fitzclarence, p. 245.

^{2.} Fitzclarence, p. 137; Seir Translation (iii), p. 182.

into the ditch, which, exploding by fire thrown on it, scorched the assailants. At times they used earthenware pots (Huqahi-Atash) with fuses and full of powder, the pieces of which caused serious wounds or flaming packs of cotton dipped in oil and other combustibles. Throwing of stones on the storming parties was another popular means of defence. Countermining was resorted to only when besiegers approached through mines and trenches.

The siege-craft outlined above was, by and large, practised by the Mughals and the Marathas. The Sikhs were, however, weaker than their contemporaries, as they had no heavy guns. Therefore, they usually had resort to strategems, such as bribing the inmates, false pretexts, feints and blockading with a view to starving out the garrison etc. In defence, they were helpless against a determined enemy like Timur Shah who reconquered Multan from them in 1780.

From about the middle of the 18th century, a formidable challenge to the Indian mode of fighting began to make its appearance in the form of new ideas of military organisation and operations, which were introduced into the country by the French and the British. Both these peoples had been in India more or less for a century and a half. But throughout this period, their primary concern had been trade and commerce, and it was not till about the middle of the 18th century that they first began to think of exploiting the fissiparous tendencies of India for their political ends. The new aims produced a lot of rivalry between the two, which ultimately led to the three Anglo-French Karnatic wars. It was about this time that for the first time on the soil of India the European methods of military organisation and fighting were experimented upon. The credit of this goes to Dupleix who was the first among the Europeans to realise that a smaller force trained and disciplined to fight in formation could easily defeat the unorganised masses which constituted the armies of the Indian rulers, and he actually translated his ideas into reality by defeating, without any difficulty, a much larger army of the Nawab of Karnatic with a small contingent of his, organised on the European model. Dupleix's success was contagious, for the British soon followed suit and raised a regular army on the new lines.

The first artillery companies were established in 1749.1 During the period of his first governorship of Bengal, Clive raised a body of Indian sepoys, trained, clothed and accoutred as the Europeans.² Some years later during the second period of his governorship, Clive re-organised the whole Bengal army into brigades, regiments and battalions. This army, at the time, consisted of infantry, artillery and a few "risalahs" of irregular cavalry, called Mughal Horse, which were meant only for minor duties. There was no army commissariat yet, and all supplies of provisions and cattle etc. were obtained through contractors attached to the brigades. The system of payment in cash was in vogue and a paymaster was assigned to each brigade. There was complete reorganisation of this army in 1786 and again in 1796 when radical changes were made in its general corstitution3 but its fundamental character i.e. the predominance of infantry and artillery and the organisation of their training and d'scipline on the scientific lines of Europe remained unchanged. There was no horse artillery in the British Indian army before 1801.

The Sepoy Army was the instrument with which the East India Company conquered India. The secret of the Sepoy Army was simple. Organised and trained in the same way as European soldiers, the Indian soldiers would be cheaper, better suited and perhaps not less efficient than European soldiers in the circumstances of India. A hundred years of warfare from the time of Clive's intervention in Arcot to the second Sikh War proved this beyond doubt.

Three characteristics marked out the Sepoy Army from the armed forces of Indian rulers. The Sepoys were drilled, disciplined and trained in the use of arms. Secondly, they were organised in units, battalions, regiments and brigades and the units functioned in peace time as well as in war under their own officers. Thirdly, as they were regularly paid, housed and their comforts looked after, they were made to feel contented. In fact, the Sepoy Army was modelled on European

^{1.} Memoirs of Bengal Artıllery by capt. E Buckle, Calcutta Review Vol. XII 1849, p. 329.

^{2.} Broom's History of the Bengal Army Vol. I; Calcutta Review Vol. XIV, 1850, p. 81

³ Calcutta Review, June 1856, Vol. XXVI, pp. 436-38.

military systems. There was, however, one major difference The Sepoy Army had two sets of officers, a set of Indian officers with ranks like Subedar and Risaldar similar to those in use ir the armies of Indian princes, who served as intermediaries between the commissioned European officers and the rank and file and secondly, the European officers in whom was vested the actual command. The Indian officers were men drawn from better class families, and held commissioned ranks, but they went up only to a rank equivalent to that of a Major. The European officer corps constituted the real leadership of the Sepoy Army. The Indian officers had only what may be called training in drill and in the use of arms. They were ignorant of tactics and strategy, without a knowledge of which they could not replace the Europeans. Sepoy Army had in fact no knowledge of warfare, no leadership of its own, and was therefore able to fight wars only under the leadership of European officers.

The Indian rulers of the time were not slow to realise the importance of the military revolution that was now in their midst. They were profoundly influenced by the easy successes of Dupleix and Clive and, convinced of the superiority of the European mode of warfare, they began to organise their troops in the same manner and to build up considerable forces under European leadership. The Nizam of Hyderabad was perhaps the first Indian ruler to have a troop organised along the new lines under the supervision and leadership of a French officer, Bussey. Later on, the process was carried much further by Raymond. Among the Marathas, the third Peshwa, Balaji Baji Rao, was the pioneer in this respect. He organised a gardi force with the help of Muzaffar Khan and Ibrahim Khan who had received training from Bussey. Large-scale Europeanisation, however, was introduced, a little later, by Mahadaji Sindhia who had been deeply impressed by the superiority of the British army in the first Anglo-Maratha War. Mahadaji was soon immitated by other Maratha chiefs. According to the estimate of Major Lewis Ferdinand Smith, the strength of the regular armies of the various Maratha chiefs towards the end of the century stood thus:1-

^{1.} Sen p. 135.

		Guns.	Bns.
Sindhia—Perrons' 5 Brigades		225	39
Filze's Brigade.		45	8
Sombre's Brigade.	•••	35	6
Shepherd's Brigade		25	5
Umbaji	***	40	10
		370	68
Holkar — Vicker's Brigade.	***	30	 6
Armstrong's Brigade.		20	4
Dodd's Brigade.	•••	20	4
Under Indian Command	130	10	
		200	24
Bhonsla- Under Indian Commando Peshwa- Only two battalions.	ers	60	15

As for the westernised constitution of the different units, the following account of Mahadaji's regular army may be helpful. Under the Sindhia ruler, a brigade was composed of 8 battalions, each commanded by a captain who was assisted by a lieutenant, either European or European by descent: A battalion had 8 companies of infantry, each one of which consisted of one Subedar, two Jamadars, one Kot Havildar, three Havildars, four Naiks and 52 Sepoys. The artillery personnel of a battalion consisted of one Sergeant Major (European), 5 European gunners, 1 Jamadar, 1 Havildar, 5 Naiks and 35 Gola-andaz, besides 5 Tindals, 35 Khalassis, 20 Beldars, 30 Gariwans (drivers), 4 ironsmiths and 4 carpenters. A battalion had also an Indian surgeon and a complement of Mutsaddis, water-carriers and the like. battalion had 408 stand of arms, 4 fieldpieces, 1 howitzer, 5 tumbrils. 120 bullocks and 2 carts. Every gun had constantly ready with it 300 rounds of shot and 100 rounds of grape. A howitzer had 50 stone balls and 50 rounds of grape. A brigade of 8 battalions consisted of 6000 men. Besides the

battalion complement of guns above-mentioned, the brigade had attached to itself 3 battering guns and 2 mortars with men to serve them. Each brigade had, like-wise, 200 irregular cavalry and 500 irregular infantry.

The other notable Indians to make experiments in the new direction were the rulers of Mysore, Haidar Ali and Tipu. They were among the bitterest foes of the British power in India, and they created, with the help of French Officers, a mighty fighting force organised, trained and disciplined in the manner of a European army, so that they might meet their adversaries in the battle-field on a footing of equaliy.

Thus it may be said that a great military revolution was in full swing in the latter part of the 18th century, comparable at least in its historic role to the revolutionary changes ushered in by the better fighting technique of the Turkish horsemen in the 12th century. It is indeed creditable that the Indian princes faced the situation realistically and made some necessary adjustments in their armed forces to be able to keep abreast of the times. But howsoever commendable their attempts might be, there were inevitably certain serious flaws in their arrangements. The first of them was their dependence upon foreigners for the supply of their arms. Being backward in the knowledge of science and technology, they did not have any advanced workshops of their own, wherefrom their requirements could be met. And the foreigners who were mostly the British, their political rivals, gave them only their rejected and third-rate arms, knowing fully well that even these would be acceptable to the Indian rulers. second weakness was equally serious, if not more. Though the men were trained and disciplined carefully, there was a deplorable lack of officers educated in warfare. The Indian rulers who imitated the organisation of the East India Company's armies, were unable, generally speaking, to understand either the strategy or the tactics of large scale operations. So far as the East India Company was concerned, it was lucky to have officers from England, who were recruited and trained there in the higher principles of war. Among the Indian leaders of the 18th century, there were very few people like Haidar Ali who understood strategy and effectively used western tactics in battle. Hence, no wonder that no arrange-

ments existed in the Indian states for the education training of men needed to officer the forces raised on the European model. As for the European officers who assisted the Indian princes in raising the new units, they were, with a few exceptions, neither competent nor dependable. Most of them were adventurers with little more than a sprinkling of military knowledge. And further, little reliance could be placed on them in time of war, as was positively proved by the desertion, in response to the Governor General's call, of all foreign officers, British as well as French, of the Maratha armies right at the outset of the Second Anglo-Maratha War. Another great weakness of the Indian armies was that their bulk was still composed of untrained and loosely organised masses of cavalry and infantry, clinging relics from the past. No attempt was made to reform them into useful auxiliaries of the trained units. Therefore, even after the raising of western-type bodies of troops, the Indian fighting practices remained, by and large, burdened with the deadweight of past military traditions. As a marter of fact, our Indian princes had neither the best of the old system (for the old branches suffered from negligence when the new branches became popular) nor the best of the new.

We have studied above, in a broad way, the various modes of fighting and principles of military organisation in vogue in the country during the 18th century, and are now in a position to conclude the present survey. In brief, the situation which confronted Ranjit Singh, the architect of the Sikh military system to be studied in the chapters to follow, at the threshold of his reign in 1799, stood thus: The 18th century had been a period of conflict and transition. The conflict was between the old and the new, between the Indian and the Western ideas, of military organisation and warfare, and as the result of this, a transition was under way. the Indian military systems or to be more precise, the different varieties of more or less the same system, had been exposed and stood self-condemned. The Mughal system had become hollow on account of the weakness of those whose responsibility it was to enforce it, was only a shadow of its former-self and was dying out. The same was the case with the Maratha system. The battle of St. Thome, 1746, had offered a challenge

to all these systems. It had demonstrated "the overwhelming superiority of the European soldier to his Asiatic rival". "Before this battle", says Malleson, "the prestige and the morale were on the side of the children of the soil. Now these prestige and morale transferred to the European Of almost every subsequent battle between the European and the Asiatic, it may be said that, in consequence of that transfer, it was half won before it was fought". The Indians were so much impressed by the European methods of fighting that henceforward they started imbibing the new ideas. the second half of the 18th century may be considered as a critical period in the development of India's military thinking. It was during that period that the untrained hosts of Indian rulers began to undergo a gradual process of transformation into trained armies with adequate cavalry and artillery support. The ball had been set rolling by the Nizam of Hyderabad. Next, the Marathas had joined in and after that, others like Haidar Ali and Tipu, Begum Sumroo and the Nawab of Oudh had come in. They all had employed Europeans of different nationalties, mostly the French, who raised trained battalions for them on western lines, but they only half succeeded, because they failed to completely assimilate these new ideas. The Sikh predecessors of Ranjit Singh, however, had remained unaffected by the new trends and had continued to pride themselves on their own desultory mode of warfare.

CHAPTER II

GROWTH AND DEVELOPMENT

The new military trends observed in the preceding chapter found their strongest supporter amongst Indians in Ranjit Singh, the ruler of Lahore, who built up a formidable army, disciplined and trained according to the European system, during the early part of the 19th century. He was thoroughly convinced of the superiority of this new system, which had been unmistakably demonstrated by the unbroken series of British conquests in India. Besides, his own ambition building up a mighty power in the Panjab and the exigencies of the political situation facing him at the outset of his career led him to realise the urgency of creating a very strong force of a superior type on the most up-to-date lines. There were not only a large number of Sikh confederacies (some of them even stronger than his) that were to be conquered and annexed, but also an even larger number of Mohammadan Panjab all over the western that had to be eliminated, if the attainment of his ambition was to be ensured. This was bound to bring him into clash with the rulers of Kabul who claimed sovereignty over them. In the east even a more terrific clash with the British and Gurkha empires expanding westward was apprehended.1 therefore, obvious to him that to cope with the immensity of his task, he required not only an army much larger than his small levy of 25002 ill-disciplined horse, but also a much bettertrained and equipped force, particularly in view of the high quality and efficiency of the rival British army.3 His military genius⁴ lies in his firm grasp of the challenge of his and in the undoubted success of his practical measures undertaken to meet it.

^{1.} IHRC - Vol. XVIII, Jan 1942, p 341.

^{2.} Prinsep - pp 29 & 184; PGR - Wade to Prinsep, May 25, 1831.

^{3.} Griffin, p. 138.

^{4.} Ibid, p. 132.

But while so keen on adopting European methods, Ranjit Singh never wanted completely to discard his own system which he had inherited from his fore-fathers, because of several reasons. Firstly, being well-known for its skirmishing and manoeuvring ability, dash and gallantry, the inherited system could be of great service to him. Secondly, the Sikhs were reluctant to change for the new arms proposed to be raised under European discipline. Thirdly, on grounds of political expediency, he thought that by retaining it he could accommodate most of the high-class troops of the Sikh chieftains¹ who might otherwise indulge in conspiracies against him. However, he wished to reform the old practice so as to be able to gain the maximum benefit out of it.

The military system of Ranjit Singh, as finally evolved, was thus a happy compromise between the old and the new ideas. It was an earnest and successful endeavour to have the best of both the systems. He was not a blind imitator of the West, exactly as he was not an orthodox follower of the East. His approach was selective and discriminating and not mechanical.

EARLY DIFFICULTIES

Ranjit Singh had, at the outset of his career, to encounter a number of difficulties and thus proceed rather slowly and warily. Firstly, his own examination of the European mode was not yet complete and he required more time to study it before taking any decision. Secondly, his chiefs and other Sikhs were too much wedded to the old system and offered stoutest opposition to any change. In their estimation, infantry was meant for menials, and artillery was a. difficult thing to become proficient in; cavalry alone being an honourable arm meant for gentlemen. Then, there were the paucity of excellent instructors and the want of necessary equipment. Several years of patient and persistent work were required to tide over all these difficulties. said to the credit of Ranjit Singh that ultimately his efforts were crowned with success.

^{1.} Bakht Mal - Khalisa Nama - ff. 59a -62a.

The growth and development of the Sikh military system passed through a number of phases or periods to which we may now turn our attention.

FIRST PERIOD (1799-1808)

The process of development during this period was governed by several factors. The first of these was Ranjit Singh's policy of conciliation towards his fellow Sikh chiefs and their levies. He was anxious not only to ensure their ready and willing cooperation after their reduction, but also to harness the great fighting skill and fervour of their troops to his own ends, being at the same time anxious to build up a strong regular force of infantry and artillery according to the European model, as "an instrument of sovereignty over the Sikhs" or "as a means to overthrow the Sikh feudalism," as Metcalfe has put it.1 The second factor was the powerful impression created on his young mind by the catastrophe which, in his very first years, befell the greatest empire of India, that of the Marathas, at the hands of the British. This strengthened his faith in the superiority of the European over the Indian military system. Further, the events of 1805 left a deep mark upon his mind. The flight of Jaswant Rao Holkar before Lord Lake, the demoralisation² of the Marathas, the orderly and disciplined way in which the pursuing British troops conducted themselves through the Panjab3 and their scarlet uniforms all served to steel his determination for the reorganisation of his army.4 This resolve was reinforced, when the Maratha ruler, while at Amritsar, impressed upon him the urgent necessity of raising a regular trained force.5 Another helpful factor was the powerful stimulus which Ranjit Singh received from the large numbers of the soldiers of fortune who, tempted by his rising power, left the armies

^{1.} For: 1808 Sec & Sep. Cons: 31st Oct, No. 1; Metcalfe to Edmonstone, Oct. 1, 1808.

^{2.} For: 1808 Sec. & Sep. Coas: 17th Oct. No 13.

^{3.} Panth Parkash, p. 133.

^{4.} Mooiciast (Vol I, p. 102) says that Ranjit Singh on this occasion, out of curiosity, visited Lord Lake's camp incognito and was greatly impressed.

^{5.} Sohanlal, Vol. II, p. 58.

of the English Company, the Marathas and Begum Samru, and came over to Lahore. Most of them were well-versed in the European method of training and discipline, while some of them were indeed men of great merit. He not only employed them gainfully, but also offered tempting salaries to attract more of such people from what was then called Hindustan.

The changes effected as a result of all these factors were of a comprehensive nature and are noticeable in almost all the branches of the Maharaja's military organisation.

Every branch of the army considerably gained in size and the aggregate strength rose from 2500 to about 30,000.² The rise after the visit of Lord Lake was more rapid than in the earlier period, the strength of the army in 1805 being only estimated at something between 5000 and 8000.³

Far-reaching changes were effected in the character of the Sikh cavalry. Its number rose from 2500 to about 6000.4 But the increase in numbers was perhaps the least important of the changes, though it is not insignificant either. Amongst the most important developments which affected it were the loss of its primacy and the emergence of some new characteristics in its set-up. These years may rightly be termed its formative period. 1799 Ranjit Singh's almost entire force consisted of horsemen, which gave to his army the complexion of being monolithic. This status of the cavalry now disappeared, as other branches, infantry and artillery, gained more and more in importance. Though still holding the predominant position, cavalry was already set on the way to becoming a subordinate arm. All the same, its organisation and efficiency were vastly improved. It was uplifted from the position of a feudalistic levy that it

^{1.} Northern India was at this time full of free lancers who readily offered their services to any one who promised to pay them handsomely.

^{2.} For: 1808 Sec. & Sep. Cons: 5th December, No 1-Metcalfe to Edmonstone, dated Camp Gungrana, No 8, 1808 Sohanlal and Capt Mathew have mentioned a strength of 100,000. This seems to be a clear case of exaggeration (Sohanlal Vol. II, p. 80).

^{3.} In 1805, Lord Lake estimated Ranjit Singh's maximum strength at 5 or 6000, while Malcolm estimated it at 8000. For : 1806, Sec. Cons., 9th July No 18-19; and Malcolm, p. 65.

^{4.} For: 1808 Sec & Sep. Cons., Nov 7, No. 2 and For: 1808 Sec. & Sep. Cons., 11 July, No. 127.

used to be in the past, and was constituted as part of the state standing army. As such, it came directly under the control and administration of the government and was distinct from the contingents of the feudatories over whom the state had but an indirect hold, and whose support was not always to be depended upon. The pattern of its constitution which became a model for the future was also evolved during this period. It was based on Derahs which were sub-divided into Misals. The Derahs of Ghorchara Khas, Sham Singh Attariwala, Gurmukh Singh Lamba and Sandhanwalias,1 which were raised at this stage, were organised on the new lines. also determined at this time that cavalry should not be burdened with any uniformity of dress or the European type of discipline, the main reason being opposition of the horsemen to such rigours. As to the efficiency of this corps, widely differing comments were made by Metcalfe and Capt. Mathew who had the chance to observe it in or around the year 1808. While Mathew calls it "indifferent, the horses small and in bad condition, remaining in the field all the year round," Metcalfe describes it as "numerous and well-equipped."2

Whereas cavalry suffered some loss of prestige, infantry acquired a much higher status during this period. It used to form a negligible portion of the army before 1799 condemned to minor duties. The impact of western ideas in the course of years, however, revolutionised the Maharaja's outlook and he embarked upon building up strong body of infantry. His desire was to organise it entirely on the lines of the English infantry, but as this was not possible for lack of efficient instructors and equipment,3 he divided it into two parts, irregular and regular, confining European training only to the latter. The irregular infantry was further expanded to a strength of 5000.4 According to Capt. Mathew, the irregular infantry was organised in battalions of 1000 each.⁵ There was, further, an improvement in its role. It was now given almost the same kind of arms as other branches

^{1.} Catalogue, Vol. I, pp. 116-117 & pp. 111-112.

^{2.} Fo1: 1808 Sec. & Sep Cons., July 11, No. 12 & Nov 7, No. 2.

^{3.} Ibid.,

^{4.} For: 1808 Sec & Sep. Cons. July 11, No. 12.

^{5.} For: 1808 Sec. & Sep. Cons. 11th Jully, No. 12; Nov., 7 No. 2.

and was employed for fighting purposes as well. There was, however, no prescribed uniform for it. As a matter of fact, it was not intended to be a permanent feature and for this reason subsequently, as regular infantry increased, the Maharaja slashed it heavily.

The raising of a corps of regular infantry was the greatest military innovation introduced by the Maharaja during this period. A humble beginning was made in 1803, when some deserters from the ranks of the English Company were employed to raise two battalions of Najibs. In 1808 its strength was estimated by Metcalfe at 1500.2 Panjabis not yet coming forth, it was composed of "the remains of the battalions that were formerly in the service of Sindhia and other native powers, together with deserters or men discharged from the Hon'ble Company's territories." These troops were formed into five battalions, four of Telingas or Poorbias, the same men the British sepoys, and one of Hindustanis or Rohillas, containing from 2 to 400 men each. A battalion was the principal unit and the Maharaja himself the supreme commander of all battalions. The chief officer of the battalion was Commandant. It is not definitely known, but in all probability the organisers being conversant with the British system alone, the constitution of a battalion was patterned on that of a battalior. in the English army. The battalions were armed with muskets and partly with matchlocks to which bayonets were attached. Sword was the personal weapon and was carried by all. In respect of dress, an attempt was made, in imitation of the British troops, to evolve some kind of uniformity, though not with much success. Scarlet turban was. according to Metcalfe, the only mark of uniformity. A partial uniformity was, however, observed in regard to boots, because several of the men wore them in the style of the Company's sepoys.

But inspite of the Maharaja's best efforts, the progress was rather slow. To give his own view, his "Peadahs were

^{1.} Dewan Amar Nath, Chapter V. p. 28

^{2.} For: 1808 Sec. & Sep. Cons., 11th July, No 12.

³ For: 1808 Sec. & Sep. Cons, 5th Dec, No. 1; AAR 1809: A Tour to Lahore, Para 18.

not fit to oppose well-disciplined troops, though they did well enough to reduce the forts of the country."

Nevertheless, Ranjit Singh was not dismayed and he continued making herculean efforts to remodel his infantry on the latest lines. Matcalfe writes: "In these foreign corps and his guns, he places his chief dependence. He is devoted to military pursuits and passes great part of his time in reviewing and exercising his troops. He evinces anxiety to obtain a knowledge of the European system of discipline and to introduce it as much as possible into his army."²

From the very beginning of his reign, Ranjit Singh showed his disapproval of the indifferent attitude of the towards guns and started building up a powerful artillery. Metcalfe bears testimony to it and says: "The Raja's attachment to his guns and his opinion of their weight, are both so great that he would never miss an opportunity of obtaining a gun. If he learns that there is a gun in any fort, he cannot rest until he has taken the fort to get at the gun or until the gun has been given to him to save the fort. He immediately dismounts the gun from the wall and drags it after him as an addition to his field train."3 Artillery, like infantry, received the maximum attention of the Maharaja who, indeed, looked upon it as an indispensable plank in his scheme of military reforms. However, during this period he had to import both officers and privates from outside, there being very few people available in the Panjab with any skill worth the name in the use of these weapons. All the same, Metcalfe speaks appreciatively of his Hindustani artillery men.4 As regards the total number of his guns of all calibres, estimates put it at between 35 and 40 at the close of this period. They included both brass and iron guns and had amongst them 5-pounders, 6-pounders, 12-pounders and even heavier guns. Most of them were country-made.⁵ Ranjit Singh was also aware of the importance and value of having his own ordnance department and it is said that he established in 1807 some factories

^{1 &}amp; 2. For: 1808 Scc. & Sep Cons, 11 July, No 14; Kiernan p. 82.

³ For: 1808 Sec. & Sep. Cons., 7th Nov, No. 2.

^{4.} For: 1808 Sec. & Sep. Cons., 7th Nov.. No 2.

⁵ One of them was an English 12-pounder and one a Dutch brass 5-pounder. For: 1808 Sec. & Sep Cons., 11th July, No. 12.

at Lahore and elsewhere for the manufacture and repair of guns.1 The guns thus produced were not of a high quality, their bores particularly often being defective, but all the same, it was a step in the right direction. As regards the organisation of the artillery, two departments2 known as Topkhana Kalan (heavy guns) and Topkhana Khurd (light guns) were set up and placed under two separate Daroghas superintendents as early as 1804. At this stage no guns were attached to any battalions and they were carried into the field separately. The carriages of the guns were three-wheeled (one small wheel being fixed in the track) and were without limbers. They are described as "tolerably good" by Capt. Mathew and "were mostly made of good seasoned sisoo wood,"3 by a carpenter from Delhi in the style of the British carriages, but were not equally well executed. They also had elevating screws in good order. As regards gun powder, although considerable quantitative progress was registered to meet the increasing demand of his rapidly growing artillery, there was little advance in the improvement of its quality. It was of the common country kind, made at Lahore and Amritsar. Mathew speaks of the Maharaja's4 possession of "both brass and iron shot all beat and of brass shells" but he is not very sure as he did not see them. The fuzes used were also of a crude type and were made of wood. Besides the guns, Ranjit Singh had about 100 shutarnals or camel swivels,5 under the management of a separate officer known as Darogha--i-Zamburkhana. There was no horse artillery during this period. The guns were drawn by buffaloes, 40 to 50 of them being necessary for the carriage of a heavy gun.

Though the main concentration of the Maharaja was on the troops in the direct pay of the government, the branch known as the Jagirdari Fauj was not ignored. The jagirdari

- 1. Panth Parkash, Part III, p. 144.
- 2. Dewan Amar Nath, Chapter VI; Sohanlal (Vol II. p. 76) mentions it for the year 1807.
- 3. For · 1808 Scc. & Scp Cons, 11th July, No. 12. Capt. Mathew's letter dated Lahore 25th May 1808, Punth Parkash, Part III, p. 130; Amar Nath, Chapter I.
- 4. For: 1808 Sec. & Sep Cons, 11th July, No. 12. Capt. Mathew's letter dated Lahore 25th May, 1808.
- 5. For: 1808 Sec & Sep. Cons 11th July, No. 14. However, Mathew's estimate is 400 which clearly appears to be an over-estimate.

system being amongst the well-known political and military institutions of the country, the Maharaja went on creating more and more jagirdars, as he went on adding more and more conquests to his kingdom. These feudatories were required in return to furnish, whenever called upon, fixed quotas of troops armed and equipped at their own expense. Such troops consisted of both cavalry and irregular infantry and their total strength at the close of the period was estimated by Metcalfe at 15000.¹ No guns were allowed to the jagirdars at this stage, as Ranjit Singh could not repose any confidence in them for the reason that he had not yet established his sway firmly.

Ranjit Singh was the supreme-commander of his army, all administrative and operational control being vested in him. From the very inception of his rule, he tried to establish as effective a control as was possible under the circumstances. In the words of a contemporary, he was trying "to overcome the great weakness of the Indian armies of the previous century that the soldiers obeyed the Colonel (immediate boss) and cared nothing for the General (distant and ultimate boss)". "His orders in the army are peremptory," writes Metcalfe, "and are universally and instantly obeyed; the greatest sardar and the lowest soldier seem to pay the same deference to him." But this control was not yet willingly accepted by his men, for the same authority hastens to add: "But he does not reigh in the hearts of his people. The disaffection which is known to prevail in his army, exhibits symptoms of danger to his power, whenever a favourable opportunity should present itself for casting off his tyranny, but at present his superior energy keeps all in subordination." As a means to the end of building up an effective control, the Maharaja introduced the practice of holding regular musters and frequent inspections.3 This practice had been in vogue under the Great Mughals, but during the 18th century had fallen into disuse. By reintroducing it and by insisting on its being carried out, he showed at this early stage his clear grasp of military issues and his organising ability.

^{1.} For: 1802 Sec. & Sep. Cons, 5th Dec, No. 1.

^{2.} Kiernan, p 80.

^{3.} Sohanlal, Vol. II, pp 60 and 73

The organisation of command was yet in a rudimentary stage. In the infantry there was no unit above the battalion and the highest officer was the Commandantwho was assisted by a few Jamadars and some other subordinate officers. Artillery was a separate entity and had its own officers, the highest being Darogha. The cavalry was organised in Derahs of varying sizes, each Derah being under a Sardar who was assisted by a Munshi. A tendency which hindered the efficient exercise of command and which persisted through the rest of the period of Sikh rule, that of burdening one and the same man with the command of state as well as jagirdari troops, is clearly visible during this period. Nevertheless, this system of command, though rough and ready, served his purpose well.

Training of the cavalry was left to the initiative of the individual horsemen as was the case under the Mughals or the Marathas. Ranjit Singh's inspiring leadership, however, gave a powerful impetus to the men who began to take keener interest in practising riding, swordsmanship and tent-pegging etc. Combined manoeuvres also, it seems, received the Maharaja's attention, as one such manoeuvre was demonstrated by him before Mr. Metcalfe in 1808.2 The greater part of his time was, however, devoted to the training of artillery and infantry. He tried his utmost to get instructors from the trained troops of the English Company, the Maratha chiefs and Begum Samru. To heighten the interest of his men, he himself attended their parades and offered handsome rewards and quick promotions to the best of them.3 To curb laziness and lassitude in his troops, he gave top priority to the conduct of regular reviews and inspections. Both Metcalfe and Mathew speak highly of his gola-andaz4 (gunners) who had joined him from Hindustan. But the Maharaja was not at all satisfied with the results achieved and was constantly on the look-out for some European instructors of talent.5

^{1.} It was quite customary for Ranjit Singh to grant jagirs to his commanders of the derahs of artillery and cavalry and to charge them with the additional responsibility of maintaining their own contingents.

^{2.} For: 1808 Sec. & Sep Cons., 15th Dec., No. 5.

^{3. &}amp; 4 For: 1808 Sec. & Sep. Cons., 5th Dec, No. 1 and 11th July, No. 12. Mathew says that Ranjit Singh himself was a capital shot and had a great skill in handling guns.

^{5.} For . 1808 Sec. & Sep. Cons., 11th July, No. 13.

In the matter of discipline, only a little progress is discernible, perhaps for want of first-rate instructors. be clear from the following remarks of Mr. Metcalfe: "I cannot speak as to the discipline of these troops, but a certain degree of regular discipline is common throughout India, in consequence of the multiplicity of corps of this description established of late years in the service of the native powers and these, in the army of Ranjit Singh are, I suppose, neither better nor worse than generality of those that are not under the management of European officers."1

In regard to morale, the object of Ranjit Singh was to lift the Sikhs out of the abyss of demoralisation into which they had fallen and to rekindle in them the old flame of zeal and enthusiasm of the pre-Misals Period. But for the time being, the attainment of this object was hindered by the jealousy of rival chiefs who could not tolerate his growing power. However, as the prospect of a strong Sikh monarchy gradually unfolded itself, they started rallying round the Maharaja. In course of time, they developed the ideology of a commonwealth and came to bear some resemblance to the troops of Cromwell's New Army.² Ranjit Singh attached immense weight to this matter and though his main dependence was upon foreign mercenaries during this period, he consciously strove to identify himself more and more with the Khalsa and to develop and harness the dynamic force of Sikhism to the ends of his political policy.3

The predominant and the most favoured system of pavment was still the traditional one of assignments of land. All the cavalry, all the irregular infantry and the entire Panjabi portion of the artillery were paid in this manner. This was very convenient to the Maharaja at the time, his revenue system being yet far from organised. At the same time, it was so

- 1. For: 1808 Sec. & Sep. Cons., 5th Dec No 1.
- 2. Kiernan, p 81.

³ Ibid, p 83; Sitaram Kohli, Ranjit Singh, p. 53 - Ranjit Singh tried to win over the Khalsa by various means, such as calling his Government Sarkai Khalsa, striking his coins in the names of Guru Nanak and Guru Gobind Singh and calling them Nanakshahis and inscribing on his seal the words "Akal Sahai Ranjit Singh". Cunninghām, p. 152, says "Every thing was done for the sake of the Guru, for the advantage of the Khalsa and in the name of the Lord. His own name and his own motives were kept carefully concealed".

much to the liking of his men. According to Metcalfe, "the most part of his country was held in Jaidad for the maintenance of troops or subject to subordinate chiefs." But this period is also noteworthy for the beginning of the system of cash payments, which was subsequently extended by the Maharaja. All the regular infantry, and the entire Hindustani portion of the artillery were remunerated in this manner.² The personnel of these branches had come from outside the Panjab and before entering the Maharaja's service, had become accustomed to the mode of cash payment. Ranjit Singh who was burning with the desire to remodel his army, gladly introduced the innovation for the benefit of those who wanted it, but any further extension of this method at this stage was checked by such difficulties as the preference of his own people for land over cash, the disorganised state of his revenues and the paucity of funds.³ The Maharaja therefore was compelled to give away most of his lands in jagir, with the result that there was very little money available from revenues. Metcalfe thus comments upon this: "Unless a complete change should take place in his system, he must continue to invade new countries, otherwise he will not be able to support his army, although he has only to provide money for his infantry and part of his artillery, his personal expenses and extraordinary levies of troops."4

The pays of his soldiers were fixed higher than in the army of the English Company, as they were intended to attract trained and talented people from outside. In the words of Capt. Mathew, "his men were well paid, receiving 8, 9, 10, 11 rupees per month, according to their size, general appearance and good conduct, none having less than rupees eight a month and got presents also at different times."5 According

^{1. &}amp; 2. For: 1808 Sec. & Sep Cons., 5th Dec. No 1.

³ There was no revenue office until 1808 and all his accounts were managed by one man, a banker of Amritsar, named Rama Sahu. Jaswant Rao Holkar had advised Ranjit Singh to organise a good office as early as 1805, but action upon that had been deferred for lack of a competent organiser. At last in 1808 Dewan Bhawam Das was appointed, who, before coming to Lahore, had served at Kabul and therefore was highly experienced in the organisation of an office of accounts. With his advent, the long-felt need of the Maharaja was fulfilled. Dewan Amar Nath, Chapter X.

^{4.} For: 1808 Sec. & Sep. Cons., 5th Dec., No. 1.

^{5.} Ibid., 11th July, No. 12; AAR 1809, p. 421.

to Metcalfe, this salary was subject to a deduction of twelve annas, on account of the paymasters and accountants attached to the corps.¹

In the matter of supplies, Ranjit Singh continued to follow the traditional method of his fore-fathers. Like them, he lived upon the country and had no depots of his own to draw upon during campaigns. It was customary for him to take the field in those seasons when the crops were sufficiently advanced to afford nourishment to his cattle and to quit it as soon as the crops were gathered.² This system proved very useful to him at a time when "his restless ambition and the weakness and want of union prevailing around him" prompted him to fight continuously and when his resources were so limited.³

Both the direct and indirect methods of recruitment were prevalent in Ranjit Singh's army. His cavalry was recruited indirectly through the chiefs, while his regular infantry and artillery were recruited directly by the Maharaja himself. Whereas the indirect method had been inherited from the past, the direct method of recruitment which was to be widely extended subsequently was initiated during this period.

As regards the composition of the army, Sikhs predominated in the cavalry, both state and jagirdari, Muslims including Poorbia Telingas in the artillery, Poorbia Hindus in the regular infantry and the low classes of Panjab villages in the irregular infantry. No Sikhs were yet found in the infantry or the artillery, as they had no liking for these arms.

To sum up, the importance of the first period of the reign of Ranjit Singh lies in its being the time when certain steps of a fundamental nature were taken which provided the basis for the military superstructure to be raised later on. It is, no doubt, evident from the testimony of the contemporaries like Bhai Lal Singh of Kaithal⁴ and Charles Metcalfe⁵ that

^{1.} A Tour to Lahore of an Officer of the Bengal Aimy in 1807. For: 1808 Sec. & Sep. Cons., 5th Dec. No. 1.

^{2.} For: 1808 Sec. & Sep. Cons., 5th Dec, No. 1; Bakhtmal, Khalisa Nama (ff 59a - 62a)

^{3.} Ibid. But Metcalfe severely criticised this system as being incompatible with a sound military system.

^{4.} For: 1807 Pol. Cons. 4th August, No 83; Bhai Lal Singh thus wrote to the British Resident at Delhi: "To provide against Ranjit Singh is no arduous task. An encampment of four battalions would be sufficient".

^{5.} Kiernan, p. 83.

Ranjit Singh's whole force, even at the close of the period and after all his strenuous efforts, was not fit to stand against more than a few battalions of a well-trained army. All the same, it may be said to his credit that he had striven hard against heavy odds and had succeeded in evolving certain broad principles which governed the future growth and development of the Sikh military system. These principles were:

- (i to adopt the European system based on the predominance of infantry and artillery.
- (ii) to remodel the cavalry as a non-feudalistic and centrally-controlled force.
- (iii) to have effectively-controlled jagirdari troops.

SECOND PERIOD—(1809-1821)

The pace of development was greatly accelerated after 1809. This was due to a number of factors. Right at the outset of the second period, Ranjit Singh had an opportunity to observe drill and some tactical manoeuvres of the military escort of Mr. Metcalfe,1 with whom he also had long talks on important military subjects. A little earlier, Capt. Mathew had met him at Lahore and warned him that one British battalion could easily beat 30,000 Indian horsemen.² Events of the year 1809 were even more impressive and stimulative. There was a clash in March 1809, in which 4 or 500 of Ranjit Singh's Akalis were defeated by only two companies of Metcalfe's escort. "This circumstance", says Prinsep, "made an impression on his mind as to the unfitness of his own troops to cope with those under European discipline." Ranjit Singh "expressed his admiration of the steadiness of the British forces. He realised the effect of their discipline as absolutely decisive against the courage and numbers of his own fiercest soldiers, devoid of organisation. It was an object lesson to him which decided him to train his army according to European methods."3 About the same time

^{1.} For: 1808 Sec. & Sep. Coas., 17th Oct., No. 13.

^{2.} Ibid, 11th July, No. 13 and 17th July, No. 13 Capt. Mathew savs that during his conversation with him, the Maharaja put most searching questions to him Foi expmple - What number of horses could one of the British battalions oppose?; did they know the training of the cavalry?, what kind of horses did they possess and why did they cut their tails?; what did they think of the Maratha army? etc.

3. Gordon, p. 96; Smyth, p. 22; Panth Parkash, Part III, p. 160.

the British gave him a rude shock by forcing him to withdraw all his troops from across the Sutlej and give up his cherished ambition of establishing his suzerainty over all the Sikh Misals. He felt mortified and furious, but he was helpless. This left an indelible impression upon his young sensitive mind. In 1810 "the failure of his attempt on Multan satisfied him that his army was still very imperfectly disciplined."1 Colonel Ochterlony's attendance at the marriage of Prince Kharrak Singh with a large military escort including one of the "gallopers", afforded him an excellent opportunity for a close examination of a body of British troops with all their accoutrements.2

From 1813 onward, the Maharaja was greatly influenced by his intense desire to capture the Indian provinces of Afghanistan like Multan and Kashmir and the formidable Afghan challenge to his arms accruing from that. were to be major conquests, thorough preparations had to be made. This gave him added incentive to modernize his army. which was strongly reinforced by the disastrous failure of his Kashmir expedition in 1814 and subsequent events.3 The Afghan opposition was set off by the Maharaja's occupation, by strategem, of the fort of Attock in 1813. Though the Afghans were badly defeated in the fateful battle of the Chuch which resulted from it, they never ceased to be a menace. Almost every year until the assassination of Wazir Futteh Khan in 1818, a war was threatened. The constant Afghan challenge kept Ranjit Singh on the alert and made him increase both the strength and efficiency of his army. Moreover, his victory of 1813 over the Afghans, which was won mainly through his disciplined infantry and artillery, gave him confidence in the efficacy of the new arms. During this period, a further incentive was provided by the defeats of the Gurkhas in 1814 and the Marathas in 1818 at the hands of the trained forces of the British.

^{1.} Baron Hugel, p. 368, Ochterlony to Edmonstone, No. 119, dated 27-2-1812; Prinsep (p 80) says that "after this, he devoted himself to increase the number of his regular battalions and formed the corps of the Sikhs called Orderly Khas. Horse artillery likewise was formed and improvements were set on foot in every branch of this service."

2. Ochterlony to Edmonstone, 23rd January, 1812, Prinsep, p. 99;

Kanahya Lal p. 230.

^{3.} Prinsep, p 108; Monograph No. 17 dated 6th Aug., 1814:
4 Gunningham, p. 156: "His confidence in discipline was increased by the resistance which the Gurkhas offered to the British army."

these defeats there was an object lesson for Ranjit Singh which a shrewed observer like him could scarcely ignore.

But no large-scale expansion would have been possible, if the financial resources had not increased sufficiently and simultaneously. The several conquests made by Ranjit Singh during this period considerably added to his funds. Moreover, Dewan Bhawani Das and Dewan Ganga Ram¹ organised for him an efficient treasury department which indispensable to his plans of further military development.

The period 1809-1821 is noted for considerable changes in almost every aspect of the military organisation, particularly in the strength, constitution and composition of the army.

The growth of the regular infantry during this period was as follows2:-

1811	 9	Battalions	& 10 Companies
1812	 8	,,	& 12 ,,
1813	8	,,	& some miscellaneous
			Companies.
1814	12	22	
1819 & 1820	 13	,,	
1821-22	 14	,,	

The rise in the number of battalions gives some idea of the progress made, but not the whole idea, because the strength of a battalion did not remain the same. Its strength ranged from 2 to 300 to 6 to 800,3 so that the total strength of regular

- 1. Catalogue, Vol. II, pp 1-11.
- 2. Catalogue, Vol. II, pp 1-11.
 2. Catalogue, Vol. I, pp 7-12 and Vol II, pp. 13-65; Monograph No. 17. No mention is made here of the years prior to 1811 and from 1815 to 1818, because the relevant records are not available. The most important of the newly raised battalions were the Sikh, the Gurkha and the Special Orderly Battalions. This table is based on the still preserved records of Ranjit Singh's Government and may be regarded as correct so far as it goes, but that it does not give a full picture may be judged from its comparison with the entries of a contemporary diary of Sayeed Azim Ullah, published under the title Monograph 17 by the Panjab Government. According to this diary, there should be 9 battalions for 1812 and 1813, 14 for 1815 and at least 16 for each one of the years from 1816 to 1821. These discrepancies are probably due to the fact that some of the papers of the Khalsa Darbar have not come down to us.
- The actual individual strength and monthly salary of some of the battalions in the year 1819-20 were as follows:-
 - Paltan Bapu Amir Singh 395 men, Rs. 2779 p.m.

 ,, Azız Khan 739 ,, Rs. 5601 p.m.

 ,, Ibadulla 674 ,, Rs. 5221 p.m.

 Bakhtawar Khan 585 ,, Rs. 3582 p.m. Ι. 2. 3. K.D.R., Bundle Aa 1., 1819-20.

infantry increased from 1500 to about 10,0001 in 1821 i.e. about seven times. As regards the constitution of a battalion, it was still the principal unit and its chief officer was still the Commandant. Each battalion consisted of 8 to 11 companies and each company had 30 to 40 men on its strength.2

The irregular infantry also underwent changes during this period. It had to be expanded, consequent upon the growing dimensions of the kingdom. Being princi pally required for guard and garrison duties, its strength increased in proportion to the rise in the number of forts to be defended. There is no definite evidence to help us form any accurate idea of its growth during this preriod. Approximately, however, the combined strength of both of its branches, namely, Sipah-i-Piyadah or Sipah-i-Oilajat (garrison troops) and Sair Jamaat (constabulary and guards) may be calculated to have risen from 5000 in 1818 to about 9000 in 1821.3

Regular cavalry was entirely an innovation of this period. The records of the Khalsa Darbar do not say anything about its growth before 1819. Most probably, the relevant papers have been lost. Its total strength in 1819-20 was 837 men, divided into three raimans (regiments), maintained at the total annual expenditure of Rs. 13,406. In 1821, one more regiment was added, which further raised both its strength and expenditure. These regiments were not uniform in size, but had wide variations ranging from 100 to 600.4 It was only

- 1. Catalogue, Vol I, p 8, has given its strength as 2852 for about 10 battalions in 1811 and 8406 for 13 battalions in 1819. The same method of calculation will give us 10,000 for 16 battalions in 1821.

 2. JIH, Vol I, Part I & II I921-22: Article by Sita Ram Kohli. In the earlier period, the size of a company was small and varied with the capacity of the instructor. But generally, as more efficient officers were employed, the organisation underwent a considerable improvement.

 3. The total salary expenditure of the garrison troops and the Sair Jamaat for 1814 was Rs 1,27,370 and Rs. 96,069 respectively. Calculating on the basis of Rs. 5/- being the average monthly pay of a foot soldier, we get their respective strengths as 2123 and 1602 for the year 1814. These strengths continued to rise till in 1821 they almost stood at 9000, the number of units in the case of garrison troops having more than doubled, and in the case of Sair Jamaat having multiplied 2½ times. (Catatogue Vol. II, p. 39). This calculation is based on the 2½ times. (Catatogue Vol. II, p. 39). This calculation is based on the available Pay Rolls of the Khalsa Darbar. Naturally it excludes that portion of it, which was paid by assignment of land.

 4. Catalogue, Vol. I, p. 9.

 Rajman Gurmukh Singh — 170 men — Rs. 3168 p. m. (This table
 - Hira Singh 122 ,, —Rs. 2359 p. m (indicates Mahtab Singh 545 ,, —Rs. 7879 p. m. (the position

a humble attempt of the Maharaja to create the like of the Company's cavalry, but for want of experienced cavalry instructors, much success could not be achieved and that is why some writers trace its origin from 1822, when Allard and Ventura were employed.

The irregular cavalry registered further progress during this period. A part of it was now paid in cash in the manner of the regular infantry. The following table will show its growth from time to time¹:

Year	Strength		Annual Salary
1813	374	Rs.	1,65,117
1814	1846	,,	5,53,692
1 817	2464	,,	8,78, 318
1819	3577	,,	11,13,782
1821	5000	,,	17,50,000

However, the major part of the irregular cavalry continued to be paid by land assignments. The jagirat papers for these years being not available, it is not possible to have any correct idea of the total strength of this portion of the army at the end of the period, but it is probable that it did not rise above 10,000.² Other remarkable features of the development of this branch during the period were the consolidation of smaller Derahs into bigger Derahs and the raising of some new³ Derahs, namely Derah Ardalyan, Derah Pindiwala, Derah Ramgurhia, Derah Jamwallan and Derah Mul Rajia.

The general constitution of the irregular cavalry continued to follow the pattern set in the first period of the reign of Ranjit Singh.

i. Catalogue, Vol. II; JIH, Vol. I, Parts I & II, 1921-22 (Article by S. R. Kohlı).

^{2.} For: 1832 Sec. Cons., 21st May, 9-10. Capt. Burnes' observations on Ranjit Singh's army may help us form some idea. According to him. the total strength of the iregular cavalry in 1831 was 50,000. This includes jagirdaii troops as well. This should give us the strength of the ghorchurra force at least as 20,000 in that year Now if that was the case in 1831, ten years before the stength must be very much less, say nearly 15,000. Excluding 5000 that were on cash payment, we shall get 10,000 as the number of those that were paid in jagirs.

^{3.} Catalogue, Vol. I pp. 109-124. Dogra Rajputs enlisted in 1815 for fighting in hills, were separated from the general body of the ghorchurras and organised in 1817 into an independent derah of 261 strong.

The most remarkable feature of the development of artillery at this stage was the creation of horse artillery in imitation of the English Company. The start in this direction was made on 22nd December 1810, when Ranjit Singh inspected 2 pieces of cannon driven by horses, which Gopal Singh Jamadar had got ready. In 1811 it was made an independent section in the topkhana and placed under a separate Darogha of its own, the first incumbent of the office being Mir Mazhar Ali Beg. As time rolled by, the Maharaja became more and more convinced of its utility, and he rapidly expanded it. For example, in 1813 alone 12 new pieces were added and orders issued for many more.2 A similar interest was taken by Ranjit Singh in the increase and improvement of his bullock-drawn guns. Moreover, to meet the growing requirements of manufacture and repair, the workshops of Lahore, Amritsar and Kotli Lorahan were now further developed and worked to their full capacity under the strict and evervigilant supervision of the Maharaja himself. Manufacturers were imported from Delhi to help improve the quality, dissatisfied as Ranjit Singh was with his own workmen who "were not making good guns on the English style."3 This period is also marked by the production of a new kind of weapon called mortar (gubarah). The first results being not very satisfactory, a few specimens were sent for from Ludhiana to serve as models for his own workmen. Some special battalions and regiments were equipped with this new weapon.4 Still another new feature of the growth of artillery in this period was that some guns were detached from the royal topkhana and distributed, as was the case in the Company's army, over the various infantry battalions. They were known as field guns and their gunners were borne on the strengths of their battalions.⁵ As regards the increase in the aggregate of guns during this period, it is very difficult to say anything definitely, because there is no direct evidence available on

^{1.} Monograph 17; Prinsep, p. 80.

[.] Ibid

^{3.} Monograph 17, 1814 (16), 27th May—30 workmen and 30 gunners imported from the British dominions.

^{4.} Monograph 17, 1814, (38), 14th November and 1814 (41), 18th November.

^{5.} Army of Ranjit Singh by Sita Ram Kohli-Part II.

this matter. However, an approximate estimate may be attempted on the basis of Murray's and Burne's figures for the year 1831. According to Murray, there were then 376 cannon and 370 jinjals. Burnes also puts the number of guns above 300.2 This shows a very great advance upon the position in 1811-12, the whole of which could not have taken place in a few years after 1821. It may be presumed, therefore, that Ranjit Singh possessed about 200 guns and an equal number of zamburaks in 1821.3 This large increase in the number of guns necessitated a re-organisation the department into batteries or derahs. There were five such derahs for the cannon and three for the zamburks in the year 1821. The batteries had no uniformity of size and varied with the capacity and personality of the commander. Here is a specimen of the individual strength and monthly salary of the batteries for 18194:

TOPKHANA

- (i) Derah Ilahi Baksh—15 guns—395 men, Rs. 2931 p.m.
- (ii) Derah Mazhar Ali Beg-6 guns-159 men—Rs. 1140 p.m.

ZAMBURKHANA

- (i) Derah Ibadullah Khan-205 men-Rs. 1800 p. m.
- (ii) Derah Ghulam Mohammad Khan-55 men—Rs. 334 p.m.

The Jagirdari Fauj had a further accretion of strength during this period. Its numbers went up from 15,000 to 20,000. Besides, the jagirdars became more and more submissive to the Maharaja owing to his rapidly increasing power, his

- 1. Army of Ranjit Singh by Sita Ram Kobli, Part II. Catalogue, Vol. II. According to the pay 10lls of 1811-12, Ranjit Singh had 30 guns, but how many of them he had in 1821 is not known.
- 2. Baron Hugel, p. 400; Burnes, Vol. I, p. 59, For: 1823 Sec. Progs 24th Oct., 21.
- 3. This figure can also be verified. According to Sohan Lal, Ranjit Singh had captured upto 1823, 64 guns from the various forts conquered by him. Adding this number to 122 guns, which Mr. Wade has mentioned for 1823, we get the number as 186. Now if we also add the field guns attached to the various battalions, we will easily get a figure slightly higher than 200.
- 4 Catalogue, Vol. I, p. 13 (Bundle No Aa I.); The Topkhana of Hahi Baksh originated in 1816—Sohan Lal, Vol II, p. 197.

policy of conciliation, his creation of a new class of feudatories and the high regard in which he was held by the greatest power of India, the British. It may also be mentioned that the efficiency of the jagirdari levies was considerably improved by the Maharaja's continued policy of strictness and vigilance.

A totalling of the numbers of each one of the branches discussed above will give us the strength of the army as a whole, at the end of this period, as nearly 50,000. This marks an increase of about 26,000 over its strength in 1808.

A number of steps were taken in this period to improve further the organisation of control and command. An efficient office was organized to maintain military records. Descriptive rolls of all the new entrants were made compulsory, and were carefully preserved in the office, so as to use them on the occasions of subsequent checks. Moreover, there was now much greater insistence on musters and inspections, and heavy fines were imposed for any defaults or irregularities revealed by them. Besides, an officer was appointed with the duty of keeping Ranjit Singh informed daily about the condition of all the battalions.

The hierarchy of command in an infantry battalion was greatly improved. The regimental staff now consisted of 1 Commandent, 1 Adjutant, 1 Mahzor, 1 Hakim, 1 Munshi, 1 Mutsaddi and 1 Naqib, while the company staff comprised 1 Subedar, 1 Jamadar, 2 Havildars, 2 Naiks and 1 Tamburchi.⁵

As regards the artillery department, it was sub-divided into several sections, called batteries, with a view to having a better system of control. No definite information is available on the organisation of command in a battery, but it may be presumed that it corresponded to that of an infantry battalion. The staff of a derah of ghorchurras was improved by the integration of the smaller units into bigger ones commanded by more efficient officers.

- 1. Catalogue, Vol I, p. 3.
- 2 lbid. Vol. I, p 10.
- 3 Monograph 17—1816 (2)—Raja Bir Singh of Nurpur was fined Rs. 31,000 for his absence
- 4 Monograph 17—1814 (34), 26th Oct, Lahore 5. JIH—Vol. I, parts I & II, 1921-22; Amar Nath, Chapter XXI,

The training of the army was now conducted on better lines than before. The horsemen were no longer left to themselves to pick up what training they might, but were required to undergo parades regularly, which were frequently inspected by the Maharaja. 1 Both the infantry and the artillery were trained on the British system² which had been adopted by him during the first period of his reign, but the training was now more efficiently organised on account of his being able procure intelligent and expert instructors like Dhonkal Singh. Every day two parades were held, which were quite often witnessed by the Maharaja who encouraged the trainees as well as the instructors by rewards of money and gold necklaces.3 Further, persistent efforts were made to get trained gunners and sepoys from the ranks of the Company.4 In 1810 Col. Ochterlony, the British Agent at Ludhiana, had to report to Mr. Edmonstone that "some of the British troops are deserting for his service." Nonetheless, there was yet ample room for improvement. An indication to this effect was given by Ventura and Allard, when in 1822 they were asked by Ranjit Singh to express their frank opinion about his army.

There was a definite improvement in discipline during this period. One reason for this was the employment of better commanders. Another reason was that the Maharaja himself was very strict and left no acts of omission and commission unpunished, whatever the situation of the culprits. usual punishments were imprisonment and fine.⁶ Never was any body awarded capital punishment; the harshest punishment being amputation of hands, noses and ears. An occasional use was made of pardon and grant of robes of honour to make an appeal to the finer sentiments of the culprits.

Ranjit Singh's efforts to identify himself and his government with the Khalsa which had commenced in the earlier period, and his numerous military triumphs over their traditional enemies, the Afghans, gradually so much enthused the general

- 1. Monograph 17 contains several mentions of such inspections.
- 2. LAR, 1808-1815, Enclosure 82; Press Lists Book 10, letter 65, dated 31st May, 1810.
- 3 & 4 Monograph 17 contains several such references, e. g. 1814 (16) 27th May
 5. Ochterlony to Edmonstone dated 31st May, 1810.

 - 6. Monograph 17 is replete with such references.

body of the Khalsa that they began to look upon the rule of Ranjit Singh as their own rule and were ever-ready to make any sacrifices for it. A sort of fanaticism was now developing which was best exemplified in the Akali troops of the Maharaja, particularly their leader, Akali Phula Singh who was always in the forefront of storming parties and who died fighting in the battle of Naushehra in 1823.

The dress of the ghorchurras continued to be as varied and colourful as before.1 But a determined attempt was made during this period to introduce a uniform dress in the regular army. This dress was imitated from the English Company and consisted of scarlet or white-coloured coats or jackets and caps or turbans made of 'banat'. The source2 which gives us this information does not, however, contain any mention of the boots and trousers worn by the soldiers, but presumably they were similar to the ones in vogue in the Company's forces. We learn from the same source that the gunners had felt-cloth uniforms.3 The equipment of the soldiery consisted of a belt, a bag for food called toshadan and a pouch for gun powder.4 All these articles of clothing and equipment were provided by the state.

In the matter of weapons, this period witnessed a considerable improvement, the main factor responsible for this being the Maharaja's close contact with the British. had seen the weapons and equipment of the British troops on many occasions and wanted to have the like of them in his own army. For this purpose great pains were taken. While the native workmen were given every possible encouragement, vigorous efforts were made to get more experienced workmen from the British territories. Moreover, hundreds of arms were purchased from the British authorities, which were to serve as models in his own workshops. For example, in 1812, 500 muskets complete with bayonets and ramrods were purchased from the Company for Rs. 14,500,.5 A little later, at his

r Sohan Lal (Vol. II, p. 117) says that Ranjit Singh in 1811 prescribed for all the troops of his chiefs a red dress of Daryai and Kımkhab with plumes for the Dusehra Review.

^{2.} Monograph 17, 1814 (18) 22nd June
3. Ibid. 1811 (5) 13th December.
4. Ibid. 1814 (26) 4th Sept and 1814 (34) 26th October.
5. LAR, 1808-1815—Ochterlony to Edmonstone, No. 120, 29th Feb, 1812 and Munkton to Ochterlony, 15th April, 1812.

request, the Company supplied him 50,000 flints and some pistols. The result was that he was able not only to improve upon his old weapons but also to equip his army with some new types of weapons, such as flint muskets and light mortars which were much better than the matchlocks and muskets hitherto in use in hi sarmy.

Recruitment was now increasingly becoming state-controlled. The Maharaja was gradually asserting his control even over the recruitment of his cavalry, which had been hitherto in the hands of his chiefs. His previous approval was essential for any fresh recruitment by his chiefs. Broadly speaking, it may be said that no recruitment was now possible without his prior orders and sanction. Most of the recruitment was carried on by the Maharaja himself, though sometimes other people as well were authorised to do so.³ It appears from the pay rolls of this period that a certain procedure of recruitment was in use, which roughly consisted of three stages: (i) inspection by the Maharaja or sometimes by his Chief Minister (in the case of authorised recruitment this formed the second stage);⁴ (ii) enlistment; and (iii) preparation of descriptive rolls.

The composition of the regular army was still predominantly non-Panjabi in character.⁵ However, Ranjit Singh strove hard to enlist the Panjabis, particularly the Sikhs, by all sorts of temptations,⁶ and his efforts were not fruitless, as Ochterlony inspected two Sikh battalions as early as February 1812.⁷ Later, as their prejudices grew weaker, they came forth in ever larger numbers. From 1815 onward, we also find him recruiting Gurkhas. He was so much impressed by their fighting qualities that he sent one Abid Khan across the Sutlej to induce them to join his service.⁸ As regards the regu-

- 1. Monograph 17, 15th January, 1814.
- 2. Monograph 17-1815 (15), 1814 (38); 1814 (41), 18th November.
- 3. Monograph 17 contains several such references e. g. 1814 (24) 25th August.
- 4. Monograph 17, 1815 (24) 15th Nov; Sohan Lal, Vol. II, p. 93 (1810).
 - 5. Catalogue Vols. I & II-relevant Pay Rolls.
 - 6. Monograph 17-1814 (12), 29th April.
 - 7. LAR, Ochterlony to Edmonstone, No. 119, 27th Feb. 1812.
 - 8. Monograph 17-1815 (15), 17th August.

lar cavalry, it continued to be composed mainly of Sikhs; but he did not have a closed mind and, whenever possible, tried to enlist Afghans, particularly those who had been formerly in the service of rulers like Shah Shuja, Nawab Mir Aly Khan and Daulat Rao Sindhia, because they brought a rich experience with them. A new component element introduced during this period was the Rajputs who were best represented by the Sawaran-i-Jamwal. This element expanded later on, as the Jammu Rajas assumed greater ascendancy in the state.

While the systems of payment of the previous period, namely assignment of land, and payment in cash with all its variations such as daily, monthly and six monthly disbursements2, continued into this period, a great deal of shifting is in evidence in the relative importance of the two. system of cash payment on the monthly basis progressively became popular. All infantry, regular and irregular, permanent and temporary, all artillery and a considerable portion of the cavalry were now paid in cash, and their pay rolls are still on record.3 A pay office was set up to make this system a success. A procedure was also evolved at this stage for disbursements. The pay bills called 'mawajub' or 'barawurd'4 were prepared by the Pay Office which, after a close scrutiny by the Dewan, were submitted to the Maharaja for sanction, on the receipt of which disbursements were made. It should be remembered, however, that there was no such pay office for the garrison troops and the ghorchurras who were paid as before through their respective commanders.5

During this period, Ranjit Singh was very particular about paying his soldiers regularly after every two months. He could not afford to be remiss at a time when he was so eager to build up his regular army. That is why we do not

^{1.} Catalogue, Vols I & II—relevant Pay Roils; Monograph 17—1813 (11), 8th June & 1813 (28), 26th September.

² Monograph 17, 1814 (27) 15th September & 1815 (3), 3rd March. Some examples of daily wages—Akalı Phula Singh given Rs. 40 a day and Sabat Khan Afghan, Rs. 15 per day.

^{3.} Catalogue, Vols. I & II-relevant portion.

^{4.} Monograph 17, e.g. 1814 (12) 29th April & 1816 (9) 7th March.

^{5.} Ibid 1812 (9) 13th August.

find any evidence of disaffection among his troops on account of accumulation of arrears.¹

As regards the rates of pay, they were lower than those in the previous period. On an average, in 1819 a regular foot soldier, a horseman and a gunner were paid Rs. 7.8, Rs. 15.6 and Rs. 7 respectively.²

There was a similar reduction in the emoluments of the ghorchurras. Instead of getting Rs. 400 to 600 a year which was the case during the first period and the early part of this period, a ghorchurra now received only between 300 and 350 rupees.³ These reductions were rendered possible by the growing stability and popularity of the Maharaja's service. It may, however, be noted that the emoluments were often augmented by generous rewards awarded by the Maharaja.

Radical changes were effected in the system of supplies during this period. The predatory system of living upon the country was now very largely abandoned, though plundering was still resorted to in an enemy's country, particularly if his attitude was uncompromising and defiant. But it was no longer counted upon as the mainstay of the army. No commissariat was established for the procurement of provisions, but the genius of Ranjit Singh evolved a system⁴ which continued to be followed, more or less, upto the end of the Sikh rule. In this system the entire machinery of the government, officials, revenue collectors, thanadars, garrison masters, courtiers, governors, and chiefs were required to in procuring supplies, price of which was the adjusted in their accounts orpaid from the central treasury. In emergencies, cooperation of local zamindars was also enlisted.⁵ The supplies comprised grains of all kinds, gun powder, cannon balls, and animals like horses, camels, and oxen etc. They were deposited in the neighbouring forts

^{1.} Syed Azımullahas' whole diary contains only one case where arrears were not paid for six months—1816 (2) 19th January, Similarly, Pt. Daya Ram mentions only one case—Shir-o-Shakar (ff 133a-135a)

² Catalogue, Vol. I, p. 8.

^{3.} JIH—Vol. I & II. By dividing their total annual salary of Rs. 11,13,782 for 1819 by the total strength of the ghorchurras i e. 3577 for the same year, we get their average annual salary as between Rs. 300 and 350.

^{4.} Monograph 17 contains several such references.

^{5.} Ibid. 1816 (11) 4th April.

and were to be drawn upon in emergencies. Normally, agents were engaged to supply provisions to the army.¹ The practice of regimental bazars was developed where these agents sold their goods. To keep the prices under control, a police official known as Kotwal was appointed. This official was further required to keep the Maharaja informed of the daily condition of the camp market.²

The principal achievements of this period may be summed up thus: The chief defects in the military organisation had been removed, namely, absence of exchequer, smallness of realised revenue and dependence upon conquest for the maintenance of the army, and lack of cohesion, as pointed out by Metcalfe in 1808. Henceforth, there was an efficient office and abundance of revenue to lend stability to the military organisation. Moreover, the disaffection of the chiefs had almost disappeared, and consequently Ranjit Singh's hold over his army had been further fortified. There had been vast improvements in both the pay and supply systems. powerful and fairly well-trained army had been built up which elicited high tributes from Moorcrost³ in 1820 and Ventura and Allard in 1822.4 A beginning of a corps of beldars, corresponding to the sappers and miners of the English Company, had been made.⁵ Nevertheless, as pointed out by Ventura and Allard, there was yet a considerable scope for further improvement.6

III PERIOD 1822-1831

After 1821 progress became even more rapid. The Maharaja's major conquests had been made, and he was now "free to devote his attention in earnest to the formation of a disciplined army." In this task he was very ably assisted

- 1. Such as Ramanand, Sukh Dayal, Sukh Ram and Daulat Ram. Some of them were also given farms of land by Ranjit Singh.
 - 2. Monograph 17--1814 (20) & (23).
- 3. Moorcroft, Vol. I, p. 98. He witnessed a parade of Ranjit Singh's trained troops in 1820 at Lahore; Cunningham p. 156.
- 4 Foreign Misc. Vol. No. 206, pp. 145-146. They were shown parades of infantry and artillery on their arrival in Lahore in 1822.
- 5. For: Misc. Vol. No. 206, p. 132, Catalogue, Vol. I, p. 12 & Vol. II, p. 26.
 - 6 Ibid. pp. 145-146.
 - 7. Hugh Pearse, p. 300.

by certain European officers namely, Allard, Ventura, Court and Avitabile.1 The first two arrived in Lahore in 1822, and the last two in 1827. All of them possessed a very rich and valuable experience of war which they had gained during the Napoleonic Wars. The advent of these foreigners, writes Wade, "has created a new era in his military organisation which the benefit of European service is calculated to introduce."2 Ranjit Singh was further inspired by the visits of some English men. The first of these, Moorcroft, visited and presented to him a number of weapons like a pair of doublebarrelled pistols, a sword and the model of a cannon, with carriage and all appurtenances complete.3 The Maharaja took advantage of this visit to parade his army before him and consult him on many important issues of military interest. In 1823 Murray was replaced by Wade at Ludhiana. The new British Resident developed most friendly relations with Ranjit Singh and paid visits to him in 1827 and 1831, during which the Maharaja had very useful discourses with him on several military subjects including the mode of attacking artillery in the field, the difference between European and native troops, the fortifications of Lahore and Amritsar, and the comparative merits of English and French soldiers.4 Similar discussions were held with Dr. Murray who attended upon the Maharaja in 1827 for several months.

The other factors which influenced the Maharaja were his anxiety to capture Sind and hostility of the Afghans of Peshawar to the extension of the Sikh sway over them. The scheme of attack on Sind never materialised, but right from 1823 the Maharaja was engaged on warlike preparations for this purpose.⁵ Peshawar was conquered in 1823, but it

- 1. Griffin, pp 137-138
- 2. For: Misc. Vol. 206, P. 149
- 3. Moorcroft, Vol I, pp. 96 & 100-101. This miniature piece of ordnance had been made by Mr. Donnie Thorne, the mint master at Farrukhabad and was of a singularly beautiful execution.
- 4 In 1827, Capt. Wade brought to Amritsar as his escort, at the special request of Ranjit Singh, a few units of English cavalry and infantry. Their parade was witnessed by the Maharaja along with all his commandants. Later a conference was called (Wade to Metcalfe, 1st Aug. 1827 Cons. For Sec. 12th Oct., 1827) to discuss this parade. Two days later, Wade was shown exactly the same evolutions by the Maharaja's infantry.
 - 5. For: 1828 Progs., 24th Oct., 16, 19 & 21.

proved to be a very tough affair which severely taxed his mental and physical energy. Troubles there were almost perennial, and the permanent stationing of a vast army in or about this province was an absolute necessity. The gravity of the situation was further aggravated, when in 1827 Syed Ahmed declared a crusade against the Sikhs.

The period 1822-1831 witnessed far-reaching changes in the constitution of the army. Now for the first time an attempt was made to evolve a comprehensive self-contained consisting of all the three arms and adequate in itself to encounter an enemy. It was a brigade under the command of the newly-engaged Europeans and was known as Fauj-i-Khas or "Francese Campo".1 It was constituted of Ventura's four battalions of infantry, Allard's two regiments of cavalry and Ilahi Baksh's one troop of artillery comprising twenty four guns. "The first in rank, discipline, and equipment in the reformed army", the Fauj-i-Khas occupied the pride of place and became a model brigade on which the remainder of the regular army was to be patterned in due course of time.2

The regular infantry continued its steady and continuous progress. The number of battalions rose from 17 in 1823-26, to 21 plus a few companies in 1831-32.'3

The strength of a battalion was further raised from 6 to 800 to about 6 to 1100, and the total strength of the regular infantry increased from about 10,000 to about 20,000.4 The individual strength and the monthly salary of a few of the infantry battalions for 1828-29 is given below by way of illustration:5-

- Paltan Amir Singh 1049 men, salary Rs. 7630 p.m.
- Chandka Prasad 2.
- { 1418 men, salary Rs. 11022 ,, 3. Mohan Singh
- Dhonkal Singh { 1274 men, salary Rs. 9667 ,, 4. Ranbir Singh 5.
- 1. Catalogue, Vol. 1, p. 16; According to Wade, the French Legion consisted of 5 battalions of infantry and 3 regiments of cavalry—Wade to Metcalfe, 1st August, 1827.
 - 2. H. Pearse, p. 305.
 - Catilogue, Vol. I, pp. 13-30, For: Misc. Vol. 259.
- 4 For: 1832 S Baron Hugel, p. 400. For: 1832 Sec. Cons. 21st May, 9-10. Burnes, Vol. II, p. 287.
 - 5. KD.R, 6th Bundle No. Aa 8.

With the exception of the Fauj-i-Khas, the various battalions of the regular infantry continued to maintain their independent status, each one of them being commanded, as before, by a Commandant. The number of companies in a battalion was standardised at eight and the strength of a comapany was now raised to over one hundred.1

There was a further increase in the strength of the irregular infantry on account of the considerably enlarged boundaries of the kingdom and the resultant increase in the number of forts and fortresses to be defended. The approximate strength of this branch was 23,950 in 1831, as estimated by Murray.²

The regular cavalry received an impetus from the appointment of Allard in 1822 as its officer-incharge. He not only raised its strength but also introduced the innovation of a cavalry trained and disciplined on European lines. The beginning was made with the raising of Rajman Khas in the very first year of his service, which is also known as the First Dragoons. Next year, the Second Dragoons, also termed Lancia from Lancers, was created.3 Hence-forward, the growth of this arm was steady and continuous upto when it reached the peak of 8 rajmans. After this an anticlimax started on account of the disaffection and the desertions caused by the irregularity of payment4, and the number of rajmans fell to 5 in 1831-32.5 As in the previous period, the regiments of the regular cavalry were not of a uniform strength, though their size was some-what larger. They varied from 200 to 600 men. In the year 1828, the largest regiment, the Akal Rajman, consisted of 650 men, while the smallest, that of Gulab Singh, comprised only 226 men.6

```
J.I.H -1921-22, Vol. I, Part I & II (Article by S.R. Kohli).
```

1. J.I.H—1921-22, Vol. I, Part I & II (Article by S.R. Kohli).

2 Baron Hugel, p 400

3. Catalogue, Vol. I, p. 16.

4 Baron Hugel, p 400

5. Catalogue Vols I & II. The year-to-year growth of regular cavalry during this period is as follows:—

1824 to 1827—4 Rajmans (Regiments)

1828 to 1829—7 Rajmans

1829 to 1830—8 Rajmans

1830 to 1831—6 Rajmans

1831 to 1832—5 Rajmans

6. Catalogue Vol. I, p. 23 (1828-29) According to Wade, each one of the regiments of Allard had a strength of about 1000 men in 1827. Wade to Metcalfe, 1st August, 1827, For. Sec. Cons: 12th Oct., 1827. to Metcalfe, 1st August, 1827, For. Sec. Cons: 12th Oct., 1827.

The total strength of the regular cavalry which was only 837 in 1819 or about 1000 in 1821 rose speedily and stood at 4345 and 3914 in 1828 and 1833 respectively, the total monthly salary being Rs. 1,03,970 for 1828 and Rs. 86,544 for 1833.

The progress of the irregular cavalry during this period lay not so much in its numbers as in its re-organisation. No doubt, some of the important derahs like the Derah Ardalyan and the Derah Khas acquired higher numerical strength, but this hardly affected the total strength of the corps which remained unchanged at about 10,000. The main preoccupation of the Maharaja, so far as this branch is concerned, was to raise its efficiency. With this end in view, in 1822 smaller units were grouped into a few bigger divisions,1 each one of which was placed under the control of a noble of high rank. Misar Diwan Chand, Jamadar Khushal Singh, Sardar Lehna Singh Majithia, Raja Suchet Singh, the Sindhanwalia and the Atariwala Sardars each commanded a division, the Maharaja himself being the generalissimo of the entire corps. As many as 32 companies which had been raised at different dates, were now combined into one big regiment called the Derah The Derah Jamwalan was merged with some Naulakha. other units to form the Derah Khas. Similarly, the Derah Ramgharia was combined with the above mentioned Derah Khas and placed under a single commander.2

Another important reform was to improve the quality of both men and their horses. This was secured by periodical inspections held every year with the object of discharging the old and the weak or otherwise unfit persons and animals amongst them.³

Far-reaching changes were effected in the artillery department during this period. Its strength was greatly enhanced, which will be clear from the following table:—4

1823—24— 5 Derahs of Topkhana and 5 Derahs of Zamburkhana.

- 1. Catalogue, Vol. I, p. 106.
- 2. Catalogue, Vol. I. pp 118-119.
- 3. News: For example, pages 48 to 207; Wade to Metcalfe, 1st August, 1827: For. Sec Cons: 12th Oct., 1827
- 4. Catalogue, Vol I, pp 16-30 In 182:, there were only two horse, three heavy, and one zamburk batteries.

1824—26— 6 Derahs of Topkhana and 4 Derahs of Zamburkhana

1826—27— 7 ,, ,, ,, 4 ,, 1828—29—11 (4 Jinsi & 7 Aspi) ,, 5 ,, 1829—30—11 ,, ,, 4 ,, 1830—32—13 (4 ,, 9 ,, ,, 4

The progress in numbers and expenditure was as follows:—

1823—24—1688 men Rs. 12270 p.m.

1828—29—3778 men Rs. 28390 p.m.

1833—34—3162 men¹ Rs. 25089 p.m.

As regards the total number of guns at the close of this period, widely differing estimates have been given by different writers, which range from S. R. Kohli's 130 cannon and 280 swivels to Capt. Murray's 376 cannon and 370 swivels.² these views, however, tend to extremes, and truth may be found somewhere in the middle. Capt. Burnes' view putting the number of cannon and swivels at about 300 each appears to be more reasonable. Further, a number of important changes were accomplished in the organisation of artillery during this period. As a matter of fact, the entire department was overhauled on the advice of some Europeans, particularly Court and Avitabile who had been invited by the Maharaja through Ventura and Allard specially for this purpose.3 The first was the rationalisation of the size of batteries. battery of horse artillery was now reduced from 15 to 8 guns.4 The following table will show the individual strength and the monthly salary of a few of the horse batteries for 1828-29:5—

- 1. Derah Ilahi Baksh—8 guns—220 men—Rs. 1698 p.m.
- 2. Derah Jodh Singh—8 guns—138 men—Rs. 1140 p.m.
- 3. Derah Shiv Prasad—8 guns—211 men—Rs. 1506 p.m.
- 1. Prinsep, p. 184—Murray gives its strength in 1831 between 4 and 5,000. Burnes tells us that in 1831 Ranjit Singh informed him that he had 100 pieces of horse artillery, each costing him not less than Rs. 5,000 in the pay of officers and men and in keeping up the horses, and that he was finding it difficult to increase the number any further (Travels into Bokara, Vol. I, p. 165).
- 2. Baron Hugel, p. 400; Masson, Vol. I, p. 430; Sohan Lal, Vol. III, Part I, p. 65.
 - 3. Murray to Wade, 18th Feb., 1827: For. Sec. Cons: 30th March, 1827.
 - 4. For: 1823 Sec. Progs. 24th Oct., 21.
 - 5. K. D. R., Bundle No. Aa 8.

No such uniformity was introduced in the case of Topkhana Jinsi or mixed guns, though here too an attempt was made to rationalise the composition of batteries, some of which had become rather unwieldy. For example, the 40-gun batteries of Ilahi Baksh and Misar Diwan Chand in the year 1823 were now reduced to more or less 25-gun batteries.¹

In the case of the swivel batteries as well, we do not find any uniformity, though here too we notice an attempt to achieve a somewhat manageable size for the units.2 The second change effected during this period was that the Topkhana was subdivided into 3 sections, namely: (i) Topkhana Jinsi or mixed batteries comprising aspi, gavi and hobath guns (from French hobit or English howitzer), (ii) Topkhana Aspi (horse batteries), and (iii) Zamburkhana or swivel batteries. All these batteries had long been there but they had never been scientifically classified. They used to form different units, big or small, of the Topkhana Mubarak or Khas (royal artillery) which was roughly divided into Topkhana Kalan (heavy guns) and Topkhana Khurd (light guns). A reclassification was now carried out, which endured, with a few modifications, almost to the end of the Sikh rule. Thirdly, the guns formerly assigned to the individual battalions of the infantry, were now detached and formed into a separate artillery park and placed under Syed Imam Shah.3

The advent of Europeans was responsible for improvement in the art of founding guns. Both Court and Avitabile were experts in this art. They were, therefore, specially charged with the supervision of arsenals and foundries. Much improvement was noticed by Capt. Burnes in 1831, who says: "The guns were well cast and the carriages in good repair: they had been made in Lahore and had cost him (Ranjit Singh) Rs. 1,000 each."

^{1.} For: 1823 Sec. Progs 24th October, 21.

^{2.} K. D. R , bundle No Aa 8.

^{3.} Prinsep, p. 184; hews, p. 649. If we are to follow Capt. Wade, even as late as 1831 each battalion had two pieces of horse artillery. This shows that the reform was either not carried out or later on revised. Wade to the georetary to the G. G. 31st May, 1831: For. Sec. Cons: 1st July, 1831.

^{4.} Article by Cotton—Calcutta Review, Oct., 1906, p. 531; Gordon, p. 99; News, pp. 283 & 485

^{5.} Burnes, Vol. I, p. 165.

The strength of the jagirdari fauj was further enhanced during this period. According to Murray's estimate, it stood at 27,014 in the year 1831. Moreover, with the consolidation of Ranjit Singh's position, a change occurred in his attitude towards his feudatories. He gradually relaxed the restrictions on their keeping guns, and demanded a service of artillery as well along with their contingents of horse and foot.²

Adding up the strength of all the branches of the army, we get the aggregate strength as 89000 in round numbers, which is not far removed from the estimates of the contemporaries like Masson, Burnes and Murray.³

All the instruments of control described earlier in connection with the second period were continued with much greater vigour. In the case of feudatory chiefs, the hold was further tightened. Ranjit Singh was increasingly becoming severe in his requisitions upon them. In 1823 one Dal Singh Naherna was threatened with heavy mulct on account of his contingent not being upto the mark, whereupon he ended his life by poison. In 1827 Hari Singh Nalwa was imprisoned for a few days and fined Rs. 2 lakhs on account of a deficiency of 150 sawars in his contingent. Three years earlier Diwan Moti Ram had been fined Rs. 70,000.4 The same kind of severe treatment compelled Fateh Singh Ahluwalia and some other feudatories like Hari Singh Kang and Diwan Singh to flee across the Sutlej to place themselves under the protection of the British, which was, however, denied to them because of the Maharaja's cordial relations with the latter.

In the organisation of command as well, some notable steps forward were taken during this period. The establishment of an infantry battalion was further augmented to cope with its increased strength, the fresh additions being:⁵

1. Baron Hugel, p. 400.

3. Masson—73400 out of which 20000 were disciplined. Burnes—75000 out of which 25000 were disciplined. Murray—81000 out of which 27000 were disciplined.

^{2.} News, p. 84. Here is mentioned an instance in which Dewan Kirpa Ram was asked to furnish 1100 horse paid in coin, 1200 horse paid in jagir, 500 foot, 100 zamburks and 5 cannon. Hari Singh Nalwa had 5 horse guns (same source, p. 388); Sohan Lal, Vol. III, Part I, p. 113.

^{4.} Prinsep, p. 136; Sohan Lal, Vol. III, Part I, p. 379; Amar Nath, p. 163.

^{5.} J. I. H., 1921-22, Vol. I, Parts I & II (S.R. Kohli's article).

one Jamadar or Subedar, 1 two Havildars, 1 Sarjan (Sergeant), 2 Naiks, and I Phuryia. In 1827 a chief-in-charge of all battalions known as 'Camp' or 'Campoo Mualla' was appointed to supervise their training and administration. The post of a Commander-in-Chief for the whole of the regular army was created in 1826. Prince Kharak Singh, the heir apparent, was the first to be nominated to this high office. Strictest instructions were issued at the time to all the unit commanders to regularly send their daily reports to the prince.2 Moreover, as Dr. Murray and Capt. Wade inform us, Ranjit Singh during this period was constantly trying to improve command by taking in sons of his Sardars, educating them at his own cost and giving them responsible assignments and by dismissing incompetent commanders.3 As noticed earlier, steps were also taken to improve the organisation of command in the departments of artillery and irregular cavalry.

In respect of training, this period marks the dawn of a new era. There was almost a complete shift⁴ from the British system followed hitherto to the French system of training. This resulted from the fact of some French Officers having joined Ranjit Singh's service, to whom, once he was convinced of their capabilities, he gave his entire confidence and maximum facilities for imparting training to his army on the French model.⁵ He spared no pains to popularise the new system,

- 1. Formerly, some companies had Subcdars, and some Jamadars. Under the revised scheme every company had both of them.
 - 2. Sohan Lal, Vol. II Part I, p. 355 & Vol. III. Part I, pp. 91 & 75.
- 3. Wade to Metcalfe, 1st August, 1827 : For Sec Cons: 12th Oct., 1827; Sohan Lal, Vol III, Part I, p 334.
- 4. But the change-over was gradual and moreover, the British system was not altogether given up. The Akal regiment of Garron was trained under this system-News, p. 395.
 - 5. Adventurer, p. 19; Sohan Lal. Vol. III, p 296.

"The Maharaja in company with his native commandants viewed the parade and was much pleased, and declared that the eulogism he had heard passed on the French manner of exercising troops was fully justified. The officers said that they possessed two books of instructions for the horse and foot, and that in 4 years the sepoys would be perfect. The Maharaja was pleased beyond measure and begged them to consider his house as their house, that a separate derah should be formed for them and all recruits put under them, independent of the two regiments of horse." For: 1822 Pol. Progs. 24th August, 4.

and encouraged his people by bountiful rewards. There is no direct evidence to prove it, but the probability is that the Maharaja's ready and enthusiastic welcome to the new system was due to the fact that he considered Frenchmen more dependable than Britishers who were his political rivals, and the French system of training and tactics superior to that of the British. He might as well have been influenced by what he had heard of the brilliance of Napoleonic victories. As remarked by Griffin, these French officers "very much improved the discipline and tactical power of Ranjit Singh's army."2 This is strongly corroborated by both Dr. Murray and Capt. Wade who witnessed the parade of his troops in 1827 and 1831.3

The Maharaja continued to enforce strict discipline. Whatever the branch of the army and whosoever the culprit, breach of discipline was firmly dealt with. There were no hard and fast rules evolved for this purpose, and penalties were usually determined, as before, by the caprice of the monarch. But there was no undue harshness. Even the most earnest exhortations of Ventura and Allard in 1825 could not procure his assent to their proposal of awarding capital punishment to some mutineers.4 It may, however, be remembered that Ranjit Singh faced a difficult situation in regard to discipline during this period. One factor which made for indiscipline was his employment of, and partial treatment for Europeans. This created among his own officers a considerable amount of heart-burning⁵ which had a deleterious effect upon dis-

I For 1823 Sec. Progs. 24th Oct., 16—Wade to Elliot, 7th Aug., 1823 and Wade to the Secretary to the G. G., 19th June, 1831: For. Sec. Cons: 29th July, 1831; Sohan Lal, Vol. III, Part I, p. 298 After witnessing a display of the French regulations, Ranjit Singh gave a gold watch and Rs. 2000 to the French officers and Rs. 500 to the Sikh trainees. Also see Sohan Lal's Diary, p. 377, for an appeal to the sons of notables for learning the French system.

2. Griffin, Rannt Singh, p. 139; For: Misc. Vol 259—Wade's great appreciation of their work. However, Cunningham uses a moderate language. "They were fortunate in having an excellent material to work with and like skilful officers, they made a good use of their means and opportunities. They gave a moderate degree of precision and completeness to a system already introduced; but their labours were more conspicuous in French words of commands, in treble ranks, and in squares salient with guns than in the ardent courage, the alert obedience and the long endurance of fatigue which distinguished the horsemen 60 years ago." History of the Sikhs (1918) p. 174.

3. Murray to Wade, 30th Dec., 1826: For. Sec Cons. 23rd Feb., 1827; Wade to Metcalfe, 1st August, 1827: For. Sec. Cons. 12th Oct., 1827.

^{4.} News, p. 662.
5. Misar Diwan Chand expressed his resentment about their fat salaries in the very presence of the Maharaja—For: 1823 Sec. Progs. 24th Oct., 16.

cipline, so much so that it was seriously commented upon by Capt. Burnes in his report of his first visit to Lahore. But open trouble came only from the men who were placed under the European officers. They did not like the strict discipline imposed on them, with the result that there were several mutinies. Sometimes the Maharaja carried his point, as in the case of the mutineers of Gyan Singh's Regiment and the Gurkha Battalion,² and at other times he had to yield as for example in the case of the insurgents of the French Regiment,3 but there is no doubt that in the long run he had his way in reconciling his men to the rigours of the French discipline. Another factor responsible for indiscipline was irregularity payment to the soldiers. There were troubles on several occasions.4 This was indeed the weakest point in Ranjit Singh's military system, which continued to mar the efficiency of his army during the rest of his reign, but it seems the Maharaja did not take it seriously, for in 1832 he expressed surprise to Burnes that the troops' clamour for pay was viewed as mutinous⁵ conduct.

This period witnessed the gradual replacement of the Hindustani element which used to constitute the bulk of the regular army before 1822, by Panjabis, particularly Sikhs whose prejudices against the European sytem, thanks to the persistent efforts of the Maharaja, were at last being uprooted. This change may be attributed to the higher estimation in which the Panjabis were held by the Maharaja who, as he once told Dr. Murray, found them more active, forward or zealous than the Purbias. Another notable feature regarding the composition during this period is the

^{1.} For: 1832 Sec. Cons. 21st May, 9-10.

^{2.} News of Ranjit Singh's Court, p. 129; For. 1823 Pol. Progs. 22nd Aug., 9.

^{3.} Ibid., p. 661.

^{4.} Once Ranjit Singh was surrounded and stoned by a regiment of matchlockmen (News of Ranjit Singh's Court, p. 354); mutiny of the rolundaz in 1827, Dr. Murray to Wade, 4th Jan. 1827: For. Sec. Cons: 23rd Feb, 1827.

^{5.} Burnes, Vol. I, p. 21.
6. This is clear from the Pay Rolls of the period, see Catalogue, Vol. I, relevant portion.

^{7.} Dr. Murray to Wade, 26th Dec., 1826. : For. Scc Cons: 23rd Feb., 1827. Wade was told a similar thing in 1827. Wade to Metcalfe 1st Aug., 1827: For. Sec. Cons: 12th Oct., 1827.

introduction for the first time of foreigners into the army. Their number was infinitesimal, but from the fact that they occupied key positions, they acquired influence and power out of all proportion to their numerical strength.

The morale of the army rose higher owing to its composition. It was becoming more and more the army of the Khalsa, the cherished object of Ranjit Singh's policy, and this had a salutary effect on the general morale, for, as very aptly remarked by Masson, the Khalsa "flushed by a series of victories, now had a zeal and buoyancy of spirit amounting to enthusiasm."

There was little change in the procedure of recruitment. However, it appears from the contemporary records that the State now directly controlled all recruitment except for the jagirdari levies, in whose case as well the disadvantages of indirect recruitment were mitigated by repeated physical check-ups. Another fact revealed by the contemporary records is that the Maharaja was now much more selective in recruitment. This was so because of his great solicitude to improve the quality of the army.²

While no change was made in the uniform of the regular infantry and cavalry, a distinct uniform was now adopted for the artillery branch, which consisted of black coats of 'banat' and white trousers.³ The improvement in turn-out now received much greater attention, and no financial consideration was allowed to stand in its way⁴, with the result that the army looked much more impressive and imposing. Masson wrote about the close of this period: "The disciplined troops of Ranjit Singh have a highly respectable appearance, are well clothed and equipped, and appear to be in want of no necessaries. They are clothed similar to the native troops in the British Indian service. The Gurkhas alone wear caps (Shakoos of the English type)."⁵ A similar opinion has been recorded by another foreign visitor, Jacque-

- 1. Masson, Vol. I, p. 435.
- 2. News of Ranjit Singh's Court, pp. 40, 55, 64, 70, 73, 177, 187, 243 etc.
- 3. Ibid., pp. 468 & 492.
- 4. 12 lakes of rupees were spent at once in 1823 at the instance of the French officers for the purchase of woollens to clothe the troops. For. 1823 Sec. Progs. 24 Oct., 1821.
 - 5. Masson, Vol I. p. 433.

mont, while Capt. Wade in 1827 noted that all the regular troops of the Maharaja were dressed, armed and equipped in the European style with the exception of the turban.

There was a definite advance in the matter of equipping the army with better weapons. Flintlock was now rising in popularity³, and the entire regular infantry was provided with this weapon. Similarly, the regular cavalry was rearmed with carbine and pistol. The rest of the army was, however, still equipped with muskets (torahdar) and matchlocks. But even these were of a much better make on account of the more efficient mistry-khana (workshop) that Ranjit Singh now possessed.⁴

We also find certain improvements in the arrangements for the manufacture of ammunition. Unlike in the past, the manufacture of all ammunition like shells and grape-shots requiring greater technical skill was concentrated at the workshops of Lahore, Amritsar, and the various artillery units of the army, and only supply of the ordinary kind of ammunition was left to the moffusil areas. But as regards the quality of his ammunition, Ranjit Singh was not yet satisfied, and in 1827 regretted to Capt. Wade that his workmen could not produce the like of British gun powder.⁵

The new system of supplies evolved during the second period of Ranjit Singh's rule and examined earlier was further elaborated. The number of stores, arsenals and magazines was considerably enlarged during this period. As regards foraging, the Maharaja now issued the most prohibitive orders to his troops not to distress people and their crops, and took prompt and severe notice of any infraction of these instructions, so that Capt. Wade could write in 1831: "Few chiefs exercise

- 1. Sohan Lal, Vol. III, Part I, pp. 15-16. Jacquemont expressed this view after seeing a parade in 1831.
 - 2. Wade to Metcalfe, 1st Aug., 1827: For. Sec. Cons: 12th Oct., 1827.
- 3. News of Ranjit Singh's Court, pp. 347, 486, 590. Ranjit Singh's application for two lacs of musket flints recommended by Capt. Murray—Book 71, Murray to Elliot, dated 20.7.1823.
- 4. Both Dr. Murray and Capt. Wade who had an opportunity to look at these weapons in 1827, testify to their good quality. Murray to Wade, 1st Jan., 1827: For Sec. Cons: 23rd Feb., 1827; Wade to Metcalfe, 1st Aug., 1827: For. Sec. Cons: 12th Oct., 1827.
 - 5. Wade to Metcalfe, 1st Aug., 1827: For. Sec. Cons: 12th Oct., 1827.

a more rigid control over the conduct of his troops than he does."1

As regards the rates of pay, they were maintained, more or less, at the previous levels for the infantry and artillery branches, but in the case of cavalry, a few changes were effected with a view to equalisation between its regular and irregular wings. In the regular wing where the rates were low, the pay of a trooper was raised from Rs. 15 to about Rs. 24 per month, while in the irregular where the rates were high, a reduction was effected bringing the pay of a trooper down to Rs. 300 per annum or Rs. 25 per month.3

In some respects, this period witnessed a definite deterioration. The regularity of payment which was the special care of Ranjit Singh in the earlier period, was now conspicuous by its absence. There were arrears for six, eight and sometimes even twelve months, with the consequence that there was a widespread discontent among his troops.4 There are two possible explanations of that. The first is his growing friendship with the British Government which induced in him a measure of complacency, as remarked by Capt. Burnes.⁵ The second is his financial difficulties arising from failure of crops, because we find him levying special taxes on his chiefs and officers. getting forced nazranas (presents), and making heavy deductions from the pays of his troops.6 Another indication deterioration was the setting in of corruption? in the pay department, as a result of which poor soldiers had to suffer.

1823—24 Infantry—Rs. 7.2 per head. Cavalry—Rs. 25.1 ,, ,, Artillery—Rs. 7.3 ,, ,, Catalogue, Vol. I, pp 14 & 22. 1828—29. Infantry—Rs 7.3 per head. Cavalry—Rs.23.7 ,, ,, Artillery—Rs. 7.5 ,, ,,

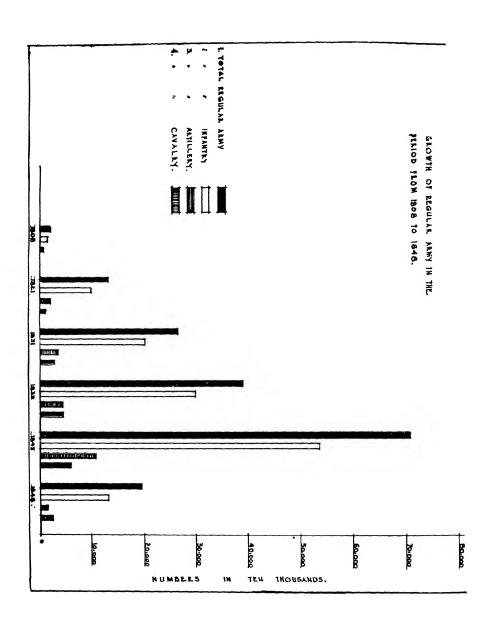
^{1.} Lahore Darbar, p. 284: 137/13, Wade to Prinset, dated May 25, 1831-Paniab Govt. Records.

^{2.} For. 1823 Sec Progs. 24th Oct., 21—Translation of a paper of intelligence from Lahore. According to Dr. Murray, Ranjit Singh paid Rs. 26/- to his regular horsemen. Murray to Wade, 16th Jan. 1827 For. Sec. Cons: 16th March, 1827.

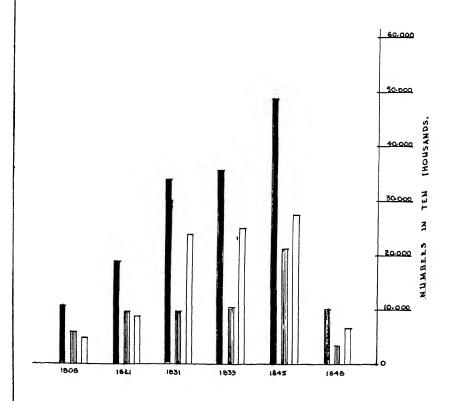
^{3.} However it should be remembered that most of the ghorchurras were still paid in jagirs. The following are the average pays of the different branches of the regular army during this period:

^{4.} Dr. Murray to Capt. Wade, 1st Jan., 1827 : For. Sec. Cons : 23rd Feb., 1827.

^{5.} For · 1832, Sec. Cons · 21st May, 9-10.
6. News, pp. 261, 262, 265.
7. Ibid., pp. 312, 365.



GROWTH OF IRREGULAR ARMY IN THE PERIOD FROM 1808 TO 1848.





Ranjit Singh had adopted the method of payment in cash in imitation of the British Government, which now became the predominant system in his army. But from the contemporary records, we learn that he was already finding it very hard to continue this mode. He lacked the requisite administrative machinery. Consequently, at this stage we find him sometimes giving preference to the older system of assignment of land with a view to escaping the botheration of being confronted, off and on, with noisy clamours for pay.

This period is particularly memorable for a large-scale expansion of the army and introduction of the French mode of training. So much advance had been made that about the end of the period Capt. Burnes, after witnessing a review of the army, could declare that the troops were "well accoutred and dressed", and that they "went through their evolutions with an exactness and precision fully equal to our Indian troops."2 An exactly similar view was expressed by the British officers who reviewed the army on the occasion of the Ropar meeting in 1831.3 But inspite of all this progress a number of serious short-comings still remained, namely: (i) irregularity of payment which greatly hampered discipline; (ii) lukewarm attitude of the chiefs towards the new mode of training; (iii) discontent among officers on account of the foreigners being given higher salaries and more importance; (iv) disaffection created by disparity in the rates of pay for the officers of the same rank; (v) slow evolutions of the Sikh battalions, and the rather miserable condition of the gun-carriages.4

IV PERIOD—1832-1839

The new system of training and discipline having been established, the main emphasis was shifted after 1831 to the

- 1. Ibid., pp. 45, 235, 244.
- 2. Burnes, Vol. II, pp. 155 & 296.
- 3 Sohan Lal, Vol. III, Part I, p 85.
- 4. For 1832, Sec. Cons: 21st May, 9-10; Cavalry officer, p. 68. "The officer who was present on this occasion told me that the movements of the Sikh battalions were very slow and to the beat of the drum; the cavalry mostly wearing bright cuirasses looked glittering and showy, whilst many of the gun carriages seemed as if a long march over a rough road would break them down."

reorganisation and improvement of the army. Among the factors which might be responsible for this, the first was the meeting of Ranjit Singh with the Governor General, Lord William Bentinck, at Ropar in 1831. Prinsep tells us that on this occasion he "examined each corps (of the British troops), and put an infinity of questions as to their equipment, asking the use and cost of every strange article that caught his eye." He was particularly struck with some of the evolutions exhibited before him by the British regiments, so much so that he sent his Sardars upto the ranks to examine closely how they were executed, and himself went up to the squares formed by the infantry to see how many ranks knelt and how many kept up fire, showing in all things a most insatiable curiosity.1" On the last day of the interview, the Maharaja was shown some artillery practice with grape and spherical-case shot, which had been arranged at his own request. This also left a deep impression on his mind. At the end of the interview he was presented two pieces of cannon along with two ammunition boxes, 12 horses at the rate of 6 per piece, two horses for the commandant, 2500 iron balls, cartridges, gola ral (?) and other accompaniments. The Maharaja himself scrutinised the guns and their appurtenances most minutely and questioned the accompanying commandant about everything pertaining to the guns.2 Thornburn says that "Ranjit Singh returned to Lahore deeply impressed by the British and confirmed in his views that their resources and organisation, particularly in the artillery branch, were superior to his own."3, "and henceforward", as Mc Gregor has said, he was most anxious that "his armies should be as much as possible on the same footing as those of the British."4

Another factor which influenced the military policy of Ranjit Singh during this period was the radical change in the British attitude towards the north western countries.⁵ The British were now free from their pre-occupations. They had finished with the Marathas, had subjugated Bharatpur and had rendered tributary the various states of Rajputana. The

^{1.} Prinsep, pp. 162, 166; Twankh Khalsa, p. 285, Skinner p. 212.

^{2.} Sohan Lal, Vol. III, Part I, p. 101; Skinner, pp 214-215.

^{3.} Thornburn-p. 15 (The Panyab in Peace and War).

^{4.} Mc Gregor, Vol. I, p. 205.

^{5.} Sinha, p. 81.

steam-roller of their power which had started in the east, was now steadily advancing towards the natural frontiers of India in the north-west. In the words of Macmunn, the 'Lure of the Indus' was now fully at work. Added to this was the Russophobia, i. e. terrible fear of the Russian into Central Asia, which was construed into a menace to their empire of India. Thus motivated, the British ment now decided to expand north-and west-ward and to have Sind, Panjab, and Afghanistan within the sphere of their influence. This alerted the Maharaja who, lest his political of expansion towards Sind and Afghanistan¹ be thwarted and his kingdom imperilled, put all the more zeal and vigour into his programme of military reform. The British danger was not the ony thing against which Ranjit Singh had to guard himself. The revival of a crusading² spirit in the Afghans after his annexation of Peshawar in 1834 and the repeated attempts of Dost Mohammed to recapture it, obliged the Maharaja to keep his fighting machine in the best possible state of efficiency.

The improvements effected during this period were also due to the entry of several other Europeans into his service, such as John Holmes, Canara, Gardener, Harlan, Cortlandt, De La Font, Fort, Foulkes, Steinback, Dr. Honigberger etc. Of these, Gardener and Honigberger were outstanding. Both of them rendered valuable services, the former as an instructor³ in the artillery department, and the latter as superintendent of a powder mill and a gun manufactory at Lahore. Besides, several European visitors came to the Panjab during this period, the most prominent of them being Baron Hugel, Jacquemont, Orlich, Vigne, and Sir Henry Fane. Ranjit Singh not only paraded his army before them and asked for their candid opinions about it, but also had general discussions with them on important military subjects, and tried to acquire information about European warfare, particularly that of Napoleon Bonaparte.⁵

The constitution of the army underwent some far-reaching changes during this period. In 1835 the whole regular army

^{1 &}amp; 2 —Cunningham, pp. 184 & 188.

^{3.} Pearse, p. 182.

^{4.} Cunningham, pp. 194-195.

^{5.} Baron Hugel, pp. 286 & 289.

was reorganised on the model of the French brigade which had long since been in existence, into a number of brigades, the object being to improve the tactical efficiency of the army. The Maharaja got his inspiration for this from, besides his French officers, the East India Company's army which, only some years before, had been reorganised into brigades. Each brigade consisted of 3 to 4 battalions of infantry, one battery of artillery and a cavalry force varying from 2 to 600 men.² The command of a brigade was given to an officer of the rank of Colonel or General. Each brigade was equipped with the necessary services for the supply of ammunition and forage, and a company of beldars.

After 1832 growth of the regular infantry became very rapid, as will be evident from the following table:—3

183335	 22	battal	ions			
1835—36	 26	,,	and a	few misce	llaneou	s com-
]	panies.
183637	 28	,,	,,	,,	,,	,,
1837—38	 29	,,	,,	,,	,,	,,
1838—39	 31	١ ,,	,,	,,	,,	,,

The minimum strength of a battalion was now further raised from 600 to 800, while the maximum strength remained

- 1. For example, French Brigade, Col Amir Singh Man's Brigade, Tej Singh's Brigade, Dhonkal Singh's Brigade, Misar Sukh Raj's Brigade, Court's Brigade, and Col. Gulab Singh's Brigade.
 - 2. Gatalogue, Vol. I, p. 33.
 - 3. Ibid. Vol I, pp. 31-44.
- 4. Different estimates have been given by contemporaries. Lt. Col. Burton (I and II Sikh Wars, Chapter II) says that a detail of Ranjit Singh's infantry in 1835 was published in the Delhi gazette, from which it appears that there were 34 battalions including some composed of Poorbias and Gurkhas and that 12 more were in the process of formation. A traveller in the Panjab the following year estimated the Sikh infantry at 40 battalions, each with 1000 rank and file. Mc Gregor says that he actually saw the book in which Ranjit Singh kept a correct list of his regular troops, and according to it, there were, in 1835, 35 battalions of infantry with 1000 men each (Vol. II, p 86). This shows that if we include the additions made after 1835, we shall have probably more than 40 battalions in 1838-39. According to the estimates of Sir Henry Lawrence prepared in 1847, there were 35 battalions in 1838-39 (For: 1847 Sec. Progs. 31st Dec., No. 335). Another estimate of the same gentleman puts it at 39 battalions (For: 1846 Sec. Progs. 26 Dec., No. 940). Sohan Lal mentions 40 battalions for 1836 including those maintained by the feudatories (Vol. III, Part III, p. 336). There are even higher estimates like 35000 and 50,000, by writers like Orlich and Lt. Barr respectively.

more or less the same.¹ The total strength of the regular infantry went up from 20,000 in 1831 to about 30,000 in 1838-39,² which amounts to an increase by one-third. The monthly salary of each battalion was also now higher. Whereas the maximum nonthly salary of a battalion in 1828-29 was Rs. 7665 for a strength of 1041, by 1838-39 it had risen to 8692 rupees for a strength of 885 only.³ This increase may be accounted for partly by the Maharaja's appointment of European commanders and partly by his soldiers having earned a few increments in the meantime. As regards the monthly salary of the regular infantry as a whole, it was Rs. 27,59,688⁴ at the close of the period as against Rs. 20 lakhs at its beginning.

This period saw no further progress in the branch of the irregular infantry, because its strength remained more or less constant at 25,000.5

Whereas the regiments of the regular cavalry now rose to 10, the actual rise in its strength was only 751 (from 3914 to 4664), the main reason for the slow progress being its comparative costliness. The Maharaja attached much greater value to his ghorchurras, and never gave enough funds to Allard who, therefore, found it difficult to raise it to the European standard of efficiency. Hence, its progress was erratic, and its numbers fluctuated greatly. Lt. Col. Skinner spoke very scornfully of it, as also did Lt. Fane who remarks that, at a review he witnessed, it was difficult to say which made the worst exhibition, Allard himself or his cavalry. The size of a regiment was now larger than in the previous period, but as usual there was no uniformity of strength, The individual strength and

- 1. In the case of the battalion of Bhup Singh, the strength was higher—1151.
- 2. The actual number ascertained from the Khalsa Darbar Records is 29617.
 - 3. K.D.R. Bundle Aa 17 (i).
 - 4. For: 1847, Sec. Progs 31st Dec., No. 335.
- 5. Henry Lawrence estimated its strength in 1838-39 at 13674 only. This shows a definite retrogression. But this is not a wholly correct estimate, as it did not include certain battalions of Najibs, which according to Murray, formed part of it.

For: 1847, Sec. Progs., 31st Dec., 335;

- 6. Monograph 18, p. 51; Wade to Metcalfe, 1st Aug., 1827 :For . Sec. Cons: 12th Oct., 1827.
 - 7. Grey, pp. 20-21.

the monthly salary of a few of these regiments may be given below¹:—

- 1. Grenadier Regiment—732 men—monthly salary Rs. 17627.00
- 2. Dragoon , —770 , , , , Rs. 18408.00
- 3. Ram ,, -502 ,, ,, Rs. 9980.00
- 4. Lancers ,, —293 ',, ,, ,, Rs. 6864.00

the irregular cavalry is concerned, the process of consolidation commenced earlier was carried a step further. The Derahs which particularly benefited were the Derah Khas, the Derah Chorchurra Khas, the Derah Ardalian and the Derah Naulakha. The Derah Khas was placed under the command of Raja Hira Singh in 1836. Five companies of Sikh troopers were added to it in 1835, and 8 other Derahs of Sikh misaldars were incorporated into it in 1839 when its number reached 1377 and its annual salary Rs. 4,141,392. The Derah Ghorchurra Khas gradually rose to 1320 by the end of Ranjit Singh's reign. The strength of the Derah Ardalian swelled to 2000 by 1837. But of all these, the Derah which made the greatest progress was the Derah Naulakha, also known as the Derah Charyari. Its size became so unwieldy that in 18352 it was split up into two sections, Naulakha Kalan and Naulakha Khurd, which were commanded respectively by Raja Suchet Singh and Rai Kesri Singh. other Derahs like the Derah Ramgariah, the Derah Pindiwala, the Derah Sindanwalia, the Derah Attariwala, the Derah Gurmukh Singh Lamba, and the Derah Mul Rajia, however, did not gain much in size or strength.3 Another important improvement made during this period was the attachment of some units of zamburkhana or swivels to some prominent Derahs of Ghorchurras. This necessary step was taken probably as part of the reorganisation scheme of 1835 to enhance the tactical value of these Derahs. However, the total strength of this arm registered practically little further advance. According to the Lahore Darbar Papers as well as Sir Henry Lawrence,4

^{1.} For: 1846 Sec., Progs., 26 Dec., 940.

^{2.} It stood at 2674 in 1835; Catalogue, Vol I, p. 114.

^{3.} Bundle Ab (i) and Ab (11)—K.D.R; Catalogue, Vol I, pp. 109-119

^{4.} Foi. 1847, Sec. Progs., 31st Dec., 335; Shahamat Ali, p. 23; Baron Hugel, p. 350. Baron Hugel and Shahmat Ali give slightly higher estimates, 12800 and 11800 respectively. But they are less dependable than the estimates given above.

it stood at 10795 in 1839 with its total annual expenditure of Rs. 31,68,714 on salaries.

As a consequence of the reorganisation of the army into brigades in 1835, the artillery branch underwent certain The horse batteries were now permanently modifications. assigned one to each brigade, just as the derahs of camel artillery were attached to the more important regiments of the ghorchurras. But the few jinsi or heavy siege trains remained, as before, a distinct corps commanded by General Sultan Mahmud and subsequently by Sardar Lehna Singh Majithia.¹ As regards its growth, the period did not witness any rise in the number of batteries or guns except for one horse battery. There was a great deal of substitution of new and better guns for the old and worn-out, but the fresh addition was very little or practically nil. The aggregate continued to stand at 300 where it had stood at the end of the previous period. According to the Khalsa Darbar Papers as well as an estimate of Sir Henry Lawrence, there were 14 batteries of jinsi and aspi guns both, comprising in all 192 guns,2 which, when added to about 100 guns posted in the different forts of the Lahore Kingdom, amount to 300 pieces of all calibres.³ As regards the total number of zamburks in 1838-39, estimates vary from 150 to 500.4 This disparity arises chiefly from the fact that they were maintained not only by the state but also by the feudatories and were kept in active units as well as in forts. The estimate of 150 covers only those attached to active units, while the higher estimate of 500 probably refers to all kinds of swivels.⁵ Besides, Lt. Barr refers to the presence of a large number of Bharmar guns⁶ (long duck-like guns) which formed part of Ranjit Singh's artillery.

6. These guns were no innovation, only their reference here is a new

thing. Lt. Barr, Calcutta Review, Vol. II, p. 178 (1844).

^{1.} Sultan Mahmud was degraded in April 1837 due to his habit of excessive drinking.

^{2.} For: 1846, Sec. Progs. 26th Dec., 940; For: 1847 Sec. Progs. 31st Dec., 335; Griffin, p. 142.

^{3.} This estimate excludes the guns of the jagirdars. 4. For: 1846, Sec. Progs., 26th Dec., 940.

^{5.} In support of this it may be said that Mc Gregor personally saw 500 camels armed with swivels on the occasion of Dusehra Parade of 1835. Vol. I, pp. 240-243.

We find little progress during this period towards uniformity in the size of the batteries. Rather, there was a slight deterioration in the case of the horse batteries which had about 8 guns in the last period but which now varied from 4 to 15 guns. The position of the 4 jinsi batteries in this respect remained almost unaltered, and they continued to vary, as before, from 15 to 27 guns. However, there was a little reduction, in the interest of improvement, in the size of the swivel batteries which now consisted of from 30 to 50 zamburks instead of about 60 as in the past. Some headway was made, however, in the personnel of the artillery department, which at the end of this period stood at 4490 as against 3162 in 1833-34. There was consequently a proportionate rise in its monthly salary which rose from Rs. 25089 to Rs. 33346-7-6.1

The process of broadening the scope of feudatory services, begun earlier, was carried considerably forward during this period. All important chiefs like the Princes, the Dogra Rajas, Hari Singh Nalwa etc. were required, in lieu of their jagirs, to maintain fixed quotas of trained battalions and artillery, besides their contingents of irregular horse and foot. It is very difficult to give the number of such battalions and guns in the year 1839, but it is known for certain that in 1845, their number was 25 out of which the Dogras alone had 21. From this a rough idea may be formed as to their position at the close of Ranjit Singh's reign. Hari Singh Nalwa had two such battalions, and similarly the other big chiefs had one or more battalions according to the value of their jagirs.³

As regards the strength of the jagirdari troops in 1839, it is not possible to form any exact idea. Shahamat gives the strength of the jagirdari horse alone as 11800. The total number, however, will go very much higher when the jagirdars' infantry and artillery are included.

^{1.} For: 1846, Sec. Progs., 26th Dec., 940 and Foi: 1847 Sec. Progs. 31st Dec., 335.

^{2.} Nau Nihal Singh was asked in 1836 to keep, in return for a larger jagir, 3 battalions, 15 pieces of artillery, 700 sawars and to pay a nazrana of 1 lakh a year. For: 1836: Sec. Cons. 3rd Oct., 24.

^{3.} According to Lt. Barr (entry dated 22,2, 1839), Raja Dhian Singh alone had in 1839 from 25000 to 30000 men with a fine body of artillery.

According to Lt. Barr, the total strength of the Khalsa army at the end of Ranjit Singh's reign was 76000 out of which the disciplined portion was 43000. According to Henry Lawrence's estimate, it was 65841 out of which the disciplined portion was 37868.2 S. R. Kohli's estimate relating to the regular army alone stands at 38301.3 According to our own calculations embodied earlier in the text, the aggregate of Ranjit Singh's military strength should be slightly higher than 80,000,4 which cost him Rs. 1,27,96,482 out of a revenue of Rs. 3,00,27,762 or about 43%.5

Ranjit Singh continued to exercise effective and minute control over his military as over his civil affairs upto the last breath of his life. When he could no longer use his tongue, even his gestures were obeyed with readiness,6 though in the last two or three years of his life, when owing to his bad health he could not bear the strain of work, he delegated a few of his duties to Raja Dhian Singh, his Prime Minister.⁷

The organisation of command was considerably improved during this period. The command of a battalion, as also that of a battery, was now vested in a Colonel. The former commanding officer, the Commandant, was now subordinated to him. Moreover, a number of Generals' posts were created, and as many as 8 Generals were appointed in 1835,8 Ventura being the Chief General. A General was put in charge of a brigade, though sometimes even a Colonel was entrusted with its command. The staff of the company was also slightly improved. The number of Naiks was increased by one, in certain cases by two, to assist the Havildars.9

1. Calcutta Review, Vol II, 1844, p. 176.

^{2.} For: 1847, Sec. Progs 31st Dec., 335.
3. Catalogue, Vol. I. p. 5.
4. Travels of Orlich, p. 167 & Cunningham, p. 193. Orlich's estimate of 1,50,000 out of which 50,000 were regular, is too optimistic to be accepted. Sir Fane in 1837 estimated that the British would require an army of 67000 to conquer the Panjab. This means that Ranjit Singh's army must be very much greater.

^{5.} Shahamat Ali, p. 24.
6. Griffin, p. 90. "It was strange indeed to observe how complete was his ascendancy, even when he had become feeble, blind and paralysed, over his brilliant court of fierce and turbulent chiefs."

^{7.} Shahamat Ali, pp 17 & 27.
8. Sohan Lal, Vol. III, Part III, p. 350. The names of the Generals were Ram Singh, Gujar Singh, Ventura, Tej Singh, Ajit Singh, Court, Misar Sukh Raj and Mian Udham Singh.
9. Catalogue, Vol. I, p. 154.

The quality of the new appointments is thus brought out by Macnaughten: "General Officers have been selected from the sons of Sardars who have had their children carefully trained in the European system of military tactics. They are generally very youngmen, not more than 17 years of age, and some of them whom I have seen are remarkable for their military spirit and intelligence." It may be pointed out that the problem of suitable commanders had been exercising Ranjit Singh's mind for the past many years. For the time being he had managed by making use of the foreigners,2 but this was hardly satisfying to a man who was convinced in his mind that such people would not be sincere and dependable in a war with any European nation. Therefore, all along he had been urging upon his chiefs to have their sons carefully trained in the new methods of war, so that he could, before long, replace the foreigners with natives. The new appointments of 1835 were an important step in that direction.

As in the preceding period, so in this period the French system of training was in ascendance. But the English system was not altogether abandoned, because Shahamat Ali found two or three battalions in 1839 trained on the British lines.3 Great strides were made in improving the training and skill of troops. Convinced at the Ropar meeting that his army was inferior4 to the British army, Ranjit Singh made a supreme effort to remedy the defects. Almost immediately after his meeting he wrote to Capt. Wade expressing a wish to be allowed to send 4 Jamadars and 40 men of his horse artillery to Ludhiana for the purpose of being instructed in the British system.⁵ His wish was not granted. Some years later another

^{1.} For: 1837, Sec. Progs., 23rd Jan., 26. Of these General Ram Singh was only 14 years old, of whom Baron Hugel says: "Notwithstanding his youth, was only 14 years old, of whom baron ringer says: Notwithstanding his yourn, his talents, vivacity and desire for information promise great things." p. 296. The Adventurer's explanation is different: "The building completed, the Maharaja does not think the same care necessary for its preservation as for its construction, and boys, simpletons and dotards are here as in older services, creeping into command." p. 19.

² According to Shahamat, half of his battalions in 1839 were commanded by foreigners, p. 23.

Shahamat, p. 25.
 Skinner, p. 213.

^{5.} Cunningham, p. 194; P. G. R. Press Lists, 137/40, Wade to Prinsep, 7th Dec., 1831.

unsuccessful attempt was made, this time to secure the services of a non-commissioned European artillerist. 1 Disappointed in this, he determined to make the most of his own officers and resources, and it may be said to his credit that he was a great success in this, as is evident from the very high tributes paid to the efficiency and training of his troops by such competent judges as Baron Hugel, Lt. Barr, Sir Henry Fane, Macnaughten, Mc Gregor and Osborne. For instance, Sir Henry Fane, the British Commander-in-Chief, after witnessing a review of Ranjit Singh's troops in 1838 wrote: "I never was more surprised than to see the extraordinary effect that our expedition to Lahore in 1837 had upon Ranjit troops. Instead of being what they then were, almost unable to move, they now went through several manoeuvres with as much steadiness as our own sepoy regiments could have done. The Sikhs are most excellent imitators as the present exhibition proves."2 And he calls their performance at the parade "most wonderful". Another writer, Miss Emily Eden, Lord Auckland's sister, described the excellent display of the Sikh army at Ferozepore in 1838 as "a sad blow to our vanities".3 The author of the Journal of a Cavalry Officer⁴ also affirms that at Ferozepore in 1838 the Sikhs gave a display of "all the British evolutions with greatest accuracy and precision, their infantry movements being much more rapid than at Ropar in 1831." Osborne at Deenanagar in 1838 also found "the steadiness and precision of the Khalsa army extraordinary and greater than that of any other troops I ever saw."5

The last period of Ranjit Singh's reign witnessed a slight deterioration in discipline. Some of the causes which made for indiscipline and spread discontent, such as irregularity of payment and disparity in the pay of men of the same rank were relics of the preceding periods.6 In addition, the rapid expansion of the army posed some new problems of discipline

P.G.R. Press Lists, 125/5, 14th January, 1839.
 Sir Henry Fane, (Vol. II, pp. 9-10) also points out that the Sikhs neglect the more simple evolutions of advancing steadily in line, wheeling and quick formations.

^{3.} Up the Country, p. 209.

^{4.} P. 71.

^{5.} Osborne, pp. 101, 102, 134, 135.

Shahamat Ali, p. 51.

which seriously exercised Ranjit Singh's mind. A great improvement in discipline had no doubt resulted from the Maharaja's being able largely to neutralise his people's opposition to the French mode of discipline and to bring about amicable relations between his Indian and foreign officers. But this was not enough. Therefore, not content with his usual methods, Ranjit Singh made frequent references to his own agent at Ludhiana and Capt. Wade on this subject with the object of evolving a better disciplinary procedure. 1834 he got a Persian abstract of the British Military Code which had been prepared by Major Hough for him¹, as also a French code drawn out by M. Chwalier. About the same time he wrote to his agent at Ludhiana to collect every possible information about the court-martials and other aspects of the British system of military discipline. When in 1835 the corporal punishment of flogging was abolished in the ranks of the British army, he at once wrote to Capt. Wade to let him know the exact reason for doing so and the substitute adopted, and was told in reply that the solitary confinement had been found to be one of the most efficacious substitutes for this.2

The general pattern of the composition of the army remained as it was at the end of the last period, except for some further improvement in the position of the Sikhs. As regards recruitment, the conditions for it were now even easier. People were no longer held back by prejudices, and the Maharaja was in a position to select the best personnel for his army which now comprised "the strongest and the handsomest people."

No alteration was made in the pattern of the uniform during this period, but even greater stress was laid on keeping the dress of the troops upto the mark by a system of periodical inspections and renewals. In the matter of equipment, however, some real progress was made. After seeing the British equipment at Ropar in 1831, the Maharaja was very anxious to bring his own equipment on a level with that of the British, and therefore every care was taken to remove the deficiencies which had come to his notice. For instance, speaking about

^{1.} Cunningham, p. 195; Wade to Macnaughten, 27th Sept, 1834; Macnaughten to Wade, 21st Nov., 1834. For: 1835, Pol. Progs. 24th August, 59.

^{2.} P. C. R. Press Lists, 118/20, Macnaughten to Wade, 18th May 1835; Cunningham, p. 195; For: 1835, Pol. Progs. 18th May, 55-56.

the first grand review of Ranjit Singh's 28 battalions of infantry and 6 regiments of cavalry, altogether about 18,000 men, at Ferozepore in 1838, Sir Henry Fane described the Khalsa troops as "exceedingly well clothed" and pointed to "the really very advanced state of equipment and discipline to which his forces have been brought."

Similarly, stimulated by what he had seen at Ropar in 1831, the Maharaja made an all-out effort to have better weapons. Under his inspiration and direction, his able European officers, particularly Court and Gardener and his like Lehna Singh Majithia and Raja Dhian Singh, worked most assiduously to catch up with the English Company. of the old pieces of artillery were now recast to conform to the new calibres introduced by him during this period.2 Moreover, to provide better models to his own artificers, he made repeated attempts to secure muskets, pistols, and guns from the British Government or from France through his French officers.3 In 1835 he sent a mission to Calcutta to purchase 1100 muskets and 500 pistols which he was permitted to buy from the Delhi magazine.4 In 1837 when he sent some merchandise to Bombay, he definitely wanted his return cargo to consist of guns, pistols, powder, shot, flints, fine woollens of scarlet, crimson and such showy colours.⁵ Earlier in 1836 Allard had brought for him from France Rs. 40,000 worth of arms and other articles.6 In 1838 a few howitzers were presented to him by the British Government.7 The result of all this was that the arms of the Maharaja were brought on par with those of the British. This was confirmed by Sir Henry Fane in 1838 when

^{1.} Sir Fane, Vol I, pp 159-160; Hugel, Mc Gregor, Barr and Emily Eden have also expressed similar views.

^{2.} For: 1839, Sec. Cons: 9th Jan., 48-Wade to Maddock, Aug. 15, 1838.

^{3.} The ultimate success may be judged from what Ranjit Singh wrote to Wade in 1836. "By the favour of God the artificers of Lahore and Amritsar can now execute all my wants in a skilful manner." For. 1836 Pol. Cons: 2 May, 57; Wade to Macnaughten, 12 April, 1836.

^{4.} For: 1835, Pol. Cons: 5th March, 185; For: 1837 Pol. Cons: 20 Dec., 102. Here is to be found the whole invoice of the purchases.

^{5.} For: 1838 Pol. Cons · 31st Jan, 32-33.

^{6. 400} curras, 1800 fuzils, 600 pairs of pistols, 2 million detonating caps, a model paste of artillery and 200 packages of curiosities—For. 1836 Pol. Progs. 5th Dec., 149.

^{7.} For: 1838. Pol Progs., 9th May, 44.

he said: "Court has brought his artillery and musketry to great perfection, the latter being quite as good as those of the Company with the advantage of being lighter." In the same year Macnaughten and Osborne after examining the Sikh artillery and seeing shell firing at Dinanagar, expressed that there was now no difference between the British and the Khalsa arms except in powder. Another remarkable achievement of the period in this respect was the addition of a number of howitzers and mortars.

There was a great deal of improvement in gun carriages as well. Baron Hugel bears testimony to the excellence those he saw at Lahore during his visit, some of them being constructed after the English model.³ Even more significant improvements were effected in ammunition. The latest innovations, spherical cases and iron shrapnels, were adopted.4 In 1833 Court introduced the fuze for which he was rewarded Rs. 5000.5 In 1838 Ranjit Singh requested Lord Auckland to send him some iron shells for operations in Afghanistan, which were delivered to him in the same year along with some howitzers.6 But despite his best efforts, some defects did remain. For example, as pointed out by Lt. Barr, were still many guns with defective bores and miserable carriages. Similarly, some of his ammunition like powder and round shot was very crude.

There was no material change in the rates of pay as such during this period.⁷ However, as reported by Capt. Burnes,⁸ the Ropar meeting had one bad effect on the Maharaja who, seeing that the British had kept so efficient an army at lower pay, wanted to reduce the pay of his own army. But instead

- 1. Sir Fane, Vol. I, pp. 159-160.
- 2. Sohan Lal, Vol. III, Part IV, p. 558.
- 3. Baron Hugel, p. 327.
- 4. Sohan Lal, Vol. III, Part IV, pp. 509, 510, 531, 551.
- 5. For: 1833, Sec. Progs. 6th June, 5.
- 6. P. G. R. Press Lists, 121/32, 11th Oct., 1838. Before this he used brass shells. (For: 1833 Sec. Progs. 6th June, 5).
 - 7. C. logu Vol. I, p. 44.
 Average monthly pays—
 Infantry—Rs. 7.7 per head.
 Cavalry—Rs. 22 per head.
 Artillery—Rs. 7.2 per head.
 - 8. For: 1833, Sec. Progs. 6th June, 5.

of reducing the rates of pay, he thought it prudent to increase the deductions and pay the army only for about 10 months in a year.

The irregularity of payment which was originally resorted to on account of certain fiscal difficulties was now used by the Maharaja as a means to maintain discipline or "as a profitable proposition." But whatever might be the motive, the results were deleterious; hardly a year passed without a mutiny. Capt. Wade's observations in this connection dated 23rd August 1834 are noteworthy: "I may observe that the irregularity with which the troops now receive their pay and the arbitrary fines which are levied on them at the partial distributions which take place, have spread a general discontent throughout the Maharaja's army, which is likely to affect its organisation to a serious degree, if Ranjit Singh does not refrain in time from the reckless disregard which he is beginning to show to their claims and interests. Out of three regiments of cavalry raised by Allard, there is at present only one remaining. The rest have dispersed."2

There is some evidence that the Maharaja wanted to eliminate during this period the existing anomalies in the grades of men of the same rank. In 1835 he wrote a long letter to his agent at Ludhiana ordering him to supply detailed information about the pay scales obtaining in the service of the British Government.³ It is also known that he was able to secure a copy of the British pay code.⁴ After that we do not know what happened to it. Probably the failing health of the Maharaja prevented him from undertaking any reform.

This period did not witness any material change in the supply system. Ranjit Singh was quite satisfied with its working and did not feel the necessity of changing it. One thing, however, needs to be noted. He introduced a mess system,

^{1.} Monograph 18, pp. 51-52.—"He would have kept the troops in arrears as a profitable proposition, though it has been suggested that he did it to maintain discipline."

^{2.} For: 1834, Pol. Cons: 2nd Dec., 62. Wade to Govt., Aug. 23, 1834 This view is corroborated by the Adventurer who (p. 19) thus writes: "The keystone, too, of an army is wanting-there is no undisputed punctual pay."

For: 1835 Pol. Progs., 24 Aug., 59.
 For: 1835, Pol. Cons: 14 Sept., 39.

"an unusual thing", something which even the British Government had not been able to do in their native regiments. As regards foraging, despite Ranjit Singh's most prohibitive orders in this behalf, there were several lapses, so that once Capt. Wade had to quote the British method in this respect and to strongly urge upon him to stop it forthwith. However, it must be mentioned that whenever any such report was made to the Maharaja, he took immediate and strict action to penalise it.

In general, the period under review is noted for many momentous changes. There were great improvements in the organisation of the army and the quality of weapons. The period also saw the introduction of the mess system, the branding of horses,³ and the institution of an "Order of Merit" termed "The Propitious Star of the Panjab.⁴" But this is only the bright side of the picture. On the dark side may be pointed out a definite deterioration in the system of pay and allowances and the Maharaja's continued failure to completely break the prejudices of his chiefs in favour of the irregular system. For instance, at a discussion initiated by Ranjit Singh in 1835 on the relative merits and demerits of the two systems, all his chiefs such as Raja Dhian Singh, Raja Gulab Singh and Jamadar Khushal Singh etc., with the exception of Attar Singh, strongly spoke in favour of the irregular system.⁵

It will not be out of place here to sum up the entire reign of Ranjit Singh. High praises have been showered upon him and his handiwork by all contemporary writers. For example, Cunningham says: "He found the military array of his country a mass of horsemen, brave indeed but ignorant of war as an art and he left it mustering 50,000 disciplined soldiers, 50,000 well-armed yeomanry and militia and more than 300 pieces of cannon for the field." Another writer, Shahamat Ali, described it in 1838 as "better regulated than

- 1. Monograph 18, p. 51.
- 2. Sohan Lal, Vol. III, Part I, p 129.
- 3. Kanahya Lal, p. 358; Catalogue, Vol. I, p. 445.
- 4. For: 1838, Pol. Cons: 5th Sept., 5.
- 5. Sohan Lal, Vol. III, Part II, pp. 271-272.
- 6. Cunningham, p. 200.

that of any native chief in India."¹ But it should be remembered that Ranjit Singh himself was not wholly satisfied. The frank reply of Baron Hugel² that his army, though stronger than any other army that might come across the Indus, was not a match for the British army, constantly pinched him, and once he openly expressed with a sense of frustration that "there was no use in keeping so large an army as he then had in his service."³

PERIOD V—(1839—1845)

After the death of Ranjit Singh in 1839 the affairs of the kingdom of Lahore fell into less competent and weak hands. The court factions now came into full play and created an atmosphere of intrigues and counter-intrigues. stability was the worst victim and in less than seven years there were as many as seven changes of government, six of which were accompanied by violence and blood-shed. Under such conditions the army could not remain unaffected. support was sought by rival parties and it played a leading role in the various revolutions which occurred during this period. This affected its pay, discipline, organisation, control, command and composition It took advantage of the weakness of the rulers and the political confusion in the country and became more and more powerful. The rulers "fearing for their lives and power were compelled to increase the numbers and pay of the army."4

Another factor which influenced the army after the death of Ranjit Singh was the growing menace of the British power to the sovereignty and independence of the Panjab. Their forward policy received a strong stimulus from their Afghan disasters as well as the state of chaos and anarchy prevailing in the Panjab and they resolved to carry the frontiers of their empire upto the Indus, if not further. Consequently, a number

- 1. Shahamat, p 23.
- 2. P. 332. "He compared the British army to a genuine shawl and Ranjit Singh's to an imitation shawl."
 - 3. For: 1838, Pol. Cons. 18th July, 52, 54.
 - 4. Griffin, p. 142.
- 5. Col. Burton says: "The Khalsas were impatient at seeing the red line enclosing the territory on every side and a conflict became inevitable in view of the over-bearing character of the Sikh soldiery and the geographical and political necessity for British expansion." I and II Sikh Wars—Chapt. I.

of provocative measures were taken: a pontoon bridge was constructed over the Sutlej at Ferozepore; the frontier military stations of Ludhiana and Ferozepore were reinferced; strong supporting military stations were erected at Ambala and Meeruth; and a huge supply depot was built up at Bussean, situated midway between Ferozepore and Ambala. As if all this were not enough, Major Broadfoot from Ludhiana and Sir Charles Napier from Sindh aggravated the situation by their arbitrary actions and provocative speeches. The Sikh army, as the embodiment and custodian of the Khalsa felt a real apprehension of danger. This instilled into it a deep sense of responsibility and spurred it to maintain unity in its ranks by establishing regimental panchayats.

The period is noted for a number of radical changes in the character of the army. The organisation of the army was taken a step further through creating divisions by attaching a few irregular units to each brigade. Pandit Jalla was perhaps the first man who thought of it. He declared on August 31, 1844 that "the Sikh troops would be formed into four divisions and that one should be stationed at Lahore, another at Amritsar, and the other two at Wazirabad and Sialkot." It is not known how this idea was implemented, but it may be presumed that steps were taken to put it into practice, as later on in November 1845 we learn from Mr. Broadfoot that the whole Sikh army was divided into seven divisions 10000 men each.2 However, a full-fledged divisional system does not seem to have been set up, as we do not come across any names of divisional commanders except during the course of the first Anglo-Sikh War. A slight change was also made in the constitution of some of the brigades which were strengthened by additional batteries of artillery.

There was a considerable rise in the numbers of the regular infantry during this period. Its progressive growth may be noted from the figures given below:—3

- 1. For: Misc. Vol. No. 349, p. 665.
- 2. MacMunn, p. 170.
- 3. For: 1846 Sec. Progs. 26th Dec., 941. These figures are based on a statement prepared by H. Lawrence in 1846 on the basis of the Khalsa Darbar Records; Griffin, p. 143. Catalogue, Vol. I, p. 86.

Total annual salary

Maharaja Sher Singh—45 battalions—36668 men—Rs. 4087668 Raja Hira Singh —46 battalions—35627 men—Rs. 5039811 S. Jawahar Singh —62 battalions—53750 men—Rs. 6656126

According to these figures, the increase after Ranjit Singh was 31 battalions having a strength of 23,750, the increase in cost being Rs. 38,986,438. The organisation of a battalion, more or less, remained the same as before. The majority of them still ranged between 800 and 1000,though there was a slight rise in disparity in their respective strengths, as we notice at this time a larger number of battalions with a strength below 800 or above 1000.¹

Like its regular counterpart, the irregular infantry also gained in strength, though the gain in this case was much less. According to Sir Henry Lawrence, its strength stood at 7,854 on the eve of the first Anglo-Sikh War.²

The strength of the regular cavalry increased during the whole period by 1579. Sir Henry Lawrence gives the following table to indicate its progressive growth in numbers as well as expenditure under the various administrations: 3—

Annual Salary

Maha. Kharak Singh—10 regiments—4665 Men Rs. 1237771/-

,, Sher Singh—12 regiments—5782 Men Rs. 1756012/ 5/-Raja Hira Singh—12 regiments—5790 men Rs. 2015947/12/-S. Jawahar Singh—12 regiments—6235 Men Rs. 2217496/14/-

As seen earlier it was not a very well-looked-after arm even in the time of its creator, Allard. After his death there was further deterioration, because there was no one equally qualified to manage it. Hardly was any progress made towards uniformity and the variations in strength continued to

- 1. K.D.R. Bundle No. Aa (24) II. The largest strength, 1216, belonged to Rattan Singh's battalion and the smallest, 357, to the 2nd battalion of Uman Singh.
- 2. For: 1847 Sec. Progs. 31st Dec., 335. Col. Steinbach gives its strength as 20,000, but the view of Lawrence being based on original records is more reliable.
- 3. For: 1846 Sec. Progs. 26th Dec., 941; For: 1847 Sec. Progs. 31st Dec., 335; Catalogue, Vol. I, p. 86; L. Griffin, p. 143; Steinbach gives the strength as 13,000.

be as wide as before.¹ However, individually the regiments made a slight headway on account of a general tendency of the period to increase the strength of the smaller regiments. For example, the Gobind Regiment rose from 98 to 528, the Jagat Singh Regiment from 266 to 365 and the Sher Singh Regiment from 450 to 554. The monthly pay bill of each regiment went up considerably. To take only two examples, the Grenadier Regiment and the Dragoon Regiment which cost in 1839 Rs. 17627 and 18408-8-0 for 732 and 770 men respectively, in 1845 cost Rs. 21945-7-0 and 22313 for 730 and 750 men respectively.²

The strength and the salary of the irregular cavalry were doubled during this period. Its progressive growth according to Henry Lawrence was as follows:—3

	Stre	ength	Yearly Expenditure
Maharaja Kharak Sing	gh 1210 10559	paid in jagirs I paid in cash	Rs. 654454 jagir 2800929/8/- cash
	11769		3455383/8/-
Maharaja Sher Singh	— 1296 13087		709448/8/- 3409392/-/-
	14383		4118840/8/-
Raja Hira Singh	1313 14457		722683/8/ - 3883737/-/-
•	15770	-	4606420/8/-
S. Jawahar Singh	- 1409 17691		767247/8/ - 5060350/4/-
Detected of a	19100	•	5827597/12/-
Raja Lal Singh	— 1613 19626		967805/8/- 5020311/-/-
-	21239	•	5888116/8/-

^{1.} The lowest strength was 125 for Lal Singh's Sawars and the highest 158 for the Akal Regiment

^{2.} For: 1846 Sec Progs. 26th Dec., 941; K D.R. Bundle No Aa 24 (ii).

^{3.} For: 1847 Sec. Progs. 31st Dec, 335; Catalogus, Vol. I, p. 107; iteinbach, p. 94. Broadfoot estimated it in January 1845 at 30,000 (10,000 aid in jagir and 20,000 in coin); For. 1845 Sec. Progs. 4th April, 58; Broadfoot to Currie, 4th January, 1845.

Several new derahs were now created, while the old derahs largely added to their numbers. Among the new creations may be mentioned the names of the Derah Raja Lal Singh, also known as Derah Maharaja Sher Singh, the Derah Fateh Singh Jogi, the Derah Imam-ud-din, also known as the Derah Nau Nihal Singh, the Derah Mangal Singh, the Derah Jawahar Singh and the Derah Mian Bokan Khan. Of the old Derahs, the Derah Khas now rose from 1377 to 2089, the Derah Ghorchurra Khas from 1320 to 1600, the Derah Ardalyan from 2000 to 2866, the Derah Naulakha to 4192, the Derah Ramgarhia to 740 and the Derah Pindiwala to 1060. The minor Derahs like the Sindhanwalia, the Sham Singh Atariwalia, the Gurmukh Singh Lambia and the Mul Rajia, however, did not make much progress.¹

Other remarkable features of the progress made by the irregular cavalry during this period are the further consolidation of the derahs and the assignment of more swivel batteries to them. At the close of the period the total number of the derahs was only 17, inspite of the fact that their strength had been doubled in the meantime.

The progress made by the artillery branch during this period is indeed very impressive. The following table will indicate its growth under the various administrations: 2—

Yearly pay

Maha. Kharak Singh —192 Guns— 4250 men Rs. 379680/10/-Mahara. Sher Singh —232 Guns— 6050 men Rs. 612736/8/-Raja Hira Singh —282 Guns— 7105 men Rs. 833244/-/-Jawahar Singh —381 Guns—10968 men Rs. 1169649/-/-

The above figure 381, according to Griffin³, shows only the strength of the field guns. Adding 104 garrison guns, he gives the total number as 484. The total strength of the swivels in the time of Jawahar Singh stood, according to Henry Lawrence, at 388,⁴ the number of men and their yearly salary being 584 and Rs. 89886 respectively. Like the guns,

^{1.} Catalogue, Vol I, pp. 109-119.

^{2.} For: 1846, Sec. Progs. 26th Dec., 941; For: 1847 Sec. Progs. 31st Dec., 335.

^{3.} Griffin, p. 143.

^{4.} For: 1846 Sec. Progs. 26th Dec., 941.

this estimate of Lawrence is also exclusive of those posted in the forts. Moreover, it may be pointed out that these estimates do not include the guns and the swivels maintained by the feudatories of the state. An over-all estimate may be obtained from Cunningham's statistics for the year 1844, wherein he has given the number of guns and swivels as 539 and 975 respectively.¹

22 new aspi and 2 new swivel batteries were added during this period. So far as the size of a battery is concerned, it showed even wider variations than before. For example, out of the 32 aspi batteries which existed at this time, four ranged between 8 and 10, fourteen between two and seven, and eleven between 11 and 15 pieces each. In the case of jinsi batteries, the old sizes were generally retained, except in the case of the Illahi Bux Topkhana which was now raised from 27 pieces to 34. Regarding the size of swivel batteries, it may be said that there was a general upward trend, with the result that their minimum strength went up from 30 to 40 and their maximum from 50 to 105 pieces.²

In the days of anarchy which followed upon Ranjit Singh's death, the jagirdars greatly added to their military power. One of them, Raja Gulab Singh, became so strong that he virtually defied the Government from 1844 onward.³ Lt. Col. Steinbach estimated the strength of the jagirdars' contingents about the end of this period at considerably above 30,000,⁴ a view which is also supported by Griffin.⁵ Moreover, this period witnessed a further increase in the number of their swivels, guns and trained battalions.⁶

By adding up the strength of the various arms mentioned earlier in the text, we get the total strength of the army as 1,50,630 out of which 71,537 or nearly 50% were disciplined

^{1.} For: 1846 Sec. Cons. 27th April, 172-180. Mr. Cunningham's estimates were, however, only an approximation, as confessed by himself.

^{2.} For: 1846 Sec. Progs. 26th Dec., 941; K.D.R. Bundle No. Aa 24 (ii).

^{3.} For: Sec. Cons: April 27, 172-181 (1846). Raja Gulab Singh's power on 1st February, 1844 was: infantry—15,500, cavalry—1700, artillery—1035, guns—94, swivels—250.

^{4.} Steinbach, p. 94. Orlich gives about 50,000 as its strength but this may be rather optimistic.

^{5.} Griffin, p. 143.

^{6.} Smyth, Appendix XXXV.

troops. This estimate is, more or less, corroborated by such authorities as Steinbach, Orlich and Griffin.1

This marks an increase of about 70,000 men over the strength of the preceding period, which looks rather abnormal for a short period of seven years. However, the increased size of the army proved more harmful than useful. expenditure rose tremendously² and became an unbearable burden for the state already losing revenue on account of chaotic conditions prevailing in it. Things became so critical that in 1845 Broadfoot anticipated a total financial breakdown and complete disintegration of the Khalsa State.3

After Ranjit Singh, by degrees, all control of the Government over the army vanished. Kharak Singh, the immediate successor of Ranjit Singh, was an imbecile, but his strong minister, Raja Dhian Singh, and his son, Nau Nihal Singh, compensated for the weakness of the Maharaja and effectively controlled the army. Deterioration in control really set in in the period of Maharani Chand Kaur when all reviews and inspections of the troops came to an end and when the majority of the army openly began to disregard the authority of the Government. When after a few months Sher Singh replaced her, there was little improvement and for several months both the Maharaja and his minister were defied, hooted and disgraced.4 Under Raja Hira Singh who came to power in September 1843 after the assassinations of Maharaja Sher Singh and Raja Dhian Singh, the army, conscious of its importance, began to assume a political role 5 Henceforward, it styled itself as the Khalsaji and behaved as if it were an institution superior to the state. The authority of the Government further deterio-

1. Steinbach (p. 74)—1,45,000—Disciplined 70,000.
Orlich (p. 167)—1,50,000—Disciplined 50,000
Griffin (p. 143)—1,18,000—Disciplined 71,543
(exclusive of irregular infantry).
In reply to Mr. Maddock's question Maharaja Sher Singh gave the

total strength of his army in 1842 as 1,20,000. No wonder then that it rose to 1,50,630 in 1845. Sohan Lal, Vol IV, Part III, p. 2.

2. For: 1847 Sec. Progs. 31st Dec., 335. Expenditure rose from Rs. 12796482 in 1839 to Rs 24630767-11 in 1845.

3. For: 1845 Sec., Cons. 20th Dec., 1845; Broadfoot to G.G., dated 15

Oct., 1845.
4. K. Sajun Lal, (Newsletter No 36)
5. For: Misc. Vol. 349, 22nd Jan., 1844 The army presented more than 8 demands to Raja Hira Singh, all political in nature.

rated under Raja Hira Singh's successor, Jawahar Singh. He was perhaps the most incompetent of all the rulers of this period. Being ever engrossed in drunkenness and debauchery, he was the laughing stock of the whole army. He had absolutely no control over the soldiery which became all powerful and issued directives through their elected panchayats to "the Rani, her son and her brother as those of the Sarbat Khalsa Jee." Jawahar Singh completely depended upon their tender mercies and also fell by their verdict and hands.

A similar deterioration is to be found in the command. The assassination and humiliation of a of officers in the disturbances of 1841 dealt a severe blow to the morale of the commanders. Henceforward, they were mortally afraid of their men² and maintained whatever little hold they still had by means of humouring them. The soldiers taking advantage of this state of affairs established regimental committees which deprived the officers of their disciplinary powers.3 The deterioration in command was further due to the dismissal or resignation of the foreign officers. of them like Ventura, Court and Avitabile left the service voluntarily, finding the conditions inconducive to honourable service, but a large number of them were dismissed as unreliable by Hira Singh and Pandit Jalla when their relations with the British Government became strained.4 Another factor responsible for the weakening of command was that ments and promotions of officers were made not on merit but on political and personal considerations, so that the new officers were "men of neither experience, nor capacity." They were

diery. Broadf oot to Currie, Jan. 26 & Sept. 22, 1845.

2. For: 1842 Sec. Cons: 31st Jan., 74-77; Tarıkh-ı-Sıkhan, Part I,
p. 551.

4. For: Misc. Vol. 349, p. 532; Steinbach, pp. 94-106. Some of them like Dr. Honigberger were, however, re-employed after the fall of Pandit Jalla.

^{1.} For: 1845 Sec. Progs. 4th April, 112; For: 1845 Sec. Cons: 20th Dec., 113 Eight demands were presented to Jawahar Singh, the concession of which would mean complete subordination of the Government to the soldiery. Broadf out to Currie. Ian. 26 & Sept. 22, 1845.

^{3.} For: 1844, Sec. Cons: 23rd March, 505; For: 1845 Sec. Cons: 4 April, 102 Richmond to Thomson, Oct. 6, 1843. Broadfoot to Currie, 16 Jan., 1845.

^{5.} For: 1845 Sec. Progs. 4th April, 110. Broadfoot to Currie, 22 Jan., 1845. General Megh Raj was given the rank of a General through the good offices of his sister, Manglan, a slave girl. What is true of this General was true of many other Generals like Gurdit Singh and Mehtab Singh. Lahore Pol. Diaries, Vol. III, p. 11.

so worthless that the panchayats of the troops in May 1845, in all seriousness proposed, as a measure of economy, that "all Generals and superior officers should be dismissed, as they were encumbrances in war and expensive in peace." Some of them like General Rattan Singh were actually rejected and turned out by their men. The appointment of a commander-in-chief for the whole army, first during the period of Rani Chand Kaur, then under Raja Hira Singh and later under Raja Lal Singh was definitely a step forward, but in the chaotic conditions then prevailing, the incumbent of that exalted office wielded but little authority.²

Training received a set-back during this period, particularly towards the end, though not so much as the critical nature of the times would have us believe. In the early part of the period, particularly until December 1844. during the brief spell of Chand Kaur's reign and the first disturbed months of Sher Singh's reign, a considerable amount of attention was paid to this matter. For instance, and Cunningham speak highly of "the alacrity and precision of the manoeuvres" displayed at Ferozepore in 1842 before Ellenborough by the escort brigade of Kanwar Partap Singh.3 Later on, however, when the control of the Government over the army became all but nominal, it suffered greatly, so that in May 1845 Broadfoot reported to Currie that "exercise and drill were out of use,"4 in the Lahore army. We learn from Major G. Lawrence that at a number of places at Peshawar the parade grounds were put under cultivation and sown with crops.5

Discipline was well maintained until the reign of Chand Kaur when the first signs of its decline appeared. The first

5. Political Diary of Major G. Lawrence, dated 28th Feb., 1847, p. 318, Vol. IV.

^{1.} For: 1845 Sec. Progs., 20th June, 58; Broadfoot to Currie, 15 May, 1845.

^{2.} K. Sajun Lal—News Letter No. 12; Orlich, p. 179. Tej Singh was appointed G-in-G twice, first in the reign of Chand Kaur and then after the death of Jawahar Singh Hira Singh held the same rank under Sher Singh.

^{3.} Cunningham, p. 229; Orlich, p. 205
4. For 1845 Sec Progs. 4th April, 111. Broadfoot to Currie, Jan. 26, 1845. Col Richmond refers to the growing absence from parades of infantrymen. For: 1844 Sec. Cons; 23rd March, 562; Dewan Ajudhia Parshad, f. 22

heavy blow was dealt to it in the reign of Sher Singh by the wide-spread uprising of the troops in which there was a lot of bloodshed, loot and plunder. The soldiery utilized this opportunity to avenge themselves on all obnoxious officers, pay masters and accountants. Discipline was finally restored after strenuous efforts extending over several months. In this task the Government was greatly assisted by the soldier's panchayats which had sprung up in the course of distrubances partly to press the legitimate demands of the troops upon the Government and partly to enforce discipline without which they thought their state would be ruined. They were elected regimental committees which worked in a democratic manner on the pattern of the village panchayats with which the soldiers were perfectly familiar. In September 1843 the simultaneous assassinations of Sher Singh and Dhian Singh gave yet another blow to discipline. The next period in which Raja Hira Singh and Pandit Jalla were in power was a highly confused one in which the troops were divided between many loyalties, but once again the army soviets gave much valuable help to the Government in maintaining discipline.1 Colonel Richmond in October 1843 thus expressed his appreciation of these committees: "So favourable is my opinion of the efficiency of the system of the committees that I feel sure a kind of Government will subsist for months to come and probably for a longer period."2 Another shock for discipline came when the administration of Hira Singh was forcibly replaced by that of Jawahar Singh. Apart from the encouragement which any use of force gives to the tendency of indiscipline, the incompetence and drunken capriciousness of Jawahar Singh matters to a serious crisis. On seeing this mounting indiscipline³ of the Khalsa army, Broadfoot reported early in 1845 to his Government: "The army being now acknowledged as supreme, has lost the sense of common danger which in the past supplied the place of discipline. It is becoming more than

^{1&}amp;2 For: 1844 Sec. Cons: 23rd March, 505. "The military habits of obedience and the religious deference to the good of the Khalsa rather perhaps than the hope of a large donation or other similar benefits" (Richmond) was the principal motive.

^{3.} Some examples of this were (1) demand for donatives and increments on appointment to any duty, (11) going home on the marching and (111) ignoring sentinel duties.—Also Dewan Ajudhia Parshad—f 32

ever disordered." But again the regimental panchayats saved the army from a complete disintegration. Realising the gravity of the situation, they imposed "an iron discipline."²

The period of anarchy had no adverse effect on the morale of the army, rather it helped in raising it even higher. The best evidence of it is available in the letter of Colonel Richmond³ to Thomson in which he wrote: "Ranjit Singh gave unity to the endeavours of the Sikhs and they achieved for themselves an empire but although he is no more and although there is now no chief of commanding intellect to bind the Khalsa together, there is yet so much pride of race and activity of mind among the Sikhs that opportunity and a few months and years of anarchy may produce a leader capable of wielding the energies of the people. The cry of the Khalsa or commonwealth of the Sikhs has as magical an influence on the followers of Nanak as the cry of Islam or of the Cross had in by-gone The Sikhs are still imbued with much of the enthusiasm of reformers and with much of the activity of mind and resolution of purpose of a persecuted race become triumphant. They will still dare and endure much for the Khalsa." However, he could not say the same thing about the Sikh chiefs about whom he observed: "Most of the present chiefs of the Sikhs must be regarded as mercenary. Their grand-fathers were tillers of the ground, but the possession of authority and wealth acquired and preserved without labour has unnerved them and they are desirous of keeping their luxuries to themselves under any loss of independence. The Sikh chiefs will perhaps now offer to hold their possessions of the British Government." The tough fight which the Sikhs gave to the British in their war of 1845-46 would not have been possible without a high morale of the kind described by Richmond, Lord Gough the British Commander in chief in this war has

^{1.} For: 1845 Sec. Progs. 20th June, 64 & 4th April, 111. Broadfoot to Currie, Jan, 26 and May 24, 1845.

^{2.} Calcutta Review, Vol. VI, 1846, p. 246.—'Europeans too often judge Asiatics by European rules and call false, unnatural or extraordinary what is merely new. It is not, however, a page of history to be lightly passed over by the Anglo-Indian, which exhibits the rude Panchayats of the Sikh army setting at naught the legal authority of the Government and yet enforcing their own with iron and my sterious sway among their comrades—Woe beside to the ranks, mutilation of a hand, an ear or a nose, even death awaited them."

3. For: 1844 Sec. Progs. 23rd March, 487.

paid glowing tributes to the men's courage, doggedness and dedication to the cause of the Khalsa on the battlefield.1

Recruitment work was at its highest during this period. Never before were so many people entertained. Although the entire recruitment continued as before to be the responsibility of the state, yet to facilitate things a considerable part of it was now delegated to the chiefs, superior officers and governors of provinces.² But this led to some bad results. For example, much less care was now observed in the selection of personnel. Besides, encouraged by the weakness of the Central Government, the people thus empowered sometimes conducted recruitment without the previous permission of the Darbar.³ It may also be mentioned here that Jawahar Singh granted, as one of his concessions to the army, the right that every man dying would be succeeded by his heir.⁴

As regards the composition of the army, whereas it continued to be dominated by the Sikhs,⁵ the relative strength of Rajput hillmen and Mohammadans largely increased, particularly under Rajas Dhian Singh and Hira Singh, as a sort of counter-poise to the Sikhs.⁶

So far as pay and allowances in this period are concerned, the troops were great gainers. Whenever they helped anybody to power, they gained an increment as a reward for their services. As a result, the pay of the infantry soldier rose from Rs. 8 to Rs. 14 and that of a horseman from Rs.

Gough and Innes, pp 252-253; Cavalry Officer, pp. 41 & 454; Pearse,
 pp. 261 & 265.

^{2.} For: Misc. Vol. 349; Tej Singh, Governor of Peshawar, entertained hundreds of Muslim mountaineers in 1844 and Sheikh Imam-ud-Din enlisted 3800 Muslim horse and foot (21st May & 15th June, 1844), p 499.

^{3.} For: Misc. Vol. 349, p. 359 Jawahar Singh entertained 200 men without consulting Raja Hira Singh. For: 1848 Sec. Progs. 4th April, 147. Broadfoot to Currie, 23rd Feb., 1845 In 1845, Broadfoot reported to his Govt. a case of above 2000 men entertained by the officers and the panchayats without the Darbar's permission.

^{4.} For: 1845 Sec. Progs 4th April, 49.

^{5.} For: 1841 Sec. Cons. 17th May, 81; For: 1846 Sec. Progs. 26th Dec., 1027. In 1845 out of 62 battalions 52 were those of Sikhs (J. Lawrence to Currie, 21st Aug, 1846).

^{6.} For: 1845 Sec. Progs. 4th April, 14. Raja Hira Singh entertained 5000 hillmen and Raja Dhian Singh about the same number. Broadfoot to Currie, 10th Dec., 1844.

25 to Rs. 30.1 The garrison, the jagirdari and the hill troops also benefited from this upward revision of pays.2 Besides, the troops received several other benefits, such as remission of a number of deductions usual in the army3 and frequent donatives in the form of presents of one month's pay or a lump sum of money or gold medals and gold necklaces.4 All this increased the financial liabilities of the state which caused a heavy strain on its economy, particularly because taking advantage of the confusion in the country the jagirdars and farmers of revenue fell into arrears, thereby causing a fall in the income of the state.⁵ However, inspite of the financial difficulties the payment was made regularly drawing, if necessary, upon the reserves built up earlier, for the reason that the rulers stood in constant fear of their also made to tumultuous soldiery. Efforts were the organisation of the pay office. It was with this view that in 1843 a single central pay office was created for the irregular cavalry.6 But as a result of the mal-administration which marked this period, a few evils also crept in. Now, for example, the Mutsaddis or accountants embezzled large amounts of Government money, 7 and the officers indulged in false musters and drew, jointly with the pay masters,8 the absentee sepoys' salaries, besides receiving bribes from the soldiers and misappropriating the state funds lying with them.

The weapons as well as the equipment in use during this period were the same as had been adopted by Ranjit Singh. There were no new improvements or innovations, nor were there any deteriorations. It is indeed creditable that the standards set up by Ranjit Singh were maintained inspite of the

^{1.} For: 1844 Sec. Progs. 23rd March, 481; For: 1845 Sec. Progs 4th April, 145. The monthly pays under Sher Singh, Hira Singh and Jawahar Singh were Rs. 9, 12 & 14 respectively.

^{2.} For: Misc. Vol. 349, pp. 326 & 432; For: 1845 Sec. Progs 4th April, 148.

^{3.} For: 1845 Sec. Progs. 4th April, 49; For: 1844 Sec. Progs. 23rd March, 481.

^{4.} For: Misc. Vol. 349, p. 348; For: 1845 Sec. Progs. 4th April, 63.
5. For: 1845 Sec. Progs. 4th April, 161.
6. Catalogue, Vol. I, p. 127.
7. For: 1845, Sec. Progs. 4th April, 68.
8. For: 1844 Sec. Progs. 23rd March, 456; For: 1842 Sec. Progs. 22nd June, 34.

political instability in the country.¹ What is even more creditable is that the rulers were able to equip and arm an army twice as big as that of Ranjit Singh.

The system of supplies inherited from Ranjit Singh was worked with great vigour, and stores, whether of grain or of arms and ammunition, were invariably well stocked. Nor can we find fault with the working of the supply services until the war of 1845-46. Their efficiency was indeed commendable in the Mandi campaign organised by Nau Nihal Singh or in the supplementary operations of the reign of Sher Singh organised in aid of the British Government. But in the first Anglo-Sikh War, a serious breakdown occurred, on account of which "the unfortunate Sikhs were literally starved for want of rations," but that was due not to any flaw in the system but due to the sinister motives of the people at the helm of affairs who were more interested in the destruction than in the victory of their army.

In general, the period, 1839-45, was in many ways one of deterioration. The army was, as Lord Hardinge put it, in a state of successful rebellion. It became uncontrollable, avaricious, unwieldy and burdensome and little reliance could be placed on its allegiance. Nevertheless, there was no decay. high morale remained intact; the standards of weapons and equipment were maintained; there was not much loss of training either; and besides, a considerable amount of discipline was preserved by its panchayats. Anarchy there was doubt, but "in that anarchy there was a singular species of order."4 Inspite of the so many shortcomings from which it had begun to suffer, the army retained much of its old vigour and cohesion-qualities which were so admirably displayed in the coming Anglo-Sikh War of 1845-46. Lord Hardinge in 1846 described it as "a well-appointed and well-drilled army, inferior to none in Asia for its courage and national pride and

^{1.} Gough & Innes, p. 67; Orlich, p. 227; For: 1844 Sec. Progs. 26th Dec., 240-B and 241. This is fully borne out by Lord Gough, Orlich and the Board of Ordnance which examined the guns of the Sikhs captured during the First Sikh War

^{2.} Pearse, r. 271. 3. Cunningham, p. 257.

^{4.} For: 1845 Sec. Progs. 20th June, 33. Broadfoot to Currie, 27th March, 1845.

superior to every other native army except our own from its European system of discipline".1

VI PERIOD—(1846—1849)

The last period is marked by British domination established as the result of their victory in the first Sikh War. This foreign domination was partial until 31st December 1846, whereafter every department of Lahore Government, under the terms of the Treaty of Bhyrowal, passed under the complete control of the British. Therefore, the credit for the complete re-organisation of the army which characterized this period belongs to the British and not to the Sikhs.

The changes made during this period were of a radical as well as comprehensive nature. However, to begin with, the aim was merely to carry out the provisions of the 6th and 7th articles of the Treaty of Lahore, 1846, which bound Maharaja Daleep Singh "to disband the mutinous troops of the Lahore army, taking from them their arms and to reorganise the regular or Ain regiments of infantry upon the system and according to the regulations as to pay and allowances observed in the time of the late Maharaja Ranjit Singh," and laid down that "the regular army of the Lahore state shall henceforth be limited to 25 battalions of infantry, consisting of 800 bayonets each, with 12,000 cavalry."2 But after the Treaty of Bhyrowal, the aim was enlarged so as to comprehend a throughgoing reform of the army. The retrenchment was carried far beyond the scope of the Treaty of Lahore.3

A revised uniform system of pays for all branches of the army was now introduced. The minimum infantry and cavalry pays were fixed at Rs. 6 and Rs. 25 respectively and the existing anomalies of different scales for the same ranks were practically removed.4 The number of deductions was also reduced which largely compensated for the reduction in pays effected now. the case of garrison troops there was an upward revision from

^{1.} For: 1846 Sec. Progs. 26th Dec., 1309 Minute dated 11, 11, 1846.
2. Cunningham, Appendix XXXIV, p. 372.
3. For: 1848 Sec. Progs. 31st March, 52; The reduced numbers in 1848 were: artillery—1650, regular cavalry—2675, ghorchurras—3165, jagirdari—4000, infantry—15200.

⁴ Lahore Political Diaries, 1847, Vol. III, p. 134; For: 1848 Sec. Progs. 31st March, 52. J. Lawrence to Elhot, 12th Feb., 1848.

Rs. 4 to Rs. 5 per month. The system of payment was also greatly improved. The number of pay masters was increased to four, though the number of pay clerks was reduced. Every effort was made to issue pay regularly as in the British army. A system of pensions was introduced on the lines of the one obtaining in the British service. Improvements were also carried out in the coinage, so that there sould be no frauds on that account. Strict marching discipline was enforced. The old practice of forced labour was declared illegal and a marching allowance was granted to enable people to make payment for what they got. Extra pay called bhatta was granted to all those serving beyond the river Indus. Courts were introduced to deal with disciplinary cases and systematic inspections of troops, stores and establishments were carried out to raise the efficiency of the army administration. regard to training, the prevalent French system was replaced by the English system.¹ To cap it all, in 1848 an new code of regulations drawn by Mc Gregor "on the pattern of those of the Company's service but modified and adapted to meet the circumstances and peculiarities of the Sikh army" was introduced.2 All these were valuable reforms but they rendered the service unpopular rather than popular. was more of discipline, but less of emoluments. There were no grants of jagirs now and no appreciative rewards as was the case under the Sikh rulers. And then there were largescale retrenchments which roused contempt in the minds of the people for the new order of things. No wonder, therefore, that the Sikh army before long made an all-out attempt in the form of another war to throw off the foreign voke.

Lahore Political Diaries, 1847, Vol. III, p. 330.
 For: 1848 Sec. Progs 31st March, 52-53.

CHAPTER III

CONSTITUTION OF THE ARMY

Having traced the growth and development of the Sikh military system, we now proceed to the examination of the most important characteristics which it developed in the course of the prolonged process of its evolution. The present chapter is concerned with the study of the constitution of the army. has been generally believed that this constitution was merely an imitation of European armies, but a close examination will reveal that there was no such blind or mechanical imitation. A considerable portion of the army consisting of irregular cavalry, irregular infantry, garrisons and jagirdari contingents had practically felt little impact of western military thought. The only portion that was vitally affected was the regular army. But even in this case adjustments were made in the light of the conditions prevailing in the country and other practical requirements. That is why we find, as will be shown later, several dissimilarities in the establishment and other aspects of the Sikh, British and French armies.

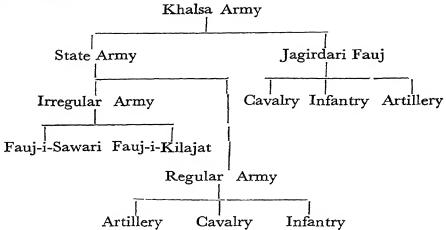
However, the portion of the army organised on non-European lines was not a mere continuation of the institutions found in the country at the time, but marked a considerable advance upon them. The organisation of a strong body of the ghorchurras under the direct control and management of the state was, if not an absolute novelty, a great step forward in the history of the Indian cavalry. It differed vitally from both the Maratha cavalry organisations which Mughal and largely based on feudalistic principles. Similarly, the jagirdari levies of the Sikhs marked a notable departure from the established practice of the country. They did not form the bulk of the army, as used to be the case in the past. their basis, the jagirdari system, was, unlike that of the Mughals and the Marathas of the 18th century, a strictly regulated system except in the last few years of our period and, consequently, they were free from many of the defects from which such bodies of troops generally suffered. A similar departure, though not in the same degree, is to be found in the organisation of the irregular infantry. The Sikh force bearing this name was not just a mass of all kinds of people huddled together, as we find in the earlier periods, but a body of active fighters with more or less regimentation and discipline.

Before entering upon the study of the structure it is necessary to have an idea army, of its classification. The Khalsa army has been variously classified, viz. (i) Ancient and Modernised, (ii) Regular and Irregular, (iii) State and Jagirdari. All these classifications, however. are merely partial in character. A complete classification will be found in the following extract from Grey; "Under Ranjit Singh the Khalsa army was divided into two divisions, the main being that under his own personal payment and the other under the feudatory forces belonging to Gulab Singh, Sham Singh, Hari Singh, Dhian Singh, Suchet Singh and Hira Singh and others. His own army was divided into Fauj-i-Ain or the regular army, Fauj-i-Sawari or the Chorchurras and the Faui-i-Kılajat, latter comprising the garrisons of forts, treasure guards, fort guards and peons or orderlies." This classification is based on two principles—(i) whether or not it is paid by the state and (ii) whether or not it is trained on the European model.The first principle, applied to entire army, gives us two broad divisions, namely the state army and the jagirdari fauj. The second is applied only to the first of these divisions, that is, the state army and it gives us two parts, the regular and the irregular,2 the latter being sub-divided into (i) Fauj-i-Sawari and (ii) Fauj-

^{1.} Grey, p. 20.

^{2.} Sometimes confusion is caused by using the terms irregular, Ghair Ain, Fauj-i-Sawari or Ghorchurras to include the jagirdari troops also, but strictly speaking, these terms were reserved only for the state army.

1-Kilajat. The following table illustrates the classification given above :—



Regular army or Fauj-i-Ain constituted the largest and best portion of the Sikh army. It comprised all the three arms, artillery, cavalry and infantry, each one of which had its own separate set-up.

Brigade—The largest unit of the regular army was the brigade which contained due proportions of all the three arms. But as was usual in the Khalsa army, there were no hard and fast rules governing the formation or the strength of a brigade. Broadly speaking, it consisted of three to four battalions of infantry, 1 or 2 batteries of artillery and 1 regiment of cavalry; and its strength varied between four and five thousands. In 1845 the total number of brigades in the army was 13, the most important two of which were constituted as follows¹:—

- I. Fauj-i-Khas
- 1. Paltan Khas— 812 men
- 2. Paltan Gurkha—693 men
- II. General Avitabile
- 1. Paltan Rup Singh-936 men
- 2. Paltan Bhagat Singh-901,,

^{1.} Bundle No. Aa 24 (1) K.D.R. The remaining brigades with their respective numbers were:— Gen. Bahadur Singh Brig.—4628; Gen. Rattan Singh Brig.—4872, Gen. Mewa Singh Brig.—5005; Gen. Court Brig.—3934; Arjan Singh Brigade—3323; General Gulab Singh Brigade—3923; General Lal Singh Brigade—3511; Ranjodh Singh Brigade—1342; Jiwan Singh Brigade—2374; General Kanh Singh Brigade—4320; and General Suchet Singh Brigade—4814 men.

- 3. Paltan Dewa Singh-824 men 3. Paltan Jiwand Singh-870 men
- 4. Paltan Sham Sota- 818 men 4. Paltan Washawala-Not given
- 5. Rajman Dragoon 1st-722 ,, 5. Rajman Gobind-510 men
- 6. Paltan Grenadiers- 716 men 6. Top Khana Baland Khan (10 guns)—142 men
- 7. Risala Shadi Lal—184 men 7. Top Khana Rustam Beg (8 guns)—136 men

The whole of the regular army was not, however, divided into brigades. There were some independent battalions also, viz., the battalions of Uman Singh, Ram Dyal and Dharam Singh. Similarly, there were several independent batteries of artillery. For example, 4 out of 5 jinsi, some aspi and swivel batteries² had no attachment with any brigade. As pointed out in *Chapter II*, each brigade was commanded by a colonel or a general who was assisted by an adjutant general³ and was provided with a company of beldars (sappers and miners), an office establishment and the necessary services for the supply of ammunition and forage.

Regular Infantry—Regiment and Battalion—Regular infantry was divided into regiments and battalions. A regiment consisted of 2 battalions. It was commanded by a colonel who was assisted by battalion commandants and adjutants. The

I. Griffin (p. 141) gives its composition as: Reg. Inf., 3176; Regular Cav., 1667; Art., 855.

^{2.} Bundle No. Aa 24 (1), K.D.R. A new era of military thought opened with Gustavus Adolphus, a king of Sweden in the 17th century. He, first of all, introduced regular uniforms and the organisation of 2 regiment—brigades and regiments of 1008 men each, divided into 8 companies of 126 men each. These ideas were later on copied and improved upon by other European countries like England and France. The Sikhs got them from these nations and adapted them to their own requirements. History of Tactics by H. M. Johnstone, p 3.

^{3.} Wade to Metcalfe, 1st Aug., 1827 Cons: 12th Oct., 1827.

regiment was, however, a manoeuvring unit. The administrative unit was the battalion or bataillon (a French term). The battalion was an independent unit for the major part of our period. Even when later on brigades were formed, it remained the pivot round which the organisation of the regular infantry moved. It was called by the name paltan which is not to be taken to mean platoon in the modern sense. Every battalion was divided into 8 parts which were called companies or pelotons (a French term). These companies or pelotons were numbered 1,2,3, 4 etc. Every two pelotons constituted a region and every four pelotons made what was called a demi-Further, every peloton was sub-divided into two equal parts which were named section 1 and section 2.1

Every battalion had on its staff one colonel or commandant or both,² one adjutant, one mahzor (major), one mutsaddi, one writer and one granthi. The colonel or the commandant was the commanding officer who was responsible for the training and administration of his battalion. The adjutant was required to assist him. The major was the battalion quarter master who supplied rations, clothing and equipment. The duty of the mutsaddi was to check the rolls every day and to present the parade statement to the adjutant or the officer commanding. He also prepared pay-rolls of the unit. The function of the writer was to write the letters and reports of the unit. The granthi was the reader of the scriptures, who was paid by the state. The Holy Granth was usually deposited near the ihanda or flag representing the headquarters of the battalion.3

company the peloton had ora staff consisting ofmore than 16 people, such as one subedar, 2 jamadars, 1 sarjan (sergeant), 4 havildars, fourrier, 4 naiks, 1 tambur mahzor (drum 1 bugler, and a few tamburchis or drummers. In the entire battalion, there were 8 subedars, 17 jamadars, 8 sarians (sergeants), 32 havildars, 32 naiks, 8 fourriers. major, 16 drummers and 8 buglers, their total being 130. The chief officer of the company was subedar who was assisted by jamadars. The havildars looked after the various sections

Zafarnamah, drill manual of Ranjit Singh's army.
 For: 1846 Sec. Progs. 26th Dec., 946.
 Cunningham, p. 157.

of the company. In this they were helped by naiks.1 The fourrier was the quarter master sergeant who was to be always with the flag and led the unit during parades and marches. The sergeant was required to help the company commander in his administrative duties.

No company was complete without drummers and buglers. The best of the battalions had bands of music.2 The drummers were in the charge of the drum major. They set the pace for the troops on the parade ground as well as during marches. The Sikh army was actually trained to the beat of drum, so that all evolutions were performed with its help. "The drum, fife and bugle", writes Col. Steinbach,3 "are in general use in the Sikh Infantry Regiments and in some of the favourites of the royal corps of Ranjit Singh an attempt was made to introduce a band of music."

Further, each battalion was furnished with a non-combatant staff of about 76 people. There were 4 time-keepers or gharyalis, 4 flagbearers, 9 khalasis, 9 artisans, 16 water-carriers, 16 cooks, 8 spadesmen or beldars, 9 camelmen and one runner or harkarah.4 The time-keepers' duty was to strike hours on the regimental gong, working by turns. The flag-bearers were distributed one for two companies and they were the custodians of the regimental colours. The khalasis were meant for the pitching of tents for officers as well as men. The artisans consisted of black-smiths, carpenters, masons, tailors, shoemakers etc. They organised regimental shops for the repair of arms, clothes, shoes, tents and other things of this nature,⁵ The spadesmen were the sappers and miners of the battalion and performed multifarious duties like levelling of pathways and building of

^{1.} Catalogue, Vol. I, p. 4.
2. Orlich, pp. 227-28; P.G.R. Press lists 142/20, dated 12th April, 1836. "Ranjit Singh was allowed by the British to employ Mon. Autonic and the bandsmen lately in the service of Begum Samru in his service."; For . 1836 Pol. Cons: 2nd May, 57—Ranjit Singh's request to Wade: "I am only in want of good musicians. If I can get a few of them, they will be able to teach their art to my people."
3. The Panyab, pp. 100, 149; Murray to Capt. Wade, 30th Dec., 1826 Cons: 23rd Feb., 1827.
4. For: 1846, Sec. Progs, 26th Dec., 1327. This was the normal strength. But in time of need more people could be engaged.
5. The shops of the blacksmiths, armourers and carpenters were known as Mistrikhana which constituted an essential part of the battalion organi-

as Mistrikhana which constituted an essential part of the battalion organisation.

cantonments and camps etc. The camelmen were in charge of the battalion camels. The harkarah or the runner was at the beck and call of the officer commanding. He carried about his verbal messages and letters. The water-supply was the business of saqqas or water-carriers. Besides, each company was assigned two cooks to prepare its meals.

The total establishment of a battalion was about 213. But all battalions were not of the same strength. They varied widely with the result that there were some variations in the strength of their establishments as well.

Nomenclature of Battalions—The battalions were not designated numerically as was the practice in the English army. They were mostly named after their commanding officers. There were, however, some notable exceptions, viz., the Paltan Khas, the Gurkha Paltan, the Paltan Fateh Nasib and the Paltan Koh Shikan.¹ The Paltan Khas got its name from its close contact with the King at the initial stage; the Gurkha Paltan was called so after the community of its members; while the other two battalions were given their dignified names on account of their meritorious services.

The regiments were distinguished from one another by means of facings of different colours. This practice, like many others, had been borrowed from the English regiments.²

Battalion Stores and Office—Each battalion had two important stores: (i) magazine where the arms of the battalion were deposited and from where they were issued daily for parades, after which they were recollected; and (ii) the store of clothing and equipment. Sometimes a ration store was also maintained to supply provisions to the troops. But it was not a permanent feature, because the provisions were easily obtainable from the regimental bazars. Besides, each battalion had an office where its records were kept and where all its written work was carried on under the direct supervision of the Officer Commanding.

Regular Cavalry—The regular cavalry was divided into regiments or rajmans as they were called popularly. Their nomenclature differed somewhat from that of the infantry

^{1.} Bundle No. Aa 24 (it) K.D.R.

^{2.} Steinbach, p. 94.

battalions. Three of them bore European names such as Grenadier Regiment, Dragoon Regiment¹ and Lancers; three of them were named after God (Akal) or God's prophets, Ram and Gobind; one of them, Hazooree Regiment, got its name from its association with the King; while the rest were designated, as in the infantry, after the names of their commanders.

A regiment of regular cavalry was constituted, more or less, on the lines of an infantry battalion. It was divided into risalas or troops corresponding to the companies of the infantry. Its total strength was slightly less; still less was its establishment; but its officers possessed similar ranks and performed similar duties. Moreover, it had the same stores as an infantry battalion had.

The staff of a regiment of regular cavalry was constituted as follows:—2

Regimental Staff

Colonel— One	Commandant-One	
Adjutant— One	Major—	One
Mutsaddi—One	Writer—	One
Granthi- One		

Risala Staff

For each risala	For the whole regiment
Risaldar— 1	Risaldars— 8
Jamadars— 2	Jamadars— 16
Nishanchee	Nishanchees— 8
(Ensign)—l	Havildars— 32
Havildars— 4	Naiks— 32
Naiks— 4	Sergeants— 8
Sergeant— 1	Trumpet Major—1
	Trumpeters— 16
The state of the s	
Total 13	Total 121

^{1.} This was also designed to act as infantry. Murray to Wade, 16th Jan., 1827 Cons: 16th March, 1827.

^{2.} For: 1846 Sec. Progs. 26th Dec., 1327.

Establishment

Time-keepers or Gharyalis	4	Flag-Bearers	4
Khalasis or Tent Pitchers	9	Mistry Smith	1
Workmen (Smiths)	1	Mistry Carpenter	1
Workmen (Carpenters)	3	Beldars	8
Bheestees or watermen	9		
	Total.	43	

This establishment is short of the battalion establishment by 33 men, the reason being that here there were no cooks and camelmen. The sawars engaged their own cooks for their meals and no camelmen were needed, because the regiment had enough spare horses or mules for the carriage of its goods.

The total establishment of a regiment was 171. The rest were all fightingmen. The number of the fightingmen was not fixed, because it depended upon the total strength of a regiment. The bigger the regiment, the larger was their number. 'In a general way it may be said that it was seldom under four to five hundreds.

Artillery-The artillery was organised into batteries or derahs (camps) as they were popularly called, which were of three categories: (i) Aspi, (ii) Jinsi and (iii) Zamburak or Swivel. There was, as Prinsep¹ says, no corps of artillery, regimented and organised as was the custom in European armies. The Jinsi or heavy train alone was distinct from the rest of the army, the other two categories being distributed over and forming part of the various brigades. But though there was no single department of artillery in the European sense, the batteries were organised, more or less, on European lines. Regarding their nomenclature, it may be said that like the battalions of the infantry, the batteries were named after their commanders.

Horse Batteries—The number of horse batteries was the largest in the Sikh artillery, rising to 32 in 1845 under Raja Lal Singh. They were the light batteries of the Sikhs, the calibre of the guns ranging from 4 to 6 pounds. In strength they did not follow any uniform pattern and varied from five to fifteen guns, although the standard batteries consisted of 8 to 10 guns².

Prinsep, i. 184.
 For: 1846 Sec. Progs. 26th Dec., 941.

The number of the personnel and the draft horses in a battery entirely depended upon the number of guns it had.

Each horse battery was divided into sections, each section comprising one gun and having, on an average, 10 or 11 gunners attached to it. A section was under the control of a Jamadar who had a Havildar and a Naik as his assistants.¹

The organisation and the interior economy of a battery very much resembled that of an infantry battalion. It had a staff² consisting of one Colonel, one Commandant, one Adjutant, one Major, as many Jamadars, Havildars and Naiks as the number of guns, one Munshi, one Mutsaddi, one Granthi and several Trumpeters. The total strength of the staff in a 10-gun battery was about 40. The duties of the higher officers like the Colonel, the Commandant, the Adjutant, and the Major, more or less, corresponded to those of the Captain, the Subaltern and the Sergeant Major in the English Company's artillery. The highest artillery officer was the General. There were four such officers in 1845-46.3 Besides their duties of supervision, the Generals commanded overall batteries, aspi as well as jinsi.

A battery of horse artillery also had a huge establishment of non-effectives. As in the case of the officers, there was some difference between the batteries, but on the average most of them had the following camp-followers⁴:—

Time Keepers	4	Flag Bearers	4
Khalasis	13	Water Carriers	13
Beldars	13	Artisans like Mistri Smit	h,
Mochees	2	Mistri Carpenter and the	eir
Tailors	2	Assistants	13
Tarrier	1	Sweepers	2
Kamas (drivers)	125	Tahliyas	104

Total...2965

- 1. Catalogue, Vol. I, p. 4.
- e. For: Sec. Progs. 31st March, 1848, No. 53.
- 3. Their names are Sultan Mahmud, Ilahi Bakhsh, Megh Raj and Gulab Singh Bhagowal. For: 1846, Sec. Progs. 26th Dec., 1327.
 - 4. For: 1846 Sec. Progs. 26th Dec., 1327.
 - 5. For: 1848, Sec. Progs. 31st March, 53. It seems that after Ranjit

The total monthly cost of this establishment in 1846 was Rs 1,504/-. It may be noted that the establishment formed more than 50°/, of the aggregate strength of a battery. The rest were gunners or golandaz who were engaged generally at the rate of 10 to a piece.1 Murray tells us that these people were not kept in peace-time, but "were enlisted and discharged according to the position of affairs," a fact which is also corroborated by Prinsep.2

Each battery had, in addition to the guns, gunlimbers, ammunition wagons and wagon-limbers. Usually there was one gun-limber and one ammunition wagon for each gun and one wagon limber for each ammunition wagon.

Among the draft animals of a battery the first place is occupied by horses. "The best horses in the Panjab," says Lt. Barr "are given to the artillery." This was quite natural, because Ranjit Singh was most interested in the building up of this arm. The horse batteries were, as a rule, fully equipped with horses, the scale being "6 or 8 as the gun and limber may require." A battery of six guns had from 36 to 48 horses for the guns and their limbers, and about the same number for ammunition wagons and their limbers, exclusive of the horses of the officers of the rank of jamadar and above and trumpeters who had one horse each and the spare horses which were kept to meet emergencies. It may be noted, however, that for the wagons and their limbers bullocks and camels were preferred to horses, though this had an adverse effect on the mobility of the battery, as it amounted to "tying up one leg of a man going to run a race."5

Lt. Barr says that the Sikhs "aped the Bengal fashion of riding the off as well as the near Horses."6 Some of the re-

Singh there was an increase in the establishment as in other branches of the army, for under Ranjit Singh it consisted only of 5 Jhanda Bardars, 5 Gharyalis, 10 Beldars, 10 Mistris, 10 Saqqas and a large number of Kamas (drivers) and Tahliyas (grooms): Catalogue, Vol. I, p. 4. The Mc Gregor Regulations laid down in 1848, after heavy cuts, a strength of 111 for one

horse-artillery troop.

1. Masson, Vol. I, p. 430.

2. Baron Hugel, p. 400; Prinsep, p. 184.

3. Calcutta Review, Vol. II, Oct-Dec., 1844.

4. For: 1846 Sec Cons: 23rd March, 562—Smaller guns were drawn by four horses. Wade to Metalfe, 1st Aug., 1827 Cons: 12th Oct., 1827.

Adventurer, p. 119.
 Calcutta Review, Vol. II, Oct.-Dec., 1844, p. 178.

2.

maining gunners and the naiks rode in front and on the sides of the guns, while the rest of the gunners along with scyces took their seats on the wagons and their limbers. The officers and the trumpeters were mounted on separate horses.

Every battery had its camp equipage, spare harness and saddle-sets, stores of clothing and rations, mistrikhana, office equipment and records, for which additional transport was provided. The average annual expenditure of a gun for the pay of the officers and men and the keep of horses etc. was Rs. 5600, and the yearly estimated expenditure for a troop of horse artillery of 6 guns under Ranjit Singh was approximately as follows¹:—

1. Furniture consisting of saddles and other trappings, tents and flags etc. and varnishing of guns etc.

flags etc. and varnishing of guns etc. Rs. 3,000 Feed of animals Rs. 19,000

3. Pay of officers and men

Total...Rs. 34.000

Rs. 12,000

After Ranjit Singh's death this expenditure went up by several thousands and even exceeded the limit of Rs. 40,000/-.

Heavy Artillery—It formed a separate department and was "divided into different portions or regiments", called batteries or derahs. The guns entrusted to the charge of this department generally "varied from 12 to 15 pounders, a few exceeding that weight of metal". Mortars and howitzers were included in this category of guns.²

The organisation of a jinsi battery was similar to that of a horse battery, the only important difference being that this had buglers and bullock-drivers in place of the trumpeters and horse-drivers³ of a horse battery.

Like a horse battery a heavy battery also comprised guns, gun limbers, ammunition wagons and wagon limbers. For

^{1.} J. I. H., Parts I & II, 1922 (Article by S. R. Kohli).

^{2.} For: 1844 Sec. Cons: March 23, 562. In 1845 there were two uch derahs: that of Ranjodh Singh's 12 Howitzers and that of Khair Ali's 1 Mortars. For: 1846 Sec. Cons: 26th Dec., 941. 9-pounders were also acluded in jinsi guns.

^{3.} For: 1846 Sec. Progs., 26th Dec., 1327. The number of bullock-rivers in a jinsi battery was 210 as against 125 horse-drivers present in a orse battery.

the transport of all these each battery was provided with a large number of bullocks, such as may be deemed sufficient for the purpose. According to Col. Richmond, the number of draft cattle required for a heavy gun exceeded 80 and was generally in the neighbourhood of 100. However, at the same time he cautions: "But as these guns are very seldom exercised and there must be many temptations to peculation on the part of the Government servants, the equipment cannot be very complete." Besides, "there were 200 and perhaps 300 more guns in magazines on the walls of the forts, mounted, more or less efficiently, on carriages," which did not require any draft.

A heavy battery also had a number of miscellaneous stores comprising camp equipage, clothing and equipment, office furniture and records, rations and mistrikhana, for the transport of which a large number of camels were provided as in the case of a horse battery, which were sometimes also employed in place of bullocks for the carriage of ammunition.

Sir Henry Lawrence has made some observations in regard to the position of the artillery personnel as obtaining in the year 1845, from which an idea may be formed about its character. He has said: "Of all the artillery men, fully one half may be reckoned as non-combatants. Of the 10968 in Jawahar Singh's time, 5905 come under the head of Amla, leaving 5063 artillery soldiers". And he details these non-combatants as follows³:—

Clashees	354	Bell Strikers	108
Water Carriers	350	Flagmen	135
Blacksmiths and		Pioneers	280
Carpenters	4 73	Grooms	1630
Tailors and		Bullock Drivers	2416
Tarriers	159		

Total...5905.

^{1.} For: 1844 Sec. Cons: 23rd March, 562. A fair idea of the number of bullock draft may be obtained from the scale laid down in 1848 under the Mc Gregor Regulations for a 6-gun battery of 9-pounders. It was 118 in total at the rate of 48 for guns and limbers, 48 for wagons and limbers, 7 for a store cart with limber, and 15 spare bullocks. Batteries of heavier guns required much more draft. For: 1848 Sec. Progs. 31st March, 53.

^{2.} For: 1844 Sec. Cons: 23rd March, 562.

^{3.} For: 1846 Sec. Progs., 26th Dec., 941.

The swivels or zamburaks as they were commonly called, were mounted not on carriages, but on camels, one on each camel, as their calibre was hardly more than one pound. Besides the gun, the camel carried its paraphernalia and one or two gunners. The swivels were organised into separate batteries which were mostly attached to the prominent derahs of ghorchurras. Under Jawahar Singh in 1845 there were 6 such batteries which were constituted as follows²:—

Monthly Pay

- (i) Jay Singh's Swivels—52 guns— 76 men Rs. 938/4/-Under the command of Ghorchurras.
- (ii) Abdur Rahim's Swivels—80 guns—127 men Rs. 2342/8/-Under Derah Naulakhas.
- (iii) Jalal Din's Swivels 40 guns 61 men Rs. 384/-Under Lal Singh's Ghorchurras.
- (iv) Fyzhushshis's Swivels— 71 guns—101 men Rs.1043/12/-Under the Ramghurrias.
- (v) Nihal Singhs' Swivels— 105 guns—146 men Rs. 1868/-Under the Irregular Sawars
- (vi) Mohd. Shah's Swivels— ... 73 men Rs. 914/-

Total 388 guns 584 men Rs. 7490/81-

It will be seen that the number of men in a swivel battery was approximately in the ratio of 3 men to 2 guns.

IRREGULAR ARMY—The different constituents of the irregular army were: (i) irregular cavalry, (ii) irregular infantry and garrison force, and (iii) jagirdari troops.

Irregular cavalry—In the Khalsa Darbar Records, irregular cavatry is variously designated as the Ghorchurra Fauj, Sawari Fauj and Fauj-i-be-Qawaid or Ghair Ain. The last of these designations was probably intended to distinguish it from the Qawaid-dan or regular army and appears more appropriate in

^{1.} Lt. Barr, p. 278—entry dated April 27, 1839. It was generally the practice with the Sikhs to decorate "the bedstalls and harness of the animals (camels) with cowries tastily displayed and to have other appointments constructed of the highest and most gay colours."

^{2.} For: 1846 Sec. Progs., 26th Dec., 941.

as much as it explains its true character and constitution. Beqawaid or Ghair Ain literally means that which follows no prescribed rules. Since this branch did not accept the European methods of military drill and discipline which were enforced by Ranjit Singh in his regular army, it came to be called by the name of Be-qawaid or Ghair Ain Fauj.

There is also another distinction to be made. According to the popular acceptance of the term, the Ghorchurra Fauj denoted the general body of irregular horse, but for purposes of classification and official records, this designation was reserved only for that portion of the irregular cavalry which was paid directly from the state treasury and was thus distinguished from the Jagirdari Fauj which otherewise resembled it in organisation and discipline or rather the lack of them.

The Ghorchurra Fauj was, broadly speaking, divided into two classes: (i) Ghorchurra Khas and (ii) Misaldar Sawars. The Ghorchurra Khas comprised only one regiment which was almost exclusively recruited from amongst the nobility of the province, while the Misaldar Sawars were the troops which originally belonged to the several independent Sikh chieftains, but which, on the over-throw of their masters, one by one had been absorbed into the Maharaja's service.

The irregular cavalry or the Ghorchurra Fauj was organised into derahs of greater or smaller size. There were as many as 17 such derahs in 1845.² As pointed out earlier, the most important of these derahs had swivel batteries attached to them, which were placed under separate commanders.

There was no supreme commander for the entire body of the irregular cavalry. Each derah formed an independent unit by itself and was commanded by a Sardar whose rank and pay depended upon the strength of the derah placed under him. There were Sardars getting Rs. 5000, Rs. 3000 or Rs. 800 a year. The Sardar was assisted by Commandants and Majors whose number was determined, though not always, by the size of the derah. Early in 1847 before the

^{1.} Baron Hugel, p. 350.

^{2.} Bundle No. Ab. 2 (1844-45), K. D. R.

Mc. Gregor Regulations were enforced, their strength in the most important of the derahs was as follows¹:—

Ghorchurra Kalan		974 - 3	Commandants	1 N	Aajor
Derah Khas		829 —10	,,	7	,,
,, Orderlies		857 —12	,,	5	,,
,, Naulakha		855 — 8	,,	1	,,
,, Maharaja Sher	Sing	h —10	,,	3	,,

In all there were 109 such officers for a total strength of 6829. Prior to the reduction effected under the terms of the Treaty of Lahore, 1846 when the derahs were very much larger, their strength must have been greater.

The other members of the staff of a derah were 1 Vakil, 1 Harkara, 1 Daftry or Writer, 1 Munshi or Mutsaddi, several Dhaunsa Nawaz (drummers), several Nishanchees (flag bearers), several Gharyalis (time-keepers) and several Granthis. The Vakil was the agent of the chief to serve as a link between him and the Government. The other functionaries performed the same duties as were performed by their prototypes in the regular army. Ordinarily, the number of drummers, flag bearers, time keepers and priests corresponded to the number of misals in a derah. As regards the Munshis, their number increased tremendously in the post-Ranjit Singh period with the result that in 1847 they were found to be in the ratio of 3 to every 100 horsemen.² This was rather too much and therefore John Lawrence, the Acting Resident, heavily axed their strength and reduced them to the scale of 1 for every 300 sawars.³

Each derah was formed of several subordinate groups called misals⁴ and each misal was composed of a band of horsemen who, being usually members of one clan, joined the army in company under the leadership of their chief. The chief, ever afterwards, continued to act as the company officer (also known as Risaldar), even when this group was subsequently incorporated into some larger unit. A misal, therefore, like

^{1.} For: 1847 Sec. Progs. 31st July, 137.

^{2.} For · 1848 Sec Progs. 25th Feb., 85. J. Lawrence to Elliot, 16 Dec., 1847.

^{3.} For: 1848 Sec. Progs 31st March, 53.

^{4.} The use of the word misal was inherited from the 18th century military organisation of the Sikhs, which was based on clannish brotherhood. The word misal which means the same was applied to such a brotherhood.

the company in a regiment, was a subordinate unit of a derah, though it had no resemblance with the latter in other respects. The misals had no fixed or uniform strength; nor were they subdivided into sections. The strength of a misal varied from 15 to 70, sometimes even more.

The irregular cavalry of the Sikhs was not organised on the basis of the Bargir-Silahdar system which was so conspicuous in the irregular cavalry of the English. We do not come across any such terms as Assamis, Khud-aspas and Be-aspas here. As a matter of fact, the personnel of the Sikh ghorchurras represented the elite of the Panjab, who could easily afford to purchase their own horses. Moreover, the clannish composition of the derahs created a feeling of fraternity which was a great check on the rise of any distinctions based on social status.

Irregular infantry and garrison troops—This division of the army included the garrison or kilajat troops as well as some regiments of infantry like the Najibs and the Ramgoles which were not disciplined and trained on the European model. The garrison troops were posted as guards within forts, at the gates of cities and at the state treasuries and comprised all the three arms-cavalry, artillery and infantry. Of the three, infantry was the largest, as the following statistics compiled by Mr. Cunningham for the year 1843 reveal³:—

Foot	 28,800	Horse	4, 509
Artillery men	 1,324	Guns	505
Swivels	 1,428		

These figures, as the compiler himself admitted, are only approximate, but all the same they are useful in sofaras they give us a peep into the respective strengths of the different constituents of the Fauj-i-Kilajat.

The garrison troops were not organised in any regiments or battalions. There were as many units of them as the number of garrisoned forts and fortified places. Each one of

^{1.} Hints on Irregular Cavalry by Capt. Trower: Calcutta Review, Vol. 5, 1846 (March), pp. 181-200.

^{2.} Calcutta Review, Vol. II-Oct-Dec., 1844, p. 176.

^{3.} For: 1844 Sec. Progs. 23rd March, 520—a statement of the forts and fortified places in the Panjab, dated Oct., 1, 1843.

them was a separate and independent unit, having nothing to do with the other similar units; nor was there any single chief holding the supreme command of these troops. The strength of a garrison depended upon the size and importance of the fort of its residence. In the strategically important forts like Attock, Peshawar, Kangra, and Srinagar strong garrisons were stationed, while in others the strength was merely nominal and varied from 25 to 50 men. Each garrison contingent was commanded by the officer incharge of the fort, known as Kiladar, who was assisted by a number of officials. The immediate commander of the troops was a Jamadar. In bigger forts where the number of the troops was larger, there were more than one Jamadar, 1 sometimes a Subedar also. The Mutsaddi of the fort was charged with the duty of taking the daily roll call and preparing the pay rolls of the garrison. The various stores of the forts had one or more Daroghas to look after them. A general idea of the constitution of a garrison troop may be obtained from the following return of the effective strength of the Govind Garh Garrison Guards in 1848 :2

Subedar		1	Naiks		19
Jamadar		1	Dominions		2
Havildars	_	11	Sipahis	_	180
		Total—214.			

The garrisons at Multan, Peshawar and Srinagar differed in some respects from the rest of them. They were enlisted, as also later on all their vacancies were filled in, by the local governors.³ Those of Multan and Kashmir were even paid by their governors. Major Broadfoot has pointed out another important feature of the constitution of the Sikh garrison. He says: "The Kiladar is changeable but not the garrison which forms no part of the regular army but serves at all times in the fortress for the service of which it is raised."⁴

- 1. News, p. 175-Mention of many Jamadars in the Fort of Kangra.
- 2. For: 1848 Sec. Progs. 30th Dec., 194. This was only a part of the garrison force whose total strength was about 800, all ranks.
- 3. For: 1846 Sec. Progs. 26th Dec., 1027, 1239. J. Lawrence to Currie, 21st Aug., 1846 and 8th Nov., 1846.
- 4. For 1845: Sec. Progs. 4th April, 148. Broadfoot to Currie, 28th Feb., 1845.

The regiments of irregular infantry like the Najibs and the Ramgoles were, however, differently organised. Their constitution was closer to that of a regular infantry battalion than to that of a garrison contingent. They had commandants, adjutants, majors, munshis, mutsaddis, time keepers and flag bearers etc. as in the regular infantry. As a matter of fact, what distinguished them from their regular counterparts was not so much the difference in their appointments and office establishments, as their inferiority to the latter in respect of training, discipline and equipment, for they were, as Capt. Murray has said, "variously armed and equipped."

JAGIRDARI FAUJ

Although there were all kinds of fief-holders, big and small, amongst the Sikhs, yet there was no gradation and classification as we find in the army of the Mughals. The elaborate Mughal Mansabdari System had lost its popularity. It had not found favour with the Marathas and the Afghans; and the Mughals themselves were already a declining power.

There were two kinds of jagirs, namely civil and military. The civil jagirs were granted to the employees of the civil department or were given for charitable (dharamarth) and therefore, we are not concerned with them. Our concern is only with the military jagirs which were expressly granted for the purpose of securing military The terms of military service were governed by the deeds of grant which detailed the lands to be assigned and the troops demanded in lieu thereof, besides an obligation on the part of the assignee that he "must do his utmost to serve, obey, remain in attendance and continue well wisher to the Sirkar."2 Every feudatory was bound by his deed to enlist, equip and maintain the prescribed quota of troops and to furnish them at his own cost, whenever requisitioned by the over-lord.3 It was not the practice of Ranjit Singh to waive off this obligation. But after his death occurred some cases in which it was waived off on payment of

- 1. Prinsep, p. 184.
- 2. For: 1846 Sec. Progs. 26th Dec., 1052. A specimen of the grant document executed in favour of Unrodh Chand and his posterity is given here.
 - 3. Sometimes a departure was made from this rule. For instance,

a nazrana, as for example in 1844, S.Nihal Singh Ahluwalia was granted exemption from service by Raja Hira Singh on payment of Rs. 25,000.1 Some of the terms of service were usually not mentioned in the deed, but were so clearly understood that they were seldom disputed. For example, if the troops of a certain feudatory were not requisitioned for a long time, a money payment was liable to be realised from him.2 Similarly, the rules regarding musters and disciplinary actions were unwritten conventions which were strictly enforced, as if they were part and parcel of the grant documents. Another implied term was the obligation of the jagirdar to temporary levies in emergencies. Further, a Qabuliyat (a deed of acceptance) had to be executed by every grantee before he could be put in possession of his jagir. This deed was executed with a view to securing a written acknowledgment of the terms of the deed of grant from the grantee and hence was mostly a repetition of the grant deed.3

Moorcroft says that "Ranjit Singh usually required his feudatories to provide for constant service, a horseman for every 500 rupees which they held in land, besides being ready with other fighting men on an emergency. This proportion left the jagirdar half only of his estate untaxed, as efficient horseman cost about Rs. 250 annually."4 same scale can be worked out from what John Lawrence says:5

when in 1825 the Rajah of Mandi represented that since he was paying a tribute, he should not be asked for any military service, but if such a service had to be taken from him, then the sustenance expenses should be paid by the Government, Ranjit Singh agreed to pay these expenses. News, p. 519.

- 1. Abstract of Panjab Intelligence, 1844, Vol. 349, p. 1.
- 2. News, p. 580.
- 3. Here is a specimen: "We, Tara Singh and Karam Singh Lamba do hereby promise and give in writing that we will maintain and furnish to the state when ver required 100 troopers and ten swivel guns, the men in both arms of the service having been drilled and trained with the troops commanded by Ventura and Allard The taaluqa of Rohtas to the value of Rs. 31,000, the villages in the neighbourhood of the taaluqa Miani to the value of Rs. 4,000 and the village Namtaz granted as personal jagir to Tara Singh have been graciously conferred upon us in Jagir—that we should keep men well equipped and in readiness "Written on 27th Chait, Samvat 1822 (31.3. 1825) K.D R., 1825; News, p. 368.
 - 4. Moorcroft, Vol. I, p. 98; Cunningham, p. 156.
- 5. For: 1848 Sec. Progs 25th Feb., 60: News, p. 252. J. Lawrence to Elliot, 31st Jan., 1848.

"A portion of the fief of every chief is personal, the rest is for the support of his contingent. Thus an individual furnishing 100 horse will probably have a jagir of Rs. 50,000 per annum. Of it, Rs. 20,000 will be his personal jagir and the remainder the supposed pay for the men; Rs. 300 per horseman being the usual rate." But this was only the general scale. In practice it was not always strictly adhered to, as the actual strength of the troops demanded by the state was very often the result of a good deal of haggling1. The first terms of the state were usually pitched high, but later on they were lowered slightly to accommodate the aspirants. It may be remembered that the favourites of the rulers invariably got a better deal than others.

The jagirdari troops comprised, like the state army, all the three arms, infantry, cavalry and artillery. The minor chiess generally had sawars alone, but each one principal chiefs invariably had representations of all the arms.2 However, as a rule, in the plains emphasis was laid mainly on horsemen and in the hills on footmen.3 The more important of the jagirdars such as princes appointed managers to look after their contingents.4

The infantry of the jagirdars had both the forms, regular and irregular. The irregular infantry was composed of matchlockmen (bandukchis) and garrisons. The hilly Rajas, particularly Gulab Singh and Unrodh Chand, had hundreds of such The regular infantry was drilled and disciplined like that of the state and was likewise organised into battalions. According to Smyth, there were as many as 25 such trained battalions in 1845, out of which 21 belonged to the Dogra chiefs alone.6 As a specimen, the organisation of a battalion

^{1.} For . 1836 Pol. Cons: 3rd Oct., 24; Panyab Akhbars, dated 28th Sept., 1839; Sohan Lal, Vol. III, Part II, p. 271.

2. The principal chiefs were known as Sardaran-i-Namdar or Sarkardaha (leading chiefs) Lists of troops maintained by such chiefs are given in the various statements of Mr. Cunningham (For: 1844 Sec. Cons: 27th April, 172-81; 15th Feb., 1843, 34). For example, the contingent of Nihal Singh Akluwalia comprised 1900 foot (3 regiments) 1500 sawars, 150 gunners (15 guns) and 25 zamburchis (25 swivels)—total,

Prinsep, p. 184.
 For instance Bhaiya Ram Singh was the manager of Kharak Singh's 4 For instance Bhaiya Kam Sing estates for many years. News, p. 300.

News, p. 259.
 Smyth, Appendix XXXV.

of Hari Singh Nalwa who held a jagir worth 8 lakhs, and spent 4 or 5 lakhs on his troops, is given below¹:—

Combatants—576 Men	_	Non-Combatants—56 Men	
Regimental Staff (Afsran)			
Commandant (Kumedan)	1	Granthi 1	l
Adjutant (Ajetan)	1	M utsaddi	l
Major (Mahzor)	1	Artisans	1
Company Staff		Beldars	7
Subedars	5	Khalasis	7
Jamadars	5	Jhanda Bardars	4
Quarter Havildars	5	Gharyalis	4
Havildars	20	Harkaras	1
Naiks	20	Sarbans	7
Nishanchis	2	Saqqas 10	0
Tamburchis	11	Cooks 10	0
		- Attended to the state of the	-
\mathbf{Total}	71	Total 56	6
Sepoys (Sair Sipah)	505		
Count T	7	629	

Grand Total—632

It will be observed from the above that although the ranks of their staff were almost the same, the establishment as also the strength of a jagirdari infantry battalion differed considerably from that of a state battalion. The total establishment of a state battalion was 213, whereas that of a jagirdari battalion was only 127. Moreover, the highest officer of a state battalion was a Colonel, whereas in the case of a jagirdari battalion it was a Commandant, the office of the Colonel being discharged by the Sardar himself who was the chief commander of all his troops, whatever their category.

The jagirdari cavalry was of the irregular type,² though Shahamat Ali would have us believe that there were some regiments of a regular type also.³ Its constitution was a sort of combination of the old ideas of the Misaldari Period with the new ones adopted by Ranjit Singh for the organisation of his ghorchurras. The idea of keeping horsemen on the basis of cash payment was absent in the period of the Misals and was

^{1.} This account is based on an original paper translated and published in I.H.R.C. Vol. XXXI, Part II by S.R. Kohli.

^{2.} Grey, p. 20.

^{3.} Shahamat, p. 22.

a novelty borrowed from the Maharaja.¹ The old ideas were reflected in the retention of the system of the misaldars, tabiadars, and jagirdars, which used to prevail among the Sikhs in the second half of the 18th century.² "The jagirdars in the Panjab had the right to grant portions of their jagirs without the sanction of the Maharaja", and this right was used by them to create their own jagirdars and misaldars.⁴

The jagirdari artillery consisted of both guns and swivels. For example, the Dogra Rajas had in 1835 "six 9-pounder, six 6-pounder horse artillery guns, 4 mortars, 4 howitzers, two 3-pounder mountain guns, 22 pieces in all, besides some camel guns, all well founded and in good order." The organisation of this branch of the jagirdars' contingent was more or less, similar to that of the Government artillery. Occasionally, Europeans like Gardener were employed to train and organise gunners. 6

Here it may be pointed out that though ordinarily the whole expenditure of the contingent was borne out of the allotted jagirs, sometimes on representations from the overburdened chiefs, compensation was granted in the form of supplementary grants or cash stipends. Further, it may be noted that the jagirdari contingents were never constant. They increased or decreased as the value of their jagirs rose or declined. Moreover, there were occasional transfers of units of troops from the Government to the chiefs and vice versa. This was mostly due to the working of the law of escheat. Whenever a chief died, his estate was confiscated, but his troops, instead of being disbanded, were transferred to the control of the state. At times, the Government also transferred some of its units to the chiefs.

- 1. News, 84.
- 2. Calcutta Review, Vol. II, Oct.-Dec., 1844, p. 176.
- 3. P. G. R. Lahore Political Diaries, Vol. IV, p. 88.
- 4. News, pp. 234 & 300.
- 5. News, p. 84; For: 1839 Sec. Cons: 3rd July, 21.
- 6. Pearse, p. 191.
- 7. For: 1840 Sec. Cons. 14th Sept., 86.
- 8. Catalogue, Vol. I, 41-A battalion of Hari Singh Nalwa was transferred after his death in 1837 to the Campu-i. Mualla i.e. the state army.

JOINT COMMAND AND DIVISION

Our examination of the constitution of the Sikh army will be incomplete without a reference to the institution of joint command, so commonly found in it. This means the appointment of common commanders for a number units, for instance, a contingent of jagirdari troops, a derah of irregular cavalry and a few units of the regular army. Tei Singh, Lehna Singh, and Hari Singh Nalwa, to take only a few of the so many cases, all held such joint commands. is difficult to ascertain the exact reason for this, but in all probability Ranjit Singh did it partly because he did not want to entrust these commands to people other than those who enjoyed his complete confidence and partly because he desired to have units of varied arms and sizeable strength, which could be of real tactical help to him. Efficiency of command, however, does not seem to be marred much thereby, as the subordinate units were well-officered and well-staffed.

A reference may be made here to the efforts of some of the successors of Ranjit Singh to associate units of irregular cavalry with the brigades of the regular army with a view to evolving what may be called divisions. It was a step in the right direction, aimed as it was at the achievement of a greater integration in the army, but the war of 1845-46 which followed soon after, blasted its prospects absolutely. As regards its constitution, nothing definite is known about it. Probably, it was a very loose type of organisation, as we do not come across any appointments of divisional commanders.

CHAPTER IV

RECRUITMENT, COMPOSITION, DISCIPLINE, MORALE AND LEAVE RULES.

Having examined the constitution of the army, we now proceed to take up some other aspects of its organisation, such as recruitment, composition, discipline, morale and leave rules.

RECRUITMENT

in the regular army", says Griffin,1 "Enlistment "during the Maharaja's reign was entirely voluntary, but there was no difficulty in obtaining recruits, for the service was exceedingly popular." Lt.-Col. Steinbach corroborates this view and adds that "army could upon an emergency be increased almost to any amount."2 The Adventurer also refers to the "great rush of candidates and recommendations at the time of recruitment."3 This phenomenon was due to several factors. Firstly, the country was at this time full of people roaming about in search of employment, consequent upon the dissolution of the armies of the Marathas and many other Indian States after they were overthrown by the Secondly, the conditions of general insecurity prevailing in the 18th century, caused partly by the absence of any strong government and partly by the repeated Afghan invasions, made it imperative for all able-bodied men to learn the use of arms in the interest of self-defence.⁵ Moreover, the injunction of Guru Gobind Singh that a good Sikh should always carry steel in one form or another on his person, had not a little to do with the pronounced partiality of the Khalsa for a military career. Indeed, the profession of arms had become so natural to an

^{1.} Griffin, p. 134

^{2.} Monograph 18, p 51; Steinbach, p. 94.

^{3.} Adventurer, p. 31.

^{4.} Skinner, p. 82.

^{5.} Mohammad Latif, p. 291; Monograph 18, ap. 67.

overwhelming section of the population of the country that no particular inducements were necessary for recruitment. Besides, the conditions of service in the Sikh army were very attractive: the pay of a sepoy was higher than anywhere else in India; the quick promotions promised a rapid rise to men of talent and ambition; and further, the growing power of the Maharaja guaranteed security of service.

All the same, there were certain categories of personnel which were not easily available and special efforts had to be made to attract them. These categories mostly comprised skilled like gunners, trained and experienced officers and instructors, and men of reputed valour like the Gurkhas. The Sikh vakils at Ludhiana had secret instructions to entice gunners and rank-holders from the English army. Sometimes, special agents were engaged for this purpose. For example, one Abid Khan was asked in 1815 to go across the Sutlei and tempt away Gurkhas. Similarly, one Sheo Dutt was despatched in 1816 to seduce the native officers of the Second Nusseeree Battalion of the British at Subathu.² The same reason explains Kanwar Nau Nihal Singh's anxiety in 1840 to secure the services of the Gurkha leader, Matbar Singh.3

As indicated earlier, except for the jagirdari levies and the provincial contingents where the control was exercised by the chiefs and the Nazims concerned.4 all recruitment rested with the Sarkar-i-Alia (the Exalted Government). Normally, this responsibility was discharged by the Government directly. The people seeking employment approached prominent courtiers or officers who introduced them to the Maharaja, sometimes with strong recommendations. In emergencies, or in times of great urgency, however, authority was usually delegated to Sardars, Commanding Officers, Governors, and other state officials for the purpose.⁵ Instances are on record where even a darogha-i-astabal or a mutsaddi was

^{1.} The Calcutta Review, Vol. II, Oct.-Dec., 1844
2. For: 1816 Sec. Cons: 25th May, 1-3. (The whole correspondence of Sheo Dutt is given here.); Monograph 17, dated 1814 (16) & 1815 (15); For: 1823, Pol. Progs. 22nd Aug., 19: Mohan lal asked to get the Maharaja Subedars and Commandants.

^{3.} For: 1840 Sec. Cons. 1st June, 52.
4. For: 1846 Sec. Progs. 26th Dec., 1027.
5. For: 1842 Sec. Cons: 28th Feb, 44-47. Clerk to Maddock, 15th
Feb., 1842.

asked to recruit soldiers. Sometimes recruiting sergeants were detailed to select recruits at fairs or in villages. 2

We have not come across any list of physical qualifications required in the candidates for enlistment in the army. But this should not mean that there were no such considerations kept in view at the time of recruitment, for we learn from several contemporary records that a policy of 'pick and choose' was usually observed.3 "Size and strength is looked for," says Lt. Barr, "and not caste throughout the Panjab services." Only stalwart youths were engaged.⁵ This may be clear from the following observations of Griffin and Steinbach. "In Maharaja's army, the infantry were the pick of the youth of the country; only the handsomest and strongest men were selected"; and "the service was very popular, the men being kept from a large number of candidates." Capt. Burnes mentions that the Sikh infantry was "not surpassed by the Indian army" (British).7 Baron Hugel and John Lawrence speak highly of the stalwart frames of the ghorchurras, while Lt. Barr pays a glowing tribute to the regiments of Allard, where "men and horses are all picked and amongst the former are to be seen many stalwart fellows who appear to advantage under their cuirasses and steel casques."8 However, it seems that the same amount of care was not taken in the case of the rest of the regular cavalry which was "very inferior in every respect to the infantry", as it was composed of "men of all sorts and sizes and ages, who got appointed solely through the interest of the different Sardars."9 Probably, there were no arrangements for

- 2. Lahore Political Diaries, Vol. III, 1847, p. 197.
- 3. Monograph No. 17 and News contain several references to rejection of people by the Maharaja, for example see pp. 40, 55, 64 and 70.
 - 4. Calcutta Review, Vol. II-Oct.-December, 1844, p. 178.
 - 5. Sohan Lal, Vol. II, p. 93; Tarıkh-i-Sıkhan, Part I, p. 34.
- 6. Griffin, p. 134; Steinbach, p. 101. This is also corroborated by Dr. Murrary. Murray to Wade, 30th Dec., 1826 and 1st Jan., 1827 Cons: 23rd Feb., 1827.
 - 7. For: 1832 Sec. Cons: 21st May, 9-10.
- 8. For: 1848 Sec. Progs. 25th Feb., 42; For: 1847 Sec. Progs. 31st July, 123; Barr, p. 245; Orlich, Vol. I, p. 227.
 - 9. Steinbach, p. 101.

^{1.} Bokan Khan, darogha of the stable, was ordered to entertain 200 men from Kasur—Panjab Akhbarat, dated 22nd July, 1840 (1839-40); Munshi Ganpat Rai asked to enlist 200 men for the Kangra fort. Panjab Akhbarat, dated 16th May, 1840, News, p. 497-

medical examination and physical fitness was determined on the basis of appearance rather than by any strict regulations as to age, height and chest.¹

The first step in the procedure for recruitment was the preliminary selection by the Dewan or some prominent courtier, particularly Raja Dhian Singh, the Prime Minister. After this the new recruits were duly presented to the Maharaja or his nominee for final selection and approval.² Approval having been obtained, certain official formalities were gone through, such as enlistment, preparation of descriptive rolls, branding of horses and dispersal of the recruits to the various units (in case no new battalion or unit was to be raised) for incorporation and training. The young recruits were known as Galla Jadidan.³ Enlistment meant making an entry in the state office, which was endorsed with the words "Dar Silk-i-Mulazmi Munslik Shudha", i.e.linked into the chain of service.⁴ The other stages-Chehra Nawisi and Dagh (descriptive rolls and branding) require a detailed treatment which is given below.

Alauddin was perhaps the first Indian ruler who early the 14th century introduced the practice of drawing up descriptive rolls of men and horses; but it was discontinued after his death. The practice was revived by Sher Shah and Akbar in the 16th century and it remained in force till the disintegration of the Mughal Empire in the 18th century. In the Panjab it was reintroduced by Ranjit Singh about the year 1815 (Sambat 1862) and was rigorously enforced throughout his reign. The Maharaja made it a rule that a man's chehra be drawn up as soon as he entered service, because it was useful not only for maintaining his service record but also as a means of verification, tracking deserters and summoning men from furlough. The descriptive rolls of the Sikhs were more elaborate than those of the Mughal Emperors. The latter, a specimen of which is reproduced in Irvine's Army of the Mughals, contains the name of the man, his father's name,

^{1.} News, p. 55—mention of 60 people each about 12 years old employed in the Akal Regiment. Similarly, the Ramgoles included many youngmen of only 12 years. It appears that the policy of the Government was not to reject promising lads merely on account of age.

^{2.} News, pp. 243 and 449; Sohan Lal, Vol. II, p. 39.

^{3.} Bundle Aa 4 (i) (1823-24)

^{4.} Sohan Lal, Vol. II, p. 93.

his father's father's name, his place of origin and his caste, followed by details of his personal appearance and marks of identification, as also the date, month and year of his enlistment. In the case of a sawar or trooper, a brief description of his horse was also recorded.1 The rolls of the Sikhs, in addition to the above particulars, show the trooper's starting pay, subsequent promotions, dates of transfer to other regiments or of removal, by death, desertion or dismissal, with a brief summary of the periodical inspection reports, giving the date of each inspection along with remarks about the animal.2 The English rendering of a specimen of a descriptive roll in use in the military service of the Sikh Government is given below:3

Arz-o-Chehra of the employee of Sarkar, Regiment Sheikh Qumaruddin, Risala No. 2, Poh 1879 (Dec. 1822), Nihal Singh, son of Tej Singh, son of Lal Singh, resident of Pahlu, average height, wheat complexion-

one increment from 1st Har 23rd Poh 1881—died. privateer.

Total—Rs. 27/- p.m.

Rs. 3/- increment as pay of a Naik, beginning from 15th Phalgun, 1880.

Total — Rs. 30/p. m. Confirmed as Naik 4th Phalgun, 1882.

Rs. 2/- increment for being promoted to the rank of Jamadar on 19th Asui, 1887.

Rupees 26per month, Rupee Horse bay, without any marks.

1880 for being promoted to 25th Phalgun 1881—Horse bay, the rank of Naik from a with black spots on the knee and a white line on the forehead. According to report (certificate of casualty) died on 1st Asuj 1885. 7th Asui 1885—Horse bay with a forehead bright like the moon, hind foot white. 29th Maghur 1885-25th Poh 1885-Bay mare died. 7th Kartik 1888-Another horse colour uniform, blaze on forehead-all four feet white.

2. Catalogue, Vol. I, p. 142. The technical name of the descriptive roll was Arz-o-Chehra.² Chehra literally means face or countenance and stands for natural features and Arz denotes temporary or artificial marks on the face of a person. Both these words were used because a descriptive roll contained both natural and artificial features.

Of the military records of the Sikh Govt. preserved in the Archives of the Panjab Government, the section of the descriptive rolls is incomplete. There are 13 bundles of papers only which comprise the rolls of 13 battalions of infantry, 6 reguments of regular and a few derahs of irregular cavalry and units of artillery, about 1/5th of the total army.

3. Catalogue, Vol. I, pp. 142 & 147.

^{1.} Irvine, p. 46.

The practice of branding the horses and camels of the army was introduced late in the Maharaja's reign in 1836 (Sambat 1893) as a means of verification. Before this the descriptions of animals contained in the rolls, as shown above in the specimen roll of Nihal Singh, were made use of to keep a check on the quality of animals. But there were loop holes in this system, with the result that the general quality of horses was not always what was desired. Therefore, this system had to be reinforced with that of branding. The original expenses of branding were defrayed by the Government, but later on this amount was deducted in instalments from the pay of the troopers concerned.1 It is not known what form of brand was used. though it is on record that different forms were employed by way of distinction for the different classes of animals engaged in the army.2

For the purpose of verification, frequent musters were held. On the day of muster the Adjutant, assisted by a Darogha and a Salotri Aspan (veterinary doctor), had to inspect the horses of his regiment to see whether they were fit for service and to compare their marks of identification with those noted in the rolls. An abstract of each inspection report was entered in the rolls giving date, month and year. When a horse was rejected as being unfit for service, the entry 'nakarah' (unfit) was made on the roll, and it was but rarely that the exact reason for rejection was stated. If the animal was passed, the entry 'Badastur' (as before) was made. If it was not looking well, the entry was 'chak na sazad' (not looking stout). When it recovered, the entry was 'chak shud' (became well).3

The pay and allowance of a trooper was to a certain extent regulated by the condition of his animal. It was, therefore in the interest of the man that his horse should be in good condition. A lean and thin animal was rejected as unfit for service,4 whereupon its sawar lost Rs. 10/- till it was again passed as fit or until he produced a new one. In case the horse

^{1.} Sohan Lal, Vol. III, pp.285-286.

^{2.} Tarikh-i-Panjab by Kanahya Lal, p. 358.
3. Descriptive Rolls of the Khalsa Darbar-Bundles Da 1 to Da 10 and Db 1 to Db 3.

^{4.} News, p. 207.

died, the trooper drew the pay of a foot soldier till he provided himself with another. It need hardly be remarked that the threat of cutting down the pay of the sawars at the priodical inspections was largely responsible for the state of efficiency attained by Ranjit Singh's cavalry.

Recruitment of Officers-As a rule a recruit was enlisted as a private or Sair Sipahi, but instances are not wanting where a man was appointed straight away as a company or battalion commander. Such appointments, whenever made, depended entirely upon the discretion of the ruler. Generally, the people who had the good luck of getting higher appointments from the very start were either the sons of his favourites like Raja Dhian Singh, Jamadar Khushal Singh and Misar Beli Ram or prominent deserters from the ranks of the English Company, such as Dhonkal Singh, Bakhtawar Khan etc.¹ The latter, indeed all those who claimed experience and previous training and demanded higher appointments, were given hard tests before their employment. Whenever necessary, thorough enquiries into their antecedents were made prior to their enlistment.2

The procedure used in the appointment of officers or the selection of feudatories was slightly different. In such cases, the presentation of the chief and his ratainers to the Maharaja was not made through the Bakshi or the Dewan, but the aspirants made a direct approach to the Maharaja, though quite often the good offices of some one of his hot favourites were sought; and there was no difficulty about this, because the courtiers themselves were anxious to win followers. After the decision about the grant of a jagir had been made, certain official formalities had to be completed, namely the execution of certain documents like (i) the deed of grant and (ii) the deed of acceptance.3

Anxious as he was to raise a strong army on European lines, Ranjit Singh employed a large number of foreign officers. But their recruitment was beset with certain

^{1.} For: 1816 Sec. Cons: 25th May, 1-3. Ross to Metcalfe, 17th April, 1826... "that men of all ranks would be admitted readily into Ranjit Sing's service where the pay of the Subedar would be Rs. 301-, of a Jamadar Rs. 251-, Havildar Rs. 161-, Naik Rs 141- and Sipahi Rs 81- p.m."

2. Monograph 17, 1812 (5) & 1813 (11 and 34).

3. They have been explained in Chapter III.

special difficulties. In the first place, they were mostly adventurers, mere soldiers of fortune who had no hesitation in transferring their services from one master to another and hence no reliance could be placed on them. Secondly, many of them were mere imposters, with very little knowledge of military art and having only their European faces to recommend them. Such people could be of no material help to their employers. A third difficulty arose from the fact that the British did not look with favour upon Europeans resorting to the courts of Indian princes. So the Maharaja had to follow a very carefully thought-out policy and made thorough enquiries, whenever any foreigner came to seek his service. In the case of Ventura and Allard who were among the first Europeans to come to Lahore, enquiries were made from Capt. Wade, the British Agent at Ludhiana,1 beforet hey were employed. Later on these gentlemen were required to certify all such cases. Further, the personal capacity of the foreign aspirants was tested through interviews and searching tests.2 after tests for some time only nominal salaries were allowed, full salaries being fixed only when they had impressed the Maharaja with success in their initial assignments. Moreover, they were required to sign contracts or bonds at the time of entering service. Several of such contracts are on record.3 It being not possible to detail them all here in original, their general features alone may be mentioned. "In the contracts entered into between Ranjit Singh and his foreign generals", says J.J. Cotton, "we find it expressly stipulated that they should abstain from eating beef or drinking tobacco, should grow their beards and marry native wives."4 Wade writing to Matcalfe on May 1, 1827 about the employment of Mevius, mentions another condition which in his own words reads: "the Raja insisted

^{1.} Murray to Wade, 2nd March, 1827. For: Cons: 2nd March, 1827.
2. For: 1822, Pol. Progs. 24th Aug., 4; Pearse, p. 181; Mc Gregor, Vol. I, p. 258. The last named writer mentions the case of a young German who was rejected by Ranjit Singh on that score

^{3.} The most important were those signed by Allard, Ventura, Mevius and La Font.

^{4.} Calcutta Review, Oct., 1906, Wade has reported Ranjit Singh's views on the condition of native marriage. "Frangies who were single men, were apt to think of their own country, grew discontented and applied for their discharge at a time when their services could not be dispensed with." Pol. Progs. 4th Nov., 1831, No. 19.

on receiving from Mr. Mevius a written agreement, binding himself not to quit his service without his will and pleasure."1 Sohan Lal writes that special emphasis was laid on the obligation of the contracting officers to render complete devotion and utmost exertion in his service and to show no weakness at the time of fighting, whosoever might be the enemy.2 secured such written engagements, Ranjit Singh thought that he had bound them to the service fairly strongly and showed them high favours to create in them feelings of loyalty to him and his state. But they were, at the most, only moral ties. He was indeed shocked when at the fag end of his life he was frankly told by Macnaughten and some other English men that his foreign officers could not be depended upon in a war against any European nation.3 Another consideration that always weighed with Ranjit Singh in the matter of recruitment of foreigners was not to lose the goodwill of the British Government, and therefore he invariably consulted them whenever any European resorted to his court, except in the case of Mr. La Font, which invited the following comment from the Governor General: "The British Government cannot view without feelings of suspicion the resort to the Maharaja's adventurers who are wholly unknown, who make their way clandestinely through the country and who having no character to lose, would not probably hesitate at endeavouring to sow dissensions between the two States, if they deemed such practice calculated to lead to their own aggrandisement."4 In the post -Ranjit Singh period when the relations of the two states became strained, the British became more and more meddlesome and wanted "the preference to be given to English men."5 The Sikhs on their part "continued to be guided by the wishes of the British Government in respect of the employment of Europeans, 6 until Pt. Jalla, considering them thoroughly unde-

^{1.} Murray to Wade, 8th Maich, 1827, Cons: 20th April, 1827. For 1827 Pol P. ogs. 15th June, 8o. According to Murray, Ranjit Singh also asked Mevius to bring his family with him, if he wanted to enter his service.

^{2.} Sohan Lal, Vol. III, Part IV, pp. 504-505.

^{3.} Sohan Lal, V.I. III, Part IV. p. 570.

^{4.} For: 1838 Sec. Progs., 1st Aug., 6. Macnaughten o Wade, 7th March, 1838.

^{5.} Press lists-1311-No. 666, dated 10th Aug., 1842.

^{6.} Ibid-1300-No. 337, dated 1st July, 1842.

pendable in any possible war with the British, dismissed who were still in service.

COMPOSITION

The Sikh army was composed of a number of classes. such as Sikhs, Rajputs, Brahmans, Khatris, Gurkhas, Hindustani Hindus and Muslims known as Purbias, Panjabi Muslims, Afghans of Trans-Indus districts and Europeans. There was no bar on any community except the Kashmiris about whom Vigne says that "on account of their almost proverbial timidity, there was a standing order against the admission of any Kashmirian as a recruit."1

Sikhs—The Sikhs formed only $\frac{1}{6}$ th of the total population² of the Panjab, but being the main-stay of the Sikh rule, they constituted an overwhelming majority of the Lahore army. Very largely, they consisted of Jats or agriculturists and came from the central regions of the Panjab, namely Manjha and Doaba. The Cis-Sutlej States of the Malwa region were under British protection, but this factor did not stand in the way of the Malwa Sikhs who wanted to take up service under the Lahore Government, so that on the eve of the Anglo-Sikh War of 1845-46, ten to fifteen thousand people of these states were serving in the Lahore ranks.3 In the words of Lord Hardinge "every village had some relations in the Sikh ranks."4

The Sikhs, it has been said, enjoyed a position of prepondrance in the army. In the regular infantry they constituted 52 out of 62 battalions in 1845, which means about 45 out of 54 thousand men.⁵ The same was the case in the regular cavalry. In the irregular cavalry their strength was 9,766 out of 10,795 under Ranjit Singh and 17,323 out of 19,754 under Jawahar

^{1.} Vigne, Vol. I, p. 368.
2. The proportions of the different communities given by H. Law—rence are: Sikhs 1/6; Hindus 1/2; Muslims 1/3. Certain estimates of the total population of the Panjab during the Sikh period are: H. Lawrence—15 lacs, Burnes—30 lacs, Smyth—50 lacs, P. N. Khere—35 lacs. J.P.U.S., 1938, vol. II, p. 19.

^{3.} H. Lawrence to G.G.— P.G.R. Press lists, Vol. 9, letter 214.
4. Lord Hardinge's comments on H. Lawrence's report referred to under

^{5.} For: 1846 Sec. Progs. 26th Dec., 1027; John Lawrence to Currie 24th Aug., 1846.

Singh.1 In the jagirdari contingents also they formed a majority, while in the other branches, artillery, irregular infantry and garrisons, they were in a minority.

Any account of the Sikhs will remain incomplete without a reference to the Akalis. They were found only in the irregular infantry and cavalry where the demands of discipline were not so urgent as in the regular army. Their total number was not large.2 But their strange dress, equipment and fanaticism made them a most conspicuous part of the army. "They were identical in character and in the manner of their onslaught with the Ghazis of Afghanistan and the Sudan."3 They had to be handled by Ranjit Singh with great tact and sagacity.

Hindus—The Hindus in the Khalsa army were drawn from several classes like Rajputs, Brahmans, Khatris, Gurkhas and Purbias.4 Brahmins and Khatris were not many in the ranks, though among the officers they were fairly well represented: Misar Dewan Chand, Misar Sukh Raj, Misar Tej Singh, Misar Lal Singh, Dewan Mokhan Chand, Dewan Ram Dayal, Dewan Moti Ram, Dewan Kirpa Ram and many other officers belonged to these classes. The other classes had better representation in the army. The Rajputs came from the hills and were found in almost all the branches.5 They had their own derahs of ghorchurras.6 The Rajas and other hill chiefs were their great patrons who drew their contingents mainly from this class. Again, most of the hill forts were garrisoned by them. The Rajputs were also represented in the regular infantry.7 In 1825 Ranjit Singh had 3 to 4 battalions of them. But after the death of Ranjit Singh when the Dogra Party got ascendancy at the court of Lahore, there was a rapid increase in their numbers.8 Gurkhas and the Purbia Hindus were found only in the regular

^{1.} For: 1846 Sec. Progs. 26th Dec., 1027; John Lawrence to Currie, 24th Aug., 1846.

^{2 &}amp;3.—Griffin, p. 136—their number was only about 3,000 under Ranjit Singh.

^{4.} Purbia means an Easterner. This word was used in the Panjab for the people coming from the areas lying to the east of the Panjab.

^{5.} Steinbach, p. 101.

^{6.} For: 1846 Sec. Progs. 26th Dec., 808; News, p. 500. H. Lawrence to Currie, 13th April, 1846.

^{7.} For: 1825 Sec. Progs. 18th March, 40. 8. For: Misc. Vol. III, No. 333, pp. 278, 428 and 496.

army. There were two Gurkha battalions in the Khalsa army in 1845-46, consisting in all of about 1,500 men.1 Contemporary records show that Ranjit Singh as well as his successors were most keen on their enlistment. For instance, in July 1837 the Maharaja observed to his courtiers that "the Gurkhas were a great people and that if 2,000 of them would come, he would employ them and form them into two battalions."2 As regards the Purbias, in the early part of our period they predominated in the regular infantry of Ranjit Singh, but gradually they yielded the first place to the Sikhs. They had also a fair representation in the officer ranks of the army. Gen. Tej Singh, Gen. Ram Singh, Gen. Bishan Singh, Jamadar Khushal Singh, Gen. Dhonkal Singh and several other officers belonged to this class.

Muslims-Of the Muslims the following classes were represented in the Khalsa army: Purbia Muslims, Panjabi Muslims and Trans-Indus Afghans. Of these the first named were the most important. The first regular battalion of Ranjit Singh was composed of Najibs, inhabitants of Saharanpur and its vicinity.3 Later on, one more Najib battalion was raised. Besides, there were several Purbia Muslim officers, namely, Sheikh Bisawan, Aziz Khan, Bhakhtawar Khan and Ibadullah etc. In 1848 Major P. George found all the officers and men of Col. Amir Khan's battalion to be Hindustani Muslims.4 The artillery personnel was overwhelmingly drawn from this class.5 As regards the Panjabi Muslims, the most prominent among them were the Afghans of Kasur and Multan and the Muslims of Jhang and other districts situated between the Chenab and the Indus.6 They were mostly employed in the cavalry, both regular and irregular, and irregular infantry. They were also found in the jagirdari contingents of the Muslim fief-holders like Nawab Qutabuddin of Kasur, Sheikh Ghulam Maheeuddin, Sheikh Immamuddin and the Fakirs. Some of the

^{1.} Bundle No. Aa 24 (11) 1845-46-K.D.R.

^{2.} For: 1837 Pol. Cons. 21st Aug., 35-Lahore Intelligence, 30th June-6th July, 1837.

^{3.} For: Misc. Vol. 332, p. 386.

^{4.} Political Diary of G. Lawrence-P.G.R. Vol. IV, p. 354.

^{5.} For: 1846 Sec. Progs. 26th Dec., 799. H. Lawrence to Currie, 7th April, 1846.

^{6.} Monograph 17, 1813 (11); News, p. 16.

Hindus also such as Dewan Sawan Mal, Dewan Mool Raj and Dewan Lakhi Mal, had in their contingents large numbers of Muslims, Rajputs by caste.1 The third category, that is, the Afghans from across the Indus were much valued for their fighting qualities and were eagerly sought by the Sikh rulers. For instance, in 1836 Nau Nihal Singh and Raja Suchet Singh were ordered by Ranjit Singh "to engage all sawars and foot men in the service of Payandah Khan of Daur Banu and Sher Mohammed Khan of Dera Ismail Khan who came to them for service."2 Similarly, from time to time hundreds of them were entertained on the recommendations of the Afghan chiefs like Pir Mohammed Khan and Shah Nawaz Khan.³ The Afghans were most in demand under Raja Lal Singh who tried to build up a strong Muslim force by way of a counter-poise against the turbulent Sikh soldiery. Besides, strong contingents of Afghans were maintained for the Government by the various Barakzai Sardars and several other Afghan feudatories Gul Mohammed Khan of Tonk.4

All the Muslims taken together in the irregular cavalry were 1029 out of 10,795 under Ranjit Singh and 2431 out of 19754 under Jawahar Singh. In the artillery they numbered more than 50% of the total strength. In the regular infantry they formed only a small minority. In the jagirdari force and garrisons their number was still less; the same was the case in the regular cavalry. All the same, the Muslims held a respectable position in the Sikh armed forces as some of them like Gen. Sultan Mohammad, Gen. Ilahi Baksh and Col. Amir Khan occupied key positions in the military service of the state and more than half of the batteries in the artillery were commanded by them.⁵

Europeans—Regarding the total number of Europeans in the army of the Sikhs, different estimates have been attempted by different writers. Smyth has estimated it at 39 and Cunningham

^{1.} For: Sec. Cons: 27th April, 1844 No. 17.

^{2. °} For: 1836 Pol. Cons: 15th Aug., 17. Lahore Intelligence, 2-8 July, 1836.

^{3.} For: 1836 Pol. Cons: Aug., 15, 17. Lahore Intelligence, 2-8 July, 1836.

^{4.} For: 1840 Sec. Cons: 2nd Nov., 91 and March 30, No. 55.

^{5.} News, p. 511; Shahamat, p. 6; For: 1844 Sec. Cons: 27th April, No. 17.

at 32¹, while there are estimates which put the number even above 50. Their nationalities were various which, along with the respective strength of each, are evident from the following table worked out by Smyth:²—

French	12	Prussian	1
Italian	4	Greek	2
Anglo-Indian	7	Scotch	1
English	3	American	3
German	3	Spaniard	2
		Russian	1

Total...39

It will be observed from the above statement that the Europeans constituted what may be called a motley or a heterogeneous body of officers. There was no feeling of unity among them. Major Pearse tells us that "the French and Italian Officers in Ranjit Singh's service held much aloof from those of the other nationalities and this must have contributed to the unfriendliness amongst them." Ranjit Singh himself once told Wade with reference to Oms, a Spaniard, that the French officers did not associate with him. Moreover, considerable jealousy divided them from the natives. Wade has thus explained it: "So long as the foreigners confined themselves to military duties, it was well and good, but as soon as they were given jagirs and they began to take part in civil administration, the Sardars became jealous of them."

Mixed and Pure Units—Having studied the class composition of the army as a whole, we now proceed to examine the class composition of individual battalions, batteries and other units. The general policy of Ranjit Singh in this connection, as he once told Capt. Wade⁶, was to prefer inter-mixing of diverse communities with a view to counter-acting any mutinous disposition on the part of

^{1.} K. D. R., Bundle, No. Aa 24 (ii) 1845-46.

^{2.} For: 1844 Sec. Cons: March 23, No. 522. Here is a return of Europeans and East Indians. Smyth, p. 36.

^{3.} Pearse, Appendix.

^{4.} For: Pol. Progs. 20th April 1827, 7; Wade to Metcalfe, 1st Aug., 1827 Cons: 12th Oct., 1827.

^{5.} For : Misc. Vol. I, No. 258. Wade to Hawkins, 25th Nov., 1830.

^{6.} Wade to Metcalfe, 1st Aug., 1827, Cons : 12th Oct., 1827.

troops. This was particularly true of the artillery and garrisons where considerations of security weighed more heavily than elsewhere. But even under Ranjit Singh there were several exceptions, so that pure units could be found practically in all branches of the army. The number of such units steadily went up in the closing years of the Maharaja's reign, more particularly in the period after his death as the strength of the Sikh component element gradually mounted to a predominent position in the army. As regards the jagirdari contingents, there was an element of mixture in them, too, but as a rule the jagirdars preferred men of their own caste and creed¹, so that their contingents came to consist of caste-brotherhoods.

Cunningham on Composition—A fair idea regarding the composition of the Khalsa army² in 1844 may be had from the following table prepared by Mr. Cunningham:

Silhe

Commandants of Corps

1. S Tei Singh

Description of Race of Men.

Guns-Sikhs and Muslims

1.	o. rej omgn	Sikns
2.	Gen.Partap Singh Pattiwa	la ,,
3.	Gen. Jawala Singh	Infantry—Sikhs;
		Artillery—Sikhs & Muslims
4.	Sh. Immamuddin	Muslims
5.	S. Lehna Singh Majithia	Infantry—Sikhs;
		Guns—chiefly Sikhs.
6.	Gen. Bishan Singh	Mohammadans, a few Sikhs
7.	Gen. Gulab Singh	Infantry-—Muslims;
	Pohvindia	Guns—Sikhs and Muslims.
8.	Gen. Mehtab Singh	Inf., chiefly Cavalry-mixed;
	Majithia	Artillery-Muslims & Sikhs
9.	Gen. Gurdit Singh	Infantry— chiefly Sikhs.
	Majithia	Guns—Sikhs & Muslims.
10.	Gen. Dhonkal Singh	Hindustanis, a few Sikhs.
11.	Col. Cortlandt.	Infantry—Sikhs & Hindus;
		Guns—Sikhs and Muslims.
12.	Sh. Ghulam Maheeuddin	Infantry—Sikhs;

^{1.} For: 1844 Sec. Cons: 27th April, 17—Cunningham' Report on the Sikh Army; J. I. H., Vol I, Parts I & II, 1921-22—Article by S. R. Kohli.

^{2.} Cunningham-Appendix XXXIX.

13.	Dewan Ajudhia Parshad	Infantry—Sikhs; Artillery—Sikhs & Muslims
14.	Gen. Gulab Singh	Till tiller y Similar C Ividailing
~	(deceased) (Calcuttawala)	Sikhs
15.	Dewan Jodha Ram	Sikhs, Muslims and Hillmen
16.	_	Sikhs and Muslims
17.	3	Infantry—Sikhs & Muslims;
	3-1	Artillery-chiefly Muslims
18.	Dewan Sawan Mal	Muslims and some Sikhs
19.	Raja Hira Singh	Muslims and some Sikhs
20.	Raja Gulab Singh	Hill men and some Muslims
21.	Raja Suchet Singh (decease	ed) —do—
22.	Capt. Kuldip Singh	do
23.	Comdt. Bhag Singh	Gurkhas
24.	Comdt. Shiv Parshad	Sikhs and Muslims
25.	Misar Lal Singh	do
26.		Muslims and Hindustanis
27.		Sikhs and Muslims
28.	S. Sham Singh Attariwala	—do—
29.	Mian Pirthi Singh	Chiefly Muslims
30.	Gen. Mewa Singh	Sikhs and Muslims
31.	Col. Amir Khan	Chiefly Muslims
32.	Comdt. Mazhar Ali	Muslims and Hindustanis
33.	Jawahar Mal Mistri	
	(Amritsar)	Muslims and a few Sikhs
34.	Comdt. Sukhu Singh	
	(Lahore)	Sikhs and some Hindustanis.

DISCIPLINE

Discipline is fundamental to any system of warfare. "Without discipline", writes Capt. Johnstone, "the tactics are bound to be fitful and desultory; no reliance can be placed upon a good method of fighting, unless the troops are under the control of their officers. A badly disciplined force, however great the capacity of its individuals may be, is apt to go to pieces and become a mob, the moment it experiences a reverse. Discipline enables the commander to be sure that his orders will be carried out even when the troops so ordered are not under his own eye. It should then be clearly understood that a mere

theory of tactics, however good, depends upon discipline for its effective application." Fully conscious of its importance, Ranjit Singh enforced a very strict system of discipline; but in this respect also as in many others his method was selective and not mechanical. His genius evolved a compromise between Indian and European ideas of discipline. Whereas he imposed the European type of discipline on his regular forces, he did not cut himself completely off from the institutions in vogue in the country and continued to follow the traditional methods in regard to the rest of his army.

In adopting the European mode of discipline the achievements of the Sikhs were creditable and have been held up to great admiration by two eminent military writers, Lord Gough and Burton.2 Col. there was no perfection, because the strict regard for orderliness which was shown on the parade ground was not always displayed on the battle field. This disparity between theory and practice has been brought out by some contemporaries who had a considerable personal experience of the written:3 "I think, Sikh service One of them has as do most others, that it (new discipline) is all fudge, well enough to look at and for display, but useless beyond this; the Sikhs have never used it yet and never will and if ever they are induced to charge, it will be in a tumultuary manner and the straight parade line system will be entirely forgotten They themselves say it will despised in the hour of action. do for parade but not for battle, you may therefore judge of what use all the drilling has been. But it has had one good effect, it has called attention to the state of the army, their arms and their physical appearance." An exactly similar view has been expressed by another contemporary, Roland Groves.4 General weakness of the men, which was once confessed by Ranjit Singh himself to Capt. Wade, was the temptation for loot in the course of a battle. The English version of the Maharaja's confession as reported by Sohan Lal, reads thus: "The system of the British is so good that even if the enemy threw gold coins

^{1.} A History of Tactics—p. 1. 2. The Sikhs and the Sikh Wars, p. 136; I & II Sikh Wars—Chapter II.

^{3.} Adventurer, p. 112. 4. Through the Sikh War, p. 1.

in the course of their fight, the soldiers would not even look at them. On the other hand, if the Khalsa soldiers saw mere corn, they would break their ranks, dash towards that and spoil the whole plan of operations."

Such weaknesses as were found in the Sikh system of discipline may be explained by the following factors: (i) Despite Ranjit Singh's best efforts, the Sikh chiefs continued to believe that the old desultory mode of warfare was the best method and they always decried the value of European discipline by describing the drill as the dance of dancing girls (Raqsi-Lulan)2. (ii) Most of the Sikh officers were illiterate and had rather poor personalities. "The Sikhs are brave," wrote Henty in 1845, "but they want good leaders and are not to be relied upon, unless under the officer they respect." Steinbach observed similarly: "They have no generals and no officers to speak of and when it came to fighting, they would be nothing better than a mob." As long as European officers were present, discipline was well maintained, but their strictness proved to be a cause of their expulsion from the service,4 for the soldiery as it gained in power after Ranjit Singh's death, became intolerant of their severe methods. The officers who replaced them were poor substitutes who found themselves unequal to the task of maintaining discipline. A contemporary has well said: "Having seen a good deal of their Sardars and Commandants, the only wonder to me is how they achieve such good stage effect on parade and how with so much want of regimental domestic economy, their platoons hold together for a day." (iii) The defective pay system of the Sikhs, with its differentiations in the pays of officers of the same rank and irregularity of disbursements, fomented mutinous spirit amongst the troops. It was for this reason that Ranjit Singh once had to tell Burnes that, "a disciplined army did not suit the manner of an Eastern Prince, for it could not be regularly paid and complained consequently of its duties."6 (iv) There

^{1.} Sohan Lal, Vol. III, Part II, p. 240.

^{2.} J. I. H., Parts I & II, 1921-22-Article by S. R. Kohlı.

^{3.} Through the Sikh War, pp. 111, 232; Seinbach, pp 94-106.

^{4.} Steinbach, p. 36; Through the Sikh War, p. 176.

^{5.} Adventurer, p. 119.

^{6.} Travels into Bokhara, Vol. I, p. 21.

was undue emphasis on levying fines by way of disciplinary action. Fine was a great source of income for the state and therefore, "crimes and trespasses as in the middle ages, were atoned for by money." Discipline was hampered by this in so far as it was no punishment for those who could afford to pay fines. (v) The bloodshed and violence exhibited in the several political revolutions which occurred in quick succession after the death of Ranjit Singh, was another potent cause of the laxity of discipline. In the words of Lord Hardinge, "the army was, during this period, in a successful state of mutiny,"2 and whatever discipline was maintained was due to its own efforts rather than to those of their Government. (vi) Capt. Orlich has attributed the weakness of the Sikh military discipline to yet another cause i. e. the adoption of both English and French training systems on account of which he says that "unity was wanting and discipline was defective in the Sikh army.."3

Code of Discipline—The Sikhs had no written military code containing regulations as to the amount and nature of punishment applicable to the various kinds of crimes.4 Every case was decided on its merit. The law applied was based on usage and custom prevalent in the country. following factors were usually taken into consideration while adjudicating :-

(i) Position or status of the culprit. (ii) Means of the culprit. (iii) Nature of the crime. (iv) Circumstances under which the crime was committed.

It may be noted that no communal considerations had any weight with the rulers. Their religious policy being one of toleration, no discrimination was ever made between one and another on grounds of religion.

Preventive Measures— Prevention is better than This is true not only of health but also of crime. That administration is the best in which there is the least Fully aware of this, Ranjit Singh infraction of rules. took every care to make such arrangements as would

Prinsep, p. 195.
 Panjab Papers, G G.'s Minute, dated 16th June, 1845, p. 1.
 Travels in India, Vol. I, p. 227.
 P. G. R.—Diary of Lt. Nucholson, dated 23rd March, 1848.

reduce the incidence of crime. In the first place, every unit was given an adequate establishment of officers to maintain discipline in its ranks. Secondly, the commanding officers of the various units were empowered to hear complaints, redress legitimate grievances and report the serious cases to the Darbar. At the Darbar there was an officer specially appointed for the purpose of receiving daily regimental reports from the unit commanders. So long as Raja Dhian Singh was in power, he discharged this function. After his death Raja Hira Singh, Mian Labh Singh and Uttar Singh Kalianwala, one after the other, held this office. Cases of an ordinary nature were disposed of by this officer, while the most important ones were dealt with by the Maharaja himself, (later on by the Wazir during the minority of Maharaja Duleep Singh). Thirdly, Ranjit Singh never let his feudatories remain absent for long. He consistently requisitioned their troops for service. By this means he was able not only to keep the chiefs under constant surveillance but also to have their forces in a state of fitness and efficiency ² An attempt was also made introduce an element of mixture in the composition of the units as from the point of view of discipline the presence of more than one community in a unit was thought to be a safeguard. is sometimes suggested that the common practice of keeping the troops in several months was intended arrears for as a sort of check upon them. But it is very doubtful, because in acutal practice it was injurious rather than conducive to discipline.3 In the period of disorderliness after Ranjit Singh's death another device was tried. Conferences of officers were frequently summoned and written agreements4 were secured from them to bind them morally to maintain discipline in the units. Besides, extensive use was made of the device of issuing repeated warning orders. Ranjit Singh never felt tired of repeating his orders against damage to crops, teasing of public and insubordination, and threatened severe punishments to the defaulters.5 One writer has made a pointed reference to yet

Shahamat Ali, p. 27.
 J. I. H., Vol. I, Part I & II, 1921-22—Article by S R Kohli.
 Monograph 18, p. 51.
 For: Misc. Vol. 349, p. 110; For: 1842 Sec. Cons. 22nd June, 34;
 For: 1840 Sec. Cons: 28th Dec., 103-105.
 Sohan Lal, Vol. III, Part I, pp. 104 & 129.

another precaution commonly used by Ranjit Singh. He has said: "Such is the temper of the Sikhs that cartridges are carefully taken away from the soldiers except in action or when used in practice. Even flints are removed from the muskets. I gather that otherwise there would be continual cases of men shooting each other or of actual units fighting amongst themselves."

It may be remembered that so long as Ranjit Singh was alive, the general state of discipline was quite satisfactory. There were certain cases of breach of discipline no doubt, but there was nothing abnormal about them. The awe of the Maharaja was such that soldiers were afraid of committing any crimes. But after his death the situation underwent a radical change and a general laxity swept over the country, with the result that the incidence of crime increased considerably.2

Punishment-Ranjit Singh never awarded death punishment, howsoever serious the crime.3 "The most creditable trait in Ranjit Singh's character," writes Burnes, "is his humanity; he has never been known to punish a criminal with death since his accession to power."4 Dr. Honigberger has reported the Maharaja's own words: "We punish but we will not take life." This was despite the fact that on many an occasion he was pressed hard by his European officers to award death punish-Allardwas severely reprimanded Once having executed some Musalmans. However, after his death this scruple was not always respected, so that we have several cases of hanging on record.5 When the British came into power after the First Sikh War, capital punishment was adopted as the extreme penalty to be inflicted in the most serious cases.6

^{1.} Monograph 18, p. 55.
2. "The soldiery are exceedingly apt in acquiring a knowledge of their military duties, but they are so averse to control that instances of insubordination are common, latterly indeed open mutiny has frequently characterised the relations of officers and soldiers." Steinbach, p. 94.
3. Even attempts on his own life were not capitally punished.—News,

p. 354.

^{4.} Burnes, Vol. III, p. 167. 5. For: 1841 Sec. Cons: 8th March, 82—Panjab intelligence, dated 8th Feb , 1841. 6. P. G.R Vol. IV, p. 406.

The popular forms of punishment prevalent in the Sikh army were as follows :-

- Dismissal or discharge. 1.
- 2. Degradation.
- Deduction of pay 3.
- Confiscation of jagirs
- Fines 5.
- Dalet or extra duty 6.
- 7. Amputation of limbs.
- Imprisonment. 8.
- Corporal punishment. 9.
- Warnings and reprimands. 10.
- 11. Apprehension of families.
- Disbandment. 12.
- Fancy punishments such as blackening the face of the 13. culprit and parading him round the town on a donkey, stamping and branding the forehead and banishment from his native town.
- Kathmarna (stocks) i.e. tying to a block of wood.

There were no fixed guiding principles as to where a particular form of punishment was to be applied, nor were there any regulations defining the amount of penalty to be inflicted for a particular offence. However, a few general observations may be made on the basis of the cases decided. Dismissal was resorted to in the most serious cases, usually such as long overstay of leave, absence from duty across the Indus, proved disloyalty, sedition and continued absence without leave. 1 Sometimes it was combined with other punishments like amputation. Disbandment was made use of in very rare cases. When there was a mutiny by some unit, the first effort generally was to catch hold of the rebels and imprison them. If they repented and asked for pardon, they were released, but in case they did not. they were dismissed and the unit wholly or in part as the case may be, was disbanded.2 The ring leaders of a mutiny always

General, p. 23.

2. For: 1843 Sec. Cons: 25th Jan., 28—Mention of disbandment of Gian Singh's Regiment for serious insubordination; For: 1845 Sec. Cons: 16th March. 40.

^{1.} Tarikh-i-Sikhan, Part I, pp. 525 & 532. Here is a mention of dismissal for not putting on the uniform. But this is an extreme case which led the victim to commit two murders out of revenge; News, p. 40; For Misc. Vol. 349, pp. 536 & 540; Panjab Papers—Lahore Resident to Governor

severer punishment than the rest. In the post-Ranjit Singh period when the whole army was in a state of rebellion, disbandment was not possible and some subtle methods like the enlistment of Muslims and hill people were devised to overawe the rebels, though the results were not very encouraging. Amputation or mutilation of limbs like hands, noses and ears was a penalty meant for grave offences. Usually, robberies, thefts, murders and moral offences like assaults on women were punished in this manner.1 Widest publicity was given, whenever it was desired to make a severe example of the culprit, as for example the murderer of the adjutant of a regiment was deprived of his hands in 1832 on the parade ground before the whole body of troops. But murder was not always punishable with amputation. Fine and imprisonment were more common punishments awarded in the case of murders. murderer was first imprisoned, then fined and was not released until the fine had been realised. The fine was not fixed according to the nature of the crime committed, but according to the length of the pocket of the culprit.2 The amount of the fine after its realisation was apportioned between the state and the family of the deceased.³ Fine was also levied for a great many other offences, like damage to crops and harassment of people. For instance, in 1840 one Allah Baksh was fined Rs. 1100 for damaging the crops. Imprisonment, one of the usual methods of punishment, was of two kinds, simple and hard. The former was merely placing men under arrest, but the latter was accompanied by hard labour and starvation, semi or full, and sometimes was a confinement for life.4 The latter was given to the most hardened criminals or political rivals who very often succumbed to death during the term of the imprisonment. This was the fate which Misar Beli Ram and Jawala Singh met in the period of Raja Hira Singh. Simple imprisonment

^{1.} Mohan Lal, p. 13; News, p. 290. Amputation was accompanied by parading on a donkey with face blackened and dismissal; For: 1841 Sec Cons: 30th Aug., 89. Murderers of Foulkes were maimed and dismissed; For: 1845 Sec. Progs. 4th April, 111. Amputation for a rape.

^{2.} Prinsep, p. 195

^{3.} For: 1838 Pol Progs., 17th Jan., 19—Jamadar Khushal Singh's son murdered one Bishan Singh. He was ordered to pay Rs. 1500 to the mother of the deceased and a handsome amount to the State.

^{4.} News, for an act of mutiny by a French regiment, (p. 661); also Panjab Akhbars (1839-1840), dated 27th Sept., 1839, p. 131.

was ordered for desertion and such other crimes, but was seldom continued for long, because it was ended as soon as a fine was settled and paid or a pardon was sought and given. Degradation or reduction in rank and pay was awarded to officers guilty of misconduct like oppressiveness, insubordination and negligence of duty. 1 For graver offences they could be dismissed. Deduction of pay was a sort of fine which was the most common penalty in the Sikh army. No pay was issued for the days of absence and for the period of overstay of leave. According to a regulation, when a soldier was absent in quarter, his pay was cut and when so on service, two days' pay for one of absence was deducted.² Deduction of pay was resorted to to punish negligence of duty, misbehaviour, non-cooperation in a battle, instigation to mutiny, insubordination of a less serious nature, rioting and fighting etc.3 As regards the amount of deduction, it was at the discretion of the supreme authority of the state. Though the deduction of one or two months' pay was the usual practice, cases involving heavier deductions were not unknown. The penalty of confiscation was applied generally to jagir-holders who included, interalia, big officers, chiefs, and ghorchurras.4 But we find that this penalty was used only as a last resort and for very serious cases of breach of discipline, such as false musters, shortfall in quotas and bad turn-out of troops, preference being given to other forms of punishment like fine, reprimand and imprisonment.⁵ The

^{1.} J.P.H.S., Vol. VI, No. 2, 1917, p. 154. Several officers degraded for refusal to obey the French Generals; Sohan Lal, Vol. III, Part III, p. 451.
2. Panjab Papers, p. 23.

^{3.} For: Misc. Vol. 349, p. 239 (deduction for desertion, p. 774, deduction for paemali, p. 590, for absence and coining without permission. In 1841 for rioting each sipahi was fined 2 months' pay, each Farrier, Havildar and Naik 21/2-months' and the Jamadar and the Subedar 3 months' and the higher officers were degraded to the lower rank; one year's pay deducted for rioting. News, fine of 2 months' pay for instigation to mutiny—P. 56.

For: Misc. Vol 349, p. 771.

⁴ For: Misc. Vol. 349, p. 557; Sohan Lal, Vol. III, Part V, p. 92. Jagirs of Gurmukh Singh Lamba, Mehtab Singh and Sobha Singh confiscated for not appearing at the court, for refusing to go to Ladakh and for coming after a long time re pectively.

For: 1840 Sec. Progs. 28th Sept., 76; For: 1842, Sec. Cons: 8th April, 37.

^{5.} News, p. 58—Uttar Singh Naherna fined Rs. 1,25,000 for his troops being below the standard, Jodh Singh Mokal fined for false muster and Gen. Kahn Singh fined 10,000 for allowing the son of Beli Ram to escape (For I Misc. Vol. 349, p. 20). Hari Singh Nalwa once fined 2 lacs for a discrepancy in his quota of troops.

use of cane was quite common in the Sikh army and corporal punishment was often made use of to correct the wrong-doers.1 But unjust beating by officers, if reported, was punished. For instance, in 1839 Capt. La Font was warned by Ranjit Singh not to beat his sepoys. Extra duty was a minor punishment which was in the daily routine of every unit. Apprehension of families was occasionally adopted to bring mutinous soldiers to a sense of duty and obedience—Raja Gulab particularly fond of it.2 The fancy punishments mentioned in the list given above were awarded generally for moral offences like minor thefts, where a public disgrace was considered an adequate punishment.3 Kathmarna or tying to a block of wood was reserved for extremely grave offences like rape, mutiny or abetment to mutiny.4 Reprimands and warnings were used in minor defaults like drinking and quarrelling or in the case of people for whom even this punishment was thought to be enough.⁵ The courtiers were held responsible for the good conduct of their sons and relatives in the service. They were warned and penalised if any one of their people went wrong.

Enforcement of discipline in the ranks was primarily the duty of the officers of the unit.⁶ They were empowered to

- 1. For: Misc. Vol. 349, p. 493. Each officer given 20 la hes by Raja Hira Singh for embezzlement of government property; News, p. 437; Burton—Chapter II—"the Commandant canes the Adjutant who in turn strikes the officers at the head of companies who again vent their ill humour on the non-commissioned officers and privates."
- 2. K. Sajun Lal, News letter No. 17 (orders for apprehending the families of mutinous soldiers mentioned here); For: 1839—Sec. Progs. 4th Sept., 189. Ranjit Singh threatened to apprehend the families of mutinous Najeebs—For: 1848 Sec. Progs.25th Nov., 209 (Abbot's remarks on Gulab Singh's army).
- 3. For: 1842 Sec. Cons: 30th March, 98-99. Some horsemen given this punishment for abusing Avitabile.
- 4. For: 1841 Sec. Cons: 1st Feb., 64 (Parading on a donkey with face blackened for plucking a sugarcane).
- 5. Warning to sipahis and officers (For: 1842 Sec. Cons: 9th July, 50-52 and 14th Sept., 44-45); reprimands for drinking and quarrelling (For: 1842 Sec. Progs. 8th June, 43), warning and a fine of Rs. 70,000 to Dewan Moti Ram (Dewan Amar Nath, p. 163 and Monograph 17, dated 4th Aug., 1817).
- 6. For: 1840 Sec. Cons: 14th Dec., 87; For: 1841 Sec. Cons: 18th Jan., 63. In 1827 Ranjit Singh told Dr. Murray that his officers had decided by a court martial that 2 months' pay should be cut from a certain corps guilty of mutinous acts—Murray to Wade, 4th Jan., 1827, Cons: 23rd Feb., 1827.

dispose of routine cases. The more serious cases had to be reported to the Darbar after careful investigation by them. Darbar had its own secret reporters in the units to supply information, so that nothing could be kept concealed. The provincial governors and other distant commanders of troops were given a greater amount of discretion in such in view of the difficult means of transport and communications in those days.1 But Ranjit Singh not only always insisted on receiving regular reports on disciplinary actions taken them, but also demanded that the worst offenders be sent any excesses Moreover, on their part punished with reprimands and transfers etc., as the case may be. Gen. Avitabile seems to have been made an exception, because he, as Governor of Peshawar, was given very wide powers of discretion.² The exception was necessary, because Peshawar was the most disturbed part of the Kingdom. Further, there was a kotwal attached to every unit, whose duty was to maintain discipline in its bazar. All culprits were apprehended and reported by him to the higher authorities. The reports from the troops stationed at the capital and in the mofussil areas were received by the Keeper of the Deorhi (the Wazir of the State).3 In the last years of Ranjit Singh's reign and after his death, this incumbent not only received the reports but also disposed of a great many of them. The final authority was the Maharaja himself or his Wazir in case he happened to be a minor like Duleep Singh. So long as the Government was strong enough, the ultimate decision depended entirely upon the ruler's discretion, but when it grew weak as under Raja Hira Singh and Jawahar Singh, a few generals and colonels were associated in the task of deciding cases of indiscipline.4

The feudatories were dealt directly by the Maharaja or the head of the state. Ranjit Singh always enforced strict musters and severely punished the defaulters. After him, however, the chiefs, taking advantage of the prevailing

^{1.} Sohan Lal, Vol. III, Part II, p. 133. A mischief-monger dismissed by the Kiladar of Kangra. Similarly, the Governors of Multan, Kashmir, and Peshawar enjoyed large powers of discipline. News, pp. 212 & 403.

^{2.} One sepoy thrown from a rock and another stoned to death for rape. (Panjab Akhbars, p. 239)

^{3.} Shahamat, p. 27.

^{4.} For : Misc. Vol. 349, p. 699.

anarchy, ceased to bother about their military obligations. Maintenance of discipline in the ranks of the jagirdari troops was an internal matter of the chiefs and if any complaints came to the Darbar, they were usually referred to them for disposal. But if any one of them did not act properly by his troops, the Darbar had the right to intervene and set matters right. The troops had the right of approach and complaint to the Maharaja against their chiefs.

Panchayats—In the post-Ranjit Singh period, discipline was enforced by the army panchayats. As explained earlier in Chapter II, they sprang up automatically during the period of the general mutiny of 1841^2 on the pattern of the village panchayats with which the Sikh soldiery had been fully familiar.³ Their role and the extent to which they succeeded in maintaining discipline have already been discussed in Chapter II. Here it is proposed to analyse their constitution only.

The panchayats were elected at the rate of 2 panches per company. Smyth makes a distinction between the two representatives and says that only one of them possessed power and influence, the other styled 'Kurr Punch' being merely the tool or assistant of the first one.4 But this view is hardly to be accepted as correct, opposed as it is to the very fundamentals and traditions of the Sikh religion. The company representatives had no independent position but existed only as part and parcel of the regimental committees.⁵ Every derah of artillery and irregular cavalry, like every battalion and regiment of regular infantry and cavalry, had a committee of its own. All these committees were subject to the control of their electors.6 The regimental committees held their meetings frequently. The army being divided into brigades, there were very often meetings of the panchayats at the brigade level.7 On the most important occasions general meetings of all the panchayats

- 1. News. (1839-40), pp. 344, 410 & 465.
- 2. Smyth, p. 87.
- 3. For: 1845 Sec. Progs. 20th June, 33. Broadfoot to Currie, 27th March, 1845.
 - 4. Smyth, p. 87.
 - 5. Career of Broadfoot, p. 223; For: 1845 Sec. Cons: 4th April, 102.
 - 6. For: 1845 Sec. Cons: 4th April, 102.
- 7. For: 1845 Sec. Progs. 20th June, 67. Broadfoot to Currie, 28th May, 1845.

were convened, as for example, when the deposition of Jawahar Singh or later when the issue of war with the British was to be discussed. There were also elected magistrates who helped the panchayats to enforce discipline among the troops. Mr. Broadfoot, giving a detailed description of them, has said: "The troops have now, in addition to their Panchayats, Magistrates elected by themselves, called Chaudharies of whom each company has two. The Panchayats attend the Darbar but can do nothing till the approval of the Chaudharies has been obtained. These officers are usually private soldiers, independent of the Government and unknown to it, enquire about them is considered an intrusion." Chaudharies palyed a very useful part in punishing the excesses committed by the troops, for Major Broadfoot hastens to add: "The Chaudharies, however, have for sometime declared the excesses of the army must be repressed and they have made an example: 6 soldiers seized and violated the female child of a Khatri of Lahore. The whole family lost caste, a thing which more than other affects the native mind. The Darbar and magistrates did not dare to interfere, but the Chaudharies, with the consent of the troops, sent two of the men to the Darbar with an intimation that the troops permitted them to be punished according to law, which was done accordingly, the men having each a hand and a nose cut off on the spot. The Panchayats were then dismissed with many praises of the justice of the troops."

The officers generally did not have "a voice in the debates or at all events not a vote" in the meetings of the panchayats, and were mere instruments of the troops. The panchayats only left the military duties of the regiments to their officers, themselves keeping their "relations with the state and the duties as a component portion of the Khalsa". To be more precise, they were concerned "with all important questions such as what pay they should demand, where they would serve, what officers they would obey. Later on they practically decided questions of Government policy and appointed

^{1.} For: 1845 Sec. Progs. 4th April, 111. Broadfoot to Currie, Jan., 26, 1845.

^{2.} For - 1841 Sec. Cons: 7th June, 64-65. Broadfoot's report, dated 3rd May, 1841.

or dismissed those called by courtesy their rulers." though sovereign in the real sense, they used "the words of subordinates" and at the time of the First War with the British, being fully alive to the unsuitability of democratic methods to operations, laid aside their assumed control, "formally accepting the purely military organisation for purely military purposes."3

Foreign Influence--At his Ropar meeting with Lord Bentinck, Ranjit Singh was deeply impressed with the high tone of discipline in the ranks of the British army. To have a similar discipline in his own army, he asked for and acquired a copy of the English Military Code in 1834, a Persian abstract of which is still preserved in the Records of the Khalsa Darbar. He took keen interest, particularly in the court-martial system of the But whether or not he adopted any part of it is not His interest was equally keen in the abolition of corporal punishment by the British, but this interest was motivated by his curiosity as to how discipline was possible without the aid of this punishment rather than by any desire on his part to follow suit. There was a regular correspondence between him and the British Government on this point⁵, but we do not find any reference to show that the Maharaja ever followed the example of the British in regard to this matter.

MORALE

Commenting on Ranjit Singh's morale, Griffin writes:6 "Ranjit Singh, although short of stature and disfigured by that cruel disease.....was the beau ideal of a soldier, strong, spare, active, courageous and enduring. An excellent horseman he would remain the whole day in the saddle without showing any sign of fatigue". Orlich corroborates this view by saying that "in battle he was always seen at the head of his troops and foremost in combat. He twice crossed the Indus

^{1.} For: 1844 Sec. Cons: 23rd March, 505. Richmond to Thomson,

October, 6, 1843.
2. For: 1845 Sec. Progs. 20th June, 33. Broadfoot to Currie, 27th March, 1845.

^{3.} Sikhs and Sikh Wars, p. 66.

^{4.} Cunningham, p. 195.
5. P. G. R. Press lists, 118/20, 18th May, 1835; For: 1835 Pol. Progs. 18th May, 55. Ranjit Singh to Lala Kishan Chand, Agent at Ludhiana.
6. Ranjit Singh, p. 90.

with his cavalry in the very face of the enemy and gained the victory. In energy of will, endurance and craftiness, he was unequalled by any of his people." He was a model of high morale. When in 1807 immediately after the conquest of Kasur he ordered his army to march upon Multan, there was some hesitation on account of fatigue, but he braced up his men by saying: "Affairs of the state do not admit of comfort and lassitude. The ruler can be only he who is ever up and doing. Hence it is only fit for the troops to imitate their ruler day and night in assiduity and self-sacrifice."

If the Maharaja was like this, his troops were no less conspicuous in hardihood, self-confidence and personal courage. Capt. Burnes has thus described them: "There are few Asiatics more brave than the Sikhs. They are individually brave and will attack a tiger or a lion on foot with a sword. Their physical powers surpass much those of the natives of Hindustan and from early life, they are trained up in every manly exercise that becomes a soldier."3 Charles Masson is equally appreciative: "As men, physically speaking, the natives of the Panjab are superior to those of Hindustan proper. Their limbs are muscular and well-proportioned and they have a stoutness of leg and calf, seldom seen in the Hindustani. As soldiers, they are extremely patient of fatigue and capable of making prodigious marches with apparent ease".4 Ranjit Singh himself once boastfully told Burnes that "he owed all his success to the bravery of his nation who were very free from prejudice, would carry 8 days' provisions on their backs, dig a well if water was scarce, build a fort if circumstances required it, a kind service which he could not prevail on the natives of Hindustan to perform."5 The secret of the excellent physique of the Sikhs lay in the fact that they were agriculturists and as such fully accustomed to a life of hardship and endurance. They despised luxury of diet and dress and prided themselves on their coarse fare and simple clothes.

^{1.} Orlich, p. 171.

^{2.} Kanahya Lal, p. 160.

^{3.} For : Misc. Vol. 269, p. 177, Burnes' Memorandum.

^{4.} Masson, Vol. I, 433 Burton refers to the byword current in the country that Panjabis have iron legs. —Chapter II.

^{5.} Burnes, Vol. III, p. 163.

Added to their physical qualities were their religious enthusiasm and self-confidence.¹ They were not mercenaries but devotees of a faith² which was still an active and living principle, in fact more living than it had ever been. It was the hour of their triumph and a crusading spirit pervaded the whole Khalsa. Every Sikh believed in a great future in which the Khalsa was to achieve still greater triumphs.³ Cunningham who was deeply impressed by the morale of the Sikhs and who considered them to be superior to the Marathas, the Rajputs and the Pathans, attributes the excellence of the Sikh soldier to, besides his hardihood of character, "that spirit of adaptation which distinguishes every new people and to that feeling of a common interest and destiny implanted in him by his great teachers."

The morale of the Sikhs was put to the severest test in the two Anglo-Sikh Wars. These wars were fought under most difficult and unfavourable circumstances. The soldiers were in arrears of pay, there were no proper arrangements for supplies, their Government was interested in their destruction rather than in their victory and above all, the leaders under whom they were called upon to fight were incompetent, uninspiring and secretly in league with the enemy.⁵ But notwithstanding all this, they fought in a spirit which drew applause even from their foes.6 The non-Sikhs did not lag behind the Sikhs, for according to Henry Lawrence, "the Hindustani Mohammadans and the Poorbias generally in no way fell short of their Sikh companions in opposition to us."7 But while one single dogged determination filled the bosom of each soldier, was indeed unfortunate that leaders were not worthy of the men, that Tej Singh was faint-hearted and Lal Singh incompe-

- 1. For: 1844 Sec. Progs. 23rd March, 80; Cavalry Officer, p. 79.
- 2. Orme, History of Industan, Vol. I, p. 49.
- 3. J.P.U.H.S., Vol V, April 1938, p 38.
- 4. Cunningham, p 153.
- 5. Pearse, pp. 265 & 271.
- 6. A glowing tribute is paid by the British C-in-C who led the British forces against them: "Policy prevented my publically recording my sentiments of the splendid gallantry of a fallen foe, and I declare were it not from a conviction that my country's good required sacrifice, I could have wept to have witnessed the fearful slaughter of so devoted a body." Sikhs and Sikh Wars, p. 138.
 - 7. For: 1846 Sec. Progs. 26th Dec., 799.

tent and only half-trusted." They were the first to flee from the battle-fields, thereby setting a bad example for their men.

The Sikhs were defeated in the War of 1845-46, but their morale could not be crushed, for Col. Malleson says: "Though the Sikh army had been decisively beaten at Sobraon, the Sikh people had never felt themselves subdued. On the very morrow of the great defeat, the soldiers and the classes from whom the soldiers were enlisted, had recognised that they had been betrayed, that they and their country had been sacrificed to the chiefs who are reaping the reward of their combined cowardice and treason."2 The Second Sikh War was actually the outcome of the fact that the Sikhs' sense of self-respect and patriotism could not tolerate the yoke of British rule in the Panjab. The morale during the Second Sikh War was equally high, rather higher, because the chiefs now were quite sincere in their opposition. In the words of Sir Henry Durand, "they fought desperately and unyieldingly and as they had never given, seemed never to expect quarter in the battle field."3 As in the First War, so in the Second they were defeated, but even "in the hour of surrender as in the hour of battle they approved themselves a worthy foe", says Sir Campbell."4

LEAVE RULES

It was customary⁵ with the Sikh rulers to grant general leave for two months during the rainy season. This was perhaps the best period for leave, because due to rains and floods in rivers, troop movements were difficult and no expeditions could be undertaken. It was also customary to send whole regiments on furlough, though sometimes exceptions were made, as for instance in 1817 the adjutant of the battalion of Dhonkal Singh was ordered to grant 2 months' leave at a time to five men from each company.⁶ All the troops could not be granted leave at the same time, but a large majority were.

- 1. Sikhs and Sikh Wars, p. 138.; Pearse, p. 265.
- 2. Malleson, p. 379.
- 3. Life of Sir Durand, Vol. I, p. 110.
- 4. Sikhs and Sikh Wars, p. 249.
- 5. Lahore Political Diaries, 1847, Vol. III, p.140.
- 6. Monograph 17-1817 (10), dated 22nd July, Lahore.

Those who were kept back were granted leave either the same year during winter or the following year. In special circumstances leave could be either put off to the next year or reduced or granted on the specific condition that the men would come back when summoned.1 There was also a provision for casual leave on special grounds.2 But that was deducted from the following year's general leave. There were no definite rules in regard to the leave of the foreign officers. They could easily get casual leave, if they insisted, as Gen. Ventura got it on the occasion of his marriage. But as a rule, they were not granted leave to go home on account of, firstly, the length of the period involved and secondly, the uncertainty of their return from leave. Exceptions were, however, made in the cases of Ventura and Allard.³ But here, too, certain conditions were imposed. For example in 1834 Allard was told by Ranjit Singh that "he might take 2 years' leave to visit his home, provided that he left his family behind in his house near Anarkali and at the same time gave an engagement in writing that if he failed to return after the expiration of leave, he would be guilty of an offence, and that he would then be given Rs. 2,000 worth of pashmina and leave to depart."4

Unlike the custom of the Mughals, the Marathas and Afghans, leave in the Sikh service was paid.⁵ idea was perhaps borrowed by Ranjit Singh from the English.

The procedure followed in regard to grant of leave was broadly speaking this: When the leave season arrived, orders were issued to the various commanders to this effect. In case there was delay, the commanders themselves could personally approach or submit petitions to the Darbar for this purpose. Next step was the disbursement of pay. The troops, long in arrears as they used to be, had to be paid before proceeding on furlough. This was the reason why generally there was

^{1.} News, p.287. Annual leave refused to the battalians of Dhonkal Singh and Najaf Khan.

This order was later on modified at the request of Ventura, and soldiers of the nearby villages were granted leave, the order remaining unaltered in the case of others.

^{2.} For example, Mian Singh and Hira Singh Commandants granted leave for 10 days—Monograph 17—1815 (21) 18th Sept., Lahore.

3. P.G.R., Press lists 117/63, 2nd Dec., 1834; For: 1841 Sec. Cons:

⁸th March, 82.

^{4.} For: 1834 Sec. Cons: 26th Aug., 3.

^{5.} Adventurer, p. 120.

some delay in the grant of annual leave. The third step in the procedure was the withdrawal of arms and accoutrements which were deposited in the Government magazines from where they were reissued on the return of the men from furlough.

To ensure that the men would return in time from leave some precautions were taken. The first was a general warning that "they must in their own interest stick to their promises." Another precaution was the withholding of a part of the pay due till after the expiry of leave. Further, nominal rolls of those granted leave were prepared and preserved in the Government office as well as the unit offices, with a view to being able to recall them from leave, if and when necessary.

However, it may be noted that these rules were not strictly observed during the post-Ranjit Singh period of anarchy. Times were such that troops were often forced to go on leave as their presence was a source of menace to the Government. Again, quite frequently, instead of depositing their arms in Government magazines, the men carried them to their homes along with them or deposited them in their own unit magazines in the custody of their own men. Moreover, the regimental panchayats gradually assumed more and more control over the administration of leave, because we find Broadfoot reporting to his Government in 1845 as: "Men go to their homes in communication with the Chaudharies of their companies, their officers are not even informed of it."

^{1.} Monograph 17, 1817 (10) 22nd July, Lahore.

^{2.} Neus, p. 251.

^{3.} News, pp. 415, 449 & 462.

^{4.} For: 1845 Sec. Progs. 4th April, 111—Broadfoot to Currie, January 26, 1845.

CHAPTER V

PAY AND ALLOWANCES, HONOURS AND REWARDS, PROMOTIONS AND WELFARE.

The present chapter will be concerned with a few other administrative aspects of the Sikh army, such as pay and allowances, honours and rewards, promotions and welfare.

PAY AND ALLOWANCES

Modes of Payment—As pointed out earlier in Chapter II, there were two modes of payment in vogue during the Sikh rule: (i) assignment of land, (ii) cash payment. The soldiers paid by the former mode were known as jagirdars, while those paid by the latter were called naqdidars. But this division was not rigid, because there were a large number of men, both amongst officers and ghorchurras, who received their payment partly in cash and partly in jagirs.¹

The method of assignment of land was looked upon with special favour. A jagir was considered more lucrative than a fixed cash salary. Moreover, a man with land enjoyed much greater respectability in the society of those days than a landless person.

There were three forms of the mode of cash payment2: Mahdari, Fasalandari and Rozinadari. Of these the most prevalent in the Sikh period was the Mahdari system. It was a system of pay calculated on the monthly basis, though it did not necessarily mean that disbursements were regularly every month. It was not altogether unknown to before Ranjit Singh; both the Marathas and India the Mughals were aware of it and more or less used it in their

^{1.} For: Misc. Vol. 349, p. 362.

^{2.} Though the usual form of Naqad payment was in coin, yet sometimes shawls or pashmina were given away instead of coins—News, p. 67. In one of his talks with Capt. Burnes Ranjit Singh once said: "How do you think I dispose of the shawls and productions of Kashmir. I pay my officers and troops with them and as I give a chief who may be entitled to a balance of Rs. 300, shawls to the value of Rs. 500, he is well pleased and the state is benefited"—Burnes, Vol. III, p. 163.

armies. Ranjit Singh's contribution lies in that he popularised it extensively in his army.

The Fasalandari system differed from the Mahdari system in so far as under it payment was calculated not on the basis of a calender month, but on the basis of crop periods of six months each and disbursed twice a year at the harvest time. The payments were known as Rabi and Kharif after the names of the two harvests. This was a continuation of an eighteenth century practice in which the chief received his revenues in kind, and for the sake of his convenience paid his troops in grain at the harvest time. This system remained in vogue so long as the Sikhs could not be changed over to the Mahdari system. regards the Rozmadari system, it was used but sparingly. Rozina or Yomiah means daily allowance, Roz or Yom meaning a day. Under this system the pay was fixed per day, though, as in the case of the Mahdari system, it was not essential that the payment should be made every day. This system was generally applied to foreigners in the probationary period of their employment, and to some of the ghorchurra leaders like Akali Phula Singh and Sabat Khan Afghan.1

Time of Payment—There was no strict regularity or punctuality observed in the matter of payment.2 Pay was seldom issued before the troops were many months in arrears. One writer has observed: "Pay is always 4, 5 or 6 months arrears, sometimes a year or 14 months, particularly the case of cavalry."3 This is corroborated by Henry Lawrence who says that "5, 6 or 9 months' pay were due to Sikh troops in their most palmy days."4 This practice of keeping the army in arrears was not, however, due to any financial difficulties, because under Ranjit Singh when the treasury was full, it was more widely practised than under his successors when financial position was gradually deteriorating. The practice had long been known in India and had been followed by the Mughals as well as the Marathas.

^{1.} Monograph 17—1814 (27) 15th Sept., Lahore & 1815 (3) 3rd March, Lahore; Tarikh-i-Sikhan, Patt 1, p.368—Col Sant Singh's Yomiah is mentioned as Rs. 40/--

^{2.} Adventurer, p. 19. Although this was the normal practice, every care was taken to pay the troops regularly at the time of active service.

^{3.} Monograph 18, p. 51.

^{4.} For: 1846 Sec. Progs., 26th Dec., 940.

deliberately adopted by the Sikhs as a matter of policy. There were at that time thousands of soldiers of fortune or mercenaries1 ever ready to transfer their services to any one who promised to pay them a little more handsomely. It was necessary, therefore, that if these men were to be taken into service, a device might be found whereby they could be made to feel that they had some stake in the service. The arrears system was regarded as a useful check on desertions to which such people had been long accustomed.2

Notwithstanding the system of arrears, payments were made, more or less regularly, after every two months. The following schedule was observed by the Government in regard to the disbursement of the salaries of their troops.3 The combined salaries for the months of:

- Baisakh to Sawan (May-August) were paid in (i) Asuj-Katik (Oct.—Nov.).
- Bhadon to Asuj (Sept. to Oct.) in Poh-Magh (ii) (January-February).
- (iii) Katik to Maghar (November to December) Baisakh-Jeth (May-June).
- (iv) Poh to Magh (January to February) in Har (July-August).
- (v) Phalgun to Chet (March-April) in Sawan-Bhadon (August-September).

Salary Rates-Many contemporary authorities affirm that the troops of the Sikh army were liberally paid-much better than those of the East India Company.4 One of them who served under Ranjit Singh writes: "The old lion was one of the most liberal paymasters; and although one spends money freely out here, I took care to transmit a considerable portion of the presents I received and the money I earned to a firm who act as my agents in Calcutta, so as to be in safety if at any time I had to make a bolt of it."5

Skinner, p. 88.
 Even in the ranks of the English Company, troops were generally 2 months in arrears, occasionally even 4 months. Murray to Wade, 4th

Jan., 1827 Cons: 23rd Feb, 1827.
3. This schedule has been prepared after a careful examination of the pay rolls and other papers extending over a period of nearly 35 years of the Sikh Government.

^{4.} Orlich, p. 227; Gordon, p. 101. 5. Through the Sikh War, p. 16.

Manifela Dadas

But though the rates were so liberal, there were no hard and fast scales of pay in vogue in the army. Different rates were paid to officers of the same rank and sometimes the seniors received even lower pay than their juniors. Particularly, there was a marked difference between the salaries of the native and foreign officers. But broadly, the emoluments of the several ranks varied within certain limits. A careful examination of their pay rolls for a period extending nearly over 20 years, gives us the following pay schedules as obtaining in reign of Ranjit Singh. In the post-Ranjit Singh period, the rates of pay were much higher, indeed abnormal.

Regular Infantry and Artillery²

Combatanta

Monthly Rates—	Come	batants	
General ³	Rs.400	to 500	Colonel —Rs. 225 to 240
Commandant	Rs. 60	to 150	Adjutant —Rs. 30 ,, 60
Mahzor (Major)—Rs. 21	,, 26	Subedar — Rs. 20 ,, 32
Jamadar	—Rs. 15	,, 27	Havildar —Rs. 12 ,, 15
Sergeant (Sarjan)—Rs. 8	to 12	Naik —Rs. 8 to 12
Sepoy	Rs. 7	to Rs. 8	3/8/-Phuriya—Rs. 7/8/- 10
Drum Majorab	out Rs. 16	Bansri-	Nawaz or Drummer.
			Rs. 8 to 10.
Establishment—			
Granthi	—Rs. 13	to 15	Sarban —Rs. 4 to 5
Granthi Mutsaddi	—Rs. 13 —Rs. 30		Sarban —Rs. 4 to 5 Langri —Rs. 4 to 5
		to 50	
Mutsaddi	—Rs. 30	to 50 to 5	Langri —Rs. 4 to 5
Mutsaddi Ghariali	—Rs. 30 —Rs. 4	to 50 to 5 to 5	Langri —Rs. 4 to 5 Beldar —Rs. 5 to 6
Mutsaddi Ghariali Jhanda-bardar	—Rs. 30 —Rs. 4 —Rs. 4	to 50 to 5 to 5 to 5	Langri —Rs. 4 to 5 Beldar —Rs. 5 to 6 Harkarah—Rs. 5 to 6

^{1.} For: 1847 Sec. Progs. 31st Dec., 326.

^{2.} Catalogue, Vol. I, Part IV, pp. 153 to 158; Political Diary of Major G. Lawrence, pp. 332-333, Vol. IV.

^{3.} After increases sanctioned in the period of anarchy, the pay of the different Generals stood as follows:—Gen Gulab Singh, Gen. Kahan Singh Man, Gen. Mehtab Singh Majithia, Gen. Sultan Mohmud and Gen. Ilahi Bux, each Rs. 10,000 a year; while Gen. Bishan Singh, Gen. Gulab Singh Bhagowal and Gen. Megh Raj Rs. 6, 120, 6000 and 4000 respectively. For: 1846, Sec. Progs. 26th Dec., 1327.

Cavalry (Regular and Irregular)

In the regular cavalry the rates were much higher except those of the establishment which were the same as in the regular infantry. There were variations here as well. The rates were approximately as follows:-

-Rs. 300 Risaldar -Rs. 40 Naik Colonel ---Rs. 29 Commandant—Rs. 150 Jamadar—Rs. 35 Trumpeter—Rs. 25 -Rs. 75 Havildar-Rs. 30 Granthi -Rs. 15 Adjutant -Rs. 35 Ensign -Rs. 35 Mutsaddi -Rs. 30 Major Sawar¹ -Rs. 20 to Rs. 26 per month.

The sawars of the irregular cavalry were paid, according to Broadfoot, at rates varying from Rs. 15 to Rs. 30 a month.2 Mc Gregor would have us believe that the variations were even wider, for according to him, "the Ghorchurras received the pay at various rates from Rs. 250 annually to Rs. 2,000, the officers receiving very much less in many instances than the men."3

Garrisons—The pay of the garrison troops was the lowest in the whole army. As in the case of other branches, there were wide variations in the rates of pay which ranged between Rs. 3 and Rs. 8 a month. Lieut Nicholson⁴ mentions the following rates of pay for Kardar Ram Rakha's troops and some garrisons:

Kardar's Troops-Sawar-Rs. 10; Sepoy-Rs. 3 -Rs. 10; Sepoy-Rs. 3/4/-. Garrison—Jamadar

Another source⁵ gives us the pay of a sepoy in the Govindgarh Fort as Rs. 4 per month. Sometimes, as an exception rather than a rule, the garrison pay was on par with the pay of other troops. For example, according to Melville, the rates at Baramulla were6: sepoy in the fort Rs. 8/-; sepoy in the cantt: Rs. 6; a camp follower Rs. 4/8/-

Jagirdari Troops—There was no remarkable disparity between the rates of pay of the jagirdari troops and those of

For: 1846 Sec Progs. 26th Dec., 1327; Murray to Wade, 16th Jan., 1827; Cons: 16th March, 1827.
 For: 1845 Sec. Progs. 4th April, 58.
 For: 1846 Sec. Progs. 26th Dec., 931; Mc Gregor to H.

- 1. Italy Sec. Progs. 20th Bec., 931; Nat Gregor to It.

 Lawrence, 24th May, 1846.
 4. Diary of Nicholson, dated 14th March & 18th Oct., 1847.
 5. P.G.R., Vol. III, p. 178; For: 1847 Sec. Progs. 31st July, 142

 This rate was raised to Rs 7/- during the anarchy period, but after the First Sikh War, it was reduced to Rs. 4 again—the rate under Ranjit Singh.

 6. PGR, Vol. IV, Melville's Diary, 15th July, 1847.

the state army, except in the case of hill troops whose rates of pay were fixed much lower.1 For instance, the hillmen of Raja Gulab Singh's contingent were paid at the rate of Rs. 2/- per month per head in addition to the ration which consisted of "1 seer atta, 2 chhatak dal, 4 pice weight of ghee and 1 pice weight of salt per diem"2 Calculating the ration in terms of money, the total monthly pay of a hillman did not exceed Rs.4/to Rs. 5/-. This rate of pay being obviously small, the troops were generally discontented. Aware of this, Raja Gulab Singh used to have a security for every soldier in his service, having possession of his wife and family.3 The non-hillmen in the service of Raja Gulab Singh were slightly better, for their pay as remarked by Iwala Sahai in one of his interviews with Henry Lawrence, was Rs. 6/-. It was left to their option whether to receive the whole amount in cash or Rs. 4/- in cash and the balance in food.4 It may be noted that hillmen in the state army also did not get as much as their colleagues from the plains. Their maximum pay in 1842 was Rs.6/- as compared with Rs. 9/- of others.5

Foreign Officers—The monthly salaries of foreign officers of the Lahore Darbar stood as follows in 1843, according to a return submitted by Cunningham to his Government:—6

Gen. Ventura	—Rs. 3,000	Col. Steinback	h—Rs.	700
Gen. Avitabile	—Rs. 5,000	G. Ramsay	-Rs.	30
Gen. Court	—Rs. 2,750	Jacob	Rs.	45
Dr. Honigberger	—Rs. 750	Mouton	Rs.	700

^{1.} For comparison's sake the rates paid in one of Hari Singh Nalwa's regiment may be mentioned here: Commandant Rs. 100/-; Adjutant Rs 60/-; Naik Rs. 9; Major Rs.15/-, Subedar Rs. 21; Jamadar Rs. 15; Havildar Rs. 11; Nishanchi Rs. 12; Tamburchi Rs. 8/8-; Sepoy Rs. 7; Granthi Rs. 15; Mutsaddi Rs. 15; Mistri Rs. 7/8-; Beldar Rs. 6; Khalasi Rs. 5; Jhandabardar Rs. 4; Gharyali Rs. 5-4-; Harkara Rs. 4; Sarban Rs. 5; Saqqa Rs. 4; Langri Rs. 4 per month. I.H.R.C. Progs. Vol. XXXI, Part II, Jan, 1955. Article by S.R. Kohli, based on original records.

^{2. &}amp; 4 For 1846 Sec. Progs. 26th Dec., 1111. Questions put by Col. Lawrence to Dewan Jwala Sahai, Minister of Raja Gulab Singh.

^{3.} For: 1848 Sec. Progs., 25th Nov, 209; Abbot's remarks on Raja Gulab Singh's army.

^{5.} For: 1842 Sec. Cons: 30th March, 98-99.

^{6.} For: 1844 Sec. Cons. 23rd March, 522. Return of Europeans and East Indians in the employ of the Lahore State by Cunningham, dated 1st Oct,. 1843.

John Holmes	-Rs. 460	Col. Cortland	dt —Rs.	700
Lawrence	—Rs. 30	Brown	— R s.	300
Gordon	—Rs. 150	La Font	—Rs.	800
Gould	Rs. 300	Keny	Rs.	350
Gillot	—Rs. 250	Alexander	-Rs.	90
H. Defossieus	-Rs. 300	Harban	—Rs.	500
Argood	—Rs. 350	Harvey	-Rs.	400

In addition to his salary, Gen. Ventura was given a jagir for his daughter.

Ranjit Singh has often been accused of being partial towards his foreign officers. But a careful survey of the total emoluments of the Maharaja's Indian chiefs will demolish this assumption. Each one of his principal chiefs such as Dewan Mohkam Chand, Misar Dewan Chand, Hari Singh Nalwa, the Dogra Rajas, Jamadar Khushal Singh, the Sandhanwalias and the Majithias etc. possessed an amount of wealth running into lakhs. For example, the wealth of Misar Dewan Chand after his death was estimated at 11 lakhs cash, 10 necklaces of pearls, 2 lakhs worth of ornaments and 4 or 5 lakhs worth of sundry goods. 20 or 30 lakhs was the minimum estimate, according to Henry Lawrence, of the wealth of any one of the Darbar officials in 1846.2 This may be explained by the fact that though the cash salaries of the native chiefs were smaller than those of their European counter-parts, they were granted vast jagirs and frequent rewards by the State.3

Deductions—Deductions in the Sikh army were called Kussarat or Kattyanee. As Shahamat Ali writes, "a great many deductions are made from the pay of the troops which reduce the actual expenditure considerably." These deductions amounted to 2 to 3 months' pay, so that, as remarked by a contemporary writer, the army got only about 10 months' pay in a year. All these deductions continued to

^{1.} News, p. 308. The value of the jagir of Misar Dewan Chand was Rs. 1,05,000/-; News, p. 362.

^{2.} For: 1846 Sec. Progs. 26th Dec., 1008. H. Lawrence to Currie, 8th Aug., 1846. Sheikh Imam-ud-din's wealth estimated at between Rs. 70 lakhs and 2 crores.

^{3.} Shahamat, pp. 45 & 103-106.

^{4.} Shahamat, p. 23.

^{5.} Monog raph 18, p. 51.

be charged until they were abolished by Henry Lawrence in 1848.1

There were two kinds of deductions in vogue in the Sikh army—(i) ordinary, (ii) extraordinary.

Ordinary Deductions — They may be sub-divided into two categories, (i) deductions in the irregular cavalry and (ii) deductions in the rest of the army.

Deductions in the Irregular Cavalry—The following list of deductions was compiled by Major Mc Gregor. Most of these charges were "antiquated and traceable to the old feudal days":—

- 1. Kussoor—A deduction from the pay of each sawar of Rs. 4/- to Rs. 7/- annually—an old established practice.
- 2. Kati Amul³ ——do——
- 3. Gerd Nuhwah—A fine of Rs. 5, 6 or 7 originally enforced on each Rs. 100 of pay from those sawars who went to their homes without leave when stationed at Lahore, having their families in the neighbourhood, a practice which became so general that it was formed into an established rule.
- 4. Piadagi—A deduction of 2/3 pay when a horse dies, until it is replaced.
- 5. Ghair Hazri—Absence without leave, a fine according to time.
- 6. Dhogh (dagh)—On enlistment when the horse is branded with the mark—Rs. 5/-.
- 7. Nas Mulazemena—On enlistment, first month's pay as
- 8. Rasoom-i-Daftar—Rs. 15 annually.
- 9. Madie-Rs. 10 on each mare.
- 10. Pursati-8 days' pay annually.
- 11. Officeree—15 days' pay, senior grades and 8 days' pay, junior grades—annually as nazrana.
 - 1. P. G. R., Vol. III, p. 465.
 - 2. For: 1846 Sec. Progs. 26th Dec., 931.
- 3. The Resident at Lahore comments on this as thus: "For instance, in the cavalry so much per saddle is levied and in different Derahs, so much Kassorat percent, varying from Rs. 3-8-- to 6-8-. The custom originated, it is said, in the ghorchurras refusing to take a particular coinage which was at a discount of one anna in the rupee; on which Ranjit Singh sent them to be paid in new Nanak Shahis from the treasury, but ordered a fine equal to the discount to be levied from each horseman." Panjab Papers, p. 23.

- 12. Husht Rozah¹—8 days' pay as nazrana in a year.
- 13. Tabdeelee-On an exchange of horses, Rs. 17/-
- 14. Na Kargi—While a horse is not in workable condition, 1/3 of the pay.
- 15. Shikam Poorie-When a mare is in foal, Rs. 25/-
- 16. Lacedgee-When a mare foals-Rs. 25/-.

In his general observations on these deductions, Major Mc Gregor has said: "Many of the deductions above stated do not seem very justifiable to our notions of fairness, still they have been in force for years and the troops enlisted knowing that they were to be subjected to them; those under the head of Madi, Barasati and Officeree seemed to have been confined to the Derahs Naulakha Kalan and Khurd only."

Deductions in the rest of the Army—Some of the deductions were similar to those described above, e. g. the first month's pay on enlistment, anazranas on the occasions of festivals like Dusehra and Basant, Ghairhazri, Rasoom-i-Daftar, Kassoor and Officeree etc.

There were, however, some other deductions which affected only those who received uniforms from the state and took their meals in the regimental messes. The deduction for uniforms was originally a charge only for the price of the articles issued, but with the passage of time it developed into a conventional charge and had nothing to do with kit except that it retained its old name.³ The deduction for meals was Rs. 2/- per month and was charged only from those who dined in the messes.⁴ Besides, there was a deduction for the loss of Government articles issued to the men.⁵

Extraordinary Deductions—Such deductions were exacted only at times of very great financial difficulty as, for instance, to meet the heavy losses suffered in an expedition or to cover

- r. Besides these nazranas, the troopers had to give offerings on all ceremonial occasions. Further, the officers had to give by custom some nazrana to all V.I. Ps.—P.G.R., Vol. III, p. 351.
 - 2. Panjab Papers: Resident to the Government, July 3, 1847.
- 3. In 1845 when the army assumed sovereign control in the State, the price of clothing charged was remitted on the ground that it had already been deducted from the soldiers' pay—For: 1845 Sec. Progs. 4th April, 47; Broadfoot to Currie, 1st June, 1845.
- 4. Orlich, p. 227; Wade to Metcalfe, 1st Aug., 1827 Cons: 12th Oct., 1827.
 - 5. Monograph 17-1814 (26) 4th Sept., Lahore.

deficit in the revenues of lean years. As only a strong government could do so, we come across such impositions only in the reign of Ranjit Singh. His successors were too weak for this kind of work. A few examples of such deductions may not be out of place here. In 1825 "the Maharaja directed Dewan Bhawani Das to proceed to the quarters of the French officers and explain to them that great expense had been incurred in the late expeditions against the Usafzais and it was necessary that they also should contribute two months' pay from the battalions and the regiment under their charge and cut it in lieu of clothing from their men." In the same year a heavy deduction was realised from the entire army on account of a deficit in the income of the state for that year. The French brigade alone had to pay Rs. 45,000 and Sawaran-i-Ardali paid Rs. 72,000/-. Even Princes were not spared, for Kanwars Kharak Singh and Nau Nihal Singh were made to pay Rs. 60,000 and Rs. 20,000 respectively.2 It may also be stated that occasionally one or two months' pay was deducted in the case of the troops falling into heavy arrears, as for instance, in 1840 Gen. Avitabile forced the Ramghol Battalion to agree to the deduction of 1 or 2 months' pay before their arrears could be cleared.3

It may be remembered that only the deductions approved by the Government could be charged. Severe action was taken against anybody, may be an officer or a chief, if he made any unauthorised deduction. Once on a complaint of a few sawars of Tej Singh that they were not being paid by the Sardar, an immediate order was despatched to him to make the payment at once; he was also warned that there must be no repetition of this.4 Similar actions were taken against Dewan Singh Doabiya and Dewan Sher Ali for like offences.5 Procedure of Disbursement-

The office of the Lahore Darbar was organised on the lines of the Mughal rulers of India and was completely free from

^{1.} For: 1825 Sec. Cons: 11th Feb., 16-17-Elliot to Swinton, 27th Jan., 1825.

^{2.} News, pp. 261-263.

^{3.} For: 1840 Sec. Progs. 28th Sept., 81—Panjab Intelligence, dated 3rd Sept., 1840.

^{4.} News, p. 391.

^{5.} Ibid. pp. 300 & 307.

any influence of the west.1 It had several divisions, each one of which was sub-divided into several sections. Of these the Taujihat-o-Muwajib Department dealt with all kinds of expenditure, civil as well as military. The Department of Military Accounts was further divided into three sections, each one of which was responsible for the accounts of the particular class of troops assigned to it. Each of the three branches of the army, namely the irregular cavalry, the garrisons and the regular army, was placed under a separate agency for the distribution of its salaries. As stated earlier in Chapter II, the derahs of the irregular cavalry were paid through their Commandants until 1822-23, through their Dewans until 1843 and after that, through a single common pay office. As there were so many changes in the arrangements of disbursement, the accounts of this branch were rather loosely kept, giving rise to frequent disputes.2 Payments to the garrisons were made through their kiladars (garrison-masters). The arrangements for the distribution of salaries to the regular army were, from the very beginning, more regular and systematic than those which obtained in the other two branches of the army. There was a separate pay office under the Bakshi or Paymaster who was charged with the custody of a separate treasury called Peti Khazana Fauj. He was assisted by a number of mutsaddies in his work and was expected to maintain and submit a regular account of receipts and payments to the head office from time to time. As regards the procedure followed in disbursement, there were a number of stages to be covered, though they were not always strictly observed; frequently short cuts were made, by-passing certain avoidable formalities. A general idea of these stages may be obtained from the following account :--

Preliminary Estimate (Taqdama) was the first step in the procedure and originated in the offices of the units at the demand of the Maharaja or his Dewan or his Bakshi.³ The next step

^{1.} Dewan Bhawani Das who organised it, had served at Kabul for several years before he came to Lahore. Another architect of the office, Dewan Ganga Ram, brought with him a long and rich experience of work under the Mughal rulers of Delhi.

^{2.} For: 1846 Sec. Progs. 16th Dec., 808; H. Lawrence to Currie, 13th April, 1846.

^{3.} Monograph 17-1812(9)-13th August. The garrison master

was the scrutiny of the preliminary estimates either by the Maharaja himself or by his officials. In the case of the units which remained uninspected for a long time, this examination was invariably accompanied by a review of 'the present state' of the troops called Maujudat. This was particularly necessary in the case of garrisons.1 Next, permanent pay rolls called Barawurd Taqsim Talab were prepared by the office and for them the sanction of the Maharaja was obtained. Then on their basis Parwanas were issued for payment to the troops. Records reveal that in the case of the Governors of Multan and Kashmir the prior sanction of the Darbar was not necessary and that they were permanently authorised to pay their troops on their own. The next stage was the issue of money. There was no difficulty in regard to the troops at the capital or with the Maharaja, because the necessary amount could be at once issued to But it was otherwise with the the officials concerned. troops stationed in the mofussil areas. If they were not far away, disbursement was kept pending until they returned to the capital, except in most urgent cases. But if, on the other hand, they were far away on some expedition, particularly on the side of Peshawar, and were not likely to return soon, the requisite treasure had to be transported on camels and mules.2

Tankhwah System—But transport of treasure to distant places involved great expense and inconvenience and therefore another arrangement was evolved known as the Tankhwah system. The word Tankhwah did not denote then, as it does today, monthly or annual salary, but it had a very restricted meanings and was used by the Sikhs to denote an order or a cheque (hundi) on some local treasury. In the words of the British Resident at Lahore, the Tankhwah system was "the system of payment of troops and other public servants by assignment on Kardars." It was a widely prevalent system and in fact almost all garrisons and other troops scattered about

of Govindgarh ordered to prepare a detailed account of the salaries of his garrisons. News, pp. 367, 290.

^{1.} Ibid. 1814 (41)—18th November, Amritsar; News, pp. 49, 126, 193 & 340.

^{2.} News, p. 251; Sohanlal, Vol. III, Part IV, p. 389.

^{3.} Panjab Papers, p. 23.

the country were paid in this manner. All payments made by the kardars were, of course, later on accounted for. A motive which sometimes led the Maharaja to resort to it was "to quash importunity and overhaste in executing an ungracious decree (his own)"2 after having acquiesced to pay. The immediate gains in view were no doubt achieved, but the ultimate results were disastrous. In 1847 Henry Lawrence, the Resident at Lahore, made a scathing criticism of it saying: "I have absolutely prohibited the Tankhwah systems. They are a perfect plague to the country; the means of pestering an honest Kardar, if such was to be found and of enabling all others to play with, to accept or to dishonour Government bills, almost at will. Tankhwahs on village Zamindars had even a worse effect, enabling horsemen and footmen and every attache of Government to live at the expense of the villagers until such time as the amount of the order could be realised. On the other hand, contumacious Zamindars would not pay powerless Tankhwahdars and in short the system was one of continued extortion or chicanery."3 However, it may be stated that the results pictured here appeared only after the strong hand of Ranjit Singh was removed by death. No Kardar had the courage to defy the great Maharaja who was always well informed about the activities of his officials.

Disbursement—The actual distribution of pay in the regular army was carried out by the Bakshi personally or by his Mutsaddis under his supervision. This was done by the Kiladar in the case of a garrison and by the Dewans of the derahs in that of the ghorchurras. It was Ranjit Singh's common practice to send his trusted ministers as observers at the distribution of salaries.4 The records of the Khalsa Darbar do not throw any light on this, but there are some instances to show that the payees had to acknowledge receipts under their signatures or thumb impressions. For instance, in 1825 Nazim of Multan, Hazari Badan Singh, was twice ordered to pay his troops and despatch receipts (Kabz-ul-Wasul). larly in the same year, the Kardar of Mankera was ordered

^{1.} Several references to this practice are present in the News of Ranjit Singh's Court (1825).

^{2.} Adventurer, p. 19. 3. Panjab Papers, p. 23; Adventurer, p. 19.

^{4.} News, p. 235.

to pay his troops and send receipts. In 1830 Fakir Aziz-ud-din informed Ranjit Singh from Attock that he had paid the garrison of Attock and had got 'Farag-Khati' (clearance slip) from every one of them.¹ It was also a common practice with the Sikh rulers to make advances called Musaidat, pending the payment of salary. These advances were recoverd at the time of periodical disbursement. In the pay rolls we find almost invariably two sub-heads against each name: the Sabiqa (the previous) and the Hall (the present) showing under each head the amount credited to the man.²

Abuses—There was a lot of corruption in the various pay offices of the Lahore State. Even a wide-awake ruler like Ranjit Singh felt sometimes depressed at his inability to uproot it. On one occasion in 1825 he made a scathing criticism of his officials saying:3 "Everyone of the officials and accountants who are in the employ of the state, receives thousands in bribery. There is none who keeps the interest of the state in view and serves the Government with honesty and loyalty." Ranjit Singh was a strong man who would not spare any one, when he came to know that he had amassed a fortune by dishonest means. He would subject him to a heavy mulct and in case of its non-payment, would order the confiscation of his property. After his death, however, things took a different turn. Taking advantage of the confusion and anarchy prevailing everywhere, the accountants seldom rendered their accounts4 and helped themselves to as much Government land and money as they could. Bakshi Bhagat Ram was found guilty of embezzlement of lakhs of rupees and dismissed in 1847. Likewise, a large number of mutsaddis were dismissed at that time, while others were demoted to the pay scales of Ranjit Singh's days.⁵ Henry Lawrence has described them

Sohan Lal, Vol. III, Part I, p. 16.
 News, pp. 49, 353 & 384.

^{2.} For: 1846 Sec. Progs. 26th Dec., 942. Mc Gregor to Lawrence, July 18, 1846; News, pp. 267 & 601.

^{3.} News, p. 365.

^{4.} For: 1846 Sec. Progs. 20th Dec., 1052; Bakshi Bhagat Ram rendered no account for seven years after Ranjit Singh's death.

^{5.} For: 1848 Sec Progs. 25th Feb., 42. 7. Lawrence to Elliot, 16th Dec., 1847. The state of affairs then was: 139 Munshis for 5000 irregulars (3 to every 100) and their annual pay was Rs. 1,20,000.

as "a strong and privileged class of rogues." They received bribes from the men and in collaboration with unit commanders received payments even for those who had long deserted Another popular device of theirs was old, worn-out and inferior coins in pay. Bakshi Ram was at one time severely taken to task by Colonel Lawrence for this offence.3 The poor soldiers were put to a great deal of inconvenience and financial loss.4 Of course, it may be said in their defence that they did not mint the coins themselves; but it may be remembered that they generally kept the good Nanakshahis with themselves and issued debased coins in their place, with a view to earning a profit on them in the market. Further, they levied too many fines on the soldiers and thereby took away a good part of their salaries. result of this was that the minds of the men were embittered and when a general rebellion broke out in 1841, they took a terrible revenge on them, which will be clear from the following account of Smyth: "With such deadly enmity did they pursue Munshis in particular that even in the streets of Lahore they were heard to declare that they would kill every man, woman and child who could either read or write Persian, the language in which the Munshis kept the pay accounts."5

HONOURS AND REWARDS

Writing about Ranjit Singh,6 Mr. Wade has said: "No prince could surpass him in liberality with which he was prompt to reward and scatter his bounties on those who attracted his notice by their gallantry, skill or devotion to his service." He spent lakhs of rupees on presents and khilats (robes of honour) every year. He was an exceedingly active ruler who constantly moved about among his troops, reviewed them every morning and evening and diligently kept himself informed of what his men thought and how they behaved, and wherever

Panjab Papers, p. 23; For: 1846 Sec. Progs. 26th Dec., 992.
 P.G.R., Vol.III, pp. 196 & 356—17 false names received 12 months' arrears of pay.

^{3.} Ibid., p. 203.
4. Ibid., p. 328 (refusal of the banias to accept the rupees served out to the men; p. 386-2 anna-batta on all rupees coined before '84; p. 522— 2 or 3 pice per rupee.
5. Smyth, pp. 87-88; Kanahya Lal, Tankh-i-Lahore, p. 35.
6. For: Misc. Vol. No. 206, Para 194.

he was impressed by anybody, may be an officer or a sepoy, he marked his favour with grant of rewards.¹ It was indeed a deliberate policy of the Maharaja to draw out the best in his people and to enthuse them particularly about acquiring skill in European methods of training and discipline. In the post-Ranjit Singh period, the amount spent on rewards was even greater than under Ranjit Singh, because then nothing could be done without pleasing the army, which entailed an expenditure of lakhs of rupees.²

There were no hard and fast rules defining when and for what purpose a particular reward was to be given. Rewards were a part of the royal patronage and were distributed at the discretion of the ruler. Usually, however, rewards were given on such occasions as reviews and musters, festivals like Dusehra, Dewali, Basant and Holi, conquests, birth or marriage of princes and departure of expeditions or diplomatic missions. Special favours were shown for gallantry in action, loyal and meritorious services and distinguished attainments in drill and firing.

The principal modes of rewards may be enumerated as jagirs, weapons like swords, spears, pistols etc., clothing like shawls of Kashmir and Banaras, kimkhob, caps and plumes, ornaments like bangles, gold necklaces and strings of pearls, cash donatives, increments and promotions, titles, medals and certificates, and animals like horses and elephants with gold and silver saddles and howdahs. Most of these items were the same as had been in use in India for centuries. The Sikhs found it convenient to continue their use except in the matter of cattle drums and standards which were in vogue with the Mughals. They were a young people noted for their practical sense, who had little appreciation for things which had no value in themselves.

^{1.} Wade to Secretary to the G. G., 19th June, 1831 Cons: 29th June, 1831.

^{2.} For instance, Raja Hira Singh gave the following presents to win over the army against Raja Suchet Singh:—Col-Rs 400; Commandant-Rs. 300; Adjutant-Rs. 200; Subedar and Jamadar-Rs. 25; Non-Commissioned officer & sepoy-Rs. 6. Later on Jawahar Singh gave every one of the regular army a gold necklace worth Rs. 25. For: 1846 Sec Progs. 26th Dec., 942; For: 1845 Sec. Progs. 4th April, 63.

The value of a reward was decided by the Maharaja on the spur of the moment and could amount to anything ranging from a few rupees to more than a lakh. Instances of single-item rewards such as plumes and dopattas are not lacking, but as a rule, all costly rewards were multi-item. This will be clear from the following two examples: (i) After the conquest of Multan, Misar Dewan Chand, the hero of that expedition, was given a khilat valued at Rs. I lakh and a jagir worth Rs. 25,000 and a title. According to Sohan Lal, the Misar was granted after the conquest of Kashmir another jagir valued at Rs. 50,000, another title and another khilat of great value.1 (ii) In 1832 Ventura was granted a khilat which consisted of a piece of kimkhob pagri, handkerchief, seven shawls. robes of cloth, five pieces of gold ornaments such as bangles, a necklace, one bracelet, one string of pearls and one zeegha (a kind of ornament) and one elephant with a silver howdah. In 1841 he was granted a khilat of 17 parchas, a sword set with jewels, a horse with silver saddle, an elephant, a pearl necklace, an armlet, a sarpech with a zeegha and an order for Rs. 10,000 in lieu of a silver howdah.²

Titles—The Sikhs followed the example of their Muslim predecessors in the matter of long high-sounding titles. The titles were worded either purely in Persian or in a mixture of Persian and Indian languages, the latter being their own innovations. Some instances are given below:-

Persian Titles

Zafar Jang Bahadur, Fateh-o Nusrat Nasib Farzand-i-Khas-ul-Khas Sardar Wala Iqtadar, Shuja-ul-Daula, Shamsher Jang Bahadur Farzand-i-Dilband

Recipients

Misar Dewan Chand³ —Raja Hira Singh⁴ Attar Singh Sandhanwalia5 -C. M. Wade⁶

- Sohan Lal, Vol. II, p. 265. For: 1841 Sec. Cons: 1st Feb., 64. Sohan Lal, Vol. II, pp. 247 & 261.
- Sohan Lal, Vol. III, Part II, p. 297. 4.
- Sohan Lal, Vol. III, Part IV, p. 438. 5.
- Panth Parkash, Part II, p. 272.

Persian Titles

Recipients

Gazanfar Jang, Amin-ul-Daula, Dilawar Jang Bahadur, Amanat Panah, —Dewan Jodha Ram¹

Kerka Ba Safa

---Avitabile²

Raja-i-Rajgan, Raja--i-Hind, Patraj Bahadur

—Dhian Singh³

Mixed Titles-

Ujal Didar, Nirmal Budh, Sardar Bawaqar, Hazbar Tang

—Lehna Singh⁴

Ujal Didar, Nirmal Budh, Sardar Bawaqar, Jarnail Awwal, Samqam- —Bhai Gobind Ram⁵ ul-Daula, Safdar Jang Bahadur

Afzal Didar, Nirmal Budh, Itmad- -Sher Singh⁶ ud-Daula, Sardar Bawagar,

Ujal Didar, Nirmal Budh, Mubarzul-Mulak, Samsam-ud-Daula

-Tej Singh

Medals & Certificates—In the award of certificates and medals, the Sikhs followed the example of the west rather than the east. Their certificate was called Parwana-i-Afrin (certificate of merit). As regards medals, a special medal was instituted by Ranjit Singh towards the end of his reign on the occasion of his grandson's marriage in 1837. It was called by the name of Kaukab-i-Iqbal-i-Panjab (The Propitious Star of the Panjab). It was a bejewelled gold medal which had three orders, mainly differentiated by the quality of the precious stones set in it.7 All the three orders bore on one side a small image of Ranjit Singh and on the other, his name.

- 1. Tarıkh-i-Sıkhan, Part I, p. 271.
- 2. Life of Avitabile, p. 554.
- 3. Panti Parkash, Part III, p 244.—The highest title was Raja which was bestowed upon the Dogra Chiefs and Lal Singh, Tej Singh, Sher Singh and Dina Nath. This title was invariably accompanied by long highsounding titles.
 - 4. Sohan Lal, Vol. III, Part IV, p. 401.
 - 5. Ibid. p. 403.
 - 6. Tarikh-i-Sıkhan, Part I, p. 760.
- 7. The first order had diamonds, the second, diamonds and emeralds, and the third, emeralds only.



Kaukub-telepal i-Punjab The Sist of the Panjaber Prosperity

The medal of the order of high henour matitudes by Mabaraja Ranjin Singh

medal resembles in shape the 'Legion de Honour' of Napoleon Bonaparte and was probably instituted on the advice of the Maharaja's French officers. The star of each class was to be worn round the neck by a red and yellow ribbon.

Certain rules and regulations were framed by Capt. Wade² at the Maharaja's request for the purpose of awarding this medal, which were adopted by Ranjit Singh after some minor improvements effected by Sir Henry Fane. According to these rules, three classes of people could be admitted to the Order. The first class was to be confined to "the members of the royal family, foreign princes and distinguished chiefs who are allied by friendship to His Highness." The second class was to consist of "Courtiers, Sardars, Governors of provinces, General Officers and the Envoys of approved loyalty and attachment." The third class included "military officers of the rank of Colonel, Major and Captain who may be conspicuous for their valour, intelligence and obedience to discipline and any civil functionaries and confidential persons who may render themselves worthy of distinction by their good conduct and integrity." The number of decorations for each one of these classes was fixed, so that the Order should not become cheap. The decorations of the military officers were distinct from those of the civilians, and they recorded "the degree of merit on the part of the individuals on whom they may be conferred". If an officer distinguished himself in one action, he was entitled to the star, if in a second or a third, one or two clasps were to be added from which the star was to be suspended, each clasp bearing the name of the action in which the winner distinguished himself. On a fourth occasion of distinction, he was to receive a gold cross to be worn above the clasps. If he got still further distinction, he was to be awarded additional clasps from which the cross was suspended, so as to show to comrades the amount of his merit.

The first of the Order and its Chancellor was Kanwar Nau Nihal Singh. The other members of this Order were to be nominated by the Maharaja. All the members thus nominated were to receive a Khilat of Investiture composed the usual number of articles according to their several degrees.

Monograph 18, p. 52.
 For: 1838 Pol. Cons: 5th Sept., 5.

The members of the first class were entitled to the appellation of Raja, of the second class, to that of Sardar and of the third to that of Bahadur. At the time of the admission of anyone to the Order, two diplomas, similar in tenor, specifying his merits and qualifications and recording the special good services in testimony of which the honour was conferred, were to be drawn out and authenticated by the seal and signature of the Maharaia. One of these was to be lodged in the royal office and the other to be granted to the recipient of the Order. There was a rule about the withdrawal of the Order which reads thus: "As the admission of the servants of the state to the different classes of this Order will depend on their good character, their zeal and their devotion to its interest, should any one commit an action by which he may forfeit his title to the Order, if he be a Sardar, he shall be divested of the badge of the Order in the presence of the Sardars assembled at the Court, when both diplomas and the title which he may have received shall be torn and annulled and the Chancellor of the Order will at the same time pass the pen of erasure through his in his book, and if he be a military officer, he shall be disgraced in the same manner before the brigade and regiment to which he may belong."

It has been reported¹ that in the interpretation of these rules Ranjit Singh was most liberal and made the award so cheap that some of his European officers had to request him not to be so liberal in this matter.

PROMOTIONS

Ranjit Singh was a shrewd judge of human character and as remarked by Griffin, "he possessed the faculty which is one of the attributes of a genius and for lack of which many brilliantly gifted men have suffered ship-wreck.—the faculty of choosing his subordinates well and wisely. He knew men and he selected each servant for the special work which he could best perform and consequently he was, even in a corrupt and violent age, wonderfully well served." Merit was the chief

^{1.} Monograph 18: Sohan Lal, Vol. III, Part IV, p. 490—Sohan Lal has given a long list of the recipients of this medal, the most outstanding of whom are the following: Princes Kharak Singh, Nau Nihal Singh and Sher Singh; the four Dogra Rajas; Jamadar Khushal Singh; Dewan Sawan Mal, Lehna Singh Majithia, the four French Generals; Fakir Aziz-ud-Din and Wade etc.

2. Griffin, p. 92.

criterion for promotion. In case any wrong appointment was made, he lost no time to rectify it, as for example he did in the case of Misar Sukh Dayal, brother of Misar Dewan Chand. He was appointed a commandant of artillery in 1825, but sometime after, was dismissed for incompetence. On the other hand, if he was impressed with somebody, he gave him rapid promotions. The case of the Dogra brothers may be cited as an illustration. Almost within six years of his taking service in Lahore, Gulab Singh became an important grandee of the state. He was in possession of many estates granted to him as jagirs in recognition of his meritorious services and was amongst the few noble, entitled to maintain a regular force of their own.1 This is also true of the other two brothers, Dhian Singh and Suchet Singh. Merit and ability had the widest scope for progress under Ranjit Singh. There were several cases where people rose from the ranks to be colonels and generals. A British writer thus wrote in the Calcutta Review of 1844. "It was absurd that the natives could not rise above the rank of Subedar and Risaldar Major in the British army, with the result that they joined the service of the Marathas and the Sikhs and rose to be Colonels and Generals."2 gives the example of General Dhonkal Singh of the Sikh army who was only a drill naik in the British army. Lieut Barr is, however, critical of the quality of the officers of the Sikh armed forces, particularly the artillery officers.3 This criticism is not wholly unjustified, but this was unavoidable under the circumstances. The Sikh officers were mostly illiterate; which was not uncommon among the Indians in those days and naturally could not be so efficient as Lieut Barr and his colleagues in the British army were.

After the death of Ranjit Singh, however, things underwent a radical change, particularly from the beginning of the administration of Raja Hira Singh. Now, it was not merit but money and party-loyalty which weighed most in granting promotions. A contemporary writer has truly said: "We should be surprised to see a Downing Street clerk or a Leaden Hall Street linen paper-maker appointed to the command of

^{1.} Raja Gulab Singh by Pannikar, p. 25.

^{2.} The Calcutta Review, Vol. II, Oct.-Dec., 1844.

^{3.} Ibid., pp. 176-178.

a corps of lancers or of a brigade of infantry or artillery; but such appointments are every day made in the Panjab where at this moment we see Ajudhya Prasad and Jodha Ram, Ventura and Avitabile's Dewans, commanding the brigades of those officers. So it was with Sawan Mal." The number of such cases may be easily multiplied, but a few examples will do for our purpose. Lal Singh Murariwala was promoted by Jawahar Singh straight away from the rank of Commandant to that of General. Another man, Jiwan Singh, "the head of fools," was promoted to the rank of Sardar.2 Megh Raj who had no qualification except that he was a brother of the slave girl, Mangla, was given the rank of General.3 Promotions were sold openly or secretly, "sometimes disproportionately to the number of vacancies, so that many officers nominally occupied a higher rank while they drew the pay of the lower."4 instance, in the time of Raja Hira Singh Lal Singh was promoted to the rank of Raja for a payment of Rs. 50,000.5 Sher Singh promoted people for money on the very day of enlistment, and Colonel Man Singh was notorious for the sale of promotions in his unit.6

WELFARE

Charles Masson remarks about Ranjit Singh: "In his relations with his troops he appears to great advantage, enjoying the general esteem which his kindness and liberality have secured. Not a day passes without thousands of fervent aspirations for the continuance of his life." The Maharaja was widely interested in the welfare of his men. Indeed, he loved them and did everything possible for them, and they in

- 1. The Calcutta Review, Vol. II, Oct.-Dec., 1844, p. 492.
- 2. Tarik h-i-Sıkhan, Part I, p. 470.
- 3. P.G.R., Vol. III, p. 11.
- 4. Monograph 18, p. 52.
- 5. P.G.R., Vol. III, p. 338.
- 6. Ibid., pp. 339 & 386.
- 7. Narrative of Various Journeys, Vol. III, p. 439.
- 8. This will be evident from the following report of Dr. Murray: "In my conversation with the Raja on these days, he enquired particularly about our Invalid Establishment and the periods of service entitling individuals to its benefits which I explained to him. He also asked what became of the effects of the native officers and sepoys who died with the regiments. Murray to Wade, 4th Jan., 1827 Cons: 23rd Feb., 1827.

return gave him their implicit obedience which helped him build up such a vast empire. The traditions set up by him were continued after his death by his successors. In the following pages we will try to get some idea of the care and solicitude which Ranjit Singh and his successors exhibited for their troops.

Health of the Troops-

The general health of the army was good. "The deaths from disease throughout the army," says Lieut-Colonel Steinbach, "do not exceed 10 percent per annum." This percentage is rather low for an age when the medical science was not so advanced. No doubt the bracing climate and the healthy diet of the Panjab went a long way in keeping the men hale and hearty, yet the importance of the Maharaja's constant care for the health of of his soldiers cannot be minimised. A few quotations from his Parwanas may be given below by way of illustration:—2

- 1. It is very cold, rain has fallen by God's grace. Today's parade will be excused.
- 2. The Sikhs of the battalions may be issued warm jackets to wear in the early mornings, as it is very cold at that time; later on in the month of Maghar, they will be worn the whole day.

Similarly, parades were excused on account of excessive heat and dirty weather.3

Care of the Sick and the Wounded-

There is enough evidence to suggest that the Sikhs had their medical establishment of Indian surgeons and physicians to look after their sick and wounded during the wars. For instance, a mention is made by Henty of a native hospital and sentries going backward and forward on their beats around it in the battle of Gujrat.⁴ In 1842 Maharaja Sher Singh wrote to his officers at Peshawar "to provide separate accommoda-

- 1. The Punjab, p. 82.
- 2. P.I.H.C, 1940 A Book of Military Parwanas—Article by S. R. Kohli.
 - 3. P. G. R., Vol. IV, pp. 442 & 478.
 - 4. Through the Sikh War, p. 354.

tion for hospital for the sick or wounded of the British or Sikh troops."1 There was also a state hospital at Lahore known as Dara-ul-Shafa in the charge of the Faqir brothers, its total yearly expenditure being Rs. 1200 under each one of the Sikh administrations.² The most serious cases were treated at this Besides, the wounded were paid blood (zakhamiana) for treatment. Munshi Sohan Lal³ mentions an example of Rs. 10,000 being given to wounded soldiers. Another source, News of Ranjit Singh's Court, mentions4 that the Maharaja offered a sum of Rs. 5000 as blood money to some wounded Akalis and on their refusal to accept it, gave them a sum of Rs. 100 as well as a jagir of the same value. But it seems that despite all this, great difficulties were experienced by the wounded because of the low development of the science of surgery in the country, and therefore, as is said by Steinbach, "deaths from wounds and contusions were of course more frequent." However, what the Journal of A Subaltern asserts about "the enemies wounded lying in heaps on the hill without any attendance, left to die of their wounds, " refers to an abnormal state of affairs, consequent upon one of the bloodiest battles. The state of affairs in the British camp after the battle of Chilianwala was no better.7

Care of the Dead-

Like all other Indians, the Sikhs are very sensitive about the disposal of the dead. As far as possible, they would not allow their dead to be dishonoured or to remain undisposed of. Mackeson in his letter to Currie, dated 6th Feb., 1846, refers to a party of Sikh horsemen who had come to burn their dead at Aliwal immediately after the battle.⁸ Similarly, during the night immediately after the battle of Chilianwala, the whole jungle was ransacked by the Sikhs for carrying their

^{1.} For: 1842 Sec. Cons: 8th April, 36; Clerk to Maddock, 31st March, 1842.

^{2.} For: 1847 Sec. Progs. 31st Dec., 337; Honigberger (p. 18) says that the Government paid for the medicines that were daily distributed there.

^{3.} Sohan Lal, Vol. IV, Part I, p. 14.

^{4.} News, p. 132. 5. The Panjab, p. 82.

Interruption
 Subaltern
 Subaltern
 Subaltern

Subaltern, p. 110.
 For: 1846 Sec. Progs. 20th Dec., 389.

wounded and dead back to their camp. Henty mentions the case of "two men with a white flag" who came with the request "to be permitted to carry away their dead," which was readily granted.1 Under normal circumstances, the invariably advanced some money to cover the funeral expenses of the dead; which was subsequently deducted from the balance of their salaries; but on the deaths of his favourite officers, Ranjit Singh spent liberally. For instance, on the death of Misar Dewan Chand in 1825 he gave 25 maunds of sandal wood, a pair of shawls and two rolls of kimkhob for the funeral cover and Rs. 2,000 by way of charity, and ordered a hartal or cessation of all work in the city.2

As regards the delivery of a deceased soldier's goods and arrears of pay, the rule in use, as explained by Dewan Dina Nath to the British Resident at Lahore in 1847, was that "his son, widow or parents or his brother with whom he had lived on friendly terms, may inherit, but a brother who had lived separate from the deceased is not considered to have any claim."3

Compensation for Losses—

Occasionally, compensation was granted to the troops for their losses in certain calamities or actions. For example, when in 1841 the camp of the Charvaree Horse was inundated by a flood of the Ravi, Maharaja Sher Singh freely mixed with the troops and rendered great service to the suffering.4 Earlier in 1837, Ranjit Singh issued Parwanas to his Sardars at Peshawar, directing them, in consultation with Avitabile, to recover the lost property of all the sepoys of the Maharaja's army and compensate those who had lost their horses in the late actions with the Afghans.⁵ Still earlier in 1825, one soldier was paid Rs. 1000 to compensate for his loss in the river Indus.⁶

Marriage Gifts—

It was a common practice in the period of the Sikh

Through the Sikh War, pp. 120 & 338.

^{2.} News, p. 275.
3. P.G.R., Vol. III, p. 143. This was slightly different from the practice in the ranks of the English Company, where the delivery was made to the next of kin, if claimed.

For: 1841 Sec. Cons: 2nd Aug., 101; Clerk to Maddock, 20th ī 841.

^{5.} For: 1837, Pol. Progs. 25th Sept., 81.6. News, p. 52.

rule to give presents or doles on the occasion of marriages.1 Sometimes the marriage gifts amounted to large sums, for instance, it was Rs. 51,000 in the case of the marriage of General Ventura's daughter.2 The yearly marriage grants to the servants of the state under the various administrations were as follows3:-

Jawahar Singh-Rs. 25,000 Ranjit Singh —Rs. 50,000 Lal Singh —Rs. 7,000 Kharak Singh-Rs. 20,000 Sher Singh —Rs. 1,52,000 After Lal Singh-Rs. 35,000 Hira Singh —Rs. 1,00,000

Fixation of Prices—

It was the policy of Ranjit Singh (it is not known whether it was followed by his successors too) not to allow prices to rise very high and thereby cause inconvenience to his troops. For instance, in 1825 prices went up tremendously on account of failure of rains, so that ard sold at 12, mash at 16 and gram at 17 seers per rupee. Ranjit Singh fixed, by proclamation, their prices at 16, 21 and 25 seers per rupee respectively, and announced that any one selling at a higher rate would have his shop confiscated. Upon this the shopkeepers closed their shops. Ranjit Singh was very angry and realised a fine of Rs. 2500 from the Chaudharies of the bazar.⁴ Similar measures were taken with regard to the prices of wheat, flour and barley. Their prices were lowered from 10 and 14 seers per rupee to 12 and 16 seers per rupee respectively. A little later, the price of flour was further reduced to 16 seers per rupee.5 Aid after the Retirement or Death of a Soldier-

There was no definite age limit either for entering the service or for retiring from it. So long as a man was considered fit for active duty, he was continued. It was not uncommon to find men of 65 or even more in the army of the Sikhs.

There was no such thing as a regular pension system,6

^{1.} P. C. R., Vol. III, p. 296.
2. For: 1841 Sec. Cons: 8th March, 82.
3. For: 1847 Sec. Progs. 31st Dec, 337.
4. News, pp. 308 & 342.
5. Ibid., pp. 550 & 591.
6. For: 1848 Sec. Progs. 31st March, 53. A regular pension system was introduced in the Sikh army by the British during the period between the two Sikh Wars.

like the one which prevailed in the British army. But from a number of recorded cases, it is apparent that a kind of allowance was granted to those permanently disabled for active service; and at times provision was also made for the dependants of a soldier who died on active duty. This allowance is noticed under two different names: Dharamarth and In the pay rolls of the army, we come across several cases in which the near relations or dependants, mostly the wife and the aged father, were granted from Rs. 3/- to Rs. 4/- per month. This allowance was ordinarily paid for life and was charged to and shown in the pay rolls of the particular regiment to which the dead man belonged and was credited as Dharamarth (literally charity) under the head Mugarrari or fixed expenditure. The total yearly Dharmarth expenditure under the various Sikh administrations was as follows:1-

 Ranjit Singh
 Rs. 1,26,915—for 2532 men

 Kharak Singh
 Rs. 1,48,635—for 2777 men

 Sher Singh
 Rs. 2,93,131—for 5142 men

 Hira Singh
 Rs. 3,34,816—for 6464 men

 Jawahar Singh
 Rs. 3,42,583—for 6135 men

 Lal Singh
 Rs. 3,42,583—for 6135 men

 After Lal Singh
 Rs. 2,17,187—for 7060 men

In a large number of cases, however, the allowance appears under the name, Inglis which seems to indicate that the practice had been borrowed from the English. A number of cases have been discovered both in the pay rolls and the descriptive rolls of the Khalsa army where men, permanently disabled on account of the loss of an arm or a leg etc., are shown as being in receipt of a regular pension or monthly allowance. For instance, in the pay rolls of Sambat 1880-81 (1823-24) there are as many as 20 cases placed on the Inglis list. Again in the pay rolls of 1830 we find a list of men who had been struck off the rolls of their respective battalions on account of old age and were shown on a sort of pension list. They were assigned the duty of keeping guard on the royal kitchen—a nominal task.

In addition to the concrete cases that one finds recorded in the papers, there are certain casual references which go

^{1.} For: 1847 Sec. Progs. 31st Dec., 337.

to show that Inglis or pension was more than a causal allowance. In a paper dated the 13th Har, 1899 (July 1842) we find a statement to the effect that the list of the privates and officers in the army who were in receipt of Inglis, should be submitted for confirmation to the Maharaja.

Hereditary Principle-

Vacancies caused by retirement, death or disablement were, as far as possible, filled up on the hereditary principle. "Ranjit Singh made it a special favour to let the son of a man killed be enlisted in his room," writes Major Broadfoot.1 The heir succeeded as naturally to the military rank or diplomatic or administrative duties of his father or uncle in the Government as he did to the management of the family business or to the ownership of the family estate, though he could continue in his new assignment on merit alone. Not only that. Influential people at the Court got the male members of their families into prominent positions even while they were themselves in service. After Ranjit Singh when the soldiery became all-powerful, the Government granted it as a right that every man would be succeeded by his heir.2 Broadfoot criticised it as "one of the first steps to deterioration as a military body." But whatever may be its value from the strictly military point of view, it certainly catered for the welfare of the army.

Recreation-

Recreation, an important aspect of life, both military and civil, was not ignored. Holidays were granted for all important festivals which were celebrated with great eclat. On these occasions, sweets were liberally distributed amongst the troops.3 On the occasion of Holi colour was issued by the Government and all ranks were encouraged to get into the spirit of the festival,4 Ranjit Singh himslef giving the lead Similarly, on Dewali oil for illuminations was issued by the On Dusehra and Basant, ceremonial parades were state. held; on the latter occasion, the whole army was dressed

^{1 &}amp; 2-For: 1848 Sec. Progs. 4th April, 48. Broadfoot to Currie,

²nd July, 1845.

3. There are several references to this effect in Sohan Lal's diary, the most important of which is given on page 344, Vol. III, Part III.

4. Sohan Lal, Vol. III, Part III, p. 134. News, pp. 17, 19 & 22. In 1825 Beli Ram estimated the total expenditure on Holi at Rs. 18,000.

in yellow (basanti).¹ The Muslim soldiers were given the fullest freedom to celebrate their own festivals. Sweets and fruits were invariably distributed at the reviews of troops. Moreover, as in the British army, the use of liquor was allowed in the Khalsa army. There were no restrictions on the distillation or drinking of wine; nay, sometimes money was actually granted for its purchase.² But excessive drinking which interfered with the efficient discharge of duty was punished.

^{1.} Baron Hugel; p. 339; Foi : 1847 Sec. Progs. 31st Dec., 148.

^{2.} News, p. 16.

CHAPTER VI

CANTONMENTS, CAMPS, MARCHES, TRANSPORT, SUPPLIES AND EQUIPMENT.

Sound administration is basic to the efficiency of any fighting machine. The quality of an army is connected in a vital way with how it is administered. An attempt has been made in the last two Chapters to examine this fundamental problem in some of its important aspects. A few other aspects of the same subject, such as cantonments, marches, transport, supplies and equipment will form subject matter of the present Chapter.

CANTONMENTS

Lieut-Colonel Steinbach has observed in this connection: "Excepting in the vicinity of Lahore and Peshawar, there are few regular quarters or cantonments; the men occupy small tents or bivouac in ruined Mohammaden mosques or caravan sarais.''1 The reason for this is explained by another writer:2 "Ranjit Singh keeps his regular army constantly on the move, so that they build few huts or barracks; they only live in tents". But it seems little inconvenience was caused thereby, for the same writer adds: "Only a small part of the army, however, experiences discomfort in the rains, for most of the army is then on leave; only some few battalions of Poorbias remain The Panjab is so flooded at that time of the with the colours. year that the movement of troops is impossible."

So far as cantonments are concerned, Ranjit Singh introduced the barrack system in imitation of the British custom. The French cantonment at Anarkali, Lahore, was, however, built in the French style, and it was so markedly different from the rest that when it was under construction³ in 1823, one Piara Singh made a critical reference to it in an open Darbar of the Maharaja. Almost all the battalions and regiments of the army had their permanent cantonments at Lahore, which were situated all round the city, the best known amongst them

The Panjab, p. 95.
 Monograph 18, p. 58.
 For 1823 Pol. Progs. 22nd Aug., 19.

being those of Mian Mir and Anarkali.1 Peshawar was another place where the troops were cantoned in permanent shelters.2 Every cantonment consisted of a number of sepoy lines, officers' quarters, store rooms for arms and equipment, and shelters for the animals and the civilian staff of the unit. All cantonments were built and maintained at the cost of the Government. It was the duty of the officers-in-charge of the troops using them to report regularly on their condition and get repairs done, whenever necessary, after securing the sanction of the Darbar. Failing this, the work was entrusted to the royal minister for buildings, Fakir Nur-ud-Din.

The annual cost of repairs for cantonments under the various Sikh administrations was as follows3:-Ranjit Singh—Rs. 1 5,000. Hira Singh —Rs. 46, 903 Kharak Singh—Rs. 1,01,664. Jawahar Singh—Rs. 1,79,730. Sher Singh— Rs. 1,63,106. After Lal Singh—Rs. 3,75,000

As to the quality of cantonments, it may be judged from what Mr. Taylor, a British Assistant Resident, said about one of them at Bannu: "These buildings are very cool and comfortable, excellent and commodious."4

CAMPS

As under the Mughals and the Marathas, camp life was a normal feature of the Sikh military system, their army being constantly on the move. In the words of Jacquemont, "Ranjit Singh is a Bonaparte in miniature and cannot remain in one place."5 The irregular troops had to find their own tents, but every unit of the regular army was provided tents by the state, according to the following schedule:6 for the Cammand-

H. Lawrence.

4. P. G. R., Vol. IV—Diaries of Taylor on deputation to Bannu—entry dated 9th April, 1848.

5. His letters, Vol. II, p. 25.6. I. H. R. C., Vol. 31, Part II, January, 1955.

^{1.} It was not until after 1825 that Ranjit Singh began to think of decentralisation of his cantonments, because in 1825 one of his officers, Himat Singh Jalahwala, recommended to him the British practice of dispersing cantonments on the ground that the reconcentration at Lahore created great difficulties of fuel and fodder. He welcomed the idea and said that 10 to 12,000 troops would be cantoned in the neighbourhood of Attock and about the same number on the Sutlej near the ferry of Phillaur-News, p.5.

^{2.} The most outstanding examples were Avitabile's Lines, Idgah Cantt, Ali Mardan Cantt, and Raja Suchet Singh's Cantt

3. For: 1847 Sec. Progs. 31st Dec., 335-estimates submitted by

ant, I for the Adjutant, I for one Subedar and one Jamadar, I for the junior company officers like Havildars and Naiks, and 1 for 7 to 10 sepoys. The shamianas given to the officers were quite big, while only humble pals (small tents) were allotted to the foot soldiers or camp followers.1 These tents were mere shelters from the sun or the cold. They wieghed only a few pounds and could be easily carried by a horseman in addition to his ordinary baggage.2 At times, the ordinary soldiers were put to great inconvenience owing to shortage of even such tents. For example, an eye-witness account of a Sikh camp on the eve of the First Sikh War mentions: "With the exception of the tents of a few of the military chiefs and sardars, the troops were not under canvas, although many had erected shelters of bushes or blankets."3 A special mention may be made of the royal and the chiefs' tents. The royal tents were of a red cloth as was thecustom with the Mughals and were surrounded by extensive walls of the same material, so that they could be easily distinguished from a distance. They also had a golden ball on the top.4 The tents of the chiefs were of different colours, but they were indeed very picturesque.

Almost all the camp equipage of the Sikh army was manufactured within the country, the most important places of manufacture being Lahore and Wazirabad. Whenever supplies of tents at Lahore seemed likely to run short, Kardars of the various districts, particularly Wazirabad, Rohtas, Jullundur and Hajipur, were called upon to supplement them from their respective areas.⁵ As regards the cost of tents, a few figures are available. For instance, a big tent of the sepoys cost about Rs. 30/-, while that of a Commandant or other high officers ranged between Rs. 50/- and Rs. 70/-The yearly expenses of the camp equipage provided by the State, as worked out by Henry Lawrence in 1847, were as follows6:-Ranjit Singh-Rs. 76,620 Hira Singh-Rs. 86, 250. Kharak Singh—Rs. 81,000 Jawahar Singh—Rs. 1,07,240. Sher Singh— Rs. 86,250 After Lal Singh—Rs. 21, 570.

The Adventurer, p. 88. Through the Sikh War, p. 47.

^{2.} Intough the bath true, p. 17.
3. Ibid, p. 152.
4. Sir Fane, Vol. I, p. 130; For: 1833 Sec. Progs. 6th June, 5.
5. Shahamat Ali, p. 58; For: 1840 Sec. Progs. 12th Oct., 114; News, p. 291; P.G.R., Vol. IV, p. 522.
6. For: 1847 Sec. Progs. 31st Dec., 335.

The basic considerations for the selection of camping sites, such as the easy availability of water, provisions proper shade or sun according to the condition of weather and security were usually borne in mind by the Sikh rulers and their camps were generally pitched in gardens, on the banks of rivers, rivulets and village ponds etc. and at places within easy reach of supplies.1 During forced marches, however, when the duration of a camp had to be limited to a night or so, the atmospheric conditions could not be given much weight. It was usual to determine the site of the next camp before breaking the previous one2, and where the country was unknown or not well known, the selection of a site was preceded by reconnaissance by a special advance party detailed for the purpose.3

The camp lay-out of the Sikhs, like many other aspects of their military system, marked the blending of the new and the old systems. Like the Mughals before them, the Sikhs had the tents of their ruler or chief commander in the midst and every thing else spread around them, the extent of the spread depending upon the size of the army comprising the camp. For example, describing one of Ranjit Singh's camp Capt. Wade says4: "In the centre of these groves is the Maharaja's residence. The rest are occupied by the Sardars of the Court and beyond them there are encampments of troops on sides, consisting of the ghorchurras, his principal camp of infantry of 11 battalions, several brigades of horse artillery, the corps of Messrs Allard and Court." Capt. Burnes also in his report from the Panjab in 1833 refers to the central position of the royal pavilion with "the troops and Chiefs cantoned in picturesque groups around."5 The royal pavilion was divided into a number of apartments, such as zanankhana (ladies' room), sleeping room, reception room and Darbar

^{1. &}amp; 2. News, p. 179; A Book of Ranjit Singh's Military Parwanas-I. H. C.,

^{3.} For: 1842 Sec Cons. 8th April, 37. Here is a mention of Raja Gulab Singh's report to the Darbar that he had detached some chiefs to reconnoitre the ground for encampment and they had selected where Hari Singh Nelver and hills. Singh Nalwa was killed.

^{4.} For: Misc. Vol , 259; Wade to Prinsep, 22nd May, 1831.

^{5.} For: 1833, Sec. Progs. 6th June, 5. Also see Sohan Lal, Vol. III, Part V, p. 36.

Hall. Like the Mughal Emperors again, Ranjit Singh and his successors were accompanied during their movements by the Dafter-i-Mualla (Government office), stables and the farashkhana furniture department) for which accommodation was provided within the royal tents.¹

In point of regularity, the Sikh camps were a great improvement upon those of their predecessors. As noticed in Chapter I, there was very little attempt atregularity or in the camps of the Mughals or Marathas. Sikhs under Ranjit Singh imbibed the western notions of orderliness partly from the British and partly from the Frenchand British-trained native officers in their own army, so that all western observers were deeply impressed by their lay-out. One of them is quoted by Colonel Burton to have said: "On their marches they encamp very regularly and I saw 30,000 men, the army of Peshawar, moved with as much facility as a single regiment on this (the British) side of the Sutlej."2 And Orlich has thus recorded his observations about a Sikh camp he visited in 18383: "The camp was pitched at right angles and perfect order was everywhere observed." However, after the death of Ranjit Singh deterioration in discipline adversely affected the regularity and order of the lay-out of the camps, as will be evident from the following observation about a Sikh camp on the eve of the first Anglo-Sikh War: "Here and there some attempt at regularity marked the places where regiments of the regular troops had established themselves. Here the horses were picketed in line, but amongst the followers of the Sardars every man had fastened up his horse just where it pleased him, without the smallest attempt at order."4

The silken flags of the units were used to indicate the various divisions or sectors of the camp. The royal camp or the camp of the chief commander was marked by the national flag which was the same as that of Napoleon Bonaparte.⁵ This was introduced by Ranjit Singh at the instance of his

- 1. Sohan Lal, Vol. III, Part I, p. 52.
- 2. Burton, Chapter II.
- 3. His Travels in India, p. 219.
- 4. Through the Sikh War, p. 152.
- 5. Jacquement, p. 175; Through the Sikh War, p. 109.

French officers and this remained in vogue until 1847 when it was changed by the British Resident.1

As in other aspects, Ranjit Singh himself regulated all affairs relating to his camps. He was in the habit of issuing instructions, as far as possible, for every petty detail, leaving very little to the discretion of his commanders. For example, he would instruct the officers commanding that they should call halt or resume the march at a particular hour, pitch their tents at or near a particular place, since it abounded in fodder, fuel and water or that they should avoid encamping on marshy and low ground.2 But even the most absolute rulers require some people to assist them. The man who carried out the Maharaja's orders in respect of the selection, lay-out and administration of his camps was styled Darogha-i-Lashkar Mukhtar Kar-i-Campoo (superintendent of the camp).8 He had a number of assistants and tent-pitchers under him. The tents of the various units were laid out and pitched by the units themselves at the places assigned beforehand by the Darogha of the camp. The Farash had the duty of furnishing the royal camp. There was a huge establishment headed by a Jamadar for this purpose.4

The Sikh camps could not be easily surprised on account of their adequate security arrangements. The royal pavilion was strongly guarded by a large body of special guards or Every unit arranged for its own security. quarter guard was put up in each unit which kept guard on its prisoners, treasury, arms, equipment and other stores. Besides, sentries were posted during the night in and around the lines. Strict vigilance was enjoined upon the guards and sentries by Ranjit Singh who once ordered severe beating of a man who had without his permission let in a beggar.⁵ Orlich tells us that in 1838 he and his party were allowed by the Sikh guards ride even to the edge of their camp.6 The vigilance the sentries of

^{1.} Punjab Papers, p. 29.
2. P. I. H. C, 1940—A Book of Ranjit Singh's Military Parwanas—by S. R. Kohlı.

News, pp. 165 & 190.
 Sohan Lal, Vol. III, Part I, p. 472.

News, p. 206. His Travels, p. 219.

than it did that of the British soldiers who were, in no way, better than the Sikhs in this matter. In the matter of women, the camps of the Sikhs were much better than those of their Strict restrictions were imposed by Ranjit Singh predecessors. on their presence in the camps. The movements of the dancing girls were carefully regulated and it was only with the permission of the Maharaja that any women could be allowed to accompany the troops. The Maharaja himself, however, was an exception and took with him the ladies of his household and his dancing girls on his tours through the country, but even he left them behind on crucial occasions. Western writers are somewhat critical of the sex morality of Ranjit Singh and his chiefs, but not so of the common soldiers about whom it is said. "They were no more immoral or dissolute than the soldiers of the 20th century."2

MARCHES

The first march of the Sikhs was comparatively a short one, but not shorter than that of the Mughals and the Marathas. No doubt, some of the factors which had caused delay in the earlier period were present even now. For example, the Sikhs also believed in lucky and unlucky days3 and seldom commenced their marches without consulting astrologers or the Holy Granth. They had for this purpose an official astrologer, named Pandit Matsudan. It often happened that the auspicious hour was timed earlier than the completion of preparations for departure. In that case a nominal march was made to some nearby place where the troops remained encamped until everything necessary was ready. But Ranjit Singh was very particular that there should be no unnecessary delay in making the start. therefore, as a rule, gave due notice to his troops to get ready for march.4 Moreover, under his keen vigilance, obedience of the chiefs as well as the troops was most prompt and did not have to encounter objections from the nobles as was the case with the Mughals. But after the strong hand of Ranjit

^{1.} Monograph 17, 1814 (16) 27th May.
2. J.P.U.H.S., Vol. V, April, 1938, p. 23.
3. Monograph 17, 1813 (16) 9th July, Lahore; P.G.R., Vol. IV, p. 146; Osborne, p. 45, writes: "Ranjit Singh rarely undertakes any expedition of importance without consulting the Holy Book."
4. Sohan Lal, Vol III, Part I, p. 213 and Vol. III, Part V, p. 107.

Singh was removed by death, circumstances underwent a change. A number of factors then appeared which led to a good deal of delay in the commencement of marches. The first factor was the policy of such rulers as Raja Hira Singh and Jawahar Singh of distributing generous rewards to the troops at Lahore, which created a situation in which nobody wanted to leave Lahore.¹ Secondly, there was a good deal of unseemly haggling² on the part of the troops ordered to be marched off. Objections were often raised by them that it was not their turn to go out or that their arrears must be paid before they would make a move.

The start having been made, the Sikh army travelled very fast and reached its destination by such long marches as greatly excited the admiration of one and all observers. Osborne³ credits it with superiority over the British army and points out: "The Sikh army possesses one great advantage over our own—the ease with which it can be moved. wheel carriage is allowed on a march, their own bazars carry all they require and 30,000 of their troops could be moved with more facility and less expense and loss of time than 3 companies of regiments on this side of the Sutlej". Short marches of seven or eight kos a day rather than long marches were an exception with the Sikhs and were reserved for times when exigencies of policy required it. As regards the length of their marches, Smyth mentions a case in which 300 miles were covered within 12 days at the average rate of 25 miles a day.4 Mr. Gardener, an officer of the Sikh army, gives a graphic account of his personal impressions in this connection: "A little before Chet Singh's murder, I myself started from Peshawar with Prince Nau Nihal Singh and about 300 troops, horse and foot, and 12 guns. The prince with a few horsemen reached Lahore on the evening of the fifth day and I with 900 infantry reached Lahore on the seventh in the morning and on the ninth day the force that left Peshawar reached Lahore. A Sikh has often been known to travel from Peshawar to Lahore

^{1.} In fact troops from outside were greatly tempted to come to Lahore. For: Misc. Vol 349, p. 453.

^{2.} Ibid., pp. 254, 803; Osborne, p. 40.

^{3.} Osborne, p. 40.

^{4.} Smyth, Appendix 16.

in five days and I had a Sikh in my corps of artillery who repeatedly went on foot from Jammu to Lahore and I had known him bring back despatches in somewhat less than 36 hours. The distance is 60 Punjab kos or about 90 miles from Jammu to Lahore, which makes 180 miles to be travelled in 36 hours, but there are several Sikh soldiers who even for a small consideration go 40 kos or 60 miles for 12 or 15 together." In 1837 when Ranjit Singh despatched his troops towards Peshawar, he fixed the speed of 28 kos for horsemen and 15 kos for foot men.² Munshi Sohan Lal³ has recorded conversation between Ranjit Singh and some British officers at the Ropar camp of 1831, in which the Maharaja told his guests that his army made marches of 20 kos a day and that he himself from the very beginning of his reign had been accustomed to long marches. In June 1838 Ranjit Singh told Raja Dhian Singh that in younger days and in early youth he used to cover long marches of 40 kos stretch.4

The Dak system or the postal system because it was primarily meant for the carrying of mail, was the quickest mode of travel in those days. Of course, it was neither possible nor open to the common soldiers and officers and was reserved only for the selected few like the Maharaja, the Princes and the prominent chiefs or commanders moving on most urgent business. The system involved the posting of relays of horses or elephants or carriages at intervals of a few kos along the entire route of the journey, so that the traveller could have, after every few miles, a fresh means of conveyance.⁵

That the Sikh army marched in good order is testified by the famous German traveller, Baron Hugel.⁶ In 1836 he fell in with some irregular battalions marching towards Peshawar about whom he writes: "They marched in good order and were followed by a body of camp-followers with their tents, also in close column." Mr. Taylor and Capt. Abbot have

- 1. Smyth, Appendix 17.
- 2. Sohan Lal, Vol. III, Part IV, p. 394.
- 3. Sohan Lal, Vol. III, Part I, p. 86.
- 4. Sohan Lal, Vol. III, part IV, p. 540.
- 5. Punjab in 1839-40, 30th March, 1839 and 5th July, 1840.

6. His Travels, p. 241.

also made reference to the Sikhs marching in columns.1 The stress that Ranjit Singh laid on the regularity of marches may be further judged from his written instructions to Ventura and Allard at Attock in 1837 "to return by regular marches to Lahore."2 Like the Mughal and Maratha armies, the Sikh army was divided during marches into three parts, namely the vanguard or advance-guard, the main body and the rearguard.3 But here the similarity ended, because in the actual order of marching, the Sikhs derived inspiration from the British rather than from their Indian predecessors. After having organised their army on western lines, it was indeed pointless for them to follow in the footsteps of their countrymen in this regard. It was all right for the Mughals to keep their cavalry and heavy artillery in front and their infantry in the rear, because their major arm was cavalry and not infantry. Maratha system marked a transition. In the early stages, they followed more or less the Mughal system of marching, but later on they modified it under the impact of western military thought, keeping sometimes their cavalry and sometimes their infantry in the front of their army and putting their bag and baggage in the rear. The Sikhs, imitating the British, had given the first place to infantry and artillery, which changed not only their tactics but also their marching order. We know it on the evidence of Mr Metcalfe that Ranjit Singh generally constituted his advance guard of infantry and guns.4 The advance guard was generally accompanied by a small body of cavalry as well, which was kept in front and on the flanks. Besides, there were a number of beldars or pioneers with spades to smooth out the roads for the passage of guns, particularly if the march lay through a hilly tract.⁵ Like the vanguard, the main body of the marching army also had elements of all the three arms, while the rearguard which brought up the bag and baggage was composed of cavalry and artillery. This

^{1.} P. G. R., Vol. VI, p. 109; Ibid. Vol. IV, p. 102.

^{2.} For: 1837 Pol. Cons: 21st Aug., 35.

³ For: 1814 Pol. Progs. 9th Sept., 6; Monograph 17—1816 (9) 6th March. Panjab Papers, p. 389. For: 1848 Sec. Progs., 25th Nov., 201.

^{4.} For: 1808 Sec. & Sep. Cons: 19th Dec., 3.

^{5.} Monograph 17, 1814 (13) 25th May; Sohan Lal, Vol. III, Part V, p. 14; P. G. R., Vol. VI, p. 106.

would be clear from the report made by Mr. Currie to Mr. Malet, dated 20th October 1848, on the march of Raja Sher Singh from Multan towards Ramnagar. Mr. Henty also refers to the place of wagons being in the rear. The king or the chief commander marched with the main body in the centre, which enabled him to control his van-and rear-guards easily.

There was no special allowance given to the troops during their marches until one was instituted by the British Resident They were, however, compensated in at Lahore in 1847.3 many ways. In the first place, all their baggage was carried on Government camels. Secondly, the system of begar or forced labour, i.e. the system of securing the services of the people on the route free of charge, was widely prevalent in the country, so that no expenditure was incurred on cooliage. as is mentioned by Sir Henry Lawrence, it was usual in the Sikh army, whenever troops were sent on service, to give them before hand a promisory note of reward to be realized by their own exertions.4 Fourthly, inspite of the Government's strict instructions to the contrary, the officers and men often procured things like fuel and fodder without any payment. But all this was hardly conducive to discipline. It led to a lot of harassment to the public, and loss of crops. Therefore when the British assumed control in 1847, they stopped many of these practices and started paying a marching allowance suited to the ranks of the troops, the lowest being Rs. 1/- per mensem for an infantry soldier while marching or in camp.5

TRANSPORT

For want of good roads and bridges, the transport problem in those days was beset with many difficulties. "By a road" says P. N. Khera, "was generally meant a mere broad path and that too not always, for sometimes it was a mere beaten track found with difficulty." Good roads were conspicuous

- 1. For: 1848 Sec. Progs. 25th Nov., 201; Panjab Papers, pp. 399 & 401
- 2. Through the Sikh War, p. 109.
- 3. Panjab Papers, 1847-49, pp. 23 & 29.
- 4. P.G.R., Vol. III, p. 184.
- 5. Panjab Papers, 1847-49, p. 29.
- 6. J. P. H. S., Vol. V, April, 1938, Social Life in the Sikh Kingdom.

by their absence, more so in the hilly areas where the difficulty of transport was consequently all the greater.1 The Government showed, however, little anxiety to improve the roads. Rather very strangely, it was the deliberate policy of Ranjit Singh to avoid the construction of good roads. he actually remarked to Baron Hugel that if he built any good roads, he would be only making it easier for his enemies to advance against him.² As regards bridges, their number was extremely limited, so that most of the rivers and nallahs had to be crossed by boats, inflated skins, elephants and if possible, forded on foot. The few bridges that existed were either of the primitive kind found generally in the hilly regions, particularly Kashmir, such as the Sangha or Sanghla type built of wooden planks, the jhoola or the rope type³ or boat bridges like those usually built on the Indus. The Sikhs also had a few bridges of masonry across small water courses, which, according to Baden Powell, "were exactly built like the Muslim bridges having all their important features, such as the usual pointed Mohammadan arch, the great strength of masonry and a small span of arch."4 Similarly, there was nothing new in the boat bridges of the Sikhs, which were built in the old traditional manner. Capt. Burnes was "struck with the singular coincidence between the Sikh manner of throwing up a bridge and that described by Arrian in his Book V, Chapter VII, when Alexander crossed the Indus."5 From this it may be inferred that a Sikh boat bridge was hardly different from that of the Mughals and, as such, had all the advantages or disadvantages of the latter so graphically described by Irvine.6

Of all the boat bridges built by the Sikhs, those constructed across the Indus are by far the best known. Shahamat Ali informs us⁷ that every year after the rains a bridge of boats

- 1. Jacquemont, Vol. II, pp. 39-40, 63 & 78.
- 2. Baron Hugel, p. 326.
- 3. Handbook of Manufactures and Arts of Panjab, Vol. II, p. 333; Vigne, Vol. II, p. 23; P. G. R., Vol. VI, pp. 102 & 104.
 - 4. Handbook of Manufactures and Arts of Panjab, Vol. II, p. 333.
 - 5. For : Misc. Vol. 269—Burnes' Memorandum, p. 139
- 6. Irvine, p. 212. From Wade we learn that Ranjit Singh wanted to improve his bridges and expressed a desire to obtain a model of a Shakespearean bridge similar to the one which was erected over the Ghembir near Sabathu. But there was no practical effect. For: Misc. Vcl., 258.
 - 7. Shahamat, p. 177.

was built at Attock to keep the communication open with Peshawar, which continued to function for 7 or 8 months thereafter. During winter its site was just above the fort of Attock, while in spring and summer it was removed to a spot lower down where it stood till the current became too strong for it. The bridge was looked after by the Qiladar of Attock and the Nazim of Peshawar.

The principal means of transport were horses, mules, bullocks, ponies, camels, elephants, carts or hackeries and boats. The animals used for the purpose were collectively known as "Dwab-i-Barbardari". Horses and bullocks were used to carry guns, while camels were employed as draft for swivels. So far as the horses are concerned, most of them were country-bred, but the best of them were imported from the trans-Indus regions like Peshawar, Afghanistan and Seistan. either by way of tribute from the Pathan Chiefs or by purchase through the Amir of Afghanistan, the Peshawar Chiefs, the Sikh officers posted there, specially commissioned agents or from the dealers in horses. As regards the price of a horse it ranged from about Rs. 200 to several thousands of rupees.² Bullocks were almost exclusively used to drag carts or hackeries of ammunition. This was, however, not a very satisfactory method. Horses, mules and camels might have served the purpose better, as is suggested by many contemporaries like Major P. George³

^{1.} The manner of the constitution of an Indus bridge has thus been described by Capt. Burnes: "Ranjit Singh retains a fleet of 37 boats at Attock for the construction of a bridge across the river, which is only 260 yards wide. The boats are anchored in the stream a short distance from one another and the communication is completed by planks and covered with mud. Immediately below the fortress of Attock, 24 boats only are required, but at other places so many as 37 are used—skeleton frame-works of wood filled with stones to the weight of 250 maunds and bound strongly by ropes are let down from each boat to the number of 4 or 6, though the depth exceeds 30 fathoms and these are constantly strengthened by others to prevent accidents. Such a bridge has been completed in 3 days, but 6 is a more usual period". For: Misc. Vol. 269, p. 139.

^{2.} Sohan Lal, Vol. III, Part II, p. 281 and Vol. III, Part V, p 113 and Vol. IV, Part III, p. 26. The Sikhs were extensive breeders of horses and depended very little on outside supply. Ranjit Singh had several studs for this purpose. Moreover, the districts of Rawalpindi, Attock, Peshawar etc. were most famous for horses and even the British sometimes used to get them from there.

^{3.} P. G. R., Vol. IV, p. 334. "All the ammunition is carried on hackeries, which in any country, much less this, can never keep up. I would recommend the substitution of mules and camels."—The Adventurer, p. 119.

and the Adventurer. But we find the Sikhs clinging to their preference for bullocks right up to the end of their rule, probably on the score of their easier availability, for any number of them were obtainable in the cis-Sutlej territory and the region of Dhani-Pothohar. Bullocks were also used for carrying supplies for the army, such as foodgrains and clothing etc. A strong bullock capable of carrying about 5 maunds of weight did not cost more than Rs. 20 to Rs. 25. Mules and camels were employed for carrying equipment, bag and baggage, Government treasure and other supplies like magazine stores etc. and thus rendered an important service, though they were less numerous than the bullocks. They were kept as stand-bys to help the bullocks out of their difficulties, such as when a cart went out of order or got stuck in sand or mud. Such an arrangement was very esssential, because the Sikh carts or hackeries were not always of the best construction.2 In the rainy season when wheeled traffic was difficult, much greater use was made of camels. A camel which was capable of carrying from 6 to 8 maunds of weight alone was admitted into service, its price ranging from Rs. 60 to Rs. 80. number of camels, like the bullocks, could be purchased within the country, but preference was always given to the camels from Leia, Karore, Jhang, Shahpur, Attock, Bahawalpur and the border regions of Rajputana. Ponies and mules were likewise procurable from within the country. The most famous source of their supply was the region of Dhani-Pothohar.3

In the hilly areas where the problem of transport presented peculiar difficulties, camels were useless and thev were discarded in favour of bullocks, mules, ponies, and elephants. According to Capt. Abbot, bullocks too were "of little use in the hills,"4 though they were often used. Mules and ponies were better fitted and, wherever possible, were preferred to bullocks. In the case of heavier luggage, elephants were used. For the carriage of guns in mountainous regions, elephants were

^{1.} In an infantry battalion camels were distributed as follows: Commandant—2 camels; Adjutant—1; Major—8; each Coy. of 100 men—4; Office—2; Mistrikhana—1 J. I. H., 1921-22, Vol. I, Parts I & II—Article by S. R. Kohli.

^{2.} Calcutta Review, Vol. II, Oct.—Dec., 1844, p. 177. 3. I. H. R. C., Vol. XXXI, Part II—Astuele by S. R. Kohli, 4. P. G. R., Vol. IV, p. 108.

the only conveyance possible,1 as admitted by Capt. Abbot. The Calcutta Review of 1849 thus explains their serviceability in hilly areas: "It can hardly be imagined how useful these elephants are, nor with what skill and intelligence they do their When a piece of artillery is drawn up a hill, the elephant is behind it and sustains it with his foot (they put their heads to it now-a-days), while the oxen pause to take breath; if the piece is going down a hill, the elephant retains it by a rope fastened to his trunk; if the tackle gets entangled or if the piece oversets or sticks fast, he assists the oxen, according to the circumstances."2 There are several other references which show that the Sikhs carried their light and moderate guns on the back of elephants along difficult routes. The hill forts like Azamgarh, Relhu and Taragarh were all conquered by bombardment from the guns and mortars carried uphill by the elephants. In the plains elephants were used either for the conveyance of the king and his nobles or sometimes for carrying guns across rivers. The maximum price of an elephant was Rs. 700/-.3

Good and durable gear or equipment of transport animals is one of the essentials of an efficient transport service. What kind of gear the Sikhs used may be judged from Mr. Mc Gregor's description of the gear of bullocks and horses given below4:— Bullock gear with brices

	2	accoon gear	will prices	
		Rs. 4/8/-	l chabak (stick)	Rs/4/-
2	ropes for reins	Rs/6/-	l khererah	
1	safrah & tant	Rs. 1/4/-	(curry comb)	Rs/4/-
2	naths (nose		1 hand rubber	Rs. $-\frac{3}{6}$
	strings)	Rs/2/6	1 rope for line	Rs/10/-

Total...Rs....7/10/-

- 1. Ibid. p. 106. "They are the only animals, however, capable of carrying field guns in mountains."
- 2. Calcutta Review, Vol. XI, 1849—Jan.-June, p. 451.
 3. Cavalry Officer, p. 26—The comparative carrying capacities of some of these animals as recorded by Humbley are given below:

Elephant-1600 Camel —480 Bullock —210 lbs. 1bs

These capacities were reduced in wet weather.
4. For: 1848 Sec. Progs. 31st March, 53; These descriptions are taken from the regulations framed by Mc Gregor in 1848 for the re-organisation of the Sikh army. They may not give us an exact idea of the Sikh gear, but they certainly mark the nearest approach to that.

Horse gear with prices

	1,3	1	
1	leather head stall	-	Rs. 1/4/ -
1	watering bridle		Rs/12/-
2	pairs of heel straps		Rs /7/ -
1	roblee		Rs/10/-
1	leading rope		Rs/4/-
1	head rope		Rs/2/-
I	blanket		Rs. 1/1/-
1	curry comb—		Rs/2/-
1	feeding bag.		Rs/2/-
1	woollen rubber		Rs/1/-
3	wooden pins.		Rs. $-\frac{1}{6}$
1	heal rope		Rs/4/-
		Total	Rs. 5/6/-

To fulfil its requirements of animal transport, the Lahore Darbar maintained a large supply of animals, besides the thousands which were distributed amongst the various branches of the army. There were different officers to look after the various categories of animals, such as the Darogha of Mules (Darogha-i-Khachran), of Camels (Darogha-i-Shutran), of Horses (Darogha-i-Astbal), of Elephants (Darogha-i-Filan) etc. The following are the statistics of the annual expenditure incurred on the purchase of various animals under the different Sikh rulers :—

Anımals	Ranjıt Singh	Kharak Singh	Sher Singh	Hira Singh	Jawahar Singh	Lal Singh	After Lal Singh
Bullocks	. 26480	100 25000 1026 21500	135 32000 200 5000	110 27000 540 12000	66128 2371	49016	174 10,000 200 5000
Camels				Rs.	441 36743	343 24657	250 22,000
Mules Rs.	85 6400	97 8000	199	50 5000	53 48000	7892	40 3000

1. News, pp. 485, 552; P. G.R., Vol. III, p. 95.

2. For: 1847 Sec. Progs 31st Dec, 335. H. Lawrence's estimates submitted to Government in 1847. There is no mention here of the expenditure incurred on the purchase of elephants. Also there is none regarding the camels until Jawahar Singh's period. Moreover, these figures are not exhaust ve. The animals which were accepted by the different Maharajas as presents or as part of tributes are not included here. For example, the News of Ranjit Singh's Court (p 653) tells us that Ranjit Singh used to get 250 horses as tribute from the Usafzais alone. The same source informs us about his writing to some zamindars to send him 50 horses and 50 mules every year and 2000 camels in revenue—pp. 518 & 207.

But howsoever large the number of state animals might be, they were not always adequate to meet the demand, with the result that a large number had to be hired. However, no difficulty was experienced in this connection, there being numerous traders in the country with large numbers of camels, mules, and bullocks open for hire. The annual bill of the hire of camels and mules alone under the various administrations was as follows¹:—

Ranjit Singh Rs. 10, 000/- Hira Singh Rs. 12,000/- Kharak Singh Rs. 16, 223/- Jawahar Singh Rs. 11,568/- Sher Singh Rs. 1,95,697/- Lal Singh Rs. 41,681/- There is no mention of bullocks here, but they were definitely hired in times of need. In 1840 Kanwar Nau Nihal Singh hired thousands of Lubana and Banjara bullocks for carrying supplies towards Mandi,² and earlier in 1838 Ranjit Singh himself had hired 10,000 bullocks at Rs. 22,500/- per mensem to carry provisions for his troops marching towards Peshawar.³ Some information is available about the rates at which some of these animals could be hired by the state. The usual monthly hire for a mule was Rs. 7/-, for a bullock Rs. 2/- to Rs. 2/8/-,⁴ and for a camel, Rs. 5/-.

Begar (forced labour)--The system of begar or unpaid labour was very popular in those days. It had been in use in India for centuries.⁵ Today it will be readily granted that it was unjust and oppressive, but then it was accepted as an established custom of the land and the element of injustice involved in it was little appreciated. The custom was more widely prevalent in the hilly areas,⁶ where the difficulty of roads and animal transport made the employment of human carriers imperative, than in the plains, though here too it was invariably resorted to, when other means were found to be unavailable. Begarees were generally taken from the low-caste men and Musalmans. Henry Lawrence gives the following description

^{1.} For: 1847 Sec. Progs. 31st Dec., 335—estimates of H. Lawrence.

^{2.} For: 1840 Sec. Progs. 28th Sept., 81 & 12th Oct., 108 & 114.

^{3.} Sohan Lal, Vol. III, Part V, p. 4.

^{4.} For: 1840 Sec. Progs. 28th Sept., 78 and 12th Oct., 108 & 114; Sohan Lal, Vol. III, Part V, p. 4.; For; 1842 Sec. Progs. 8th June, 43.

^{5.} Panyab Papers, p. 29-Resident to Govt., Aug., 2, 1847.

^{6.} News, pp. 215-16; P. G. R., Press Lists Book 8.

of this evil custom: "Capt. Abbot alludes to the curses of the begar or forced labour system. It is one so inherent in native institutions that I fear there will be great difficulty in eradicating it.......I will return to the subject and do all in my power to restrain the seizure of carriers, but the fact is that the chiefs, soldiers and servants consider that low-caste men and Musalmans (kamin) were created to be their beasts of burden." The system of begar was ultimately abolished by the British in 1847 when a marching allowance was granted by way of compensation to the soldiers.

Soldiers' Self-exertions-It would be rather unfair to the personnel of the army not to mention the great and unsparing exertions which they generally put in to tide over the difficulties they encountered in the course of their marches, such as the break-down of hackeries, casualties to animals, unavailability or shortage of labour and steepness of roads. tributes to their endurance have been paid by Capt. Abbot and Mr. Taylor who were otherwise not very sympathetic towards Capt. Abbot writes in his diary under 18th 19th November, 1847: "I cannot close the journal without remarking upon the excellent conduct of the Sikh troops of the force acting under me. Sepoys carried their baggages on their own heads, due to shortage of hill carriage, leaving behind much that was necessary for comfort in this lofty, bleak region in order to be punctual to the day I had appointed for their arrival at Dunna." Mr. Taylor led a brigade of Sikh troops in 1847 from Peshawar to Bannu through the Lachhee Pass Paying his tribute to the men with and the Kohat Kothul. him, he writes: "The soldiery worked like coolies through whole days without a word of discontent; had they not done the difficulties would have been doubled."2 Mr. Vigne mentions3 a very interesting instance of a Sikh General carrying a six-pounder slung on poles and borne by 32 men at a time, 200 men in all being employed on this service, because carriages could not be used on that path. Even when there were no emergencies, the Sikh sepoys, "being very scantily supplied with carriage, as a rule carried on their heads or backs 15 or

^{1.} Panjab Papers, p. 29.

^{2.} P. G. R., Vol. VI, p. 111.

^{3.} Vol. II, pp. 181-182.

20 pounds weight of grains and clothes." i In 1827 Ranjit Singh himself boastfully told Murray that his sepoys carried, besides their arms and accoutrements, 2 or 3 days' provisions with them on their backs.2 However, Lieut. Barr is rather critical of the "long strings of soldiers on a line of march carrying burthens," but he too had to admit that "on occasions it has proved to themselves most useful-indeed has saved them from starvation." This stands in contrast to the conditions in the British army where the soldiers were spared such exertions.

Boats—Boats were occasionally used for carrying supplies.3 but more often than not, they were used as a means of crossing the rivers. All the rivers had their ferries and ferry-boats, but there were wide differences in their weight, in the manner of their construction and their cost, depending on the nature of the rivers on which they were plied. Most of the boats at the important ferries belonged to the state and the boat-men were paid employees of the Government. However, in addition to their pay, Ranjit Singh usually granted them generous rewards to keep them attached to his interests. The boats plying on the Ravi, Chenab and Jhelum rivers were, by and large, owned and run by traders in salt. In time of need these boats could be and were hired by the state 4

SUPPLIES

The Sikhs did not have any specially organised commissariat department⁵ like the British; nonetheless they recognised that it was the Government's responsibility to make arrangements for the provision of supplies to their army. The whole machinery of the civil administration was harnessed to this end. The Maharaja (later on during the minority of Dalip Singh, the Wazir), being the all-powerful head of the Govern-

- 1. The Calcutta Review, Vol. II, Oct.-Dec. 1844, p. 175; For: 1827 Pol. Progs. 30th March, 28.
 - 2. Murray to Wade, 24th Feb., 1827, Cons · 30th March, 1827.
- 3. Sohan Lal, Vol. II, pp. 212-213—Boats full of supplies were sent to Multan in 1818 via the Jhelum and the Chenab.
 - 4. Sohan Lal, Vol. III, Part V, p. 23.
- 5. In 1848, however, when the British were in control of the Lahore Government, a special department was established, which consisted of a Commissary General, 4 Assistants and a large number of gumashtas and servants. For: 1848 Sec. Progs. 31st March, 53.

ment, was himself the commissary general, the accountant general and the auditor general. All Nazims, Kardars, Courtiers, Thanadars, Chiefs and Garrison Masters were at his beck and call, who, on instructions from him, made all the necessary arrangments. At Lahore Faqir Nur-ud-Din was put in charge of the erection and maintenance of public works, preparation of arms and ammunition, and procurement and storage of food grains etc., but his powers were extremely limited: he was more of an agent of the Maharaja than a minister or even a secretary.

Having assumed the responsibility for provisioning their army, the Sikh rulers established a number of stores and depots all over the country. Supplies of foodgrains were purchased or collected in lieu of land revenue1 and stored in the neighbouring forts. For this purpose permanent duties were assigned to Nazims and Kardars. For example, the Kardars around Amritsar were required to put into Govindgarh annually 3000 maunds of grain.2 The same was the case around Lahore, where a certain territory was marked off for this purpose.3 As regards the Nazims, they were responsible for replenishing the stores in the forts under them. The Nazim of Multan was often required to send grain supplies to places even outside his province.4 The most important forts where the stores were housed, were Lahore, Amritsar, Rohtas, Multan, Kangra, Sialkot, Attock, Peshawar and Dera Ismail Khan. Along the much frequented Lahore-Peshawar Road godowns were built up at a distance of 30 to 40 kos from one another.5 The man incharge of the store was known as Darogha-i-Zakhira, who was assisted by some mutsaddis. He was required to take every care to protect it from wet and harmful insects. The Qiladars were also charged with the responsibility of looking after the stores.6 Occasionally, the accounts were

^{1.} News, p. 234—mention of 1 lakh maunds of grain collected by Nur-ud-Din in lieu of revenue from the Taaluqa of Surian.

^{2.} Lahore Political Diaries, Vol. III, p. 191.

^{3.} Neus, p. 403.

^{4.} Sohan Lal, Vol. III, Part II, p. 184.

^{5.} For: 1827 Pol. Progs. 30th March 36; Murray to Wade, 24th Feb., 1827 Cons: 30th March, 1827.

^{6.} News, pp. 310, 335 & 348—Ranjit Singh's instructions to the Qıladars of Kangra, Nurpur and Kotla.

audited and severe punishments awarded, if any embezzlement was detected or if there was any evidence of negligence of duty. 1 No issue from the stores was possible without a letter of authority from the Darbar. Generally, they were reserved for emergencies, because in normal times supplies were pro-In case the stocked foodgrains cured from other sources. were not used for a long time and were likely to get spoiled, they were sold in the open market and replaced by fresh supplies with the permission of the Government. A few instances are also available in which they were sold, not because they were likely to be spoiled, but because it was profitable to sell them on account of a rise in prices.2

While cantoned at big cities like Lahore and Amritsar, the troops were provisioned by Modis (providers of cereals). They had several agents (Gumashtas) who purchased, stored and supplied the requisite food materials to the shops of their masters in the cantonments. In case they experienced any difficulty in procuring the necessary requirements, it was always open to them to request the Government for aid, as they did in 1825 when Ranjit Singh accepted their request and furnished them with Tankhawahs or assignments of 10,000 of corn on Guirat and a neighbouring district.3 The Modis were not always above board and we instances in which they were punished for dishonesty.4 During marches the problem of supplies was more difficult, not only because the requirement of transport was much greater, but also because at times the troops happened to pass through areas short of supplies. The difficulty was all the greater, if the size of the moving army was very large. Therefore, on such occasions a number of agencies were pressed into service to furnish supplies to the bazars of the troops. Before any movement was ordered, all the Kardars having territories along the proposed route of march were alerted⁵ to get their supplies ready and to send them to the troops when they passed

^{1.} News, pp. 171, 255, 261; The Darogha of the Lahore Fort stores was fined Rs. 20,000 for negligence of duty.

^{2.} News, p. 300.
3. Ibid., p. 498.
4. Ibid., pp. 280, 475 & 585—mention of imprisonment and a fine of Rs. 10,000-.

^{5.} Monograph 17, 1813 (34) 13th Nov. and 1817 (1) 8th & 9th January.

through their areas and also in their rear, as far as possible. No negligence on their part could be tolerated. For instance, when in 1846 they were found guilty of neglect, we find John Lawrence urging Raja Lal Singh to punish or dismiss them.1 As regards accounts, they were as a rule adjusted in the revenues collected by them. Zamindars and Jagirdars of the neighbouring areas were frequently called upon to supplement the supplies.2 Similarly, the Qıladars on the route were required to comply with any indents made upon them. If the troops happened to be in any one of the provinces, it was the duty of the Nazim concerned to make the necessary arrangements for feeding them.3 In the case of large-scale operations, such as the Mandi campaign of Nau Nihal Singh's period, all local authorities, including Thanadars and Ijaradars (farmers), were ordered to help with whatever provisions they could arrange for.4 Moreover, huge convoys of supplies were despatched from the capital to supplement the local resources. Ranjit Singh used to work day and night on this work during his campaigns.⁵ In addition to the official agencies described above, there were some private agencies which played a leading role. They built up their own godowns with the help of their agents, from where they sent supplies in their own carriage for sale in the bazars of the army. Mr. Broadfoot makes a reference to the respect in which the convoys of such dealers were held among the Sikhs.6 The Sikh rulers never forgot how vital the services of these people were to their success in the field and therefore, to keep them genuinely in their interest they granted them farms of land and many other favours.7

Mr. Burton says that the bazars of the Sikhs contained all that they required and he considers this as an important

2. Ibid, 6th April, 1816.

7. Monograph 17, 1814 (40) 15th November.

^{1.} For: 1846 Sec. Progs. 26th Dec., 1239. John Lawrence to Currie, 8th Nov., 1846.

^{3.} Sohan Lal, Vol. III, Part III, p. 321; For: 1842 Sec. Cons. 30th March, 98-99.

^{4.} For: 1840 Sec. Cons. 9th Nov., 127-132. Lehna Singh ordered to urge the neighbouring hill authorities to provide the troops with every necessary.

^{5.} For: 1842 Sec. Cons. 28th Feb., 44-47; Monograph 17, 1814 (17) 1st June and 1815 (18) 26th August; Zafarnamah Ranjit Singh, Chapter XX.

^{6.} For: 1845 Sec. Progs. 20th June, 33; Broadfoot to Currie, 27th March, 1845.

cause of their rapid mobility, for the reason that the movements were unencumbered by long trains of carriage carrying supplies. Further, a vigilant watch was kept over the bazars through the appointment of Kotwals who regularly reported all serious cases of default to the Maharaja for necessary action.

Capt. Burnes tells us2 that the Sikh portion of the army lived in messes which were supplied by the Government at a deduction of Rs. 2/- per head per month. The Sikhs were the first Indians to do so, because we do not find it in vogue even in the native units of the English army. The reason is that the Sikhs unlike most other Indians were, due to the teachings of their Gurus, emancipated from caste prejudices in the matter of food. Their religious institution of the community kitchen (Langer) had given them the necessary training for this. It is difficult to understand why the Muslims did not take to this system, free as they were from food taboos, but it may be surmised that they did not want to lose the independence of choice implied in the traditional system in which everyone could eat whatever one liked. The first time we find a mention of the mess system in the Sikh army was in 1823-24 in the case of the Sikh battalions of Ventura, from which it may be inferred that it was an innovation introduced by Ranjit Singh chiefly at the instance of his French officers.3

Every unit having a mess was provided with cooks and watermen at the rate of one each for 50 men.⁴ This is apparently an inadequate number, but it was thought sufficient, because the cooks were probably assisted by the soldiers themselves. Moreover, the messes were voluntary, so that all such people as desired, made their own arrangements or had only their chapatis baked in the common hearth. In the units which had no messes, this number was more than enough, because the cooks were concerned only with the baking of cakes. The cooking utensils and camels for their conveyance were provided by the state.⁵

- 1. The First and Second Sikh Wars, Chapter II.
- 2. His Travels, Vol. II, pp. 286-287.
- 3. 4 & 5—I.H.R.C., Vol. XXXI—Part II, January, 1955—A trained Infantry Battalion by Kohli; Wade to Metcalfe, 1st Aug., 1827 Cons: 12th Oct., 1827.

The staple dietary of the soldiers consisted of chapatis of wheat flour, dal (pulses) and ghee. On some occasions one or another delicacy like Halwa or Khir (pudding) or a dish of meat was added to the meal. There was a fixed daily scale of ration for each soldier—an innovation which followed naturally from the introduction of the mess system. The following figures are available about the Battalion Khas of the French Brigade: wheat flour I seer, pulses 2 chhataks or 4 ounces, ghee ½ chhatak or 1 ounce, firewood I seer, common salt 2/7 ounce. The same scale, it may be presumed, more or less prevailed in the other units.

The cattle of the army were fed by the state, except those which belonged to the ghorchurras. The following are the details of annual expenditure incurred on the feed of horses, mules, ponies and bullocks as under the various administrations.² They do not, however, cover camels and elephants:

Ranjit Singh Rs. 2,50,661/ 4/Kharak Singh Rs. 2,54,946/Sher Singh Rs. 1,90,736/Hira Singh Rs. 2,69,196/Jawahar Singh Rs. 2,34,504/12/Lal Singh Rs. 3,91,348/ 8/-

The feed of the cattle comprised grain, bhoosa (dry fodder), grass and green fodder of jawar and makki. We do not know the exact daily scales, according to which these animals were fed, but it is possible to have a rough idea about them. These were higher than those proposed by Mr. Mc Gregor³ in 1847, for Major P. George writes in his Diary that

^{1.} Ibid; For: 1848 Sec. Progs. 30th Dec., 194—Here is a somewhat higher scale, but it does not seem to be so exact. The scale is: wheat 3 seers kacha, ghee I chhatak, dal 2 chhataks, salt 1/4 chhatak and wood 3 seers kacha.

^{2.} For: 1847 Sec. Progs. 31st Dec., 335.

^{3.} For: 1847 Sec. Progs. 31st March, 53; P.G.R., Vol. IV, p. 144. The scales proposed by Mc Gregor were as follows:—

Elephant—8 to 12 seers atta daily, $3\frac{1}{2}$ maunds of sugar-cane, 3 maunds of dry curbee and 4 maunds of green forage, masala -/12/- per month.

Bullock—gram 2 seers per day at station and 3 seers on command, bhoosa 7 seers, masala -/1/- per month.

Horse—3 to 4 seers gram per day, grass 14 seers dry and 17 seers green per day; masala not given.

Camel—gram at graze 1 seer daily, at station $l\frac{1}{2}$ seers daily and on command 3 seers daily, bhoosa 10 seers and masala -/2/- per months.

he strongly pleaded against the new reduced scales. Mr. Kohli's calculations1 give us the daily scale of an artillery horse as 4 seers of gram worth -/3/- and 3 maunds of green fodder worth -/2/-, the total daily cost being -/5/-. Every unit had to submit its requirements every fortnight (in the course of movement only for the duration of the stay at a particular place) according to which it was given a Tankhawah on the neighbouring Kardar.² The troops at Lahore sometimes, owing to too much concentration there, experienced great difficulties in the matter of supplies, for the local Kardars found it impossible to meet all their requisitions and therefore the Tankhawahs had to be assigned on places farther off. For instance, in 1823 on the representation of the French officers to Ranjit Singh that their cattle were suffering much from the scarcity of grass round Lahore, the Maharaja gave them the sanad (assignment) of village Kanah Kachh to procure grass and grain for their horses.3 In times of exigency, protected grazing grounds maintained by the state could be utilized. The duty of feeding and looking after the animals was performed by servants known as Tehlias or Khidmatgars who were provided with vaboos (ponies) for the carriage of grass, fodder and grain.4 the grazing season the cattle were sent out for grazing expenses on fodder and grain were thereby reduced.

As in some other departments of administration, there was a good deal of corruption rampant herein also. We have a number of cases on record in which Ranjit Singh had to punish his dishonest daroghas of stables who misappropriated part of the ration or ratib issued for their cattle. On one occasion a mutsaddi was fined Rs.5,000/-5, while on another the whole staff of the royal stables was imprisoned. After Ranjit Singh's death, corruption increased further on account of the growing weakness of the Government. In 1848 Major

^{1.} P.G.R, Vol. IV, p. 435; P.I.H.C., 1940—A Book of Military Parwanas by Kohli.

^{2.} P. G. R., Vol. IV, p. 432.

^{3.} For: 1823 Sec. Progs. 24th Oct., 14.

^{4.} Calcutta Review, Vol. II, Oct.-Dec., 1844, p. 175; P. G. R., Vol. IV, p. 144.

^{5.} News, p. 407.

^{6.} News, p. 320.

Lawrence found on enquiry that "there were many careless officers who indented the maximum possible and then wasted or improperly used for their private purposes the whole excess caused by sick and absent horses." He then amended the system by establishing a general godown replenished after every 15 days, on which indents were made by the different units every day for the actual number of horses on feed.

Foraging-Inspite of all the above-mentioned arrangements of commissariat made by the state, foraging was widely practised among the Sikhs. Charles Masson thus observes about it: "It is invariably their custom at the close of a march to separate from their camp and to rove over the country for 4 or 5 miles, armed with cudgels and making booty of anything that falls in their way." Lieut. Barr describes them "admirable foragers, i.e. desperate plunderers." But this scarcely affected the efficiency of their marching, for a European officer of the Khalsa army has observed3 from his personal experience: "As soon as we reached our ground, the men, horse and foot, scattered over the country and often goin'g 5 and 8 miles for forage and renewing the march next morning with as much alacrity as if they had slept all night." As pointed out by Barr, it gave the Sikhs in a way an advantage over the British. He writes: "We have seen a couple of British regiments sit for hours at a place for want of wood to cook, where in the course of an hour as many Sikhs would have their pots boiling."4 But in the final analysis the defects of foraging greatly out-weighed its merits. All camps were in the nature of "scourages of greater or less violence to be endured like a flight of locusts or an earthquake," remarks the Adventurer.5 This was admitted by Maharaja Sher Singh in 1841 presence of his courtiers, Sham Singh Attariwala and Rai Kesree Singh, when he praised the manner in which British camps were held and said: "Whatever direction the Khalsa troops might march, the country for 10 miles round was altogether ruined."6

P.G.R., Vol IV, pp. 375 & 432. Calcutt i Review, Vol. II, Oct.-Dec., 1844, p. 175.

Adventurer, p. 40.

Calcutta Review, Vol. II, Oct.-Dec., 1844, p. 175.

Adventurer, p. 58.

For: Misc. Vol. 335; Newsletter No. 1, dated 1st Jan., 1842.

As has been mentioned earlier in Chapter II, Ranjit Singh was a great forager in the beginning. But later on he turned against it. He was deeply impressed with the disciplined and orderly manner in which the British troops marched and encamped.1 He was also impressed with the favourable effects which the British system produced on the minds of the people at large.2 Also as his empire expanded, a consciousness grew upon him that the devastation caused by his troops was not a loss to the enemy so much as it was to his own subjects whose welfare was his moral and political duty. Moreover, with the passage of time Ranjit Singh became increasingly aware of its tactical weakness. Therefore, before many years of his reign were over, he organised an efficient supply system and issued strict orders against the harassment of people and destruction of crops. To emphasise their importance, the orders were repeated off and on. As a matter of fact, every commander, on the eve of his departure, was reminded of these orders and warned of severe penalties in the event of default.3 own camps Ranjit Singh was most particular about such things and we find enough evidence to show that he always put up strong guards round his camps for the protection of crops.4 Fines were levied in case agriculture suffered through the negligence or wilful misbehaviour of any officer or man, but wherever such loss was unavoidable, 'paemali' (compensation for damages) was paid, though, as in the Mughal times, this was generally inadequate. After Ranjit Singh Nau Nihal Singh also endeavoured to enforce strict discipline in this matter, but after him the army became too powerful for the state, so that foraging could be indulged in without any fear of punishment by the authorities.

But even the best efforts of RanjiSingh could not altogether stamp out the practice of foragintg. There were several

^{1.} Sohan Lal, Vol. III, Part III, p 522—Ranjit Singh's own words to Raja Dhian Singh: 'That it was a usual custom in the territory of the Sahibs that none of the footmen or horsemen dared trespass into their fields or even cut their trees'.

^{2.} Mc Gregor, Vol. I, p. 289.

^{3.} P. I. H. C., 1940, pp.3 67-371. Here is a specimen: 'You must march carefully, must cause no harm to any people or their crops. You will be held responsible for this.'

^{4.} Sohan Lal, Vol. III, Part I, p. 106; News, p. 547.

reasons for that. In the first place, it was an old, popular, and deep-rooted practice.1 The Mughals and the Marathas had freely indulged in it. The latter may indeed by called the greatest foragers of India. The Sikhs themselves had practised it during eighteenth and early nineteenth centuries on extensive scale. The Advanturer referring to this old traditional practice of the country thus comments on the attitude of the Indians towards this: "Throughout India the Government servants expect free quarters and if refused, owe a grudge to the stout zamindar. Grass and wood especially are expected gratis, and even if the superior pay for them, little, if any, of the price reaches the rightful owner." Secondly, the irregularity of payment which was so rife, especially under Ranjit Singh, compelled, as it were, the troops to resort to the objectionable and forbidden course of foraging. Thirdly, there was no marching allowance to cover the expenses of the journey until the fag end of the period. It may be argued that the Sikh soldiers did not deserve any such allowance, because they received higher pay than the British soldiers and their was carried by the Government. But it may be bered that they suffered from a number of deductions which considerably reduced their pay.

CLOTHING AND EQUIPMENT

The idea of uniform dress and equipment was borrowed from the British who had introduced it into India from Europe during the eighteenth century. Europe had got it from Gustavus Adolphus, a Swedesh king, and Marlborough during the seventeenth century.³ Ranjit Singh borrowed from the British not only the idea but also the pattern of their uniform, with a few adjustments necessitated by his circumstances. It may, however, be remembered that he was not the first man in India to have the uniformity of dress, because the ground had already been prepared in the second half of the eighteenth century by a number of Indian princes like Mahadaji Sindhia and Tipu Sultan.

^{1.} Mc Gregor, Vol. I, pp. 289-290. "The Maharaja was anxious to imitate us (the British) in warfare and discipline, but there were some old deep-rooted practices which he could not forego".

Adventurer, p. 59.
 Palit, D. R., p. 13.

The regular army with the exception of cavalry was provided with all equipment and clothing by the state in lieu of a deduction from the salaries of the men. As a rule, new clothing was issued after every two years on the occasion of Dusehra when the annual muster was held,2 as also on certain special occasions, such as interviews with Lord William Bentinck and Lord Auckland. During the winter, except for head and foot gear, the men of the regular infantry were dressed and accoutred like the British in red and blue, with different coloured regimental facings to distinguish corps as in the British service.3 Their jackets, called Kurtis, were made of scatlet banat or broad cloth and had white stripes of braid scross the breast, while their trousers were of blue linen The latter were rather of a loose type which did not hinder easy sitting and were sometimes also white in colour. Some regiments like the Gurkhas wore Chakoos or caps of black banat,4 with green jackets faced with red, similar to the English Rifle Regiments of the period, but the most popular head dress was the turban, "a blue turban with one end loose and spread to cover the head, back of the neck and shoulders."5 Their foot gear consisted generally of the country-made shoes. The artillery men of the Sikhs wore both black and red jackets, with white or blue trousers6, while their regular cavalry was dressed in crimson but light dragoon jackets and "dark blue trousers bearing red stripes with crimson silk turbans, brought somewhat into a peak in front and ornamented in the centre with a small brass halfmoon from which springs a glittering sprig about two inches in height (a uniform half-French and half-Sikh)."7

During the summer the whole regular army was dressed

^{1.} The horsemen, both regular and irregular, provided themselves with every thing out of their own salaries, but if their horses were killed in action, they were given an extra recompense. Murray to Wade, 16th Jan., 1827 Cons: 16th March, 1827

^{2.} Sohan Lal, Vol. III, Part III, p. 337; IHR.C., Vol. XXXI, Part II. Jan., 1955—Article by S. R. Kohli.

^{3.} Gordon, p. 101; Archer, p. 74. Dr. Murray in 1827 found several battalions dressed in white jackets and white pants. *Murray to Wade*, 30th Dec., 1826 & 1st Jan., 1827 Cons : 23rd Feb., 1827.Distinctive marks on Kurtis were also in use—Sohan Lal, Vol. III, Part IV, p 490.

^{4.} Orlich, p. 227; Masson, Vol. I, p. 433; Grey, pp. 27-28.

^{5.} Steinbach, p. 94; Burton, Chapt. II.

^{6.} News, pp. 468 & 492; Grey, pp. 27-28.

^{7.} Fane, Vol. I, p. 117; Monograph 18, p. 24; Lieut. Barr, p. 213.

in white, with turbans of different colours like red, green and yellow. In 1838 Mr. Osborne found the entire body of 12,000 troops of all arms he reviewed at Lahore wearing either red or yellow silk turbans.¹

In the hills where winters were terribly cold, leather suits called 'Postins' were issued to the troops, as for instance, the whole army of Zorawar Singh during his march upon Ladakh was thus equipped.² Elsewhere quilted or padded clothes were used as protection against cold.³ Moreover, as in the British Indian army, warm cloaks were used in the cold season, though only by those who could afford them.⁴

The equipment of an infantry soldier somewhat resembled that of his counterpart in the Company's army and consisted of a musket pouch, a cross-belt and a Toshadan or bag for storing food.5 The Sikh cross-belt was, however, of blacks and not white leather, as was the case with the British Indian troops. The equipment of a cavalry soldier comprised, according to the account of Lieut. Barr who happened to review Allard's regiments in 1839, a pair of black belts, one of which supported a pouch and the other a bayonet, a girdle round the waist, partially concealed by a swordbelt, to which a sabre was suspended and a small leather receptacle for the butt of the carbine, which was so attached to the individual as to give it the appearance of being slung across the back. Their saddles were concealed with a crimson cloth edged with a border of blue and white stripes and the harness was adorned with brass studs.7

The most important portion of the irregular army of the Sikhs, the ghorchurras were responsible for the supply of their own accourrements. They constituted the elite of the Sikh army and were most gaudily dressed, so that at

- 1. Osborne, entries dated 1st and 22nd June, 1838; Burnes, Vol. III, p. 155.
- 2. For: 1842 Sec. Progs. 8th June, 43 and Cons: 14th Feb., 80 and 11th Sept., 44-45
 - 3. Mc Gregor, Vol. II, p. 48.
 - 4. Monograph 18, p. 29.
- 5. Monograph 17, 1814 (26) 4th Sept.; For: 1840 Sec. Progs. 28th Sept., 75 (mention of 100 Toshadans supplied to recruits).
- 6. Occasionally, the accoutrements were red. Murray to Wade, 30th Dec., 1826 Cons: 23rd Feb., 1827.
 - 7. Lieut. Barr, p. 213.

Ropar in 1831 their "silken array" and "gold and tinsel" stood in sharp contrast to the "simple solidity of the British."1 They observed no uniformity, but dressed up as they liked. "From the first", says a contemporary source, 2 "the Maharaja's European officers had to abandon the idea of introducing anything like uniformity in dress. The men clothed themselves and in addition to the expense it would be to them to get new clothes on joining, their feeling of independence would revolt against any dictation on such a subject." Many descriptions of their turn-out by contemporary writers are available, of which the following one by Baron Hugel perhaps by far the best: "The strange troop before me was the most peculiarly Indian. The uniform consisted of a velvet coat or gaberdine over which most of them wore a shirt of mail. Others had this shirt made to form a part of the tunic. A belt round the waist, richly embroidered in gold, supported the powder-horn (powder flask). It is a strange sight to a European to see their slippers embroidered in gold, covering their naked feet. Some few amongst them wear high jack boots."3

The jagirdari contingents had the similar "motley and picturesque appearance", most of the men "being well-to-do country gentlemen, the sons, relatives or clansmen of the Chiefs who placed them in the field and maintained them there and whose personal credit was concerned in their splendid appearance."4

Akalis, another portion of the Sikh irregulars, were a class by themselves in respect of accoutrements and never failed to attract the attention of outside observers. Mc Gregor thus writes about them⁵: "The Akalis wear but little clothing and are sometimes divested of it altogether. Their turban is of a peaked or conical form and invariably of a blue colour; over

- 1. Adventurer, p. 225.
- 2. Through the Sikh War, p. 63.

- 5. Mc Gregor, Vol. I, pp. 237-238.

^{3.} Baron Hugel, pp. 330-331. Emily Eden's impressions of the diess and equipment of the ghorchurras gathered during her visit to Amritsar in 1839: "I suppose there was not one who would not have made the fortune of a painter. Our troop was dressed entirely in yellow satin with goldscarfs and shawls, but the other half were in that cloth of gold which is called kincob—their arms were all gold"—Up the Country, p. 213.

4. Griffin, p. 143; Steinbach, p. 94.

this are placed steel circles (quoits) made so as to fit the shape of the turban, diminishing gradually in diameter as approach the top." The rest of their dress was a pair of shorts. a long blue shirt, a girdle round their waist to suspend a sword from and a simple country-made pair of shoes.

"The officers were allowed to exercise their own tastes in dress and accordingly every one turns out better or worse according to his espirit-de-corps, his personal vanity and the length of his purse," says Vigne. This point has been further elaborated by Mr. Orlich who has written: "Almost every one of the Sikh officers of these regular troops was dressed according to his own taste; some in English, others in French uniform or in a mixture of both; some wore turbans or caps with shawls wrapped round them and others helmets and chakoos; some had high boots with coloured tops and others shoes; some wore white and others coloured pantaloons. altogether a strange medley."2 However, broadly speaking, a few general observations may be made about their accoutrements. (i) As regards the Sikh chiefs and high officers, they were all gaudily dressed. The great Maharaja actually insisted that they should be so dressed and always took the defaulters to task. Gold, jewels, velvets, silks, muslins and shawls were profusely used by them. Gold was used on their weapons, saddlery trappings and clothes, besides ornaments. White, red, green and yellow were the most popular colours of the clothes used by them, which generally consisted of jackets, chooridar pyjamas (tight-fitting trousers), turbans, cloaks and plumes. Henry Fane's description of their dress reads as follows3: "The dress usually worn by the Chiefs is handsome and becoming; consisting of the said turban with a small plume. 4 stuck in the front much in the same way

^{1.} His Nur.ative, p 295.
2. Orlich, p 227; Monograph 18, p. 101. Soltykoff, a Russian visitor to the Panjab in 1842, calls the Sikh officers a "queer sight" in "patriarchal beards and uniforms of satin, velvet or cloth of gold," wearing what they liked.

^{3.} Fire Years in India, Vol. I, pp 121-122.
4. Vigne, Vol. I, pp. 306-307: No Sikh officer of any rank is ever seen without one in his turban, and in those of the sardars and great men the feathers generally are uneven in number, between 10 and 20, are fastened into a funnel-shaped stem, entirely covered by gold wire or thread or some times richly ornamented with peails, emeralds and rubies." The heron's feathers were available from Kashmir where heronies were strictly guarded all the year round. These feathers were very costly, each costing Rs. 1-.

as the Highland Chiefs of Scotland place a heron's feather in their bonnets; a short jacket generally made of silk handsomely embroidered and trousers made wide at the knee and fitting close round the ankle, of gold or silver kincob with a dagger stuck in the belt, often covered with precious stones. We afterwards found that the trouser fitting tight at the knee was the more common costume, the loose one being an innovation lately introduced by the heir-apparent and now beginning to be adopted by the dandees of the Court of Lahore." Ornaments were most commonly used, specially by the Princes who put on the most magnificent diamonds, emeralds and rubies etc. Raja Suchet Singh was found by McGregor to be the most gorgeously dressed of all, who "wore a profusion of jewels, while his arms and horse trappings were magnificently ornamented with gold and tinsel." A number of them put on steel or chain armour and carried shields of metal or leather embossed with gold or silver.2 Some of the Sikh chiefs and high officers occasionally imitated European dress like frock coats and pantaloons,3 but such cases were not many. The foreign officers preferred the costume of their own nationality, though they made adjustments here and there, to adapt themselves to their new environments; the most important of them being in the matter of beards, turbans and gorgeous However, broadly speaking, the costume of high European officers in those days consisted of a cap Persian velvet of red or green, having lace on its border, the crown of which was puckered up in the centre on which was fixed a tassel of gold threads which hung over it and looked beautiful, a cloak of Kashmir shawl in the winter season and of white cloth in the summer, a shirt, a waist-coat and a pair of loose trousers.4 For instance, General Avitabile and Court were observed to be wearing in 1839 magnificent costumes, that of the former consisting of "a long green coat fashioned not unlike a Musalman's 'chapkun' and ornamented with a profusion of lace and three rows of oblong buttons of solid gold, trousers of scarlet cloth, with a broad gold stripe down the

^{1.} History of the Sikhs, Vol. II, p. 26,

^{2.} Through the Sikh War, p. 62.

^{3.} Hugel, p. 347; Vigne, p. 322.

^{4.} Grey, p. 361.

seams, a green velvet cap, with a band also of gold lace and a tassel of the same material, but no peak and an embroidered belt to which a be-jewelled sabre was attached." They also grew long flowing beards and frequently, in the fashion of the country, put on turbans of silk or Kashmir shawl.²

The usual method of distinguishing ranks of officers from one another in the Khalsa army was by means of lace work on their jackets or Kurtis, as will be clear from the following table³:—

```
Sepoys'
         iackets —
                             5/- worth of lace work.
                      Rs.
Naiks'
                      Rs.
                             6/-
Havildars'
                             7/-
                                           "
Jamadars' &
Subedars'
                     Rs. 30/-
                                           "
Majors'
                  -- Rs.
                           25/-
                                           "
Adjutants'
                      Rs.
                           50/-
                                           22
                                                 9 9
Commandants',, -
                      Rs. 100/-
                                           33
```

Material and Preparation of Accoutrements-

The principal materials used in the preparation of the Sikh accourrements such as woollens, silks, ordinary cotton cloths, metals of various kinds like gold, silver and bronze and skins of animals were mostly available within the country. Kashmir and Multan were two prominent centres of manufacture of silks and woollens of diverse colours, as Peshawar and Kasur were reputed for leather works. It was the deliberate policy of Ranjit Singh to patronise all these industries, because he wanted to become as much self-sufficient in this respect as possible. Such a policy was not only useful from the defence point of view, but was also greatly conducive to the prosperity of his people. But absolute self-sufficiency is never possible

- 1. Lieut. Barr, pp. 231-232.
- 2. Grey, p. 361.
- 3. I.H.R.C., Vol. XXXI, Part II, January, 1955—Article by S. R. Kohlı.
- 4. For: 1832 Sec. Cons: 9th April, 6-8—Wade's observations. Both Wade and Murray were informed by Ranjit Singh in 1827 that all the accourtements of his army were made at Lahore. Murray to Wade, 1st Jan., 1827 Cons: 23rd Feb., 1827 & Wade to Metcalfe, 1st August, 1827 Cons: 12th October, 1827.
- 5. Burnes, Vol. II, Part III, pp. 395-410; District Gazetteer of Peshawar, p. 228; Fane, Vol. I, p. 186.

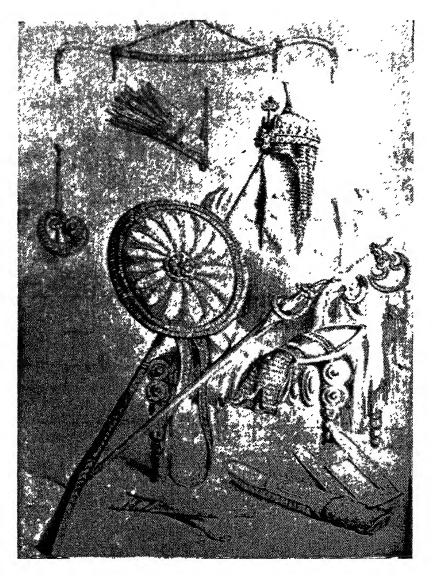
and Ranjit Singhhad to import from out side certain quantities of materials required by him.1 The requirements of the Panjab in metals were, to some extent, supplied from Calcutta by the water carriage of the Ganges and the Jumna and then over-land to Amritsar. Broad cloth of the red colour was similarly imported from the British Dominions in considerable quantities. Again, the Murshidabad yellow silk was most favourite with the Sikhs and was imported for them by Marwari merchants. In 1837 on his own account Ranjit Singh ordered bulk purchase of woollens, silks and muslins of various colours for his regiments and battalions in lieu of part of his own merchandise sent to Bombay.² The manufacturing and repairing of the equipment was completely done within the country. The Panjab had long been noted for the making of saddlery, harness, foot-gear, in-laying of gold, silver and precious stones and embroidery etc. All these arts got a powerful stimulus under the rule of the Sikhs who needed them so badly for their military purposes. The Government being responsible for clothing and equipping the major portion of its army, huge stores of raw materials and finished goods were built up by purchase through manifold agencies, such as the Darbar's special officer, Faqir Nur-ud-din, Courtiers, Chiefs, Nazims and Kardars. Uniforms were distributed either ready-made or cloth was issued to the unit commanders with instructions to have them tailored and to charge the expenses to the Government. The annual expenditure of the various Sikh administrations on uniform alone, as worked out by Henry Lawrence, was as follows³

Ranjit Singh—Rs. 1,68,250 Hira Singh—Rs. 1,56,725 Kharak Singh—Rs. 1,68,250 Jawahar Singh—Rs. 2,10,339 Sher Singh —Rs. 1,56,725

^{1.} Trevelly an to Bentinck, dated 4th June, 1831—Captain Wade's ist of imports in the Panjab—For: 1832 Sec. Cons: 9th April, 6-8.

^{2.} For: 1837 Pol. Progs. 11th Sept., 27.

^{3.} For: 1847 Sec. Progs. 31st Dec., 335.



A collection of Sikh arms.

CHAPTER VII

ARMS, AMMUNITION AND TRAINING

Here we propose to examine the arms, ammunition and the training system of the Sikh army as found during the period of our study. The subject is technical, but all-important, as it constitutes the basis of tactics and to an extent, even of strategy.

ARMS

The arms of the Sikhs may be studied under the following heads: 1. Defensive Arms, 2. Short Arms, 3. Small Fire Arms, 4. Cannon.

1. Defensive Arms

Helmets—Helmets or 'khods' as they were called, were close-fitting steel caps, "completely circular or pot-shaped," and "beautifully inlaid with gold." They were surmounted by shafts (small central tubes) to hold plumes of white-horse hair or feathers from Kashmir herons. The sides were protected by a curtain of chain armour and a curious nose-guard (a thin bar terminating in a triangular piece, fastened in front and so contrived as to step up and down at the wearer's pleasure). Such helmets were worn generally by chiefs and high cavalry officers. Common troopers wore simpler skull caps, surrounded by chain armour.

Chain and Plate Armour—They were two different kinds of armour and were generally worn separately, though sometimes the chain armour was worn beneath the plate armour. The chain armour was worn with or without lining, and sometimes was made to form a part of the tunic. It was called Zira (mail) and a suit of it comprised a "Kurta Zira", a

^{1.} Through the Sikh War, p. 62; Baden Powell—Handbook of Manufacture, Vol. II, Div. 4; Baden Powell—Indian Arms and Armour.

"Pyjama Zira" and a "Kulla Zira". Most of the chain work was rather coarse, though cases of fine and skilful workmanship were not unknown either.

The plate armour or 'Chahar Aina' (four mirrors) as it was commonly called, was more popular with the Sikh nobility. The whole of it was beautifully damascened with inlaid gold work (koft). It consisted of two larger oblong plates worn back and front and two smaller side-plates, the upper edge curved downwards to allow for the movement of arms. These plates were attached with small leathern straps and buckles. The suit was completed by armlets which opened a long side joint or hinge. Hands and legs were protected by chain work. All the armour, although strong and capable of resisting a sword cut or a spear thrust, was very light, the steel being of the finest temper and quality.² It may also be mentioned here that there were hundreds of French cuirasses in vogue in the Khalsa army, which had been brought by Allard from France.

Shields—They were slung across the back, but while in action they were held in the left hand and not upon the arm, as was the custom in Europe during the middle ages. They were either of steel inlaid with gold or of rhinoceros hide (gainda) or buffalo hide (the common ones), generally studded with gilt bosses or one larger boss in the centre. They were always circular and about 18 or 20 inches in diameter, but the size varied. The damascened steel shields of Gujrat and Sialkot were most famous.³

2. Short Arms

Bows and arrows, battle axes, and maces which were so popular in the past were out-dated in the period of the Sikhs. Of these, bows and arrows were still carried occasionally, but their utility as weapons of war had gone on account of the wider prevalence of fire arms. The usual short arms of the Sikhs were swords, daggers and spears or lances.⁴

- 1. Through the Sikh War, p. 62; Fane, Vol. I, pp. 156-157; Baron Hugel, pp. 330-331.
 - 2. Baden Powell-Indian Arms and Armour; Fane, Vol. I, p. 128.
 - 3. Baden Powell-Indian Arms and Armour.
 - 4. Baden Powell-Indian Arms and Armour.

Swords—The varieties of the swords most known in the Panjab were the talwar and the kirch.¹ The talwar had a slight curve in the blade, whereas the kirch was a straight sword like the European infantry sword. Of the two, talwar or the cutting sword was the more popular and was used by most of the army people. The Sikh artillery men, however, used the kirch or the heavy thrusting sword. As compared with the English swords, the Sikh swords had smaller hilts like other Indian swords, but were more useful in war, as was proved in the two Anglo-Sikh Wars.2 The swords of the Sikh nobility were very costly, because their blades, handles, guards and scabbards were all tastefully decorated with gold and jewels. Sir Henry Fane tells us that "the blades of Ranjit Singh's swords alone were in some instances valued at £ 1000 and the gold and jewels upon their hilts and scabbards at five times that sum."3 Sword sheaths were usually made of thin slips of "sembal wood", covered with velvet, leather or kinkhob.

Daggers—The daggers4 used in the Panjab were the katar, the peshkabz, the bichua and the chhura. The katar was the name of a triangular and heavy-bladed dagger, whose chief peculiarity was in the handle, which consisted of two side bars to protect the hand and one cross-bar at right angles to the direction of the blade. Its handle was always of steel. The peshkabz had a blade quite straight at the back and sloping at the edge to a fine point. Its handle was usually of 'shirmahi', the white bone of a large caticean. The sheath, whether of leather or velvet, was worn so as to cover a part of the handle. The bichua was a dagger with a waved blade and had a handle either of iron-gilt or else had a handle with a side-guard, also like a sword. The chhura was the long Afghan knife. handles of daggers were often of ivory, of "marpech" jade, of agate or of rock crystal. The blades of all these, like those of swords, were often prettily inlaid with gold.5

- 1. Baron Hugel in 1836 had in his collection of Panjab weapons a fearful sabre which could be wielded by both hands, known as 'Hatta'. But this kind of sword was rare and was a curiosity rather than a weapon of war. Baron Hugel, p. 350.
 - 2. Vigne, Vol. I, p. 236; Archer, p. 73.
 - 3. Fane, p. 165.
 - 4. Baden Powell-Handbook of Manufactures, Vol II, Div. III.
 - 5. Baden Powell-Indian Arms and Armour.

Spears or Lances—They were one of the weapons of the Sikh cavalry. They were long shafts of steel or bamboo with sharp pointed steel blades. Their length was from 10 to 15 feet.¹ The best of them were also studded with gold.

Chakra or Quoit—This was particularly the weapon of the Nihangs or Akalis who carried it as part of their peculiar dress and accourrements. A quoit consisted of a large thin circle of steel, 6 to 8 inches in diameter, the outer edge being very sharp. It was thrown by rotating by means of a finger and could be effective at a great distance, about 60 to 100 yards.

3. Small Fire Arms

The following were the different categories of the small fire arms used in the period of the Sikh rule: matchlock, flintlock, carbine, percussion cap gun, bharmar, sherbacha, double-barrelled gun and pistol.

Matchlock-This was a kind of fire arm, having a long wrought-iron barrel attached by bands to a wooden stock, which was fired by a 'fatila' or a slow lighted match, held between the jaws of a metallic serpentine, with its bottom heavier thanits top. There was a trigger which, when pulled, brought the lighted match into contact with the priming powder in the flash pan and caused the discharge.2 It was particularly known as "Banduk Toradar". According to Baden Powell,3 this name was derived from the "Taur" or "Tor", the elephant creaper, the fibrous stalks of which, when dry, were used for slow matches. 'Fatilas' were also prepared from the air roots of the Pipal (Ficus Religiosa) and the "Bar" Indica) trees. Matchlocks had long been in use in India, ever since the advent of the Mughals, and until the period of the Sikhs they were the predominant fire arm of the country. Even under the Sikhs they were in fairly common use, though their predominance had disappeared, as some more effective weapons had become popular. However, the Sikh matchlocks were much better designed and the foreigners like Jacquemont and the Adventurer were very fond of them.4

2. Pollard-History of Fire Arms, p. 6.

^{1.} Baron Hugel, p. 198; Murray to Wade, 16th Jan., 1827 Cons: 16th March, 1827.

^{3.} Baden Powell-Handbook of Manufactures, Vol. II, Div. III.

^{4.} Adventurer, p. 34; Jacquemont, Vol. II, p. 34.



A manufacturer of arms at work,

Flintlock—The flintlock or snaphaunce as it was sometimes called, was purely a European invention and unlike the match-lock, there was nothing indigenous about it. It was first invented during the 16th century, but not until the beginning of the 18th century was it adopted as a service fire arm, in preference to the matchlock and the wheel-lock, the weapons mostly used hitherto. In India it was introduced by the British and the French during the 18th century. It was called "Brown Bess", and was the major infantry weapon until it was replaced by the percussion cap system about the middle of the 19th century. Tke Sikhs were perhaps the first Indians to see its advantage over the matchlock and to adopt it on a large scale in their army.

The flintlock was a long-barrelled piece, firing with flint and pan. It was popularly called in the Panjab by the name of "Banduk Pathar Kala''¹ or "Banduk Chaqmaq''. It carried no lighted match, but had a self-contained ignition mechanism. There was a hammer which, strikin gon a piece of flint, produced a spark which ignited the priming powder in the pan and caused the discharge. This was often called the musket to distinguish it from the matchlock, but properly speaking the term musket was applicable to both matchlocks and flintlocks which could be fired from the shoulders.² Bayonets of steel called 'sangin' were generally attached at the fore-ends of these pieces in the manner of the English. We have the evidence of Lord Gough to say that the Sikh infantry muskets were the same as the British.³

Bharmar—It was a kind of fire arm that had both a flint and a slow match, in case either should fail to go off. It was invented in Ranjit Singh's time by a Hindustani called Mirza Bharmar and hence the name.⁴ The Bharmar was considered to be better and more dependable and carried truer and farther

- 1. Baden Powell, Vol. II, Div. III.
- 2. Pollard says that originally the name musket (meaning young male sparrow-hawk) was given to every heavy matchlock or the wall piece type, which was fired from some rest, but which was the smallest of all cannon, the bird being the smallest of all hawks, but later on it became common for all shoulder-stocked fire-locks. History of Fire Arms—p. 7.
 - 3. Sikhs and Sikh Wars, pp. 67 & 136.
 - 4. Baden Powell, Vol. II, Dry. III.

and hence was usually preferred to a pure matchlock or flint-lock.¹

Carbine—It was a short-barrelled flint-lock with the muzzle slightly trumpet-shaped, also known as blunderbuss.² Its bore was the same as that of a musket, but its barrel was much shorter and varied between 25 and 32 inches. It was specially meant for horsemen, because the heavy and long matchlock or musket could not be employed with ease on horse-back. The carbine which was then in common use in European armies was introduced into the Sikh army by the French officers, Ventura and Allard. In 1840 as many as 200 carbines were imported by Ventura for his Sikh troops.³ One of the regiments under these officers was known as Dragoons Regiment from the use of dragoons which were "short pieces of 16 inches barrel and full musket bore with fire-locks or snaphaunces."

Percussion Cap Gun—It was superior to the flintlock as the latter was superior to the matchlock, because it was fired by means of a detonator, i.e. a cap containing an explosive composition. It was known in the Panjab as "Banduk Masaladar", from the use of masala in it.⁵ But it may be noted that it was not a very common weapon, just as it was not so in the army of the English Company. It had long been known in Europe, but its adoption in the army came gradually after 1825.⁶ However, as time went on Ranjit Singh was fully convinced of its superiority and he imported from France two million detonating caps in 1836 through Allard. Had he lived longer, he might have converted his fire-locks to the percussion cap system.⁷

Sherbacha—It was a mountain gun used by the Sikhs.⁸ Its barrel was shorter than that of a carbine, but its mouth was wider, truly trumpet-shaped.⁹

- 1. Diaries of Lieut. Nicholson, p. 312. In 1827 Dr. Murray saw the Gurkha battalion armed with this. Murray to Wade, 12th Jan., 1827 Cons: 2nd March, 1827.
 - 2 & 5.—Baden Powell, Vol. II, Div. III.
 - 3. For: 1840 Pol. Cons: 4th July, 147.
 - 4. Pollard, p. 53.
 - 6. Pollard, p. 114.
 - 7. For: 1836 Pol. Progs. 5th Dec., 149.
 - 8. P. G. R., Press Lists, 759, dated 4th Dec., 1843.
 - 9. Baden Powell, Vol. II, Div. III.

Double-Barrelled Gun—It was a kind of flintlock with two but shorter barrels. It was first introduced into the Panjab probably as one of the British presents for Ranjit Singh. Later on, some attempts were made to imitate the English double-barrelled guns, but not with much success. One such piece manufactured in the hills was presented in 1831 by Raja Gulab Singh to Jacquemont who thus wrote about it: "I should have preferred one of their long matchlocks as a curiosity, but he considered this double-barrelled gun a masterpiece of Himalayan skill. You will, however, see some day that it is not a brilliant specimen."

Pistol—It was known as Tamancha or Tabancha,² and was in fairly common use. It was patterned after the highly developed European pistols, of which Ranjit Singh at one time imported 500 pairs from France and at another time purchased 500 N.C. New from the British Indian Government.³

4. Cannon

The following were the main categories of the Sikh cannon: (i) guns (both light and heavy); (ii) howitzers; (iii) mortars; (iv) jazair or jazail and zamburk.

Guns (light and heavy)—There were hundreds of such guns in the possession of the Sikhs. Of them, 12 pounders and above were heavy guns. One of them, Zamzum or Top Bhangian, was as big as 84 pounder. But the majority of the guns were less than 12 pounders, ranging from 3 to 10 or 11 pounders. There were also some very small guns, one to two pounders, but their number was very limited. The guns of the Sikhs were much heavier in metal than the British guns, for according to Lieut. Barr, a four pounder of theirs was often as heavy as a 6-pounder of the British. The guns of the Sikhs had all sorts of calibres and barrel lengths. The lowest calibre was 1.8" for a 3-pounder and the highest 9" for a 84-pounder.

- 1. Jacquemont, Vol. II, p. 34.
- 2. Sohan Lal, Vol. III, p. 47.

3. For: 1836 Pol. Progs. 5th Dec., 149; For: 1837 Pol. Cons: 20th Dec., 102.

- 4. It was made of brass and its particulars were: length—13'-8", calibre-9", thickness of metal-breech-6" and muzzle 3.7"—For: 1846 Sec. Cons: 26th Dec., 677.
- 5. For: 1846 Sec. Progs. 26th Dec., 240 B, 241; Calcutta Review—1844, p. 178.

Whereas generally the calibre increased with the increase in the weight of shot, it was not strictly the same for similar weights, as for example, 6 pounders generally varied between 3.3 and 3.7 inches and 12 pounders between 4.4 and 4.7 inches in calibre. In barrel lengths the variations were even wider. For example, they were between 3'-1" and 6'-1", between 4'-11" and 7'-5'' and between $4'-9\frac{1}{2}''$ and 8'-7'' in the case of 6, 9 and 12 pounders respectively.1 Curiously enough, sometimes the barrels of the heavier guns were shorter than those of the lighter guns. Like their Mughal and Maratha predecessors, the Sikhs gave dignified and pompous names to their guns, such as Fateh Jang, Jang-i-Bijli, Sher Dahan, Leila and Majnu. Sometimes, the guns were named after their founders or places where they were cast, for instance Top Dhian Singh Wali or Top Nakodar Wali. The large pieces of cannon usually bore Persian inscriptions in the manner of the Mughals, sometimes in verse, giving the name of the founder as well as the place and the year of manufacture. Scores of such inscriptions are to be found in Mohammad Latif's History of Lahore. However, in other respects; the Sikh guns were a great improvement upon those of the Mughals and the Marathas, because they were not cumbersome and slow-firing like them. Particularly in respect of field guns the Sikhs were far ahead of their predecessors.

Howitzers—They were popularly called "Hobath" or "Obchi", a Panjabi form of the French Hobit or Howitz.² They were heavy pieces and generally formed part of the siege train, though they were often used as field guns also. They differed from the ordinary guns in so far as they had 'Kothis' or chambers³ at the end of their bores and had greater calibers, greater weights of shot and smaller lengths, as will be evident from the following particulars of some of the howitzers of the Sikhs:—

Return of Ordnance captured during the Battle of Feroz Shah, 21st and 22nd December, 1845.4

- 1. For: 1846 Sec. Cons: 26th Dec., 677.
- 2. Gatalogue, Vol. I, p. 67; Baden Powell, Vol II, Div., I.
- 3. Baden Powell, Vol. II, Div. I.
- 4. For: 1846 Sec. Progs. 26th Dec., 241.

- 1. Howitzers-7 inch calibre-14 inch length-42 lbs. wt. of shot.
- 2. ,, 5.7 ,, ,, 2'-1 ,, ,, 24 ,, ,, 3. ,, 4.3 ,, ,, 3'-9 ,, ,, 9 ,, ,,

The thickness of the metal was dependent upon the weight of the shot used. It varied for a 24-pounder from 3.2 to 2.6 inches at the breech and from 1.8 to 1.3 inches at the muzzle and for a 12-pounder from .8 to 2.6 inches at the breech and from .8 to 1 inch at the muzzle. Like other guns they were mounted on carriages.

Mortars—They were called 'Gubaras' and part of the siege train, though like the howitzers they were often used in the field. Their calibres usually ranged from 7 to 8 inches, but in some exceptional cases they were below 7 or above 8 inches. Their bores varied generally from 10 to 12 inches, though sometimes they were widened up to 1'-11", particularly when the metal used was quite thin. The variations in their chambers were not very wide and were usually between 5 and 6 inches. As regards the thickness of the metal, the usual standard was I foot and 2 inches, but there were some exceptions.1 Mortars were made of gun metal, never of iron, and like howitzers were mounted on carriages. A mortar was the most difficult thing to manage in gunnery, as it was "not only most dangerous but most perfectly useless without a proper knowledge of the due strength of the powder and the exact measure of the fuze."2

Jazair or Jazail and Zamburak—It was a small-bore iron piece, but as it was too heavy to be carried by an individual, it was mounted either on a tripod or on a camel's back. A wall piece or swivel mounted on a tripod was known as jazail or jazair, whereas one mounted on a camel was called zamburak.³ Such weapons were merely long muskets, some of them as long as seven feet,⁴ which used shot of nearly one pound.

- For: 1846 Sec. Cons: 26th Dec., 677; For: 1846 Sec. Progs. 26th Dec., 241.
 - 2. Baden Powell, Indian Arms and Armour, p. 330.
 - 3. Adventurer, p. 58.
- 4. Baden Powell, Vol. II, Div. I; Lt. Barr, p. 250; For: 1846 Sec. Cons. 26th Dec., 878. Big. Wheeler has given the particulars of a jinjal (a kind of swivel) which he found in the fort of Kangra in 1846 as: weight of shot 12 oz., calibre 1'.7". length 2', but they mark an exception rather than the rule.

Ammunition powder was in universal demand, as it was required for priming all kinds of weapons. Muskets fired cartridges and small leaden balls. Similar, though bigger, iron or leaden balls were required for the camel guns. Cannon used various kinds of balls of zinc, of iron, of brass, of wood and of stones. Mortars fired grape shot and canister. Similarly, howitzers fired shrapnel shells of brass, of iron and of zinc, besides round shot, grape and canister. In addition, there were several other kinds of balls, such as blue lights, spherical cases, carcasses and smoke balls. Matches, fuzes and portfires were used as igniters. The latter two were of two sizes, small and big, the larger size being particularly reserved for mortars.

Arms and Ammunition-Their Manufacture, Repair and Storage. Almost all the arms and ammunition required for state forces were manufactured and repaired in the foundries, workshops and work centres in the country, some of which were owned by the state and worked by its agencies, while others belonged to the thousands of private individuals and companies spread all over the kingdom. Amongst these latter, the most important centres were Kotli Loharan, Lahore, Amritsar, Wazirabad and Kashmir. They were all in a flourishing state on account of the government patronage and the great demand in the country for their products. There had never been in the past in India any restrictions on the manufacture and sale of arms, nor were there any now under the Sikhs. Rather, the definite policy of the Sikh Government was to patronise their manufacture, to stimulate it in every way possible and to utilise the products to the utmost in supplementing the state resources. Every year the Government made purchases worth thousands of rupees from these manufacturers.3 Besides, they were patronised by the jagirdars. The most prominent among

^{1.} The spherical case was a kind of missile newly invented and was one of the rarest inventions of those days. The first such shell cost Gen. Court Rs. 30,000.

^{2.} For: 1848 Sec. Progs. 30th Dec., 194—Return of ammunition in the Fort of Govindgarh. For: 1846 Sec. Progs. 26th Dec., 679—Return of the Sikh ordnance and small arms stores collected in the Hammam and Masjid Magazines.

^{3.} For: 1841 Sec. Cons: 25th Jan., 101. The blacksmiths of Lahore given Rs. 2,000/- for making balls.

them, the Dogra Rajas, Jamadar Khushal Singh, Tej Singh and Lehna Singh Majithia had magazines¹ of their own for their own use and for the use of the Government, whenever required, but others had to depend entirely upon the private artisans. Besides, the private manufacturers were the only source of supply for all such persons in the army as were required to find their own arms.

However, even all the private sources taken together were not enough to meet all the requirements of the state forces. Moreover, they could not be depended upon for the supply of such improved kinds of weapons and ammunition as the Maharaja was eager to possess. His ambition of not lagging behind the British in the quality of his arms could not be realised until he had his own arrangements for their manufacture. Hence, workshops were established at the forts of Lahore, Amritsar and Shahzadabad,² in the camps of the French officers, particularly Court,³ in the principal units of the state artillery⁴ and at the provincial capitals under the supervision of the Nazims there. Further, repair shops were set up in every unit of the army, whether horse or foot.

The establishment of the principal Government magazine at Lahore will illustrate the organisation of a magazine under the Sikhs. Faqir Nur-ud-Din was in over-all charge of this magazine. Under him there were a number of mistry-khanas as they were called, each one under a Darogha or superintendent. Amongst these Daroghas the names of Jawahar Mal, Qadar Khan and Dr. Honigberger are outstanding. The last-named had under him a powder mill and a gun manufactory. The Faqir himself had one workshop directly under him, known as Karkhana Khalifa Sahib. Every Darogha was assisted by a number of clerks such as munshis, mistris, and workmen such as armourers, black-

^{1.} For: 1838 Pol. Cons: 18th July, 52-54; For: Misc. Vol. No. 349, p. 166.

^{2.} K. Sujan Lal—News letter No. 25; For: 1842 Sec. Progs. 8th June,

^{3.} For: 1814 Sec Progs. 23rd March, 481; For: 1840 Sec. Cons: 16th March, 40.

^{4.} Monograph 17-1817 (3) 11th Jan; P.G.R., Vol. IV, p. 377.

^{5.} Honigberger, P. XVIII; For: 1844 Sec. Progs. 4th April, 46.

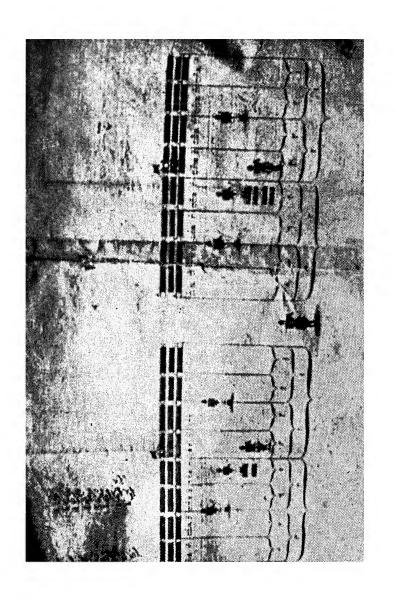
^{6.} For: 1822 Pol. Cons. 11th Oct., 23.

smiths,1 braziers, carpenters, gunstockers, coopers, sawyers, painters, bhistis, sielagurs, turners and sweepers. technicians were most carefully selected and handsomely paid, some of them being specially imported from Hindustan. Several carts and camels were attached to the magazine for the conveyance of military stores.2

The biggest arms store or arsenal was at Lahore. was housed in the Hamam and Badshahi Masjid buildings.3 Fagir Nur-ud-Din, assisted by a large staff consisting of munshis, watermen and sweepers, looked after it. The store contained, besides arms and ammunition, every variety of required for the military department including lead, iron and equipment. The second and the third biggest arsenals were located at Amritsar and Peshawar in the forts of Gobind Garh and Shamir Garh respectively.4 Next in importance were the magazines of Multan, Srinagar, Attock, Kangra and Rohtas⁵; and last of all there were those of the various batteries, battalions and regiments and minor forts in kingdom. The officers responsible for such stores were required to furnish periodical reports.6 Occasionally, there were audits of their accounts and punishments were awarded for embezzlement or negligence of duty.7 Similarly, frequent inspections were carried out to check whether the goods were arranged in proper order.8 Wooden boxes and skins were generally used for storing gun powder.9 Sometimes, careless officers put shot and powder in the same boxes, which practice was later on sternly stopped by the British Resident at Lahore.

Total Annual Expenditure—The Sikh Government had to spend every year a considerable sum of money on the purchase of their magazine stores. The total annual expenses incurred on them under the various administrations, as worked out by

- They included filemen, firemen, hammermen and bellowsmen.
- For: 1848 Sec. Progs. 31st March, 53.
- Cavalry Officer, p. 68; Smyth, Chapter II; P.G.R., Press Lists, 551-3. Cavalry C 13th April, 1846.
 - P. G. R., Vol. III, p. 94.
 Sohan Lal, Vol. III, p. 227.
 - Panjab in 1839-40-7th August, 1839, pp. 111 & 193.
 - For: #844 Sec. Progs. 23rd March, 456. P.G.R., Vol. III, p. 387. Smyth, Chapter II.



Regular Infantry of Maharaja Ranjit Singh at the Falling-in Position.

Henry Lawrence, are as follows:-

Ranjit Singh-Rs. 1,00,000/- Hira Singh -Rs. 1,25,000/-Kharak Singh-Rs. 80,000/- Jawahar Singh-Rs. 35,000/-Sher Singh —Rs. 2,10,000/-.

TRAINING

As remarked in Chapter II, originally the English system of training was in general use, but after the arrival of the French officers in 1822 the French system was substituted for it, which remained in force until 1847 when the British Resident, Henry Lawrence, reintroduced the English system² on the ground that the Sikhs must look upto them "as their masters in tactics and discipline."3 It was therefore predominantly the French system on which the Khalsa army was trained, though the English system was not altogether discarded even in the best days of the French system, because at least 3 or 4 regiments were always trained according to the English method.4 In the following pages we propose to discuss some of the broad features of the training imparted in the various branches of the regular army.

Regular Infantry

The complete system of training in vogue in the regular infantry of the Sikhs is contained in a Persian document called Zafarnamah⁵ which is a translation of a French pamphlet of military instruction brought from Europe by Ventura and Allard. There are three broad divisions of this system, namely (i) drill, (ii) weapon training and (iii) evolutions. The main outlines of each one of these divisions may now be summarised.

Drill (First Course)-Drill was, as it is today, the first essential of military training. It was divided into two courses and was taught under three heads: (a) falling in, (b) drill without arms and (c) drill with arms.

- (a) Falling in—The army fell in three deep6 in regiments

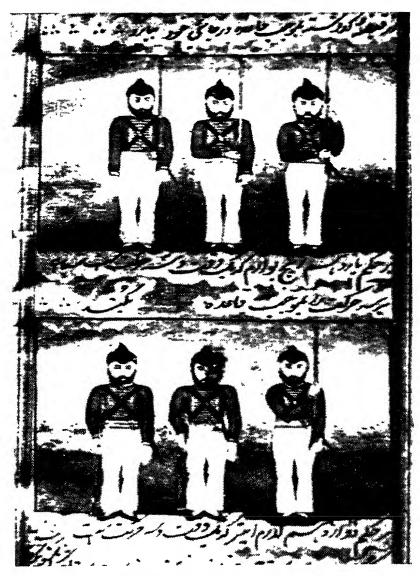
- For: 1847 Sec. Progs. 31st December, 335 P. G. R., Vol. III, p. 293.
 For: 1847 Sec. Cons: 28th August, 186.
 P. G. R, Vol. III, p. 293.
- 5. Zafarnamah is a beautifully illustrated manuscript which is preserved in the Panjab Government Records Office, Patiala.
- 6. Wade to Metcalfe, 1st Aug., 1827 Cons: 12th Oct., 1827. This formation was purely a French innovation.

was done on the right side by the right hand by bending the body and putting the left foot a little forward. This exercise was done from the Reposez Armes and not from the Porte Armes as in the fore-going exercises.

- (8) Levez Armes (Lift Arms)—By this the arm was restored to the original Reposez Armes position.
- (9) Examinez Armes—The feet as well as the body were turned a little to the right and the 'gaz' (rod) was taken out of its chamber and put into the barrel for examination.
- (10) Remettre—By it the position prior to Examinez Armes was restored.
- (11) Baumnette Une (Fix Bayonet)—The arm was brought down from the Slope Arms position, so that its butt rested on the ground. Then the bayonet was unsheathed and fixed by the right hand.
- (12) Croiser Armes (Cross Arms)—The arm was carried from Porte Armes position to the bone of the right thigh where the left hand held it firmly in the middle.
- (13) Descendre Armes (Trail Arms)—First of all, the arm was carried from the Porte Armes position to the right direction as in the Roposez Armes, so that its butt was about four fingers from the ground. The front part of the arm was thrown forward to have the trail position.

Weapon Training—The training in drill was followed by a course of weapon training. The first exercise in this connection was loading which was taught in the following twelve stages:—

- (1) Charger Armes—At this command the loading position was formed in which the musket was held firmly by the left hand, while its butt was under the right arm-pit and the thumb of the right hand was on the flint-lock.
- (2) Ouvrez—This was a simple exercise having one timing and one movement. In this the 'farzul' (touchhole) of the flint-lock and the 'toshadan' (pouch) were opened.
- (3) Bouche—This was also a simple exercise in which a cartridge was taken out of the pouch and its head put between the teeth.
- (4) Dèchirer—The head of the cartridge was torn off at the spot containing powder, and the cartridge was held carefully between the first two fingers of the right hand.
 - (5) Amorcer—It was an exercise consisting of one



Soldiers at Drill with Arms. The exercise shown here is Reposez Armes.

timing and one movement in which the touch-hole was examined and filled with powder. The cartridge was held as in No. (4), slightly away from the farzul (touchhole).

- (6) Fermer—At this the farzul was closed and the right hand was slightly withdrawn to be put on the small of the butt, the cartridge being still held between its first two fingers as before.
- (7) L' Arme Bouche—An exercise in which the butt was taken out of the right arm-pit and the position of the weapon was so changed that the butt rested on the ground on the left side and the muzzle stood opposite the chest. The cartridge was held near the muzzle, fully ready for loading.
- (8) Cartouche en—At this word of command the cartridge was rubbed a little and pushed into the barrel with the thumb of the right hand.
- (9) Tirer—This was an exercise of two movements in which the rod was detached from its chamber and with the help of the fingers of the right hand inserted into the muzzle for the purpose of stuffing the cartridge into the barrel.
- (10) Bourrer—This was a simple exercise of stuffing. The entire rod was now pushed into the barrel and struck twice at the head of the cartridge.
- (11) Remettre—In this exercise the whole rod was withdrawn from the barrel and put back into its chamber. Now that the musket was loaded, the muzzle was removed by way of precaution a little farther from the left side of the breast.
- (12) Porte Armes—This was the last stage in which the loaded musket was put back into the carrying position.

After having taught all these steps one by one a great deal of practice was given to make the men proficient in loading.

Quick Forms of Loading—After sufficient practice had been given in the above-mentioned step-by-step method of loading, two quick methods of loading were taught: (i) charge précipitée, (ii) charge a volonté.

- (i) Charge Précipitée—This was quick-time loading carried out in four stages, each stage being acomplished with a separate word of command.
 - (ii) Charge a Volonté-This was loading in quick time

in one stage only. At the word of command Charge Armes', the entire procedure from beginning to end was gone through.

Firing—Loading was followed by instruction in firing. This subject was treated under two heads: (i) firing by stages, (2) feu de rangs.

- (1) Firing by Stages—The lesson on the mode of firing was done in a number of stages which are given below:
- (a) Apprêtez Armes—This means the ready position which was taught to the three ranks separately. At the command "Feu de premier rang", the men of the first rank put their right knees on the ground, bent their left knees and held their weapons in the ready position. This was followed by another word of command "Feu de second rang". At this, the ready position was taken by the second rank which was different from that of the first rank, in so far as it was not a kneeling but a standing position. Last of all, came the turn of the third rank which did Appretez Armes in the manner of the second rank at the word of command "Feu de troisieme rang."
- (b) Joue—This means aiming. At this word of command, the muskets were brought into the right shoulders by all the ranks and aim was taken with the right eye.
- (c) Redressez Armes—This command was given to bring the sepoys from Joue back to the Apprêtez Armes position.
- (d) Feu—At this command the muskets were fired. After firing the sepoys remained in the same position until the next order.
- (e) Charger—At this command all the three ranks abandoned their position of Appretez Armes and opening their farzuls and toshadans, got ready for re-loading. Actual reloading was done at a separate word of command.
- (f) Porte Armes—If the instructor now so desired, he could order Porte Armes instead of reloading. In that case, all the three ranks closed their farzuls and assumed the carrying position.

After all the steps outlined above had been mastered, a quicker mode of firing was taught. There were only five words of command, namely "Feu de peloton", "Peloton Armes", "Joue", "Feu", and "Charger". Feu de peloton was merely cautionary. At Peloton Armes all the three ranks did Apprêtez Armes in the manner described earlier. At Joue



Soldiers at Drill with Arms. The above exercise illustrates Présentez Armes.

they took aim, at Feu they fired and at Charger they reloaded their arms.

(2) Feu de Rangs-This means firing by ranks. this exercise the first and the second ranks fired, while the third merely did the loading for the second rank. The sepoys of the first rank did not kneel down, but fired in the standing position. The commands of the instructor for this were "Feu de rangs, Peloton Arme", "Commencez le feu". "Feu de rangs" was merely cautionary. At Peloton Arme, Appretez Armes was done by all the three ranks. At Commencez le feu the first and the second ranks did "Joue" and fired. The first rank did the reloading themselves, but the second rank gave their empty weapons to the third rank and got from them loaded ones. This exchange was continued till the beat of the drum. In the course of this activity, none was permitted to do Porte Armes and every thing was done in the position of Appretez Armes. But at the beat of the drum every one was required to do Porte Armes after carefully reloading his musket.

In the beginning, empty muskets were used for safety's sake, but after the sepoys had become experts in this, live cartridges were issued to them, along with the instruction that every time they must carefully see their touch-holes and that in case they found no smoke coming out of them, they must step out of their ranks, find out the cause and set it right before rejoining the ranks. When ball ammunition was being used, it was essential for the instructor himself occasionally to examine the weapons of the sepoys, lest anyone of them should have more than one cartridge in it.

Range Practice—This was an essential part of the training. It was customary with Ranjit Singh to be personally present at the firing practice of his troops and to encourage the best shot with rewards.

Drill—(Second Course)—The training in firing was followed by a second course of drill which consisted of some more difficult exercises, such as mark time, change of step, a few forms of marching in a body and alignement etc.

Marquez le Pas and Changer le Pas—For 'mark time', the word of command was "Marquez le pas marche". This was followed by 'Peloton halte', if the troops were to be halted, but in case further march was intended, another command

"En avant, marche" was given, In the case of change of step, the order was "Changer le pas marche".

Marche en Bataille-This means marching in a single rank of nine men standing elbow to elbow with the help of a right or left guide. The words of command used for this purpose were: (i) Peloton en avant guide à droite march, and (ii) Peloton en avant guide a gauche marche. Every trainee was required to follow the six rules of good marching, which were: (i) The elbow of each man must always be touching that of the next man towards the guide. (ii) The left elbow and the right arm must always be attached to the body according to the rule. (iii) If any pressure came from the direction of the guide, it was not to be resisted, but if it came from the opposite side, it was always to be resisted. (iv) In case the elbow of a man separated from that of another or in case it went ahead of or remained behind it, the fault was to be rectified slowly and not hurriedly. (v) The head was to be adjusted in the direction of the guide and eyes to be fixed 15 paces in front. (vi) In case a man went ahead of the line or remained behind, the fault was to be removed imperceptibly by shortening or lengthening the pace.

Oblique Marching—The next exercise was oblique marching which was taught in the following four forms:

- (1) Oblique à droite guide à gauche—This was a slanting march to the right by the left. It was rather a very difficult exercise.
- (2) Oblique à gauche guide à droite—This was the opposite of number one.
- (3) Oblique à droite guide à droite—It was the same as No. one with this difference that the guide was on the right in this case.
- (4) Oblique à gauche guide à gauche—It was the same as No. 2, but with the guide on the left.

Pas Accèlèrè and Pas à Droite—These were two other forms of marching. The rules of the two were the same, as also the length of the pace, but they diffèred in the number of the paces covered in one minute. The pas accèlèrè was faster than the pas à droite, the rate of the former being 100 paces per minute as against 76 paces per minute of the latter. Both the forms were commonly practised and one could be

changed into the other by the following words of command:
(a) Pas accèlère marche, (b) Pas á droite marche.

Marche à Volontè—This signifies easy marching which was generally used on occasions like route marches, when it was felt that marching in step would be tiresome to the soldiers.

Marche en Arrive—This means marching back. It was carried out at the command "En arriere marche" and was brought to an end by the command "Peloton halte". The instructor was particularly required to see that the men kept proper dressing and did not run into one another.

Marche de Flanc (flank march)—To begin with, only one rank was taken. For the right flanking march, the command given was "Peloton, par le flanc droite droite marche". For the left flanking march, the words "gauche gauche" were substituted for "droite droite". There were strict instructions for the dressing of sepoys during the march. This finished, file-marching was taken up. The number of ranks was now increased to three. For the right and left flanking marches, the respective commands used were "Par file a droite marche" and "Par file a gauche marche". At the word 'marche', wheeling was done by the first file to the right or the left according to the command. All the following files acted likewise after reaching the spot of wheeling. After this if the instructor desired the en bataille or linear position, he ordered "Peloton halte, faire une." At this the files halted and automatically turned to the right (Par le flanc droite), if they were marching to the left, or to the left (Par le flanc gauche) in case they were going to the right.

Alignment—The next lesson was alignement or dressing. First of all, instructions were given to each man separately. Then the whole rank was taken and was asked to act together. The word of command for this was either "A droite alignement" or "A gauche alignement". At the former, all the men in the rank were to take two paces forward and to dress up, elbow to elbow, with the two guides already selected with their heads facing the right. At the latter, the same thing was done, but with this difference that their heads faced the left. The instructor then checked up the dressing and corrected the faults.

There was another kind of alignement called "alignement en arrieré" or dressing behind. It fully resembled the

exercise described above, the only difference being that it was behind and not in front of the rank. The word of command for this was "En arrierè á droite alignement."

The following points were specially emphasised in this exercise:—

- (a) All men should march quietly towards the place of alignement.
 - (b) The head and the body must be kept upright.
- (c) The head should not be turned too much in the direction in which alignement was intended.
- (d) None must go ahead of the line selected for alignement.
 - (e) Only the head should move at the command 'Fixe'
- (f) When the instructor is checking faults, none except the man pointed out should move.

Alignement was followed by Comme Dresse on (?) which was of two kinds: (a) Comme Dresse on de Front, (b) Comme Dresse on en Marche. The former was used to convert a column into a line and a line into a column. The latter was employed to wheel the column to the right or the left. The following words of command were used:—

Camme Dresse on (?) de Front

- (1) Par peloton à droite marche—at this the ranks turned to the right.
- (2) Par peloton á gauche marche—at this they turned to the left.
- (3) Peloton halte—this order was given when they reached the desired line.
 - (4) A droite alignement—dress up from the right.
 - (5) A gauche alignement—dress up from the left.
 - (6) Fixe—steady.

Comme Dresse on (?) en Marche

- (1) A droite comme dresse on (?) en marche-wheel to the right.
- (2) A gauche comme dresse on (?) en marche—wheel to the left.
- (3) En avant marche-march forward.

After this a few other drill movements were taught which are given below:—

(1) Rompre Rang Marche—This was meant for dismissal

or breaking off. If the troops were formed in alignement, the command given was "Rompre reveu". In case was intended that the troops after dismissal should go to their respective lines, a more elaborate command was used: "Par peloton une poste pas accélèré marche".

- (2) Former les faisceau was the command for piling arms. When the troops were required to deposit their arms in a kot and break off, the following command was given: "Reposez armes, former les faisceau, á droite alignement, bataillon demi tour á droite, bataillon en avant pas accèlérè marche, rompre rang marche".
- (3) A few bayonet exercises were also taught as part of the drill, such as fixing and unfixing of bayonets. The commands were: (1) Remettre la baionnette-unfix bayonets, (2) Baionnette au canon-fix bayonets.

Tactical Training-All British officers1 who witnessed the review of the Sikh army at Ferozepur or at Lahore in 1838 and 1839, were astounded at "the accuracy and precision" with which all their manoeuvers were executed. One of them, Emily Eden, has described it as "a sad blow to our vanities". All words of command were in the French language, though some of the manoeuvres very much resembled those of the British army.² The most important of them are as follows:—

Columns—Columns and lines were the pivots round which the evolutions of the Khalsa army revolved.

The following exercises were meant for regulating distance in the columns3:

- (1) Par la tête de lacolonne pour le á distance—When the distance was short and it was intended that the column should have the proper distance, this command was given.
 - 1. Cavalry Officer, p. 71; Up the Country, p. 209; Fane, Vol. II, pp. 9-10.
 - 2. Fane, Vol. II, pp. 9-10; Cavalry Officer, p. 71.
- 2. Fane, Vol. 11, pp. 9-10; Cavalry Officer, p. 71.

 3. Marshal Ney—Military Studies, p. 24. "The marches and evolutions executed in column, form the essential parts of military tactics. In such cases, commanders of battalions and of platoons cannot pay too much attention to all that relates to the direction of the march, to the perpendicular of the flank pivot where the guides are, to the distances between the platoons or the divisions, of which the columns are composed and to the intervals between the different battalions or regiments, in order to give the line the facility of deploying in every direction; resuming the line of battle either to the front or on one of the divisions or sub-divisions of the centre or on one of the two flanks; and of executing, in fine, all such movements, facing to the rear of the original direction; or by a counter-march."

- (2) Serrèz la colonne—This was intended to reduce the distance.
- (3) Colonne à distance entiere—This exercise was executed when it was intended to have the column at wheeling distance.
- (4) Colonne à demi-distance—This was meant for having a column at half distance.
- (5) Avec colonne—This was meant to open out a column to avoid a well or a pit in front.

The following orders were used to march off a column :—

- 1. Colonne en avant guide à gauche pas accèlere marche— This order was used to advance a column with its right in front (en colonne l' á droit en tête).
- 2. Colonne en avant guide à droite pas accèlère marcheu This command was given to advance a column standing with its left in front (en colonne la á gauche en tête).

The following were the orders used for turning the columns to the right or the left:—

- 1. Tête de colonne à droite—head of the column to the right.
- 2. Tête de colonne à gauche—head of the column to the left.

From a line into a Column and vice versa—The most important manoeuvres, according to Henty, were those relating to the formation of columns into lines and lines into columns. The columns were generally formed from lines in the following four manners:—

- 1. Par peloton à droite—command for forming a column from a line from the right.
- 2. Par peloton à gauche—command for forming a column 3rom the left end of the line.
- 3. Par peloton en arrière droite—command for forming a column in the rear of the right end of the line.
- 4. Par peloton en arrière gauche—command for forming a column in the rear of the left end of the line.

The following were some important evolutions regarding the conversion of columns into lines and vice versa:—

- 1. Formation of a close Column from a Line—First of all, the
- 1. Through the Sikh War, p. 66.

Commanding Officer gave the order "Colonne serrer par peloton sur la quatrieme peloton du second bataillon 1' á droit en tête en colonne". Upon this, the Commandants on the right ordered "Sur la second bataillon en avant colonne bataillon par la flanc gauche" and the Commandants on the left ordered "Sur la second bataillon en arriére colonne bataillon par la flanc droite". The actual movement was executed at the command "Pas accéléré marche" which was first given by the Commanding Officer and then repeated by the various Commadants.

- 2. Formation of a Line from a Column—The order of the Commanding Officer for this movement was "Par bataillon face sur la premier bataillon deployée colonne". This order was repeated by all the Commandants. The evolution was executed at the command "Pas accéleré marche", given by the Officer Commanding and repeated by the Commandants.
- 3. Formation of a Battle Line from a Column at the Wheeling Distance (Colonne a distance entiere par peloton la droite en tête)— For this the Commanding Officer's order was "Sur la premier peloton du troisieme bataillon deployèe colonne premier regiment contre marche". Upon this, the Commandants on the right and on the left put their respective battalions through a number of evolutions until an assault line was formed.

Squares—Forming and unforming of squares was a vital part of the tactical training of the Sikh infantry. The squares were called carré or echiquier and were of several kinds, viz. carré region (square of divisions), carré peloton (square of pelotons), carré plein (solid square), carre vide (hollow square), carre colonne seriér (square of close column), and carré echelon (square of parallels). Some of the important square exercises are mentioned below:—

- 1. Carrè Region and Sections—This square was formed from regions or divisions which were formed in the following manner:—
- (i) Par region á droite—used when divisions were to be formed on the right of the alignement.
- (ii) Par region á gauche—used when the divisions were to be formed on the left of the alignement.
- 1. Marshal Ney-Military Studies, p. 51-A detailed description of the formation of a hollow square is given here.

- (iii) Par region en arriére à droite—used when they were to be formed behind the alignment on the right.
- (iv) Par region en arriére á gauche—used when they were to be formed behind the alignement on the left.

The following words of command were used for breaking divisions into a line:—

- 1. Par region á ligne marche.
- 2. Par peloton á ligne marche.
- 3. Par section á ligne marche.

The following words of command were used for forming squares of divisions and sections:—

- 1. Carré region bataillon par la flanc droite par region par file á gauche marche.
- 2. Carré sections bataillon par la flanc droite par section par file á gauche marche.

The following words of command were used for breaking squares of divisions and pelotons:—

(1) Rompre la region (2) Rompre la peloton.

The following words of command were used for forming divisions and pelotons:—

- (1) Former la region (2) Former la peloton.
- 2. Carré Colonne—Squares were formed not only from regions but also from columns. Different words of command were employed for different columns. A column might be a close column with its right or left in front or with its head to the right or to the left or it might be a column at full distance, at half distance or at wheeling distance. The words of command had to be adjusted to what kind of column it was. There were also variations resulting from the position of the particular peloton on which the square was intended to be formed. There were a number of battalions in a column and each battalion had 8 pelotons and a square could be formed on any one of them, but a slightly different procedure had to be adopted in each case.
- 3. Carré Echelons—This was the name of a square formed with a number of parallel battalions at a distance of 100 paces each. Such a square was formed in two stages. The first stage started with the Commanding Officer's order "Echelon par bataillon au pas en avant par la droite former la ligne echelon" and ended with the advance of each one of the batta-

lions a hundred paces. The second stage comprised the formation of the square. A separate order was given by the Commanding Officer, which was later on repeated by each Commandant to his battalion. The order was "Former la carré par region á droite pas acceléré marche". For breaking the square, the order of the Commanding Officer was "Former la regions" and that of the Commandants "Par la flanc á droite (or Par la flanc á gauche) á droite (or á gauche) pas acceléré marche."

- 4. Six Deep Square—Generally squares were formed three deep, but sometimes six deep squares were also executed. The following words of command were used for forming such a square from the divisions or regions:—
- (i) "A distance du sections serrér la colonne pas accéléré marche"—At this the first division of the first battalion stood fast, while the other divisions advanced and took their respective posts.
- (ii) "Deployèe carré par sections á droite á gauche pas accéléré marche". At this the square was executed by the divisions under the orders of their Commandants.

The above square was dissolved at the Commanding Officer's order "Former la regions". The Commandants first repeated the same order and then gave their own orders "Bataillon par la flanc droite par la flanc gauche á droite á gauche". The final order was "Pas accéléré marche". A six deep square could also be formed from a line. The Commanding Officer ordered "Colonne á distance du sections par regions sur la premier region du premier bataillon en arriére en colonne". Upon this the Commandants ordered "Bataillon par la flanc droite droite". Then the Commanding Officer said "Pas acceléré marche". The same order was given by the Commandants to their respective battalions. This was followed by another order of the Commanding Officer: "Deployèe carrè par sections á droite gauche pas accèlèrè marche". At this the square was formed. For its breaking the word of command used was "Former la regions".

1. For: 1831 Sec. Progs. 25th Nov., 23. Capt. Burnes witnessed two battalions forming a square and going through several changes of position in echelon which they executed in the French mode, firing by peloton wings with great regularity.

Colonne Contre la Cavalerie—This square was formed when a column was suddenly surrounded by the enemy and when there was no time for more elaborate evolutions. For forming this square, the order given by the Commanding Officer was "Colonne contre la cavalerie á droite á gauche en arrière alignement pas accèlèrè marche". The square was prepared by breaking off five files from the right and the same number from the left.

Crossing of a Bridge—The particular formation for crossing a bridge was called file-marching. The Commanding Officer gave the order "En avant sur la centre passer la file bataillon par la flanc gauche par la flanc droite á gauche". After this Commandants on the right ordered "Bataillon par la flanc gauche" and the Commandants on the left "Bataillon par la flanc droite". The move was made at the "Pas accèlérè marche" command of the Commanding Officer. Flags were used to mark the passage through which all the files were required to pass. After crossing the bridge, the original line was resumed at the command "Par peloton á ligne" of the Commanding Officer.

Regular Cavalry

Like the regular infantry, the regular cavalry was also trained on the French model. The details of that system are not available, but we know for certain that all the words of command in use in this branch were also French.¹ The Lahore Akhbar of the 15th to 17th July, 1822 clearly mentions that the French Officers, Ventura and Allard possessed two books of instructions, one for the horse and one for the foot, when they arrived in Lahore.² In 1827 Capt. Wade and Dr. Murray were shown manoeuvres on more than one occasion by some regiments trained by these French officers.³

- 1. Monograph 18, p. 24.
- 2. For: 1822 Pol. Progs. 24th Aug., 4.
- 3. Murray to Wade, 16th Jan., 1827 Cons: 16th March & Wade to Metcalfe, 1st Aug., 1827 Cons: 12th Oct., 1827. Writes Murray: "They (Dragoon Regt.) executed some manoeuvres which were done much more slowly than is the custom with our regiments of cavalry, but still very well."

Regular Artillery

Like the other branches of the regular army, the artillery too was trained on the French system. Not only all the words of command in use were French. but also, as William Barr has said, the whole system of gunnery was French. The gunners were taught how to lay, aim, prime and fire a gun. All their movements were in the beginning at the walk,2 but later on this defect was remedied by ordering them at the double. The gunners were also given some basic lessons in drill. Their tactical training largely resembled that of the infantry, because likewise they had to form in lines, columns and squares.3 But they had some evolutions special to their arms, such as forming batteries and firing.4 Great emphasis was laid on giving practice to the men in the firing of cannon, correct firing being the desideratum of all their training. For this purpose firing ranges were prepared and made use of.

Combined Manoeuvres

Training would be incomplete and not of much practical use, if the different arms are not taught how to manoeuvre together, because success in the battle field largely depends upon their mutual cooperation. The Sikhs recognisd this and frequently organised combined manoeuvres. Luckily, one such has been described by Orlich who witnessed it at Ferozepur in 1842. He writes: "The Sikh Brigade consisted of two regiments of infantry, one of cavalry and two batteries. It manoeuvred with great precision under the command of General Court. The manoeuvres were evidently executed on a pre-conceived plan and the movements of the a rtillery and cavalry were as rapid as could be desired. The infantry first formed in line, then divided into two bodies with sharpshooters in advance and then formed columns of attack, supported by the cavalry which advanced round the wings and

- 1. Barr, pp. 258-260.
- 2. Skinner, p. 213.
- 3. Burnes, Vol. III, p. 165.
- 4. For : Misc. Vol. 206, p. 146.

attacked. When repulsed, it rallied behind its infantry and artillery which had formed its squares and opened a brisk fire." Sohan Lal also makes a reference, though a bare one, to some of these combined movements displayed at Ferozepur in 1838.

The combined movements, as also the marching and the evolutions of the three arms separately, were carried out at the beat of the drum or at the sound of the trumpet as was the practice in European armies at the time.

^{1.} His Travels, Vol. I, p. 205.

^{2.} Sohan Lal, Vol. III, Part IV, p. 568.

CHAPTER VIII

TACTICS

In this and the following chapters we shall examine the fighting technique of the Sikhs both under and after Ranjit Singh. A fighting technique has two main aspects, tactics and strategy, which, notwithstanding that they often merge into each other, can yet be distinguished and studied separately. "Strategy is the method by which a commander seeks to bring his army to battle, while tactics are the means by which he seeks to defeat his enemy in the battle," or as another writer puts it, "strategy is the art of projecting and directing a campaign; tactics is the art of handling forces in battle". Even so, they are vitally interlinked. Tactics is, as Liddell Hart says, "only an application of strategy on a lower plane."

The principles of strategy are more or less permanent. They seldom change, though their applications may vary with people acting under various circumstances. This is not. however, true of tactics which have been steadily changing through the centuries. They are subject to the influence of of changes in the military organisation, in the relative importance of the different arms, and in the weapons of war. examination of the Sikh tactics during the period under review will reveal a certain process of evolution which was inevitable result of the far-reaching military changes introduced by Ranjit Singh. This process of evolution, it may, however, be remembered, was characterised, like most other aspects of the Sikh military system, by a skilful union of the new with the old tactics. Whereas there was a strong bias in fayour of the tactics of Europe, the old tactics were not altogether abandoned, but were followed, though in a modified form, by the large number of his ghorchurras who refused to benefit by the training system of the west.

^{1&}amp;3 .- Liddell Hart-Indirect Approach, p. 335.

^{2.} Combined Training, 1902.

study of the Sikh tactics may be conveniently split up into three periods, viz. (1) 1799 to 1823, (2) 1823 to 1839, and (3) 1839 to 1949.

First Period (1799 to 1823)

This may be termed the period of transition in which emphasis began to shift from the old to the new tactics. At the outset of this period, Ranjit Singh was a mere misaldar and his method of fighting was not different from the one followed by his brother misaldars, which has been described at some length earlier in Chapter I. But gradually he came under the influence of the new military trends which had been gaining currency in the country since the middle of the 18th century. Several circumstances such as the examples set by some other Indian princes, the unbroken series of British triumphs and the defeat of his Akalis by Metcalfe's escort in 1809, combined to convince him of the urgent need to remould his tactics and he started raising a powerful body of trained infantry and artillery with a view to attaining his object, and by 1822 as many as 14 battalions of infantry and a number of batteries of artillery had been trained in the western method of fighting. This led to a great improvement in tactics. The shock tactics of the cavalry were strongly reinforced by the fire tactics of the new arms, which imparted a greater steadiness to the troops on the battlefield. Formerly, the battles were mostly cavalry melees. Matchlocks were no doubt used, but sword rather than the matchlock was the decisive weapon of war. Now battles began to assume a more orderly and organised appearance. The newly developed arms of infantry and artillery were arrayed in the centre to initiate the fight, to hold the enemy, to meet his counter attacks and to give covering fire, while the horsemen from the flanks could advance and put the enemy to flight.

But while there was a definite advance towards the adoption of a new technique of fighting, it in no way marked a radical departure from the traditional method¹. Cavalry during this period was still the predominant arm and the

^{1.} Selections from the Papers of Lord Metcalfe-Sir W. Kaye, p. 29. Metcalfe to Edmonatone Nov. 6, 1808.

tactics of the period were largely governed by this factor. In 1820 Desa Singh Majithia, one of Ranjit Singh's principal officers, emphatically claimed before Mr. Moorcroft that "all Ranjit Singh's conquests had been won by the sword and that he had never known the infantry and artillery of any service." This view may be slightly exaggerated on account of the fact that the Sikh chiefs, wedded to the old system, thought very low of the new arms and the European mode of drill, but still it contains a measure of truth. So many tactical functions were performed by cavalry that it could easily be called the chief factor responsible for the Maharaja's victories of this period. All skirmishing was done by it; most of the battle manoeuvres, such as envelopment, attacks on flanks, frontal attacks counter-attacks, and pursuit, were carried out by it; and further its role in the hand-to-hand fighting was almost monopolistic in character.

The best illustrations of the tactics of this period are provided by the battles of Chuch (1813) and Naushera (1823). The former was the first pitched battle between the Sikhs and the Afghans, which was waged to decide the possession of the Fort of Attock. The two armies, commanded respectively by Dewan Mohkam Chand and Wazir Fateh Khan, lay opposite each other for weeks, having only occasional skirmishes. Ultimately, the Sikhs advanced towards the Afghans and making a detour selected a position which had many advantages, particularly the advantages of proximity to water and of holding out a threat to the Afghan rear. A battle-order was then drawn up.1 The whole army was divided into four parts: right, centre, left and reserve. Infantry tillery were posted in the centre and a little ahead of the rest of the army. Some artillery was also put in the reserve. The cavalry was distributed over all the parts, but its main positions were on the right and left wings. The advance of the Sikhs upset the Afghans who left their position and made an attack upon the Sikhs at the latter's selected site. This was met by artillery and swivels. The infantry gave musket firing in volleys, but when the Afghans still moved on, they formed

^{1.} For: 1813 Pol. Cons: 6th Aug., 18; Griffin, p. 192.

squares1 fort heir own defence, as also the defence of the guns. The Afghan attack under Dost Mohammed Khan, however, was so impetuous that these squares were broken, the infantry gave way and some of the guns were captured. At this point, Dewan Mohkam Chand, who was immediately behind the centre and had been anxiously watching the battle scene, ordered the artillery of Darogha Gause Khan to advance to the help of the troops being driven back, but the Darogha stood inactive.² This was the most critical moment in the battle. The Dewan then promptly exchanged his elephant for a horse and personnally led up the whole reserve force of artillery, cavalry and infantry against the advancing Afghans. There was now a terrible hand-to-hand fighting in which both the parties displayed feats of courage and gallantry. The cavalry resorted to 'utara' (dismounting) and fought with the sword.3 The Sikh guns at this time proved most useful, because their incessant firing checked the Afghans and killed off large numbers of them. After some time, the Afghans were demoralised. Wazir Fateh Khan had not sent any help from behind and the scorching sun was becoming unbearable for them. They, therefore, turned back and took to flight. Seeing this, the Sikh cavalry followed up and pursued the Afghans up to a distance of 8 kos, thereby rendering the victory complete.4

The second battle was also between the Sikhs and the Afghans. The respective commanders on this occasion were Ranjit Singh himself and Wazir Azam Khan. Having detached some artillery and troops towards Azim Khan to prevent him from crossing the river and joining his 'mulkias' (militia), Ranjit Singh crossed the Kabul River and achieved a tactical surprise⁵ by making a cavalry charge upon the 'Ghazis' before their preparations were complete. But this charge fell through, for the enemy position was on the summit of a hill (called Pir Sabak), from where they could make a very effective use of firing and stone-throwing. Seeing the Sikh attackers retreating, the Afghans pursued them and made

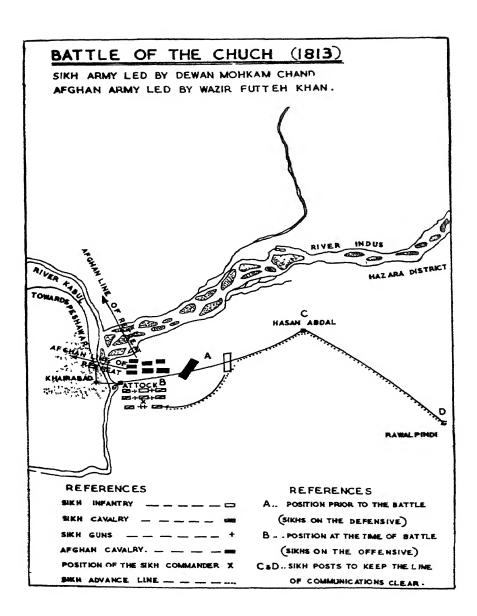
^{1.} Ibid.; Kanhaya Lal, p. 230; For: 1833 Sec. Progs.,6th June, No. 2.

^{2.} For: 1813 Pol. Cons: 6th Aug., 17.

^{3.} For: 1813 Pol. Cons: 6th Aug., 18.

^{4.} For: 1813 Pol. Cons: 6th Aug., 18.

^{5.} For: 1824 Sec. Progs. 29th Oct., 9; Kanhaya Lal, p. 308.



a counter attack. The Sikh artillery now opened a nonade, while the Sikh infantry, standing in line with the guns, resorted to the tactics of file-firing1 i.e. they fired by platoons, then filed and wheeled to the rear to make way for others who, coming up to the front, fired and retired similarly. The heavy body of fire from the infantiv and the cannon greatly annoyed the Ghazis and arrested their progress. Recovering, however, from the check and realising their inferiority in a distant combat, the Ghazis by a simultaneous movement, sword in hand, rushed on en masse, cut their way into the ranks of the Sikh infantry, threw them into confusion and took the two pieces of cannon from which they had suffered so much. another charge of the same nature two more pieces of cannon were, in like manner, taken. But these guns were soon recaptured by the Sikhs. In several places the Sikh regiments were broken and the Ghazis were victorious, but in others the Sikhs, though in confusion, continued the combat.2 This was a most anxious moment for the Maharaja; but he rose equal to the occasion. His first problem was how to rally the fleeing troops. He set both his infantry and artillery to block the passage of the fugitives.3 Then he addressed them in bold words and by challenging their sense of gallantry and self-respect roused their fervour and making a counter-attack drove back the enemy at all points. Almost simultaneously, he ordered up his body-guard of three thousand ghorchurras to make a flanking move and envelop the hill on which the enemy was posted.4 This manoeuvre having been completed, firing was opened upon the Afghans from all sides. They could not reply to the Sikh firing as by now their ammunition had been entirely exhausted and their numbers greatly diminished. Then the Sikhs (among them the most notable being the Akalis of Phula Singh) commenced their charges. Three times the Afghans were charged. Twice they repelled and drove the Sikhs back by the sword. The third charge was more successful and a great slaughter was made among the enemy. At last, the

^{1.} For: 1824 Sec. Progs 29th Oct., 9; Kanhaya Lal, p. 308.

^{2.} For: 1824 Sec. Cons: 29th Oct., 9.

^{3.} Kanhaya Lal, p. 308.

^{4.} For: 1824 Sec. Cons: 9th Oct., 9.

Ghazis broke through one of the lines of the Sikhs and fled away.¹ There was no pursuit of the enemy on this occasion, as there was hardly any day light left for the purpose.

The foregoing account will give us a clear idea of the tactics employed by the Sikh army during this period. The repeated cavalry charges or the cock method of as it has been called by Moorcroft because the Sikh horsemen, in the manner of a cock, would fight, run away and again return to the fight,2 was a continuation from the Misaldari period. Similarly, pursuit of the enemy in the event of his flight, keeping a reserve and envelopment were no new tactics. The 'utara' performed by the Sikh cavalry in the battle of Chuch was simply an imitation of the Mughal tactics bearing the same name. But perhaps the old tactics would not have achieved so much success, had they not been modified to suit the training of the regular infantry and artillery. For example, a contemporary writer attributed the victory of the Chuch plain to the firm conduct of Dewan Mohkam Chand and some other chiefs and to the over-whelming effect of the Sikh artillery upon the Afghan cavalry.3 Another writer, Mr. Moorcroft, has made a similar comment on the battle of Naushera, 1823.4 He says that the Afghans would have won the day, had not the disciplined regiments of the Sikhs stood firm.

Any examination of the tactics of this period will remain incomplete without a reference to the ones which were employed in besieging or defending forts and fortresses. The importance of these tactics may be judged from the fact that the wars of this period were largely sieges, pitched battle being an exception rather than a rule. The country was full of forts and the tendency of every chief was to fight from within a fortification. The siegecraft employed was generally the same as had been in use under the Mughals and the Marathas. Likewise, it

- 1. For: 1824 Sec. Cons: 29th Oct., 9.
- 2. & 3. For: 1824 Sec. Progs. 29th Oct., 9.

^{4.} For: 1813 Pol. Cons: 27th Aug., 7. Delhi Resident to John Adam, dated 6th August, 1813. The Afghan tactics of rush, obstinacy in fighting and precipitate flight in the case of defeat, with no discipline and no attempt at rallying, as explained by Ranjit Singh himself to Capt. Wade in 1827, were inferior to those of the Sikhs. Wade to Metcalfe, 1st Aug., 1827, Con: 12th Oct., 1827.

was backward both in its theory and practice. The Sikhs oftener resorted to stratagems or prolonged investment than they did to coup de main for the reduction of a fort. All big strongholds such as Lahore, Kangra, Kasur and Attock were captured in this manner, while the fort of Multan, which was carried by a coup de main in 1818, could only be reduced after several similar attempts had proved abortive. Ochterlony remarked in 1810,1 their siege operations were not carried on in any skilful manner. There was no proper planning for the erection of batteries and choice of lines of approach. There was, at this stage, practically no impact of the western military thought on the siege tactics of the Sikhs who were very much inferior to the British who, with their powerful siege trains and their system of approaches in parallels2, were in a much stronger position. The only improvement noticeable in their craft was the result of their possessing a heavier park of siege guns. It was hence somewhat easier to breach the walls and gates of forts, which rendered the resort to storming or assaulting a little more practicable. In the earlier period, when elephants had to be used for battering purposes, seldom was any fort taken by storm.3

The main outlines of the siegecaraft followed by the Sikhs are as follows. Sieges were, as before, prolonged affairs, some of them lasting for months together. Usually the first step in a siege was to surround the place and stop all egress and ingress. Then, all sorts of stratagems were tried to secure a short cut to success, such as apprehension of families of the garrison, intrigues with gatekeepers, offers of temptations, devastation of the country around and the use of similar other devices. But if nothing availed, the investment was made more rigorous with a view to starving out the garrison; but this

1. Ochterlony to Lushington, No. 57 dated 17th April, 1810.

3. Irvine, p. 270.

4. For instance, the siege of Kasur in 1807 lasted for more than 2 months. The siege of Multan in 1810 lasted even longer. Kanhaya Lal,p. 180.

^{2.} This will be clear from a number of siege descriptions contained in "War and Sport in India—An Officer's Diary (1803)".

^{5.} For example, Mc Gregor instances Sada Kaur's use of bribery in the conquest of Kasui and deception in that of Kangra.—History of Sikhs, Vol. I, pp. 158 & 165. The best example of the offer of generous terms is provided by the siege of Mankehra in 1822.

being a prolonged affair requiring a considerable amount of time and patience, a regular technique of trench approaches, bombardment and assualts was put into operation.1 First of all, a reconnaissance was made. Then positions for different batteries and lines of approach were determined. Usually, each prominent chief was entrusted with a battery² line of approach. This done, bombardment was opened on the walls of the fort and work on the trenches was started. A sort of keen competition was kept up among the various parties. Rich rewards were promised to those who pushed forward their works in the minimum time. As the trenches were being carried forward, the batteries were moved ahead and the firing was continued. Trenches were open and not underground passages like those of the British, with the result that they were very safe. The garrison could easily spot position and line of advance and dig out trenches to hinder the advance of besiegers. Troops followed in the trenches, fully ready to meet any sallies or sorties from within the fort. When the trenches were carried close enough to the ditch, open trenches being no longer possible, covered passages were dug out which opened out into the ditch and through which assaults could be made. At this point, it was customary to spring mines under the fortifications. If successfully worked, they could cause wide breaches and enable the storming parties to enter the fort. Sometimes counter mines were sprung by the garrison causing a heavy loss to the invaders, as for example at the time of the siege of Multan in 1810. The final act was the storming of the fort. It was an extremely risky job and as far as possible was avoided. variably, it was preceded by an appeal to the garrison to make a surrender. In the event of the failure of such appeals, storming was inevitable. For this purpose, assaulting columns were organised to make a forced entry into the fort either escalade or through the breached gates or walls. A terrible hand-to-hand fight then took place in which both the besiegers

^{1.} Centenary Volume, p. 19. Article by S. R. Kohli on the siege of Multan, 1818. Moorcroft, Vol. I, p. 101; Prinsep, p. 114.

^{2.} Batteries were emplacements or earthworks where the battering guns were placed and were known as 'murchals'.

and the besieged displayed feats of great valour.¹ It may be added that on approaching close to the fort, guns were mounted on artificial towers prepared for the purpose or on the roofs of nearby buildings, if available, to fire with greater effectiveness upon the inmates and their shelters.

Defence of a fort was comparatively much easier, particularly when a sufficient number of heavy guns were mounted on its walls. First of all, attempts were made to give battle to the enemy outside the fort. In case the enemy's force happened to be too powerful, all the gates were closed and the most dependable guards were put up for their defence. Guns were fired through embrasures in which every fort of any consequence abounded. Occasional sallies or sorties were made to arrest the advance of the enemy's trenches and batteries. Countertrenches and counter-mining were often made use of for this purpose. When the enemy troops were right at the foot of the walls, powder pots or other combustibles were generally thrown on them, to cause disastrous burns.2 The last step in the defence was to put up a bold hand-to-hand fighting at the breaches or the gates stormed by the enemy. It may be added that treachery being a most likely occurrence in such situations, a close watch had to be maintained all along on all suspects.

Second Period (1823-1839)

The transitional period of tactics came to an end soon after the arrival of the French officers, Ventura and Allard, in 1822, which ushered in "a new era in his (Ranjit Singh's) government." They were subsequently followed by several other Europeans including Court, Avitabile and Gardener. All these officers unitedly raised a mighty army, many times its size in the previous period, and comprising all the three arms trained on the European model, mostly French. The predominant arm of the preceding period cavalry, was now relegated to a secondary position. Moreover, there were great improvements effected in weapons and tactical units.

^{1.} Griffin, p. 186.

^{2.} Ochterlony to Lushington, No. 58, dated 23rd April, 1810.

^{3.} For: Misc. Vol. 206, p. 149---Wade's account of Ranjit Singh.

The popular weapons of the infantry, matchlocks and flint-locks, were considerably improved. Cavalry was equippd with pistols and carbines, while in artillery new guns like howitzers and mortars were introduced. Also better fuzes and ammunition were now made use of. As regards tactical formations, formerly there was practically no organisational coordination between units of the different arms. This flaw was removed by the setting up of a larger tactical unit, the brigade, which was a self-contained comprehensive entity consisting of infantry, artillery and cavalry, all of the regular type. All these developments were bound to have far-reaching effects on the tactics of the Sikhs.

The new system of tactics, which was extensively, employed hereafter, was French.1 It was naturally so, because the principal instructors were the ex-officers of the Napoleonic army. A brief account of this system has already been given in Chapter VII. Broadly speaking, these tactics were based upon columns, deployed order, squares, and skirmishes. most popular formation was the close column. line was generally formed of two lines of close columns, the columns of the second line being arrayed opposite the intervals of the first line, so as to give less chance to the hostile artillery and to facilitate the passage of the lines. The intervals between the columns were garnished with skirmishers and cannon. This kind of battle order was thought most useful for offensive purposes, as close columns possessed great mobility and impulsion. For a defensive battle in position a slightly different order was observed. The first line was deployed, while the second was usually in columns of attack. With a view to imparting a still greater mobility and impulsion to the columns, the command was distributed in depth i.e. each brigade formed its own first and second lines in order that each general might have his support under his own orders and not have to expect help from another. The deployed order was employed only sparingly, but it was the best method for firing upon the enemy and also

^{1.} A fair idea of the contemporary French tactics may be had from Military Studies by Marshal Ney, a Napoleonic officer. The original manuscript has been translated into English by Mr G. H. Caunter. For a specimen, see the list of French evolutions for the infantry under Appendix III.

for meeting his fire, for the reason that it created an extended front. It was the favourite method of the British who preferred it to the column order. Their army being much more disciplined, the disadvantages of this method-for instance, less-mobility and less solidity-caused no serious handicaps to them. The French, who were imitated by the Sikhs, mainly concentrated on mass and depth, because their men were not so well trained and disciplined as the British and also because these gave them a greater power of manoeuvre.

The square formation was another common tactic generally employed against cavalry attacks. There were several ways in which a square could be formed, but the regular square was formed of a battalion on a two-company front. Such a square could be used both offensively and defensively. The British used a slightly different square which had a front of three companies, with one company on each flank. It was better, because it gave more fire power and was less exposed to enemy's fire, but it was inferior to the French or the Sikh square in as much as it possessed less mobility or power of manoeuvre.²

Skirmishing was considered extremely essential to give protection to the infantry and artillery. The Sikhs were reputed skirmishers before the establishment of Lahore monarchy. Even later on, when they gradually switched over to the new mode of fighting, they did not dispense with those of their tactics in which they were so adept; on the other hand they employed them effectively in cooperation with their newly acquired In these tactics, the major role was played by artillery and infantry. Artillery was used not only to open the fight and inflict the initial losses on the enemy but also to arrest his advance and give covering fire for the conduct of all manoeuvres, whether of advance or of withdrawal, directed against him. Cannon were not, as in the past, constantly aimed at a single fixed point, usually the centre of the enemy, but, on the contrary, were used tactically to fire upon all parts of the enemy's battle line. Volleys, enfilading fire and cross fire most popular fire tactics were some oft he However, artillery, without the aid of infantiy, was of little use. Infantry had a vital function in leading the attacks

2. Ibid., p. 33.

^{1.} History of Tactics by H. M. Johnstone, p. 43.

and counter-attacks. In the event of the invader's continued onward rush, they formed squares to defend themselves and the guns.¹ The role of cavalry was comparatively minor but not unimportant. It was generally employed to cover the flanks of the columns of attacks; while in the event of a repulse it was required to retreat and form up in the rear. It was also kept in the reserve for use in emergencies. Moreover, the Sikh ghorchurras were posted on the wings and were expected to carry out flanking movements. Pursuits, reconnaissance and skirmishes were other important tasks carried out by cavalry.

Mr. Orlich points out a flaw in the tactics of the Sikhs, which arose from the juxtaposition of both the French and the English systems. His observation reads²: "The tactics differ in the various brigades; those which are under French officers being trained on the French system, while those under British officers, according to the English tactics. Thus unity is wanting and discipline is defective. A single mishap would cause a complete disruption of these troops." When it is realised that not more than two or three battalions in all in the whole regular army were trained according to the British system, the seriousness of this flaw is mitigated.

The tactics described above were, however, not mechanically followed in actual practice³, as the situation of each battle determined which of them were to be applied. Here are a few examples which may throw some light on the subject.⁴ In the first place, we have the fights with Sayed Ahmed of Bareilly who worked up and conducted a crusade against the Sikhs during 1827-31. There were three actions and in all the three he was defeated. The first one is very significant. The Sikh commander, Budh Singh, with a small force of about

^{1.} Dr. Murray has given a specimen of some infantry tactics. "The battalions commenced firing by companies from flanks to centre. They then gave three volleys, formed a hollow square on the two central companies, and began file-firing, all which they executed very well. They afterwards deployed into a line and marched past the bungalow at a quick step." Murrey to Wade, 30th Dec., 1826 Cons: 23rd Feb., 1827.

^{2.} Orlich, Vol. I, p.227.

^{3.} Henty, 16; Adventurer, p. 112.

^{4.} The period from 1823 to 1839 was comparatively free from any big battles, because Ranjit Singh's conquests had been practically completed during the preceding period.

8000 horse was attacked by a big host of Ghazis near Akora in 1827. An open battle was not possible in view of the disparity in the numbers of the two armies. Therefore, the Sikhs fought from behind some hastily built-up loose breastworks of stones1 and mainly banked upon cannonading. Afghan assault was repulsed, but no pursuit could be made because of the shortage of numbers and the victory remained incomplete. After some years in 1835 Amir Dost Mohammed, the ruler of Kabul, made a bold bid for the recovery of Peshawar from the Sikhs. He also declared a holy war and marched at the head of a huge army. Ranjit Singh engaged in negotiations to bide time until his preparations were complete and then suddenly invested his camp. The order of investment adopted indicates the influence of the new tactics.2 Infantry in separate divisions formed the first line with artillery arrayed in between and close behind. The cavalry was in the rear line and was to give support wherever it was needed. Dost Mohammed was so much terrified that he fled away during the night, leaving his whole camp standing. He was pursued by the Sikhs upto a distance of 10 kos. In 1837 the Afghans again attacked, this time with a greater measure of success. A heavy park of guns was brought to bear upon the defences of the Fort of Jamrud, which were destroyed, though the garrison could not be dislodged. At a critical moment, Hari Singh Nalwa appeared suddenly from Peshawar under the cover of darkness and took the besiegers by surprise.3 The ground being hilly and unsuitable for a close fight, the SikhCommander feiged retreat and drew the enemy off to an open plain where he could deploy his troops more advantageously.4 The battle of Jamrud, as it has been called, is noted for the effective use of the new tactics. It opened with a cannonade. After the Afghan guns had been silenced, the infantry, which had been

^{1.} Burnes, Vol. I, p. 84. On this occasion, Ranjit Singh despatched towards Peshawar between forty and sixty thousand soldiers including regulars and a heavy park of artillery, but the enemy had been defeated by Budh Singh before the arrival of these reinforcements.

^{2.} For: 1835 Pol. Cons: 15th June, 85. Ranjit Singh's letter to Lala Kishan Chand.

For: 1837 Pol. Progs. 7th Aug., 86--extract from Masson's

^{4.} For: 1837 Pol. Cons: 29th May, 58-60. Wade to Macnaughten, 13 May, 1837.

carefully disposed in the centre, advanced in the formation of columns of attack.1 It was a most vigorous attempt, and the Afghans were put to flight. At this stage, a serious blunder was committed. Hari Singh was opposed to any pursuit of the fleeing Afghans on the ground that the area was hardly fit for such a purpose. But his impetuous ghorchurras posted on the wings of the battle-array defied his orders and ran after the enemy, thereby disrupting the whole battle order.2 The enemy went into hiding behind the hills and lay in ambush for the pursuing Sikhs. Moreover, the propensity of the Sikhs to plunder worked a great havoc with the discipline of their troops.3 Taking advantage of the general confusion thus created, some of the Afghans rallied and made a counter attack upon them. This made the Sikhs panicky and put them to flight. Hari Singh again came to their rescue and attempted a rally to ward off the enemy's counter-attack. He was successful in this, but unfortunately being mortally wounded, had to retire from the field, while yet the fight was on. The Afghans had not been beaten off and therefore, while the Sikh General lay dead within the fort, the army dug up trenches around the fort and carried a defensive battle until the arrival of reinforcements from Lahore.4

It may be added that the irregular cavalry continued to follow, as before, the cock method of fighting referred to earlier, for Charles Masson writing about the same time said: "In action their reliance is not so much upon the charge as upon a desultory species of warfare to which they are well trained. It consists in advancing upon their enemies until their matchlocks can take effect, discharging them and precipitately retreating to reload and to repeat the same manoeuvre."

So far as siegecraft is concerned, this period marked a great deal of advance. There was no big siege resembling that of Multan in 1818, but from the several petty sieges that were conducted during the period we may infer that the method

- 1. Sinha, p. 101.
- 2. For: 1837 Pol. Progs. 31st July, 23. Ranjit Singh to Wade, July 1837.
 - 3. Barr, p. 133; Sohan Lal, Vol. III, Part III, p. 450.
 - 4. For: 1837 Pol. Progs. 31st July, 23.
 - 5. Narrative of Various Journeys, Vol. I, p. 436.

of starving out the garrison was now practically discarded in favour of causing breaches by means of cannonading and reducing forts by assaulting or storming. This was so owing to the operation of three factors: (1) Ranjit Singh had acquainted himself more closely with the British manner of conducting sieges, as for example in 1825 he kept himself in close touch with almost the day-to-day progress of the siege of Bharatpur, (2) large increase in artillery, and (3) availability of mortars and howitzers which were most effective for battering the walls of forts. In May 1838, Sikhs displayed before Lord Auckland at Ferozepure their skill in the European methods of laying a siege to a fort and won his admiration.²

Third Period (1839-1849)

Broadly speaking, tactics introduced by Ranjit Singh were continued after his death. But two things may be noted, which differentiate the post-Ranjit Singh period from the earlier periods. They are (i) fall in the tactical efficiency of the troops, and (ii) shift of emphasis from offensive to defensive tactics.

The best period of Sikh tactics ended with the death of Ranjit Singh in 1839. After him there was a period of deterioration, because both training and discipline, which constitute the basis of sound tactics, received a positive set-back after the death of the great Maharaja. There were quick and violent changes of government leading to a terrible state of chaos and anarchy in which there was no ruler strong enough to maintain the tactical efficiency of the troops. The court was split up into rival factions which were deeply engaged in intrigues and counter-intrigues. The frequent invocation of the aid of the army by the politicians to further their selfish ends made it vain and conceited, so that the officers were little cared for and discipline suffered heavily. Parades became irregular, with the result that the standard of tactical training fell rapidly.

^{1.} Sohan Lal, Vol. III, Part I, p. 39. Moreover, Dr. Murray tells us that "the Raja put many questions to me about our European regiments and concerning the siege of Bharatpur, the details of which he seemed anxiou to learn, and as I communicated them, he explained in Panjabi to his Sardars." Murray to Wade, 1st Jan., 1827 Cons: 23rd Feb., 1827.

^{2.} Sohan Lal, Vol. III, Part IV, p. 509.

Moreover, the large number of fresh recruits enrolled during this period could not be properly trained, who thus remained almost raw youths. Further, all European officers were expelled and replaced by incompetent and unscrupulous sycophants who were incapable of manoeuvring large bodies of troops.

Another notable feature of this period was the enhanced importance of defensive tactics. This is best illustrated by the two Anglo-Sikh Wars which took place about the close of this period and in which the British being better led and better disciplined the Sikhs were forced to be on the defensive. their battles were positional in character. The positions were care fully selected and sometimes were further strengthened with artificial works. As to the disposition of the troops on the battlefield, the deployed or extended order was adopted, which was considered as the best method for the purposes of defence. No strict uniformity, however, could be observed in the application of this order, as the actual forms of array of troops largely depended upon the nature of the battle-site selected. were bound to be variations between a battle like Chillianwala or Gujrat where the troops were spread over an area of several miles and a battle like Ferozshah or Sobraon where they were compressed within a small enclosure of entrenchments. When there was an open area, the pattern of disposition was generally the deployment of infantry and artillery in the centre and cavalry on the wings, unless the line was too long, in which case units of cavalry were also disposed in the centre behind artillery and infantry, but in the case of enclosed areas, the three arms were arrayed all along the line in the following order: artillery in front, infantry in the centre and in the intervals between the guns, and cavalry in the rear. The disposition of the army having been completed, an effort was made to invite the attack at the position chosen. This was done by opening a gun fire. When the enemy formed his assault line, a terrific cannon fire was directed upon his guns and other vital parts of his line with a view to demoralising the opposing troops by causing damage and giving an idea of the opposition they would have to encounter in case they intended to advance. cannonading was further intensified, as the enemy approached nearer and nearer. On his coming within the range of musketfire, the infantry with their muskets joined in. About the same time, sallies were made by cavalry under the covering fire of the guns. Finally, there was the melee in which muskets, pistols, spears and swords were freely used. Sometimes muskets were thrown aside and swords drawn by the Sikhs to carry on the fight, because they could not make effective use of their bayonets as the British could. To frustrate the enemy's efforts to cut down the gunners and spike the guns, squares were formed by the infantry. possible, charges or counter-charges were made amidst loud shouts and beating of the French pas de charge1 on their drums, the flanks of the attacking parties were turned and the enemy guns captured and spiked. The tactics of keeping reserve for use in an emergency were invariably resorted to. Another important piece of tactics applied was the employment of the ghorchurra units on the wings to threaten the flanks of the enemy. Rarely a flank was actually turned. The real purpose seems to have been to cause a diversion to stop or slow down the advance of the enemy's assaulting lines or columns. When defeated and dislodged, attempts were made to rally the fleeing troops and combat the pursuers. It was a fairly common practice with the Sikhs to cut off their own line of retreat with a view to instilling desperation in the minds of their warriors. In the case of defeat, an effort was always made to rescue as many guns as possible, though generally the majority of them had to be left behind in the field. Another instance of their defensive tactics was that their field camps were usually mined, so that when the enemy troops overran them, numerous explosions were caused inflicting great losses on them.

First Anglo-Sikh War (1845-46)

A brief tactical review of the battles of the Anglo-Sikh Wars may be given to illustrate what has been said above. The first of these wars comprised four battles, namely Mudki, Ferozshah, Aliwal and Sobraon. At Mudki there were no entrenchments; but all the same the Sikh position was a strong

one lying "in a deep belt of dense jungle and stunted trees,"i which, while giving cover to the artillery and infantry of the Sikhs, rendered the fire and approach of the enemy difficult. The disposition of the Sikh army was in a long deployed line "extending the British line on either side" and having artillery and infantry in the centre and cavalry on the right and left wings. The battle opened with a gun duel which lasted for about one hour. At the same time, great masses of Sikh horse advanced on both the flanks as if to attempt a great enveloping movement, but this attempt was soon completely foiled by the counter-moves of British cavalry. were now themselves outflanked and their cavalry Raja Lal Singh took to flight. As the result of this, the position of the Sikh centre became very critical. For a time the Sikh artillery and infantry posted here, with their blast of grape and musketry, and the Sikh sharpshooters hidden in trees, with their well-aimed shots, slowed down the pace of the troops advancing upon them, forcing them to form squares, but this could not be for long, because the Sikhs were soon after attacked from both the rear and the front.3 The Sikh infantry and guns stood resolutely against these attacks, but after some time they were driven back with the bayonet until they were forced to give way. Their retreat was most dogged, because, while being pursued by the British, they several times rallied and turned back upon their pursuers. Mudki was a blind affair for both the parties on account of the utter confusion that prevailed between the dusk and the dark. Whereas the British troops got bewildered and fired into each other, some infantry battalions, when driven back by Wheeler's Brigade, retired blindly to a flank, passed across the greater part of the British line in column and were then hustled back once more across the front of the same brigade,4 suffering heavily as a result thereof.

Next was the battle of Ferozshah which was "one of the most momentous and certainly the hardest fought-out one

^{1.} Fortescue, Vol. XII, p. 351.

^{2.} Gough and Innes, pp 76-77; Gen. Gough to Governor-General, Dec., 19, 1845.

^{3.} Gough and Innes, pp. 76-77.

^{4.} Fortescue, Vol. XII, p. 353,

ever engaged in by the British in India." Realising from their Mudki experience the danger of fighting in the open, the Sikhs took up here a much more difficult position which was accessible, like Mudki, only through a belt of jungle and further, was entrenched on three sides, besides having a village in the midst to be used as a fortification within a fortification. The fortifications were not unusually formidable, having neither deep ditches nor high ramparts,2 but they were fairly strong and have been described as a "bull of all horns," defended as they were by a great mass of guns of heavy metal and greater calibre than any of the enemy's pieces excepting two heavy howitzers. The disposition of the Sikh troops was carried out in the usual deployed order, but their plan being to conduct the battle from within an entrenched area, this order was so modified that all the three arms were properly distributed along the entire length of the line.4 The infantry and cavalry were deployed behind as well as between the guns which were mounted at all prominent points. The cavalry was dismounted to be hidden from the enemy's view. A little away to the rear but within the enclosure itself was situated their field camp harged with mines for security's sake. Like Mudki, sharpshooters were also employed here. They were posted round the wells to shoot down all who approached them. As usual, the battle was opened by a gun duel, in which the Sikh guns, being superior in weight and calibre, had the better of the British artillery, but instead of following it up with an offensive they waited in their trenches for a British attack which soon developed. However, while the British were advancing, the Sikh guns grew fiercer and fiercer.5 Europeans were their special targets, for the Sikhs believed that if they were demoralised, the backbone of the enemy's opposition would be broken.6 As the result of this, Littler's attack upon the extreme left was successfully repulsed with severe losses. Seeing this, when Gilbert

^{1.} Gordon, p. 143.

^{2.} Fortescue, Vol. XII, p. 360.

^{3.} Gough and Innes, pp. 252-253.

^{4.} Fauj Khas was deployed on the west, while the brigades of Baha dar Singh and Mehtab Singh were on the south, east and north-east with irregulars behind them. The officers were in the centre. Suri, 71.

^{5.} Rait, p. 17.

^{6.} Rait, p. 31.

and Wallace's Divisions moved forward upon the Sikh centre, the heavy blast of the Sikh guns was turned upon them, but the two Divisions, despite all this, were able to continue their forward movement and fall upon the Sikh gunners with the bayonet. Thereupon, the infantry behind the artillery formed squares and put up a vigorous fire of musketry from a lying position. 1 By the time these troops were beaten and driven back, the Sikh ghorchurras had come up and attacked the invaders. While this fight was going on, the infantry that had been pushed back, rallied and made a counter attack upon the British troops, though only to be driven back once In the meantime, the Sikhs on the left had made a counter attack upon the gap opened by the retreat of Littler's Division² and attempting to pierce through that, had threatened the left flank of Smith's Division.3 There was a furious encounter there in which the British caused the Sikhs to stage a retreat to their camp. A foothold in the Sikh enclosure was thus gained by both Gilbert and Smith. But then darkness of the night came on, taking advantage of which the Sikhs cleared the enemy completely out of their area. They continued harassing their foes with their artillery throughout the night,4 so much so that the British gave up all hope of success and began seriously to think of running away. But in the meantime, a number of explosions had occurred in the Sikh camp which had destroyed all their tents and a large part of their ammunition. all, Raja Lal Singh, taking advantage of the prevailing order and the darkness, had fled away from the camp with all his irregular cavalry and the gunners of 60 pieces of artillery, thereby exposing to danger the whole of the left side of the camp, which was under his charge. When the British heard of this, they changed their minds and resumed the attack the next morning when they had just a walk-over.5 The Sikhs now took to flight towards the Sutlei leaving 73 of their guns behind to be captured by the enemy. They were not pursued as the British were feeling too exhausted for this. The defeat the Sikhs at Ferozshah was not due to any want of gallantry

^{1.} Mc Gregor, Vol. II, p. 103. 2. Fortescue, Vol. XII, p. 362.

Rait, p. 22.
 Rait, p. 25.
 Colonel Mouton—Rapport, p. 6.

on their part, for throughout the battle they had fought most desperately and won the admiration of one and all, but, as remarked by Lieut. Col. Burton and other writers, due to their lack of enterprize and failure to make a bold offensive.¹

Ferozshah was followed by Aliwal which was fought between Harry Smith and Ranjodh Singh. The position here was not so carefully chosen.2 Instead of any jungle or uneven ground intervening between them and the enemy, there was an open plain which could offer the least impediment to the attackers. A few trenches were no doubt dug out, but they were insignificant as compared with those of Ferozshah. Another serious flaw in this position was that the line of retreat was obstructed by the Sutlei at the back. The only redeeming feature was the inclusion of two villages, Bundri and Aliwal, in the battle line at the two ends. regards the disposition of troops, it was more or less on the lines of the battle of Mudki. The fight was, as usual, opened by the Sikhs with a fierce cannonade from the whole length of their entrenchments. Smith, however, undaunted by this, decided to attack on the Sikh left and centre.8 Ranjodh Singh, realising the danger, brought forward a large body of cavalry to avert the British threat to his left flank, but was defeated and driven back by Cureton in great disorder upon his infantry regiments. The next objects of the enemy's attack were the left and the rear of these infantry regiments, which were also driven back after a stubborn resistance. Ranjodh Singh, now realising that his retreat by the ford of the river was seriously menaced, tried to save himself by throwing back his left and reforming his line at right angles to the river, using the village of Bundri, which had been strongly fortified, as a pivot.4 To cover this manoeuvre he again brought forward a body of horse. This was countered by the 16th Lancers of the British who crashed into the Sikhs and rode through them, hunting the fugitives towards

^{1.} Lt. Col. Burton, Chapter II, p. 26.

^{2.} Fortescue, p. 381. Henty says that the battle of Aliwal was actually fought in the open, ahead of the entrenchments, the village of Aliwal being the key of the Sikh position. Through the Sikh War, p. 172.

^{3.} Lt. Col. Burton-First and Second Sikh Wars, p. 34.

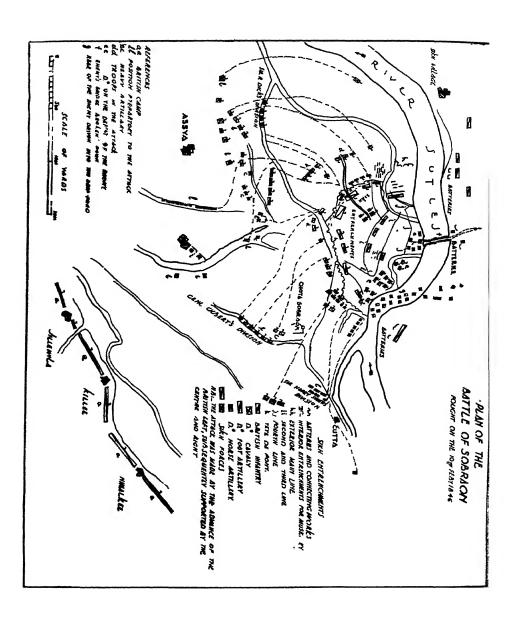
^{4.} Fortescue, Vol. XII, p. 377.

river. However, when these Lancers wanted to return, their way was blocked by some Sikh infantry who formed themselves into squares or rather equilateral triangles and received them in the kneeling position with a volley at short range. When the Lancers broke into them, the Sikhs threw away their muskets and fought fiercely with sword and shield, but they were ultimately defeated. Meanwhile, Smith had thrown some other squadrons of horse against an entrenched Sikh battery which was successfully stormed in the teeth of a terrific cannonade. The Sikh infantry in the rear of the battery, after firing to the last, did not await the attack, but boldly advanced to meet them with the sword and closed with them in a bloody and determined struggle. These Sikh battalions, trained by Avitabile, fought in fact most gallantly, but the British infantry now came up to second their cavalry. However, the village of Bundri could not be carried, until two batteries of horse artillery had been brought up.1 At last the Sikhs began to flee. The British dashed among the fleeing soldiers, until about 800 to 1000 men rallied under the high bank of a nullah and opened a heavy but ineffectual fire from below the bank. Once again they were charged and exposed to a deadly fire of 12 guns within 300 yards. The battle was now won. The Sikhs, completely hemmed in, were fleeing in disordered masses into the ford and the boats in utmost confusion. Singh had 9 pieces unlimbered to cover the ford, but they were only fired once before the pursuers were upon them. British howitzers soon began to play upon the boats, causing heavy losses. On the opposite bank of the river a sort of line was attempted to cover their retreat, but this was speedily dissolved by a salvo from every piece of Smith's artillery.2 Before closing this brief study of the battle of Aliwal, two further points may be mentioned: (i) The poor role of the cavalry which were the first to take to heels; and (ii) the high aiming of the guns due to the mischief of Mr. Potter who was secretly in league with the British, on account of which the British did not suffer much.3

^{1.} Mc Gregor, Vol. II, p. 138.

^{2.} Fortescue, Vol. XII, p 379

^{3.} Mc Gregor, Vol. II, p. 140.



Sobraon was the fourth and the final battle of the First Anglo-Sikh War. The Sikhs put their last stake on it and defensive works of so formidable a nature were constructed that the like of them had never been seen in any of the previous battles of this war. They could only be surmounted by the aid of scaling ladders and were so arranged that they afforded complete protection to three lines of infantry, one above the other, who could thus pour a tremendous fire upon an advancing foe.1 However, their weak point was on the right where a considerable part of the line was defended only by slight entrenchments on account of the fact that the looseness of the sand there rendered it impossible to throw up parapets.2 The entire bridge-head, as it may be called, occupied a perimeter of about 4000 yards, the river line being about 2750 yards in extent.3 This bridgehead was joined by means of a boat-bridge to the entrenchments on the other bank of the river. As at Aliwal, the position of the Sikhs had a river close behind it, which rendered it extremely dangerous.4 Troops were disposed in the usual deployed order. Infantry and artillery were mainly deployed on the centre and the left, whereas irregular cavalry supported by zamburaks was posted on the right. The reserve force of the Sikhs consisting of all the three arms was arranged on the right bank of the Sutlei in such a way that its batteries could play upon the flanks of any hostile force advancing on the right side of their encampment.

The defensive tactics of the Sikhs enabled the to choose their own time for commencing the attack.5 They were not even on the alert, because when the c nnon fire was opened by the enemy, they were found unprepared, but when once they realised the danger, their bugles sounded the alarm, their drums beat to arms, and in a few minutes they manned

^{1.} Through the Sikh War, p. 176, Construction conducted under the superintendence of Mouton and Hurbon.
2. "The Sikhs proposed to Tej Singh that the detachment of ghorchurras and the howitzers and guns should be posted on the right, but the open ground was left unoccupied." Suri, p. 84.

^{3.} Lt. Col. Burton, p. 38.

^{4.} Mouton was opposed to fighting with the enemy in this position which, in his opinion, was untenable. He was for attacking the British immediately or withdrawing across the river—Rapport, p. 7.

^{5.} Mc Gregor, Vol. II, p 153.

their batteries and opened fire on their assailants. In the gun duel which now ensued and lasted for about two hours, the Sikh guns got the better of the enemy guns, sheltered as they were behind "well constructed batteries of earth, planks and fascines." However, not dismayed by this rebuff, the British advanced to the attack of the right wing of the Sikh encampment, which, being the weakest, was the easiest to conquer. The Sikhs first tried to arrest their advance by a terrific fire from their cannon including those across the river, wall pieces and muskets, but when they saw the enemy moving steadily forward, a sally was attempted by Mouton with a body of irregular cavalry.2 After some initial success, these troops, being unaccustomed to European warfare, fled back in great disorder. The advancing troops were now emboldened and they dashed ahead and stormed the entrenchment and drove the Sikhs in confusion from their guns upon their inner entrenchments. But the Sikhs recovered speedily and counter-attacked, sword in hand, with the utmost determination.3 Lord Gough, who was keenly watching all this, at once sent some reinforcements to the rescue of his attacking division and at the same time directed Gilbert and Smith to throw out their light troops and make demonstrations on the centre and the left of the Sikhs. However, the troops of General Court and General Mehtab Singh, who were posted in the centre, took not the slightest notice of these feints and turned all their efforts against the invaders on their right. Gradually, the British were forced back and the Sikhs recaptured their guns and batteries, thereby frustreing Lord Gough's original plan of action. Then the British Commander-in-Chief ordered that the feints and Smith be converted into real attacks. The of Gilbert Sikhs relieved from the pressure upon their right, flew to their centre and left to take up the challenge. Gilbert's first two attempts were foiled by the Sikhs. The ramparts were too high to be ascended without scaling ladders. On the extreme left, Smith was likewise frustrated by Sham Singh Attariwala. Hick's Brigade which led the assault thrice was driven back

^{1.} Lt. Col. Burton, p. 39.

^{2.} Rapport, p. 8.

^{3.} Fortescue, Vol. XII, p. 386.

with heavy losses. For full one hour the issue of the fight was in the gravest doubt.1 It was only after the fall of Sham Singh with all his followers that the English could reach his batteries. But the diversion of the Sikhs form their right to their centre and left had enabled the English on that side to rally and renew their attack with success. In the meantime, Gilbert's Brigade also, making another assault, had at last penetrated into the entrenchments, the men hoisting each other up the embrasures in default of ladders. The Sikhs. now pressed from three sides, began to give way slowly and stubbornly and were ultimately driven back upon their bridge of boats which gave way under the weight of the retreating army.2 By a strange fatality, the river had also risen considerably during the night. The Sikhs, therefore, had to wade through the water under a shower of shot and shell from the cannon of the enemy and perished in thousands, and thus had to pay a heavy price for their blunder of having a river across their line of retreat.

The following points stand out in the battle of Sobraon. Firstly, the Sikh cavalry, as usual, put up a very poor show, for it could not stand against the British cavalry or infantry. Secondly, the heavy guns of the Sikhs were aimed high and their shot generally passed over the heads of the enemy troops. This was because of the paucity of the trained gunners, a large number of whom had fallen in the previous battles. Musketry, with its repeated volleys and long-continued rolls, was much more effective than the cannon.3 Thirdly, the flight of Tej Singh, the Sikh Commander-in-Chief, quite early in the fight, left the Sikhs without any head to coordinate the efforts of the various units.4 Fourthly, although the Sikhs had bayonets, yet they were unable to make any effective use of them. They relied more on their swords and threw away their muskets when the hand-to-hand fight started. British. The their proficiency in the use of bayonets were tactically superior to them.5

^{1.} Fortescue, Vol XII, p. 386.

^{2.} Ibid, p. 387; Mc Gregor, Vol. II, p. 176.

^{3.} Mc Gregor, Vol. II, p. 175; Through the Sikh War, p. 180.

^{4.} Mouton-Rapport, p. 8.

^{5.} Mc Gregor, Vol. II, pp. 164 & 176.

Second Anglo-Sikh War (1848-49)

Now we may turn to the Second Anglo-Sikh War which also consisted of four battles, namely Ramnagar, Sadulapur, Chillianwala and Gujrat.

Ramnagar, the first of the series, had no artificial entrenchments, but the site selected for the battle was nevertheless the strongest possible for defence. The their encampment as well as the Sikhs had body of their force on the right and high bank the Chenab where their batteries were so skilfully erected that only the muzzles of the guns were visible.1 were also in occupation of an island, about two acres in area, in the midst of the river as well as the broken and irregular ground on its left bank. The force on the island consisted of a detachment of 4000 men with a battery of 6 guns. main channel of the Chenab lay between the island and the right bank and communications between the main body and the troops on the island were kept up by boats. On the other side of the island the channel was fordable, being in fact little more than a sandy water course, about 30 yards wide, partially filled, with a steep fall of 4 or 5 feet from the bank. channel was commanded by the cross-fire of two batteries on the right bank and by the point-blank fire of the six guns on the island.2 On the left bank of the river there were only a very limited number of troops who, after having been driven out of the town of Ramnagar by the British, had retired and taken position there.

Ramnagar was not a full-fledged battle, as only parts of the opposing armies came into collision, but it is noted for some clever and successful tactical manoeuvres on the part of the Sikhs. The first of them is that their advance-guard at Ramnagar, instead of engaging the British troops in a fight, quietly withdrew at the enemy's approach towards the river. Some horse batteries and a body of cavalry of the British followed them. When the retreating Sikhs reached the broken ground near the left bank of the river, they at once hid themselves and lay in ambush. When the pursuers arrived there,

^{1.} Rait, p. 200.

^{2.} Annual Register, 1848, p. 433.

they were subjected to a full blast of the Sikh batteries on the At the same time, a terrible fire was directed upon right bank. them by the soldiers lying in ambush. The British had not only to run back, but also had to abandon one of their guns, which had stuck fast in the bed of the river.1 The second maneouvre was even more successful. Encouraged by their initial success, the Sikhs pushed some reinforcements of cavalry across the river under the covering fire of their artillery, who not only captured the abandoned British gun, but also appeared in mass on the top of the left bank, to provoke the British into making another attack. The trick was successful, because immediately Lord Gough ordered Col. Havelock and Col. Alexander to charge them with the 14th Light Dragoons. Havelock led his regiment straight against the Sikh cavalry which now withdrew into the river bed under the covering fire of their guns across the river, and was entrapped there. Thereupon, the Sikh guns and muskets came into full play and inflicted heavy losses on the enemy and drove him back precipitately.2 After this Lord Gough gave up the idea of having any further engagement with the Sikhs on the spot, but turned his mind to a strategical flanking move which, a few days later, resulted in the battle of Sadulapur. battle of Ramnagar it was noticed by Thackwell, a British General, that the Sikhs had a sort of propensity to aim their cuts at the neck.3

In the case of the battle of Sadulapur there was no previously prepared position. Rather, on the contrary, as at Mudki, there was an attempt to meet the advancing enemy half-way. However, even here the Sikhs' instinct for selecting a strong ground for fight is in evidence, for they made a skilful use of certain villages and the dense cover around them, including standing crops. Their battle-line considerably overlapped the British line. The order of disposition of their troops was: cavalry on the wings and infantry and artillery in the centre. The battle was commenced by the Sikhs and the English were taken totally by surprise. The first targets

1. Thackwell, p. 33.

^{2.} Fortescue, Vol. XII, p. 435. In this action some of the finest of the British cavalry officers like Cureton and Havelock were killed.

^{3.} Thackwell, p. 59.

were the advanced British pickets which were at once evacuated. Then started a cannonading from the heavy Sikh guns, which caused the enemy to make a short retrograde movement.1 Seeing this, the Sikhs felt encouraged and advanced in a mass, opening fire with their guns and threatening to envelop both flanks with their cavalry, but these attacks were frustrated by the British cavalry and horse artillery.2 After this the battle was reduced to a gun-duel which lasted for about two hours and there the battle ended. "The whole affair was little more than a skirmish, neither side being willing to close with the other."3 The Sikhs enjoyed certain important advantages, but they wasted their opportunity for lack of ability to launch an offensive.

Next was the battle of Chillianwala which was the hardest fought action of the Second Anglo-Sikh War. Once again, the Sikhs, as at Aliwal and Sobraon, took up a false position with a broad river, the Jhelum, in their rear, extending in a concave line from the village of Lakhni Wala on their right to that of Rasul on their left. Its front was towards the east. so that Lakhniwala formed the southern and Rasul the northern extremity of their array. The Sikh regular troops were distributed in a succession of villages. The Bannu troops were at Lakhniwala under Ram Singh to the strength of one regiment of horse and four of foot, with 11 guns. A mile to the north of them at Fateh Shah ki Chuk were Atar Singh and Lal Singh with two regiments of horse, ten of foot and 17 guns. Yet another mile northward at Laliani was Sher Singh with one regiment of cavalry, nine of infantry and some 4000 of irregular horse and 20 guns. Then came the irregular levies, some of them at Moong, in the rear of Chuk Fateh Shah and thus in second line, and the rest stretching away to the northern extremity at Rasul.4 The whole Sikh line measured. as the crow flies, about 6 miles. It was much longer than the British line and overlapped it on both the right and the left wings. But this has been criticised by Durand as"being too extended for numbers."5 All the same it was an extremely

Lt. Col. Burton, p. 88.
Fortescue, Vol. XII, p. 439; Thackwell, p. 89.
Fortescue, Vol. XII, p. 439.
Fortescue, Vol. XII, p. 449; Burton, p. 93.
Durand, Vol. I, p. 78.

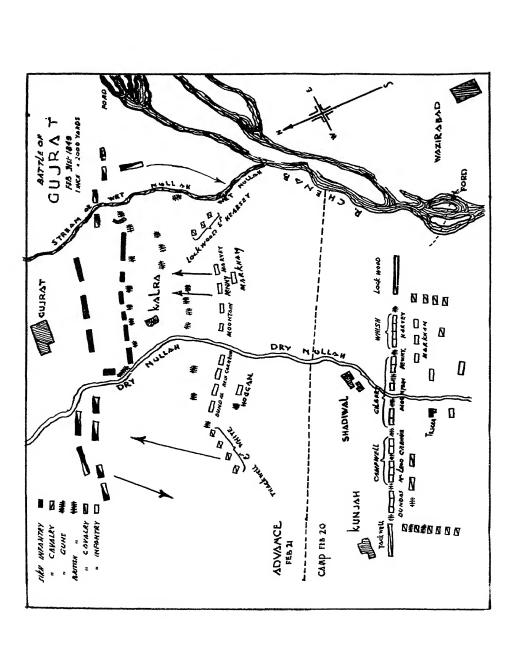
difficult position. A wide thorny jungle of varying density, consisting of bushes which were 7 or 8 feet high, stretched in a south-westerly direction before the array of the Sikh army! from Laliani to Lakhniwala. From Laliani northward there were high ridges, Rasul, the northern end of the line, being situated at the end of one of these ridges and commanding the plain to the east below. The Sikh camp was at Rasul, built up among such a network of precipitous ravines as made it almost inaccessible.2

When the British reached Chillianwala, the Sikhs had already moved forward, drawn up in battle array.3 Being ignorant of the Sikh position and of the approaches towards it, Lord Gough wanted to put off the fight till the next morning and to devote the intervening period to reconnaissance,4 but the Sikhs, anticipating his intentions, successfully him into fighting by a few well-aimed shots on his troops. full-fledged battle now started in which the first step was the usual gun duel. Being carefully screened from view and having heavier weight and larger calibre, the Sikh guns fared better than the enemy's guns. However, the offensive was taken by the British and not by the Sikhs who preferred to stand on the defensive. When the British line was advancing through the jungle, which very largely upset their formations, the Sikh guns were put to the maximum use to impede the movement of the enemy who, nevertheless, pushed forward. The first to close up with the Sikhs was the Brigade of Penny Cuick. One of its regiments, the 24th made a rush for the guns of Sher Singh's right and after a short fierce hand-to-hand struggle, carried them. But the Sikhs soon rallied and hurled them back and their cavalry pursued the enemy for some distance,5 inflicting heavy losses on them. Meanwhile. Brigade under Campbell's personal direction had likewise advanced and engaged in front with Sher Singh's right. One of its regiments, the 36th, was repulsed by the Sikh infantry which promptly followed them up with two guns, but another

^{1.}

Burton, p. 93. Thackwell, p. 122.

^{3.} Burton, p. 94. 4. Fortescue, Vol. XII, p 451. 5. Fortescue, Vol. XII, p. 453.



to keep the batteries of Lane practically out of action. Another thing worth mentioning is that the Sikhs posted observers on trees to watch the manoeuvres of the enemy and to supply information about them. That the Sikhs wanted to concentrate their fire on Europeans is further revealed by this battle.¹

The battle was indecisive, though the balance had slightly tilted in favour of the Sikhs. The extreme right and left of the Sikhs did not exert themselves fully. Had there been a greater degree of coordination, much better results might have been achieved. Another defect was that the Sikh infantry fired so badly that the British could approach them without much loss.²

The battle of Gujrat, which followed a month and a quarter after Chillianwala, was the last of the series. Though defensive in nature like the other battles, it was waged in the open field, there being no entrenchments and no natural obstacles of formidable nature. The Sikhs were drawn up about a mile to the south of Gujrat in the form of a crescent, with both flanks slightly refused, facing to the south. In the centre were arrayed their regular infantry with their right resting on the dry bed of the Dwara and the left on the flowing stream of Katela. The space between these two channels measured roughly 6000 yards and was covered by two fortified villages, Chhota Kalra and Bara Kalra, behind which the battalions were drawn up, with guns in the intervals between them. On either flank stood their cavalry. Dost Mohammed's Afghan horse being on the right.3 It may be pointed out that the streams of the Dwara and the Katela gave no real protection to the Sikhs.4 The Dwara was absolutely dry and useless except that one of its bends gave some cover to the Sikh infantry in front of their artillery. The Katela was wet, no doubt, but this also served little useful pupose. The camp of the Sikhs lay further up and encircled the town of Gujrat.5 It was carefully mined and charged and resembled the Ferozshah camp of the First Anglo-Sikh War.

^{1.} Thackwell, p 122, Durand, p 92.

^{2.} Durand, p. 92.

^{3.} Fortescue, Vol. XII, p 463.

^{4.} Malleson, p. 428.

^{5.} Thackwell, p. 334.

Having taken the position described above, the Sikhs awaited the British attack. They had very good opportunities for taking the offensive, but they did not think it prudent to take any risk by leaving their chosen position. When the British line was advancing towards them, they resorted to their usual tactics of cannonading to damage the hostile guns and stop or slow down their movement, but in excitement their gunners started firing even when the enemy was yet out of their range. This premature firing betrayed the position of the Sikh guns and enabled the British to make adjustments in full safety in the disposition of their cannon and troops. This was followed by a terrible gun duel for two and a half hours in which the superior artillery of the British caused heavy losses to the Sikh artillery, and made the Sikh line retire a little behind the line of the Kalra villages. Meanwhile, the Sikh horse opposite Lord Gough's right had come into action. They advanced first in heavy masses upon the front of his cavalry, but when they were checked by the British horse artillery, they tried to turn his right flank to get at his guns and spike them. They made a number of attempts for this purpose, but every time were foiled by Hearsay who commanded the British Brigade of cavalry opposed to them. However, the Sikh horse gave the enemy no chance of closing with them and by skilful manoeuvring led them further and further away from the rest of the British army, thereby greatly exposing the right of the British centre.² But when they were thus moving away, they suddenly realised that they had gone far away from the main theatre of fighting and giving up their manoeuvres hastened back towards their colleagues.

By noon Gough decided to order a general advance. His plan³ was to attack the left and the centre of the Sikhs and to double them upon their right. Gilbert, who was required to execute it, was soon confronted by a heavy fire from the fortified village, Bara Kalra. The fire came from both the flanks of the village where some heavy guns had been posted by the Sikhs. When this fire was silenced and the British

^{1.&#}x27; Durand, p. 99.

^{2.} Fortescue, Vol. XII, p. 465.

^{3.} Durand, p. 99.

resumed their advance, a staggering fire of musketry came upon them from the loopholes of the village walls. Gilbert was forced to order up some supporting troops. There was then some obstinate and bloody fighting in the village. The Sikhs were ultimately driven out, but with the aid of their batteries in the rear of the village they soon made a counter-attack which greatly perplexed the British. However, this was also beaten and the Sikhs slowly and sullenly retired.¹

Simultaneously, the other fortified village, Kalra, further to the right, was cleared by Harvey's Brigade after a stubborn resistance from the Sikh defenders there. Almost about the same time, the Sikhs met certain misfortunes on their right centre. Campbell, who was advancing against it, carried every thing before him and bringing two of his guns on a flank, swept the bend of the Dwara clear of the Sikh infantry positioned there and occupied it himself.2 But inspite of all these reverses, the Sikhs maintained their morale and started reforming their lines and encouraging their men for a bold counter-attack. However, the proposed attack never came off, for the reason that Campbell and Dundas now had advanced further by the line of the Dwara and thrown themselves across the right flank of the Sikhs.3 Further away on the right, the Afghan horse, who, in the early part of the action, had attempted to turn the left flank of the British, had not only been beaten but sent flying by Thackwell with the Sind Horse in pursuit, which had gone so far ahead that it very dangerously threatened the right and the rear of the Sikhs and was in a position to interpose a few squadrons and preclude the possibility of retreat by the direct road on the Jhelum. Seeing their line of retreat thus endangered, the principal Sikh chiefs took flight, greatly demoralising their men by their cowardly example.4 The remainder made their last bid to turn the fortune of the battle by exploiting a gap which luckily had now appeared in the centre of the British line. Their idea was to throw a body of infantry and cavalry into that gap, disconnect the two wings of the British army and defeat them in

^{1.} Fortescue, Vol. XII, p. 465.

^{2.} Durand, p. 101.

^{3.} Durand, p. 102.

^{4.} Thackwell, p. 227.

detail. Actually, they had made some progress, but then their hearts failed, partly because they found Campbell's guns firing on their right flank and partly because their own left and centre were now in full retreat before Gilbert's troops. All was up now. The Sikhs ran away, leaving their entire camp standing. It was a decisive victory for the British, because with it ended the Second Anglo-Sikh War. The Sikhs were defeated due to (1) the early flight of the Afghan horse which wholly exposed their line of retreat to the enemy, (2) their failure to make their flanking moves really effective, (3) the poor role of their cavalry, (4) the superiority of the British in artillery and in steadiness, and (5) the weakness of their leadership.

As regards siegecraft, the new trends observed during the preceding period were continued into this period. The principal tactics were, as before, in case of offence, effecting of breaches by guns or mines in walls and gates and taking of forts by storm or assault, and in case of defence, cannonading from mounted guns, making sallies or sorties and immediately repairing all breaches caused by the enemy. Other tactics such as stoppage of all ingress and egress, apprehension of families of and intrigues with the garrsison were used, more or less, as pressure tactics only.

The period is noticed for a number of important sieges, namely the siege of Lahore by Sher Singh in 1841, the siege of Lahore by Hira Singh in 1843, the sieges of Anandpur and Kamlagarh by Ventura in 1840,³ the siege of Attock by Chattar Singh in 1848 and the siege of Multan by the British in 1848. The Sikhs were besiegers in all except the last case where Diwan Mul Raj defended himself resolutely for several months against the British. With the exception of Attock, all the forts besieged by the Sikhs were taken by storming the breaches effected by means of battering guns.⁴ The case of Attock

^{1.} Durand, p. 102. 2. Raj Khalsa, Part III, p. 547.

^{3.} Panjab in 1839-40-4th November, 1840.

^{4.} During the first siege of Lahore, the first attempts of Sher Singh at storming were repulsed by Raja Gulab Singh, mainly due to Sher Singh's own rashness. Later on, stronger measures were taken for this purpose. The siege was no doubt brought to an end a few days later through negotiations, but it is certain that the new measures of Sher Singh would have, before long, placed the fort at his disposal.

Smyth, Chapter II, p. 87.

was different, because at that time they did not possess sufficient heavy cannon, and it had to be taken by close investment extending over several months.

In the end, a few general observations may be made on the main principles of tactics of the Sikhs. They fought both defensive and offensive actions, the latter being more common than the former. Defensives were resorted to only against a superior army, as that of the English Company. On such occasions, the strongest possible ground was selected and entrenchments and earthworks were added to render it as impregnable as possible. For an offensive open ground was preferred and if necessary, feints were made to draw off the hostile forces to such a ground. There was no dogmatism about the battle order, which was formed according to the nature of the site chosen. The conduct of a battle was based on the cooperation of all the arms, the brigade being the principal tactical unit. But artillery and infantry constituted the core of their tactical mechanism, cavalry being a mere supporting arm. The major attacks were led by artillery and infantry in columns. Cavalry was employed to render help by skirmishing, turning flanks, causing diversions and pursuing the enemy in the event of his defeat. In the case of repulse, squares were formed by the infantry to protect the guns and hold in check the rushes of the hostile cavalry. These tactics had been mostly borrowed from the European military system, though they had been carefully blended with a sprinkling of the Sikh tactics of the 18th century. The adoption of the foreign tactics by the Sikhs was fully justified by the manner they fought against the British. All the same, there were a number of weak points in their tactics, which sometimes landed them in serious difficulties. In the first place, their ghorchurras, renowned for their cock method of fighting, could be effective only against an undrilled cavalry like their own, such as the Afghan cavalry. They were superb in the role cavalry,1 but as against the trained and disciplined British cavalry, they could accomplish little, because the entire effect of their cock tactics was neutralised by the persistent and steady advance of the enemy. Secondly, the Sikhs, placing

more reliance on the sword than on the bayonet, rendered their infantry tactics inferior to those of the British.1 Their often having to throw away the fire-arms to take up the sword was a sure proof of their tactical weakness. Thirdly, as Mac Munn² says, their guns were "too heavy for open manoeuvre". Moreover, many of their gunners were inefficient, who often fired over the heads of their assailants. Fourthly, as compared with the British, the Sikhs fought rather tumultuously, their officers being deficient in the ability to maintain discipline in the ranks at the time of fighting and to manoeuvre large bodies of troops. And lastly, their preference for a line of retreat blocked by a river or a broken bridge over one that was clear and unobstructed was militarily wholly unsound. The desire of infusing desperation in the minds of the troops, which might be the underlying motive of this preference, was achieved at an enormous price, for the loss of life and property suffered as the result thereof was, to say the least, most disastrous.

^{1.} Rait, pp. 5 & 73.

^{2.} Mac Munn, p. 185.

CHAPTER IX

STRATEGY

From the tactics we proceed to the strategy, the other aspect of the fighting technique. Strategy, as explained earlier, is conducted at a higher level and in its broad sense covers "affairs stretching from political spheres to the direction of warfare in the main theatres of operation." Formulation of aims, planning, logistics, movement of troops and broad manoeuvres executed both before and between battles, all fall within the province of strategy. The best strategy has been defined as one which observes such sound principles as maintenance of objective, offensive action, surprise, concentration, economy of force, security, mobility and cooperation.² These principles. as stated earlier in Chapter VIII, remain, more or less, steady and unchanged through the centuries, although their application may vary with changing circumstances. Our account of the strategy of the Sikhs may be divided into two sections, viz: (i) under Ranjit Singh, and (ii) after Ranjit Singh.

Under Ranjit Singh

Ranjit Singh was a great strategist. Jacquemont has called him "a Bonaparte in miniature".3 Gough and Innes have described him as a great military general4. Indeed, he fully satisfied Jomini's test of a great general, as he possessed "a great and comprehensive mind," "a moral courage which leads to great resolutions", "sangfroid or physical courage which overcomes dangers", and "some clear-cut knowledge of the principles of war."5 Mc Gregor attributes his success to his "superior energy of character and a great power of discrimination by which he was enabled to seize on every

Jacquemont, p. 174.
 Gough and Innes, p. 29.
 Calcutta Review, Vol. XXVII, Sept.-Dec., 1856, p. 126.

Skinner (Vol. I—entries Oct., 26 to 30) writes: "In every way Ranjit proved himself to be a far superior soldier to any other native. He was as if gifted with the intelligence of an English Field Marshal..."

Palit, p. 45. Lt. Col. Buine—Art of War on Land, p. 12.

favourable opportunity of extending and retaining his power undiminished for a series of years".1

The principles of strategy followed by Ranjit Singh may be classified as (i) general and (ii) those applied in the organisation and direction of campaigns. In military parlance the former is called grand strategy, while the latter, military strategy.

General Principles (Grand Strategy)

The general principles of Ranjit Singh were based on the Kautalyan tradition tempered with conciliation and liberality.2 They carried a great weight with him and actually governed his policy. A brief discussion of them may not be out of place here, because they sometimes won him bloodless victories and often paved the way for his military triumphs.

He was machiavellian in outlook, a true representative of the Kautalyan tradition in the Indian military thought. Elphinstone has said: "Ranjit Singh has not studied Machiavelli, but that wily Italian never had a pupil who more seriously pursued some of his principles or more completely practised the maxim of "divide et empera." Victor Jacquemont has described him as "an old fox, compared with whom the wiliest of our diplomats is a mere innocent." Capt. Wade who had many years of close contact with Ranjit Singh. while commenting on his usual technique says that he had an insatiable love of power and was ever ready to usurp further territories by every sort of means. "It was not the way of the Sikh ruler," he adds, "to infringe any engagement with naked aggression, but he gratified his ambition by chicanery. This he would practise by instigating others to sow the seeds of dissension between him and his intended victim. He would direct his emissaries to incite border tribes to commit border depredations on his territory, so that he might have an opporutnity of making reclamations from them."5 Ranjit Singh may

^{1.} Mc Gregor, Vol. I, p 203.
2. Guyranwala District Gazetteer, p. 26
3. Elphinstone (For: Sec. 1824 Progs. 29th Oct., 9).—It may be noted that according to Moorcroft, the petty state system into which Ranjit Singh was born, was analogous to the petty state system which produced the Kautalyan philosophy.
4. Letters from India—1829-32, p. 162.
5. Wade to Prinsep, May 18, 1831—P.G.R., 173-3.

not be an old wily fox, as Jacquemont says, but he was certainly a realist in diplomacy, as all great diplomats must be and are apt to be.

The Maharaja was a past master in the technique of playing off one against another. He employed every device, fair or foul, to create divisions. Lump sums, khilats and jagirs were freely distributed for this purpose. As a matter of fact, this was the greatest secret of his success. It is a great tribute to his skill1 and subtlety that though the people were fully aware that he was so clever in creating divisions, yet they fell easy preys to him. While engaged in the reduction of the trans-Sutlej Misals, he entered into an alliance with the Kanhaya and Ahluwalia chiefs and used them against the other Misals, namely, Bhangis, Nakais and Faizullapurias.² A similar strategy was used in regard to the cis-Sutlei Misals. During all his expeditions from 1806 to 1808, he tried his utmost to win over some of them like the Phulkians by enriching them at others' cost3 and would have certainly attained his object, had not the British, in their own interest, intervened. Similar devices were also employed in the reduction of the hilly and the trans-Indus regions. On the Kangra side, Raja Sansar Chand was detached and used against the other hilly rulers of Chamba, Nurpur and Kulu etc. In Jammu the younger branch of the ruling family headed by Raja Gulab Singh was pitted against the elder branch. Beyond the Indus, not only the Sadozai Shah Shuja was played off against the Barakzai Dost Mohd. Khan but also dissensions were sown amongst the Barakzais themselves and Sultan Mohd. Khan and Pir Mohd. Khan were detached to weaken the position of their brother, Dost Mohd. Khan at Kabul. Lower down the Indus in the the vicinity of Dera Ghazi Khan, the Laghari and Nutkani tribes were set up against the Khosa, Gurchani and Mazari tribes.5

^{1.} Here are a few notable examples. At Bhaseen, he worked dissensions amongst the allies, who "became the dupes of his policy, split into factions and being unable to carry unanimous measures into effect, betook themselves to flight". Wade's History of Ranjit Singh, p. 32. At Naushera and Jamrud the Barakzai brothers were played off one against the other.

^{2.} Sohan Lal, Vol. II, p. 50.

^{3.} Ochterlony to Edmonstone, 18th Jan., 1809; Kiernan, p. 3. 4. For: 1838 Sec. Progs. 17th Oct., 68—Wade to Macnaughten, 30th March, 1838. 5. Massy-Chiefs and Families of Note, Vol. II, pp. 406-407.

Being a realist, Ranjit Singh never hesitated to make use of ruses and stratagems, if it suited his purpose. A few striking examples may be given by way of illustration: In 1801 Dal Singh of Akalgarh was cordially invited to visit his court, but when he came, he was arrested and his fort besieged.1 The same stratagem was successfully used many years later against the Raja of Nurpur and Nidhan Singh Hattoo. In 1809 the son of Raja Sansar Chand was captured while he was negotiating with Ranjit Singh on behalf of his father, as a means to forcing Sansar Chand to hand over the fort of Kangra to the Sikhs. The device of false letters was employed at the battles of Kishtwar (1821) and Naushera (1823).2 Later on in 1834 the possession of Peshawar was secured by the use of a trick that Kanwar Nau Nihal Singh, the commander of the Sikh army, was desirous of seeing the city.3 Earlier, the Sikh army had been sent across the Indus under the pretext of exacting an enhanced tribute of horses.4 The ruse of false negotiations was employed to gain time at the battle of the Church in 1813 and later on in 1835 against Dost Mohammad Khan in Peshawar.

Another striking feature of Ranjit Singh's strategy was his adroit use of expediency. He was no adventurer, "no rash leader" and was not prepared to take any but the very carefully calculated risks. It was on this account that he refused to be hustled into action against the British in 1836 over the question of Shikarpur or to invade Kabul, though repeatedly exhorted by his officers, or to undertake singlehandedly the responsibility of restoring Shah Shuja to the throne of Afghanistan under the terms of the Tripartite Treaty.6 Whenever and wherever he found any stiff resistance, instead of meeting it with promptness, he usually adopted the policy of temporisation and lying in wait for a better opportunity.7

- 1. Sohan Lal, Vol. II, p. 49.
- 2. Masson, Vol. III, p. 57; Gulab Singh by Pannikar, p 29.
- 3. For: 183 Sec. Cons: 24th June, 26-30; 19th Aug., 1—Wade to Macnaughten, 9th May, 1834 and 17th June, 1834.
 4. Masson, Vol. III, p. 228.

 - 5. Gordon, pp. 104-105.
- 6. For: 1838 Sec. Progs 17th Oct., 104—Macnaughten to Govt., 3rd June, 1838; Mc Gregor, Vol. II, p. 35.
- 7. V. Kiernan, p. 84; Selections from the Papers of Lord Matcalfe-Kaye, p. 32-Matcalfe to Edmonstone, Nov., 6, 1808.

Adaptability was a very notable trait of his character. He never minded modifying his original plans, if the circumstances demanded it. Moderation rather than outright annexation and flexibility rather than rigidity were the main constituents of his policy. Annexation was usually not insisted upon at the initial stage, but on the contrary was put off until the situation was fully ripe for it. In the meantime, the whole stress was laid upon the gradual undermining of the strength of the enemy through perennial raids and realisation of repeated and ever-mounting tributes. A typical illustration of this is provided by the conquest of Multan. The first expedition was led against it as early as 1807, when its Nawab agreed to pay a fixed annual tribute. After that almost every year an excuse was found to increase the tribute and send an army for its realisation until the place was considered sufficiently weak for a final assault in 1818. It may be added that Ranjit Singh was most quick in exploiting the weaknesses of his enemies. For example, the moment he learnt that the the Afghan Government had been thrown into confusion by the assassination of Wazir Fateh Khan in 1818, he embarked upon the conquest of Kashmir, Peshawar, Dera Ismail Khan, Bannu and Dera Ghazi Khan'¹ Later on in 1834 when Dost Mohammad Khan was entangled with Shah Shuja, he quietly annexed the province of Peshawar to his dominion. same stratagem is revealed in his dealing with Jiwan Singh of Rawalpindi, Jodh Singh of Wazirabad and Jodh Singh Ramgariah,² all representatives of the old Misals. He reduced them to submission and let them alone during their lives, but as soon as they died, their possessions were annexed without arousing any resistance.3 The Maharaja's sense of expediency is, however, displayed by the manner in which he tried to make capital out of the presence of the Metcalfe Mission with him in 1808. Desiring to take advantage of the British nervousness on account of the threatened Franco-

^{1.} For: 1819 Pol. Progs. 2nd Jan., 40-Metcalfe to John Adam 6th Dec., 1818.

^{2.} Gujranwala District Gazetteer, p. 25.

^{3.} Some other very good illustrations of his method are provided by the ingenious way in which he dealt with Sman Zaman of Kabul in 1800, Munshi Yusuf Ali (British envoy) in 1801 and I. R. Holkar and Lord Lake in 1805.

Russian invasion of India and their anxiety to have a defensive alliance with him, he immediately embarked upon an expedition across the Sutlej with the object of establishing his firm sway over all the Sikh Misals there and confronting the British with a fait-accompli. It was a very clever move, but cleverer still was the use he made of the presence of Metcalfe. The troops having marched off, the English envoy was requested to follow for the purpose of further talks. These talks were put off time and again on some ground or the other and the envoy had to follow the Sikh army for several days. The motive of the Maharaja behind this diplomatic performance was to give out that his actions enjoyed the support of the British Government and thereby to quicken the process of subjugation of the cis-Sutlej chiefs. A parallel case is provided by his invasion of Multan in 1810. On this occasion he posed as an agent of Shah Shuja, the ex-king of Kabul. The king had met him a little before at Sahiwal and sought his help against his rivals. Ranjit Singh, envisaging his utility as a Trojan horse, at once marched upon Multan to demand its possession in the name of the Shah.² Subsequently also, Ranjit Singh made repeated attempts "to use the Shah as a tool in furthering his own ends in Sind and in territories beyond the Indus."3

But although a machiavellian and an adept in the use of expediency, Ranjit Singh was a man of liberal and conciliatory disposition. "The most creditable trait in Ranjit's character is his humanity, he has never been known to punish a criminal with death since his accession to power......Cunning and conciliation have been the two great weapons of his diplomacy", writes Burnes (Trevels into Bokhara, Vol. I, p. 143). It was invariably his endeavour to secure the surrender of the enemy through negotiations conducted before or in the course of hostilities. Emissaries were despatched to the enemy's camp

^{1.} For: 1808 Sec & Sep Cons: 14th Nov., 20. Metcalfe to Edmonstone, 26th Oct., 1808 "There is but one conclusion to be drawn from all this deceit, which is that the Raja wishes to make the presence of this mission an instrument of promoting his designs of subjecting the whole of this country."

^{2.} For: 1810 Pol. Cons: 20th March, 79. Ochterlony to Lushington, 26th Feb., 1810

^{3.} P. I. H. C, 1940—Ranjit Singh 2nd Shah Shuja's expedition to Kandhar, 1831-33 by L.R. Nair.

with letters bearing liberal terms.¹ Such negotiations did not always succeed, but sometimes they did produce the desired result, as for instance, in the case of the capture of Mankera in 1821 and Dera Ismail Khan in 1836, when their respective Nawabs were made to surrender by offers of jagirs worth one lakh rupees each.² Further, conciliation and generosity marked the treatment meted out by him to the vanquished, "it never being his policy to reduce anyone to desperation." Also, the Maharaja's continued practice of distributing largesse and respecting all religions won him the attachment of his people and disarmed the hostility of his erstwhile enemies. The result was that his reign was seldom marred by rebellions.³

The offer of liberal terms was generally accompanied or followed by warnings of dire consequences in the event of hostilities breaking out. This was done with the object of intimidating the enemy into submission. In case there was no response, a demonstration of force was made by amassing large numbers of troops and guns. In the early stages of his rule particularly, Ranjit Singh made it a deliberate policy to parade a heavy park of artillery along with his large cavalry with a view to striking awe in the ranks of his adversaries.4 Diplomacy was thus fortified with a show of armed strength. This was one of the reasons why he met so little opposition in overcoming his opponents in those early days. noticed in 1808 that most of his successes were bloodless and that his prestige and his army carried all before them.⁵ still there was no effect, he threatened and if necessary, indulged in loot and plunder of the enemy's country. For instance, we find him writing to one of his commanders in 1817 as: "If the Nawab of Multan pays up the revenue tax, it is alright, but otherwise his country should be devastated and he should go afterwards to realise the tax from Dera Ghazi Khan and that if its ruler also refuses to pay, his country should likewise be plundered".6

^{1.} Centenary Volume, University Sikh Association, p. 19.

^{2.} For: 1836 Pol. Cons: 31st Oct., 55; For: Misc. Vol. No. 206, p. 157.

^{3.} Griffiin, p. 98; Gordon, pp. 110-111.

^{4.} Sohan Lal, Vol. II, p. 57.

^{5.} V. Kiernan, p. 84.

^{6.} Monograph 17, 1817 (4) 30th March; Kanhaya Lal, p. 168.

However, the key of the Maharaja's strategy lay in his continued friendship with the British. He acknowledged their superiority in every way and as regards fighting with them, he was convinced that it would be ruinous for him. Once he frankly admitted it in so many words: "I might perhaps drive the British or the Ungreez Bahadur as far as Allegarh, but I should be driven back across the Sutlej and out of my kingdom." Therefore, he not only avoided being embroiled with them, but also deliberately pursued a policy of cultivating intimate relations with them. Such a policy was the first essential of his expansion towards the west and the consolidation of his dominion. With the British as a hostile power in the rear, he could not have marched safely upon places like Multan, Kashmir and Peshawar. Further, the political atmosphere of the Panjab was such that, were the British willing to intervene, there would have been no dearth people asking for their aid against the aggressive designs of Ranjit Singh, for actually the Nawabs of Multan and Bahawalpur, the Barakzai rulers of Kashmir and Kabul and some of the hilly Rajas made repeated overtures for British assistance or protection against Ranjit Singh.² Ranjit Singh, therefore, scrupulously avoided getting involved in any anti-British movement in the country.3 He would even sacrifice his own interest as in the case of the Sind affair,4 but would never abandon the policy he had so carefully thought out and so consistently It was his constant endeavour to promote, by exchange of courtesies, presents, diplomatic missions and inter-

1. Mc Gregor, Vol. II, p. 35; Orlich, Vol. II, p. 168.

² For: 1811 Pol. Cons: 19th April, p. 57, For: 1810 Pol Cons: 25th Aug., 49; For: 1813 Pol. Cons: 15th May 17, For: 1817 Pol Cons: 17th Sept., 19; For: 1817 Pol. Cons: 18th July, 1-2 & 19th Sept., 26; For: 1819 Pol Cons: 20th March, 15-16, For: 1837, Sec Cons: 10th April, 16-17; For: 1824 Sec. Progs. 29th Oct., 1-8; For: 1815 Pol Cons: 2nd Aug., 35 & 15 Aug., 4

^{3.} From time to time attempts were made by the disaffected rulers of India to create combinations against the British. The Maratha rulers of Gawalior, Indore and Nagpur and the Rajas of Bhaiatpur and Nepal were the most prominent amongst them. Ranjit Singh thought that there was no prospect of success for any one of these combinations and therefore he did not want to damage his own interest by joining hands with them.

^{4.} Ranjit Singh was thoroughly outmanoeuvred by the British or the question of Sind. All his hopes were dashed to the ground, when the British established their protectorate over Sind. Ranjit Singh fretted and fumed, but refused to take up arms against the British.

views, amiable relations with the British. Particularly, on the eve of important expeditions, special efforts were made by him to win their goodwill. The results of this policy were most encouraging and fully confirmed the Maharaja's faith in its necessity and continuation. The British interfered with the conquests of Ranjit Singh until the very closing years of his reign when they, under the influence of Russo-phobia, closed the avenues of further extension of his power in the direction of Sind and Afghanistan.1

Military Strategy

In the words of Charles Masson Ranjit Singh "exhibited decisive proofs of great personal valour, quickness conception and promptitude of execution." He showed an acquaintance with the principles of war, which would do honour to any General.2 Amongst the principles he practised, the most important were rapid mobility, secrecy, security, maintenance of objective concentration, economy of force, offensive action and coordination. A brief discussion of each one of these may not be out of place here.

Rapid Mobility—The wars of Ranjit Singh, like those of Napoleon, were wars of movement. Thoronton says that celerity of movement was "one of the instruments of Ranjit's success."3 His armies were reputed for their quick movements and long marches. This gave the Sikhs a decisive advantage over their enemies, which may be evident from the following In 1810 the rapidity with which Ranjit Singh assembled his large army around Multan for the purpose of siege has been highly praised by Prinsep.4 In 1811 both Mahmud Shah, the King of Kabul, and his Wazir, Fateh Mohammad Khan, were out-manoeuvred by the vigour and expedition with which the Maharaja marched his army against them, so much so that even the British Resident at Delhi expressed admiration for "the celerity and decision" with which Ranjit Singh acted on this occasion.⁵ In 1812 during the

For: 1837 Pol. Cons: 17th July, 32-35.
 Masson, Vol. I, p. 439.
 Calcutta Review, Vol. II, 1844, p. 488.
 Prinsep, p. 80.
 For: 1811 Pol. Cons: 13th April, 18; Delhi Resident to Edmonstone, 18th March, 1811.

joint Afghan-Sikh expedition against Kashmir Dewan Mohkam Chand, the commander of the Sikh army, who was left far behind, managed to reach the valley at the same time as the Afghans did. In 1819 the movements of Ranjit Singh were so quick that both Dost Mohd. Khan and Yar Mohd. Khan were non-plussed and forced to evacuate Peshawar without any resistance.¹ In 1823, when Azim Khan declared a holy war against the Sikhs in Peshawar, Ranjit Singh completely upset his plans by reaching there even before he had been able to collect his troops fully and inflicted a defeat upon him at the battle of Naushera.2 In 1824 and again in 1827 even the floods of the Indus could not hinder his movements. He waded through the river along with his whole army and though he had to lose a part of his force on account of the violence of the current, he was able to confront the enemy before the latter was able to cause damage.3 And finally, in 1837 after the death of Hari Singh Nalwa "reinforcements were brought up with a speed and reflected great credit which on the organisation," with the result that the Afghans were obliged retire.4 Charles Masson has recorded glowing tribute to the Maharaja for his Indus campaigns. campaigns on the Indus, his achievements were of the most brilliant kind and no commander could have surpassed him in beauty and celerity of his movements."5

A similar celerity characterised the mobilisation troops for campaigns. The Khalsa state under Ranjit Singh was an expanding one, with a "large disposable army, impatient of repose" and "engaged in continual warfare".6 After the two months' annual leave during the rainy season, a grand muster was held every year, usually at Amritsar, occasion of the Dusehra Festival. All troops were required to attend it, complete with their arms and equipment.7

For: Misc. Vol. No. 206—Wade's History of Ranjit Singh.
 For: 1824 Sec. Progs. 29th Oct, 9—Moorcroft's account of the battle of Naushera.

Masson, Vol. I, p. 140; For: 1824 Sec. Cons: 24th Dec., 1-2.
 Gough and Innes, p. 34.
 Masson, Vol. I, p. 439.
 For: 1831 Pol. Cons: 17th June, 41—Wade to Prinsep, 18th May, 1831.

^{7.} Prinsep, p. 100.

defaulters, whosoever they might be, were heavily punished. After this, right upto the setting in of the rains next year, the troops were at the disposal of the Maharaja, engaged in or ready for, active service anywhere. Moreover, Sikhs travelled light and did not require long to get ready for a march. Their administrative services were quite efficient. The troops were kept well provided with arms and equipment and inspections were held to check up their turn-out. Besides, no delay could be caused by food supply arrangements, because in the earlier period the Sikhs lived on the country and later on, after this practice had been given up, food supplies were available from the innumerable forts of the country, which were kept at all times well-stocked. As regards the assembling of troops, the practice followed was that except in emergencies when orders were sent to commanders to march straight towards the place of operations, troops were first mustered at a suitable place for the Maharaja's inspection and disbursement of pay.2 These precautions were considered necessary to maintain the efficiency and morale of the army.

Secrecy and Surprise—Ranjit Singh was an excellent planner. Once Burnes wrote to Macnaughten about him: "No one entertains a more exalted opinion than I do of the Maharaja's head to plan and ability to achieve." He took every possible care in formulating his plans. He consulted maps, acquired information beforehand about routes and approaches, held discussions with his courtiers, made enquiries from people acquainted with the place or places in question, determined how many and what kind of troops would be required, made thorough administrative arrangements, systematically went through the clearance of obstructions on the way, set up efficient intelligence services and then waited for

- 1. In 1818 when a march upon Peshawar was intended, the whole mobilisation was completed in 15 days, while in 1823 it took only a month to get ready to march against Azim Khan. Kanhaya Lal, pp. 266 & 303.
- 2. Panth Parkash, Part III, p. 196; Kanhaya Lal, p. 239—mobilisation and inspection at Sialkot for leading the first expedition of Kashmir in 1814; Lahore news, 15th to 17th April, 1839—payment of troops before committing them to action.
 - 3. For: 1838, Sec. Progs. 17th Oct., 71.
- 4. News, p. 177; For: 1823 Pol. Cons: 5th Dec., 103—wrote to Murray for a map of Sind.

a favourable opportunity to set off and strike. Considerations of weather and availability of supplies were given due weight in the formulation of plans.2 However, while doing all this the Maharaja was able to keep a strict veil of secrecy over his intentions. His favourite technique for maintaining secrecy was to create confusion by making mutually conflicting declarations. Mr. Ochterlony, a British Agent at Ludhiana, several times had to admit his helplessness to "pry into his real designs."3 Later on in 1836, Captain Wade had to make a similar confession to Macnaughten: 4 "The design expressed by the Maharaja of removing from Amritsar to Sialkot would imply that he has relinquished his intentions of proceeding towards Multan after the festival of Dusehra, but there is no relying on the declarations of His Highness regarding his movements, he makes no one privy to them before their execution and often designedly gives out an entirely opposite course to that which he intends taking."Similar was the observation of Osborne in 1838: ".....and it is curious to see the sort of quiet indifference with which he listens to the absurd reports of his own motives and actions which are daily poured into his ears at the Durbar, without giving any opinion of his own and without rendering it possible to guess what his final decision on any subject will be, till the moment of action has arrived." (Court and Camp of Ranjit Singh, p. 35). It was customary with him to issue orders to the troops to get ready for march without

^{1.} Through the Sikh War, p. 76; News, p. 447; Monograph 17—1812 (10) and 1813 (31-32). A typical example is his treaty with Wazir Fatch Khan in 1812. This treaty was made with the object of making a military survey of the valley of Kashmir and its approaches. After this survey, vigorous efforts were made to clear the obstructions on the way. (For: 1813 Pol. Cons: 8th July, 5). In 1836 Ranjit Singh consulted some bankers of Shikarpur about the prospects of his success over that country—For: 1836 Pol. Cons: 7th Nov., 45.

^{2.} For: 1825 Sec. Cons: 16th Dec., 5-6; Monograph No. 17-1813 (29), 10th Oct.

^{3.} Ochterlony to Lushington-No. 34, dated 6th Dec., 1809.

^{4.} For: 1836 Pol. Cons: 7th Nov, 45. Dr. Murray makes a similar observation: "In fact he keeps his measures so profoundly secret from every one that not even his most confidential servants know in the morning whether their master intends to shift his camp or remain where he is "Murray to Wade, 27th Feb., 1827 Cons: 20th April, 1827 Dr. Honigberger expressing a similar opinion says: "The prominent trait of his character was that he (Ranjit Singh) rarely did what was required of him and acted often contrary to what he said. In general, no one was informed of the place to which he intended to go, nor of the time appointed by the astrologer for his departure."

revealing the particular direction until the last moment, so that people were kept guessing as to what his real designs were. This enabled him to make successful surprises upon his enemies. In 1799 his conquest of Lahore was the result of a surprise. Ranjit Singh first went to Majithia to be joined by his motherin-law Rani Sada Kaur's forces. From there he made dash under the cover of darkness and laid siege to Lahore, while yet the night was on.1 The Bhangi Sardars of Lahore were completely taken by surprise and without any resistance they fled away, yielding a bloodless victory to the Maharaja. The attack was made when the rulers of Lahore were the least prepared for it. It was the worst time of the year for a military compaign. The summer 's heat was scorching; the monsoons were expected to break at any moment and turn the plains into a vast marsh land. Similarly, all the three cis-Sutlei expeditions of 1806, 1807 and 1808 were great surprises. In 1806 and 1807 he set off under one pretext or the other,2 but after advancing into the interior of the country suddenly turned round and pounced upon some of the chiefs there. In 1808 he was encamped at Kasur, ostensibly on the way to Multan, when Metcalfe met him. His sudden march from there immediately after the arrival of the English envoy, combined with the rapidity of his movements, took all the cis-Sutlej chiefs unawares, with the result that he effected absolutely unhindered progress right upto Thanesar. 1810, wishing to create a surprise in the invasion of Multan he mobilised his army partly at Amritsar and partly at Akhnoor (Jammu) with the object of misleading the Nawab Multan into thinking that he was going to invade Kashmir.3 In the same year a surprise was made upon Fateh Khan of Sahiwal who was captured without any resistance.4 In 1831 a most successful surprise was sprung upon Syed Ahmed, the leader of the Muslim crusade against the Sikhs, by Prince

^{1.} Sohan Lal, Vol. II, p. 41. Panth Parkash, Part III, p. 112.

^{2.} In one case the pretext was to settle the dispute between the Patiala and the Naba States and in the other to mediate between the Raja and the Rani of Patiala—Kanhaya Lal, p. 170; Sohan Lal, Vol. II, pp. 61 & 65.

^{3.} For: 1810 Sec. Cons: 13th Feb., 3.

^{4.} Griffin, p. 206.

Sher Singh. The Syed was killed with 500 of his people and his whole equipment and baggage were captured. 1 Many years later in 1837 Hari Singh Nalwa carried out one of the best surprises at Jamrud. While "the Afghans were congratulating themselves on its (the fort of Jamrud) being about to fall into their hands", on the morning of the 30th April "Hari Singh unexpectedly attacked their position and for the moment carried all before him."2

Security-Ranjit Singh was fully alive to the strategical significance of the factor of security. Like a consummate general he conjured up all possible dangers and tried to eliminate them before undertaking a campaign. striking illustration of this was the conquest of Kashmir. task was beset with many difficulties. The routes to that country, narrow, difficult and unfamiliar, lay through a number of hostile states, so that it was not only that advance could not be smooth and unimpeded, but also that there could be no security for the lines of communications and supply. sequently, Ranjit Singh had to devote years of slow steady work to the clearance of the various obstructions standing in his way. He started doing so as early as 1810 when he secured the submission of the forts of Akhnoor and Mangla.3 In 1811 further progress was made and in 1812 Dewan Mohkam Chand was sent in company with Wazir Fateh Khan to procure information about the passages into Kashmir. In 1814 a premature attempt was made to effect the conquest, but since the path had not yet been completely cleared of all the difficulties, it met with a disastrous failure.4 But Ranjit Singh was not discouraged and the preparatory work was continued in the following years⁵ until in 1819 the final conquest was made without much resistance. Before undertaking expedition, it was usual with the Maharaja to despatch advance letters to the state officials and influential local people on the route of march, warning them of the impending departure of

^{1.} For: 1841 Pol. Cons. 17th June, 41. Wade to Prinsep, 18th May, 1831.

Masson, Vol. III, p 384.
 Monograph 17—Enclosure No. 78, 10th to 18th Jan., 1810.
 For: 1814 Pol. Progs. 9th Sept., 6, 8; Monograph 17, 1814.

For: 1815 Pol. Cons: 25th Nov., 29; For: 1816 Pol. Cons: 13th Jan., 25.

troops and ordering them to guard the passages of rivers and other strategic points.1 Similarly, details about the base, the camping sites, the lines of supply and their protection were carefully worked out beforehand. Unless the Maharaja decided personally to command the troops on the front line, he took upon himself the most onerous responsibility of organising and guarding the base and the lines of supply.2 The protective measures generally consisted of setting up pickets, patrols and thanas at suitable points.3 The best illustrations of this are provided by the numerous trans-Indus operations of the Maharaja. There were no hard and fast rules, but broadly speaking, in these operations the base was located somewhere between Wazirabad and Rohtas. Between the base and the forward position a few divisions were stationed for the purpose of protecting the line of communications and furnishing ready reinforcements to the forward troops in the case of an emergency.4 One of these divisions was compulsorily stationed at Attock, the most strategic point on the line⁵ and was charged with the duty of keeping the hostile elements of the neighbourhood down with a view to preventing them from interfering with their supplies or retreat in the event of failure and guarding the boat bridge at that place.6 For instance, in the operations of 1834 against the apprehended attack of Dost Mohammad on Peshawar, the Sikh army was divided into three parts. Vanguard Division was commanded by Nau Nihal Singh. The Second Division, under the command of Prince Sher Singh, was posted at Attock. The Third Division was far behind under the personal command of Ranjit Singh, which formed

^{1.} Monograph 17—1814 (3) 22nd June; For: 1827 Pol. Progs. 30th March, 28.

^{2.} In both the expeditions of Kashmir, 1814 and 1819, Ranjit Singh remained behind at the base. In the various Multan expeditions also he was behind at the base. But in several cases, for example, those of Mankerah (1821), Peshawar (1819) and Naushera (1823) he was with his forward troops. Prinsep, p. 122; Monograph 17, 1812 (6), 7th April.

^{3.} L. A.R.—intelligence dated 6th March, 1810.

^{4.} For: 1835 Pol. Cons: 15th June, 82.—In 1827 when the operations against Syed Ahmed were going on, Gulab Singh and Kishen Singh halted on the Chenab and Jamadar Khushal Singh and Prince Sher Singh halted at Attock. For: 1827 Pol. Progs. 30th March, 28.

^{5.} For: 1835, Pol. Cons: 15th June, 83; For: 1827 Pol. Progs. 30th March, 28.

^{6.} P.I.H.G., 1940—A Book of Parwanas by S. R. Kohli.

the base for the entire operations. From Attock onward upto Peshawar strong guards were put up from place to place for the security of the road.¹ Similarly, all possible precautionary measures were taken for the protection of the camps of the troops in that danger zone. Marches were generally made in the skirmishing order, as the large bodies of skirmishers marching in front and on the sides of the army offered protection against the possible enemy attacks.²

Ranjit Singh's anxiety for his own security was only equalled by his concern about imperilling that of his enemies. He always tried to intercept their letters and cut off their supplies. For example, Mian Dedo's rebellion in Jammu was defeated by means of cutting off his supplies.³ In 1813 the harkarahs of Wazir Fateh Khan were intercepted, from whom some valuable letters were discovered, bearing on the secret correspondence of the Afghan leaders with some of the native princes of India.⁴

Maintenance of Objective—" This principle does not seek to guide in the actual determination of an object. as in all other conscious efforts of mankind, an object or motive is an essential prerequisite. After an object has been firmly decided upon, this principle stresses the importance of maintaining that object, without confusion or doubt, until it has been finally attained."5 No general can achieve much success, unless he strives to maintain his military objectives. Ranjit Singh was fully conscious of this and was known for "a clear conception of the object in view,"6 but cautious and circumspect as he was, he never had any fancy for objects, the attainment of which was uncertain and fraught with danger. However, he recognised that the strength of the enemy lay chiefly in his army (a Clausewitzian concept) and his principal forts. Both these objects, being the centres of gravity, were his favourite targets. His first attempt generally was to get at the enemy's

^{1.} For: 1837 Pol. Progs. 31st July, 19—instructions to Nau Nihal Singh to put 200 sowars and foot soldiers at different places to guard the road from Attock to Peshawar; Sohan Lal, Vol. III, p. 245.

^{2.} Henty, p. 81.

^{3.} Gulab Singh by Pannikar, pp 27-28.

^{4.} For: 1813 Pol. Progs. 23rd July, 7.

^{5.} Palit, p. 79.

^{6.} Gordon, pp. 110-11.

army and cursh it. But since pitched battles were not so popular in those days as sieges, every campaign ultimately tending to become a siege or a series of sieges, he could not be oblivious of the importance of concentrating on sieges. "Like Louix XIV, sieges were more congenial to him than pitched battles in the open", writes V. G. Kiernan.1

However, in following this principle Ranjit Singh did not always act with rigidity. As explained earlier, he was essentially a man of accommodating disposition. Therefore, if necessary and if it did not run counter to his policy, he at times agreed to put off the final attainment of his objects. He preferred a strategy of subtle accumulation of small gains like the 18th century rulers of Europe. The most striking examples are the conquests of Multan and Kashmir in which several attempts had to be made before the places could be ultimately reduced. In the words of Gordon, "he knew when to execute, when to yield and how to contract his measures."2 But it may be noted that this flexibility on his part never relinquishment of the original objective altogether, because the Maharaja's steadfastness of aim was hardly affected by the passage of time. His accommodation of the enemy was only a passing phase, because attempts were continued to exploit every favourable opportunity that arose to further the attainment of the final goal.

Offensive Action-Military history provides no example o a victory won purely through defensive action. Defence can at best avert defeat; it cannot win final victory. Offensive is superior to defensive for two reasons: (i) it provides liberty of action to the attacking commander who can attain numerical superiority by choosing his point of attack, whereas the defender suffers the disadvantage of having to be strong everywhere; (ii) its psychological effect raises morale much better than that of the defensive.3 If Ranjit Singh had not realised this fundamental fact, he might not have risen above the position of a petty chieftain that he was in the beginning of his career. His whole career was that of a conqueror and empirebuilder and his large army was ever seeking new exploits of

Kiernan, p. 84.

^{2.} Gordon, pp. 110-111. 3. Major Palit, p. 83

adventure.1 Offensive, therefore, both strategic and tactical, was the keynote of his fighting technique. However, defensive was not ruled out as something absolutely useless. made use of, whenever situation demanded it, as a prelude to offensive operations. For example, in 1835 when Ranjit Singh heard of the hostile designs of Dost Mohammad, he "despatched peremptory orders to his Sardars at Peshawar to avoid a general action and await his arrival." In consequence of these orders, the Sikhs renewed negotiations to amuse the Amir until the arrival of the Maharaja. They stood on the defensive even when the Amir, seeing through the trick, made an attack on them.2 However, when Ranjit Singh arrived on the scene, offensive was forthwith assumed and the Afghan ruler was enveloped, with the result that he grew panicky and fled away to Kabul. Two years later in 1837 when the Afghans again showed their aggressive designs, the Maharaja, being preoccupied with the marriage celebrations of his grandson, had to send strict instructions to Hari Singh Nalwa, the supreme commander of the frontier force, to remain on the defensive until he was reinforced.3 Earlier in 1827 Budh Singh, when threatened by an overwhelming army of Syed Ahmed, had to remain entrenched for a considerable length of time before he thought it prudent to take up an offensive.4

Concentration and Economy of Force—They are actually two facets of the same principle. Concentration, in the words of Napoleon, means "to unite on a single front a greater mass than the enemy". Economy of force is complementary to it, because it helps to achieve concentration by ensuring that the strictest economy is enforced in detaching troops for commitments which do not directly help the attainment of the main purpose. It therefore implies that such detachments must be kept to the barest minimum and must be able to hold the maximum number of enemy forces, whenever necessary.⁵ Now as regards Ranjit Singh, the Calcutta Review⁶ of 1844 mentions

4. For: 1827 Pol. Progs. 30th March, 28. 5. Major Palit, pp. 86 -87. 6. Vol. II, p. 488.

^{1.} For: 1831 Pol. Cons: 17th June. 41. Wade to Prinsep, 18th May, 1821.

^{2.} Masson, Vol. III, p. 339. 3. For: 1837 Sec. Cons: 10th April, 16. Wade to Macnaughten, 25th Feb., 1837.

that numbers were one of his main instruments of success. He possessed a huge army and ordinarily was able to have a larger concentration of troops than his enemies. Moreover, the disunity of his rivals was a great helping factor, because he could deal with them in isolation. Further, his close friendship with the British and his conciliatory policy towards the vanquished practically freed him from the anxiety of detaching heavy guards for the security of his capital and his long frontier in the east and south and bestowed upon him the benefits of economy of force.2 Generally, he conducted his operations on the principle of a single line which, according to Jomini, is the best method of achieving concentration at a particular point.3 Even in grave situations in which a number of adversaries threatened to make a united cause against him, he won victory not by dividing his force and having more than one operational line but by manoeuvring to concentrate against the allies turn by turn. In 1834 he wrote4 to Dewan Tara Chand who was conducting operations in the region of Bannu, saying that "hurry and haste are not good, that he must proceed tactfully and steadily and should not launch his attack on all sides, for a single front is always desirable. following examples may illustrate this point. (i) In 1801 when Ranjit Singh was laying siege to Akalgarh, he was suddenly told of Sahib Singh Bhangi's entering into an alliance with Jodh Singh of Wazirabad in aid of the Chief of Akalgarh. Ranjit Singh at once raised the siege, wrote a threatening letter to Jodh Singh to intimidate him and immediately marched upon Guirat and defeated Sahib Singh. Later on, he dealt with the Akalgarh and Wazirabad Chiefs one by one. Thus the enemies were defeated in detail by the strategy of concentration.⁵ (ii) The Nawab of Kasur, who himself had an eye on Lahore, could not tolerate its occupation by Ranjit Singh

^{1.} Griffin, p. 199.

^{2.} For: 1835 Pol. Cons: 20th April, 36. Wade to Macnaughten, 181 April, 1835. Alarmed by Dost Mohammad's threats, Ranjit Singh advanced almost all his troops towards Peshawar, himself also proceeding in tha quarter. Such was his faith in the British neutrality and friendship that the cities of Amritsar and Lahore were both left without any other garrison than the guards at their gates.

^{3.} Earle-Makers of Modern Strategy, p. 86.

^{4.} Sohan Lal, Vol. III, Part II, p. 207. 5. Panth Parkash, Part III. pp. 119-121; Sohan Lal, Vol. II. p. 49.

and made several attempts to create confederacies hostile to him. The first among them was formed with the Bhangis of Amritsar and Gujrat. Nothing could, however, be achieved by it, as the vigilance of Ranjit Singh enabled him to put them down one by one through the principle of concentration. Having failed here, the Nawab tried to enter into a conspiracy with the Nawabs of Multan and Ihang. As soon as Ranjit Singh learnt about it, he at once marched with the whole of his army upon Kasur and crushed it before any body could come to its rescue. Then Jhang was attacked and dealt with in the same manner. Last of all, it was the turn of Multan, but he dealt with it at leisure¹. (iii) In 1823 at Naushera also² the same strategy was used. There were not many chiefs here threatening to combine their forces, but only one whose forces, however, were split apart by the River Landa. Ranjit Singh despatched a few of his regiments against Mohammad Azim Khan, the Afghan Commander, to contain his force at Naushera and concentrated the mass of his army against his tribal levies and won a decisive victory.

Examples are also on record in which he tried to cause dispersal of the enemy troops by means of diversions. To take only one of them, when in 1813 Wazir Fateh Khan was in camp with all his army across the road to the fort of Attock opposite the Sikh army, the Maharaja threatened to march upon Kashmir, which made the Afghans nervous and obliged them to detach some of their troops in that direction and to open negotiations for an amicable settlement. This gave the Maharaja the much-valued time to despatch his own army to the theatre of war.³

Coordination—"It is only by effective cooperation that the component parts of any force or nation can develop the full measure of their strength." The better the cooperation or coordination, the greater the chances of success. This maxim of strategy was considerably realised under Ranjit Singh. His military machine worked smoothly and without any obstructions.

^{1.} Panth Parkash, Part III, pp. 139-142.

^{2.} For: 1824 Sec. Progs. 29th Oct., 9; For: Misc Vol. No. 206, p. 104
3. Monograph 17—1813 (10) — 31st May, 1813 (11) - 8th June, 1813 (15), 30th June.

^{4.} Major Palit, p. 90.

This was because of the nature of the Khalsa State and the personality of Ranjit Singh. The state was a virtual, though not, absolute, despotism with all the strings of power centralised in the hands of its head, so that there could be no discord or incoherence in planning or execution. Clashes between civil and military authorities, which are so natural today, were unthinkable under such a government, as one and the same man was at the helm of both civil and military affairs. Moreover, Ranjit Singh's masterful personality secured to him the implicit obedience of his subordinate commanders.

As regards strategical control, Ranjit Singh exercised it in a considerable measure over his campaigns. His qualities as a born leader and an organiser enabled him to plan and direct the entire military activity himself. It was he who drew the original plans of his expeditions, mobilised and despatched troops, giving detailed instructions about routes, length of marches, camping sites and drawing of supplies. 1 It was again he who organised the logistics of his operations.2 Very often, particularly in the early part of his career, he personally conducted operations, and on such occasions he exercised a thorough control, extending even to reconnaissance, as in the Kashmir campaign of 1814. But even when he was not personally commanding the army, he tried to be as effective as possible.3 For this purpose, he insisted on being kept informed of all that happened. The commanders had the strictest orders to send regular reports about their movements and actions to the Maharaja.4 Arrangements were also made for official reporters who furnished information regularly about the operations. On the basis of all this information, instructions were issued from time to time by Ranjit Singh to guide his commanders. Special establishments of dak were laid

^{1.} P. I. H. C., 1940—A Book of Parwanas by S. R. Kohli; Murray to Wade, 2nd March, 1827 Cons: 2nd March, 1827.

^{2.} Panjab in 1839-40, 11th April, 1839; Monograph 17—for organisation of the first Kashmir expedition in 1814; Centenary Volume, University Sikh Association, 1939—for conquest of Multan by Kohli.

^{3.} Nau Nihal Singh in 1835 asked by Ranjit Singh not to engage in fight with the Afghans until his arrival—For: 1835 Pol. Cons:15th June, 82; detailed instructions issued to Khushal Singh in 1825—News, pp. 215-216.

^{4.} Monograph 17—15th Sept.—for reports regularly submitted during marches and operations by Kharak Singh.

on for the communication of war news and official orders. As for example, in 1818 when the attack on Multan was in progress, a despatch rider was posted at every third mile between the capital (where Ranjit Singh was staying) and the Army Camp at Multan, so that the Maharaja could obtain the latest information and be able to transmit orders1.

But though considerable, Ranjit Singh's control over operations could not be complete in the very nature of things. The means of transport and communications in those days were undeveloped, so that the commanders and sub-commanders on the spot had to be given a great deal of lattitude and discretion. They were the best judges of the situation and were allowed to act independently within the frame-work of the general instructions of the Maharaja.2 If at any time they felt that their situation demanded that the general instructions of the Government be ignored, they could do even that. As for instance, Budh Singh, who was instructed in 1827 to hold back until he was joined by the French officers and troops, refused to do so by saying that he could maintain his ground.3 Similarly, Hari Singh Nalwa often acted on his own in contravention of the instructions of the Maharaja. Too much centralisation of control in this respect, the Maharaja believed, was neither possible nor desirable, because it killed initiative in the man on the spot.

The object of coordination is not fully achieved, unless there is also full understanding and cooperation between the subordinate commanders themselves. Ranjit Singh, therefore, always insisted that there should be not merely intercommunication between them, but that they should also discuss and settle important matters in war councils4 consisting of the

^{1.} P. I. H. C., 1940—A Book of Parwanas by S. R. Kohli; Sohan Lal, Vol. II, p. 255—mention of dak arrangements made in the Kashmir expedition of 1819; Fatehnama Guru Khalsaji, p. 57.

2. Here is a specimen of his general instructions. When in 1835 Nau Nihal Singh, who was encamped on the Barah opposite Dost Mohammad 'sarmy, asked for Ranjit Singh's permission to attack the Afghans, he was told to "remain quiet unless the enemy should dare to commence the attack, when he was at liberty to oppose him and do justice to his valour." For: 1835 Pol. Cons: 15th June, 32.
3. For: 1827 Pol. Progs. 30th March, 36. For: Misc. Vol. No.

^{206,} para 198.

^{4.} A typical example is the war council held by Kanwar Nau Nihal Singh in 1839 at Peshawar to discuss the despatch of Sikh troops towards Kabul—Panjab in 1839—40, p. 83.

senior commanders. As for instance, when in Kanwar Nau Nihal Singh was sent to Peshawar as the Supreme Commander of the forces there, he was emphatically instructed 'to act according to the counsel and advice of the glorious chieftains and to be careful to act with due patience and steadiness and never to indulge in rashness in the undertaking.' (Sohan Lal, Vol. III, Part III, P. 394). However, it may be pointed out that mutual jealousies of the chiefs and officers greatly hampered the cause of cooperation among them. 1835, for instance, the Sardars who had been sent to oust Dost Mohammad from the province of Peshawar, were found wasting their time and energy in mutual quarrels. It was only when Ranjit Singh personally reached there that "disorder confusion were converted, as if by magic, into order and regularity and the energy inspiring the bosom of the chief was communicated to those under his command." The conduct of the Sardars in 1837 at the same place was even more disappointing, so much so that the Maharaja deeply regretted it to Raja Dhian Singh.2 Mackeson also writes to the same effect: "Ranjit Singh is well aware that his army without his own presence has no head and his Sardars act independently of each other without concert and without strength."3 It was on account of the mutual jealousies of the Sardars that Ranjit Singh always preferred to appoint chief commanders of expeditions from amongst the princes. To give a typical example, in 1818 in the operations against Multan no one liked to serve under Misar Dewan Chand and therefore, Prince Kharak Singh had to be appointed the over-all commander.4 The same device had to be followed in connection with the Kashmir operations in 1819.

After Ranjit Singh

The post-Ranjit Singh period witnessed a considerable deterioration in the strategical efficiency of the Sikhs. political instability and the disorganised state of affairs prevailing throughout this period were hardly conducive

Masson, Vol. III, p. 341.
 For: 837 Pol. Progs. 25th Sept., 81.
 For: 1838 Sec. Progs. 17th Oct., 72.
 Panth Parkash, Part III, pp. 207, 213; For: Misc. Vol. 206,

efficiency in the work of planning, organisation and direction of a campaign. After Ranjit Singh's death, there was no leader of his stature and calibre to keep the discordant forces in check and to carry on the affairs of the state firmly and well. The result was that, excepting perhaps mobility, all the principles of the Great Maharaja's strategy heavily suffered, the worst sufferers being control and coordination.

The disastrous consequences of this deterioration were manifested in the two Anglo-Sikh wars which took place at the end of this period. Actually, this was one of the most important causes of their defeats in these wars. A critical study of the Sikh strategy of these wars may substantially establish the correctness of these remarks.

First Anglo-Sikh War (1845-46)

There was no proper planning and organisation for this war. The people at the helm of affairs, Raja Lal Singh and Tei Singh, had got their appointments as Prime Minister and Commander-in-Chief respectively only a month before early November, 1845. But even if they had got sufficient time, they would have hardly put their hearts into the affair, because they were interested in losing and not winning the war. Their whole endeavour was somehow to commit the Khalsa army to a war with the British¹ and for this purpose the very excitable material of the soldiery was "by degrees wrought upon."2 About the preparations of the war they were the least concerned. Whatever was done, was done just to put a veil upon their real intentions. As a matter of fact, "they were indifferent from their firm persuasion that, if victorious, they will find new means of power and wealth and if beaten, they will be what most of them desire, the heads of a subsidiary instead of an independent state."3 Moreover, their competence may also be questioned. Raja Lal Singh had never seen war before and Tej Singh was just a mediocrity, who owed his rise more to Ranjit Singh's affection for his

^{1.} Panjab Papers—Governor General to the Secret Committee, December 2, 1845.

^{2.} Cunningham, p. 246.

^{3.} For: 1846 Sec. Progs. 26th Dec, 184. Broadfoot to Currie, Nov. 20, 1845.

uncle Jamadar Khushal Singh than to his own merit.¹ The war preparations were further hampered by lack of unity and cohesion among the Sikh chiefs. Raja Gulab Singh at Jammu was not only making secret overtures to the British, assuring them of his support in the event of a war, betraying the secrets of the Khalsa Government and bargaining for his own selfish interests, but was also constantly working, through his agents, among the soldiery to disrupt their unity.² Dewan Mool Raj of Multan was similarly trying to have secret relations with the British.³ At the capital, Bhai Ram Singh was in league with the enemy and was passing secrets to their agents at Ludhiana.⁴ He was also obstructing the war effort by trying to dissuade the Rani and Raja Lal Singh from such a course.

The extent of disorganisation which marked the initial stages of the war may be judged from the fact that the army did not march till about 20 days after the final orders for its movement had been issued. The original date fixed for the departure of the troops was 18th November (11 o'clock), but not a soul stirred out on that day.5 The troops had no faith in the Rani and the chiefs, Lal Singh and Tej Singh. Rather, they had strong suspicions against them and secretly tried to replace them by Raja Gulab Singh.⁶ Therefore, they said that they would move only if their chiefs moved. Both the chiefs on their part were afraid of assuming the command. What they really wanted was to commit the army and not themselves. And so ultimately, even when they agreed to assume the leadership under great pressure, they had no heart in the operations to be undertaken. Tei Singh hung back till the last moment and did not march off until he was rebuked and forced by the Rani.7 Under such circumstances, it was natural for the

^{1.} Panjab Papers, p. 434; For: 1846 Sec. Progs. 26th Dec., 197.

^{2.} Gough and Innes, pp. 141 & 58-60; For: 1846 Sec. Progs. 26th Dec., 209. Broadfoot's letters, 1st Dec., 1845.

^{3.} For: 1846 Sec. Progs. 26th Dec., 184 & 302. Letters of Broadfoot & Cunningham.

^{4.} For: 1845 Sec. Cons: 20th Dec., 106-108; For: 1846 Sec. Progs. 26th Dec., 197.
5. For: 1846 Sec. Progs. 26th Dec., 188. Broadfoot to Wheeler, 20th

Nov., 1845.
6. For: 1846 Sec. Progs. 26th Dec., p. 184. Broadfoot to Currie, 20th Nov. 1845.

²⁰th Nov., 1845.
7. For: 1846 Sec. Progs. 26th Dec., 197 & 214. Tej Singh was the last to cross the Sutlej-Suri, p. 70.

troops also to show reluctance to depart. Orders were repeated by the Rani almost every day and yet for about 20 days there was no indication that the army would march off.1

In the midst of this confusion and uncertainty, a plan of war was drawn up on the night of the 17th November, according to which the army was to be divided into seven divisions: one to remain at Lahore, one to proceed to Peshawar and the rest to march against Ropar and the hills nearby, Ludhiana, Hurrike, Ferozepur and Sind. Each division was to be 8000 to 12000 strong. Sham Singh Attariwala, Lal Singh, Tej Singh and Ranjodh Singh were to be the commanders of the Ferozepur, Hurrike, Ludhiana and Ropar divisions respectively.2 Under the same plan, Raja Gulab Singh was assigned the duty of guarding Attock with his own army. Unfortunately, there being no proper security arrangements, the plan was communicated to Mr. Broadfoot the very next day.8 This plan, however, did not work and was soon altered under the pressure of disturbances breaking out in certain parts of the kingdom. One brigade had to be sent to Dera Ismail Khan for the suppression of the rebel Fateh Khan Tiwana4 and a similar force had to be despatched to keep peace in Poonch and Hazara. On certain uprisings taking place at the instigation of the British in Kulu and the neighbouring hills, despatch of troops in that direction also became imperative. However, in the interest of economy of force, this difficulty was got over by raising local levies there,5 which were charged, besides this function, with the guarding of the passages of the upper ranges of the Sutlej. As the result of all these developments, a few necessary adjustments were made in the strength of the divisions intended to march against the different places, the main emphasis being laid on the Ferozepur-Hurrike front.6 Further, Ranjodh Singh was now put in-charge of the Ludhiana front and the command of the Ropar force was transferred

^{1.} For: 1846 Sec. Progs. 26th Dec., 212. Rani's complaint Dewan Dina Nath and Tej Singh.

For: 1846. Sec. Progs. 26th Dec, 192. Broadfoot to Gough, 20th

Nov., 1845.
3. Sikhs and the Sikh Wars, p. 71.
4. For: 1846 Sec. Progs. 26th Dec., 204 and 210.
5. For: 1846 Sec. Progs. 26th Dec., 647 & 217.
6. For: 1846 Sec. Progs. 26th Dec., 191; Broadfoot to Napier, 20th

from him to Golonel Chet Singh. When the various disturbances had broken out, it was feared that they would, by enhancing the commitments, adversely affect the principles of economy of force and concentration, but thanks to their ingenuity and the huge size of their army, the Sikh effort was not affected in any serious manner and they were able to bring to the field a force 35,000 to 40,000 strong with 150 pieces of artillery, exclusive of the force detached towards Ludhiana-a force larger than the opposing British army. But though the plan of the distribution of troops was sound, their supply arrangements broke down from the very outset. Even before the river Sutlej was crossed, there were reports of scarcity of provisions from Raja Lal Singh's camp, and several villages were plundered on the way.

The Sikhs were the first to cross the river Sutlej on the 12th December, 1845. This was, however, not due to any rapid mobility on their part, for they had been marching haltingly and hesitatingly, but due to the fact that for certain reasons the British had kept the main body of their army a long way off at Ambala.⁵ The crossing of the Sutlej was effected by the Sikhs without any declaration of war, not with a view to gaining any initiative or surprise, but because their leaders, in their selfishness, were in a hurry to commit their troops to a war with the British.⁶ Mr. Mc Gregor suggests that the best strategy for the Sikhs would have been to remain on the right bank of the Sutlej and to stoutly resist its passage by the British invaders. Had they followed this course, he says, "the turn of affairs might have been different. The

1. Cunningham, p. 262; Suri, p. 63.

3. For: 1846 Sec. Progs. 26th Dec., 216, morning.

^{2.} For: 1846 Sec. Progs. 26th Dec., 210—a newsletter from Lahore.

^{4.} For: 1846 Sec. Progs. 26th Dec., 212: Broadfoot's letter dated 5th Dec., 1845; Suri, p. 65. According to Ajudhia Parshad, crossing the river was not begun till the 14th Dec. and not completed till 16th Dec.—Suri, p. 67.

^{5.} The most important of these reasons were (i) over-confidence in their ability to defeat the Sikhs; (ii) fear that closer proximity to the Sikh border would augment desertions in the ranks of their sepoys; and (iii) the desire that the Sikhs should commit themselves first. Sir Peel's speech in the House of Commons—First Sikh War Despatches, p. 172.

^{6.} For: 1846 Sec. Progs. 26th Dec., 212—News Abstract, dated 5th Dec., 1845.

Sikhs might have in that case opposed the British, not in the open field, as at Mudki and Aliwal, or in the temporary entrenchments as at Ferozshah and Sobraon but at Amritsar shutting the gates and placing their guns in that fortress and the still stronger adjacent one of Gobindgarh." This kind of strategy seems to be the only correct line of action, when we bear in mind their lack of leaders and disorganised state of affairs. But such a course hardly suited the purpose of those who had set them in motion from Lahore. For their own ulterior motives, they had put it into the heads of their men that "conquest and not defence was their object," an idea which appealed most to "their ambition and arrogance."

It has also been suggested by Mc Gregor that the Sikhs should have "effected the crossing of the Sutlej" in hot winds when the European soldier could never withstand the burning sun of India." Obviously, there seems to be a considerable weight in this view. But the reality is that apart from the fact that they had been accustomed to waging wars in the winter ever since the beginning of their political career, their system of forage supply, already precarious, would have completely broken down and put them in a position of great hardship and embarrassment, if they had postponed the season of action.

Whatever the motive, the Sikhs, by crossing the Sutlej many days before the British, had gained a very valuable initiative, so that it was open to them to attack and reduce the garrison of Ferozepore, to isolate it from Ludhiana and to destroy the main British depot at Bassein. "Had the Sikhs pushed forward at once after crossing," says Henty, "Bassein with its great stores of provisions must have fallen into their hands and a week or ten days must have elapsed before arrangements for provisioning the Umbala force could have been made. In that case, the whole Sikh army would have been able to concentrate its effort upon the capture of Ferozepore which, in the absence of any fortifications capable of withstanding a powerful artillery, could scarcely have been defended successfully."

^{1 &}amp; 2. Mc Gregor, Vol. II, p. 205.

^{3.} Mc Gregor, Vol. II, p. 63.

^{4.} Through the Sikh War, p. 196.

And had they won these successes in the initial stages of the war, the entire British Indian soldiery of the Bengal army and almost the whole of the people of the cis-Sutlej Sikh states would have most probably joined hands with them. The Indian sepoys of the British were greatly disaffected towards their masters and allured by the higher pays of the Sikh army, were merely waiting for a favourable opportunity to declare themselves openly. Similarly, the cis-Sutlej Sikh rulers were fed up with the British treatment towards them. Moreover, they had a genuine sympathy for their co-religionists from across the Sutlej. In the event of such an eventuality taking place, the events of 1857 would perhaps have been anticipated, with much better chances of the British being thrown out of the country.

But nothing of the sort happened. A golden opportunity was lost through lack of cooperation between officers and men, absence of coordination³ of effort, and treachery on the part of leadership. Instead of taking to a course which could benefit the Sikhs, Raja Lal Singh put himself in secret communication with Capt. Nicolson at Ferozepore immediately after crossing the Sutlej at Hurrike, conveying that "he was helpless but he could delay the Sikh attack on Ferozepore, divide the Sikh force and induce a great part to march to Ferozshah to attack the Governor General and recommended that the British Ferozepore troops then should attack the remainder." On hearing from Capt. Nicolson that "professions of friendship were of no value without corresponding action," Raja

^{1.} Fortescue, Vol. XII, p. 345; For: 1846 Sec. Progs. 26th Dec., 199-200. Assurances of native soldiers in the British army to come over and join the Sikh service are mentioned here.

^{2.} For: 1846 Sec. Progs. 26th Dec., 1300 & 1309. H. Lawrence to Currie, 27th July, 1846 and Minute of the Governor General dated 11th Nov., 1846: "There can be no doubt that if we had suffered reverses, that, as in the case of Patiala troops at Budowal, the contingents would have joined the enemy and we should have had a grand rising of the population in our rear as far east as Karnal, cutting off our supplies and our small detachments and making war upon us to the knife."

^{3.} Suri, pp. 68-70. There was inter-communication and cooperation between the various units, but there was no cooperation on the part of the chief officers. Meetings were often held, at which representatives of the men insisted on immediate action, but the officers temporised.

^{4.} For: 1846 Sec. Progs. 26th Dec., 889—Memo. of H. Lawrence; Cunningham, p. 263; Mc Gregor Vol. II, p. 80; Mouton, Rapport, p. 5.

Lal Singh and Tej Singh put it cunningly to their men that they wanted to leave the easy prey of a mere cantonment untouched for the time being and attack the leaders of the English and exalt the fame of the Khalsa by the captivity or death of a Governor General.1 And so while Tej Singh was left to carry on operations gainst Ferozepore, Raja Lal Singh marched away with the bulk of the army in the direction of the advancing British army. A village called Ferozshah at a distance of about 10 miles from Ferozepore was selected as the site of the would-be battle with the British. It was a wise choice, because the place lay across a road which alone, owing to scarcity of water, could be used for the advance of the British army towards Ferozepore.2 But not satisfied with the division of the army already made, Raja Lal Singh further divided it and took a small portion consisting of less than 2000 infantry, about 22 pieces of artillery and 8000 to 10,000 horse, not to prevent the junction between the enemy's Ambala and Ludhiana armies, not even to attack the enemy depot Bassein, but foolishly enough, to challenge the entire united British force. Clearly, his sinister plan was to get the Khalsa army defeated in detail and to earn the gratitude of the British.3 Mr. Cunningham, confirming this, says that Raja Lal Singh "in accordance with his original design, involved his followers in an engagement and then left them to fight as their undirected valour might prompt."4 However, the battle of Mudki was regarded by the determined Khalsa as an experimental one only. They had taught a lesson to the enemy and this, inspite of their heavy losses, gave them considerable encouragement,5 which inspired them to the heroic action of Ferozshah. But they had realised the folly of having fought in the open and now quickly threw up waist-high earthworks to give the next battle from an entrenched position.

- 1. Cunningham, p. 263; Malleson, p. 354.
- 2. Through the Sikh War, p. 157.

- 4. Cunningham, p. 265.
- 5. Mc Gregor, Vol. II, p. 46.

^{3.} Mouton (p. 5) says that this scheme was suggested to Lal Singh by Nicolson: "This treason saved the English from a sure defeat"; Malleson, p. 355. According to Ajudhya Parshad, the march of the Sikhs towards Mudki was most haphazard, un-planned, disorderly and bound to end in disorder. Suri, p. 71.

Having tasted of the Sikh steel at Mudki, the British felt it imperative to effect a junction with the division Ferozepore before engaging in another General Littler at action with the Sikhs, encamped in a horse-shoe form round the village of Ferozshah. So they left the main road and made a detour. At this stage, the Sikhs wanted to take an offensive and fall upon the enemy, but were withheld by their officers from doing so. This made them so bitter against Raja Lal Singh that they plotted to murder him.¹ Tej Singh, with his usual lack of vigour and vigilance, let General Littler slip away and join Lord Gough's force. Even then in the battle which ensued soon after this, the British might have been defeated, if the Sikh leaders had not been insincere. Raja Lal Singh fled away in the midst of the fight and revived the spirits of the enemy who was nearly defeated.2 When Tej Singh arrived on the battle scene next morning with a fresh host drawn up battle order, "the wearied and famished English before them a desperate and perhaps, useless struggle." He had been urged by his zealous and sincere soldiery to fall upon the English at day-break, but his object was to have "the dreaded army of the Khalsa overcome and dispersed and he delayed until Lal Singh's force was everywhere put to flight. at the last moment he rather skirmished and made feints than led his men to a resolute attack and after a time he precipitately fled, leaving his subordinates without orders and without an object at a moment when the artillery ammunition of the English had failed, when a portion of their force was retiring upon Ferozepore and when no exertions could have prevented the remainder from retreating likewise, if the Sikhs had boldly pressed forward."3 Victory was practically within his grasp, but he allowed it to slip away treacherously.4

The battle of Ferozshah left both the parties shattered and disorganised. The victors were no better than the vanquished who were left unpursued to recross the Sutlei at will.5 The myth of the British invincibility was broken,6 with the

Suri, p. 73.
Tarıkh-i-Sıkhan, Part I, p. 582; Mouton, Rapport, p. 6.
Cunningham, pp. 267-268.
Malleson, p. 364
Mac Munn, p. 190.
Malleson, p. 365.

result that their cis-Sutlej feudatories began to show signs of indifference and occasional hostility towards their masters. Realising that without reinforcements it would be impossible for them to resume operations, the British now sent for more troops and a heavy park of artillery with ammunition from Delhi, Meerut and Kanpur and in the meantime decided to remain strongly entrenched at Sultankhanwala, watching the frontier.

The Sikhs, after the defeat, returned to the right bank of the Sutlej. They had suffered heavy losses both in men and material and were practically without guns, ammunition and food supplies. Yet their morale was high and their spirits unbroken. They did not regard their defeat as a defeat in a fair fight, but on the contrary, attributed it to the treachery of their leaders. Therefore, they rallied and decided to continue the fight, preferably under new leaders. Their panchayats again became active, which sent deputations to wait upon the Rani and Raja Gulab Singh. They made urgent appeals to the latter² to assume charge of the Wuzarat at Lahore and to take over the conduct of the war from the hands of the traitorous Lal Singh and Tei Singh. The Rani was hesitant to accept the change, but she was forced to agree to that. Raja Gulab Singh soon after arrived at Lahore with his army and was vested with the office of the Prime Minister.

In the meantime, war preparations had been commenced and were being pursued with remarkable zeal and vigour. Work on a bridge across the Sutlej and a bridgehead on its left bank had been started under persistent pressure from the men.³ Simultaneously with this, Dewan Moolraj and Ranjodh Singh were ordered to threaten the British flanks. The former had been indifferent from the very start of the war and had remained practically neutral,⁴ as the result of which Sir Charles Napier, the British Governor of Sind, advanced into Bahawalpur and menaced the right flank of the Sikhs.⁵ But unlike the Dewan,

- 1. Malleson, p. 366.
- 2. Mc Gregor, Vol. II, p. 149; Surı, p. 82.
- 3. Suri, p. 82.
- 4. For: 1846 Sec. Progs. 26th Dec., 302 & 336; Cunningham to Napier, 18th & 31st Dec., 1845; Governor General to Napier, 26th Jan., 1846.
- 5. For: 1846 Sec. Progs. 26th Dec., 304—Governor General to Gough, 13th January, 1846.

Ranjodh Singh crossed the Sutlej with a force about 8000 strong and threatened Ludhiana, then protected only by a weak garrison. Fire was set to its cantonment by one of the predatory bands of the Sikhs, which struck great terror in all the frontier military stations of the British. It was a move of great strategical value. It enabled the Sikhs not only to draw supplies from the left bank of the river and to carry them over to the right bank, but also put them in a position from where they could seriously interfere with the British reinforcements under way from Delhi and other stations.2 From the British side, Harry Smith was sent to encounter and eliminate this threat.3 He reduced the Sikh fort of Dharamkot without any resistance and then proceeded to make a junction with the Ludhiana force. Ranjodh Singh, like a shrewd strategist, occupied the village of Budowal which lay on the road being followed by Smith and tried to cut him off from Ludhiana. But Smith was undeterred and he made a detour. Ranjodh Singh also marched in a parallel line and isolating the enemy's rear, fell upon and plundered it,4 but he failed to bring Smith to a battle and to prevent him from joining the Ludhiana army. Had he taken the offensive a little more boldly, he might have not only destroyed the force of Smith but also upset the whole plan of Lord Gough.⁵ His failure cost him and the Sikhs heavily, because he was soon forced to fall back on the Sutlei under a serious threat to his line of communications with Phillaur from Smith and Godby on one side and Wheeler on the other.6 Taking advantage of this, Smith immediately occupied Budowal and prepared himself for an attack upon Ranjodh Singh on the Sutlej. The Sikh commander failed to appreciate the imminence of the danger properly and being over-confident of his strength, wanted to make a move the relief of the fort of Gungarana or for the occupation of the neighbouring town of Jugraon, both of which were close to

- 1. Burton, p. 30.
- 2. Fortescue, Vol. XII, p. 372; Gough & Innes, p. 111.
- 3. For: 1846 Sec. Plogs. 26th Dec., 312.
- 4. Burton, p. 30.
- 5. Burton, p. 37, Fortescue, Vol. XII, p. 380.
- 6. Fortescue, Vol. XII, p. 375; Burton, pp 30-32.

the British line of communications with the Jumna.1 was completely out-manoeuvred and forced to fight in the open and with a river in the rear—both of them serious blunders. Moreover, he failed to maintain secrecy about his resources and intentions, because Mr. Brown whom he sent as a spy to the English camp, betrayed his master's cause and passed on to the enemy much valued information about the Sikh force. The results were bound to be disastrous. He was further handicapped by non-cooperation from some of his chiefs. Of them, Ajit Singh of Ladwa had been quarrelling with him all the time and the commander of the Ahluwalia contingent was insincere and secretly in league with the British.2 The Sikhs were routed at Aliwal and Ranjodh Singh's force was driven in a shattered condition across the Sutlej to Phillaur where it made a half-hearted attempt to rally, but it was no use, because it was refused all help from Lahore.3 With this defeat, all Sikh influence on the left side of the Sutlei came to an end, while the British prestige was raised considerably. The people who were indifferent or hostile to the British hitherto, now convinced of their ultimate victory, deserted the Sikh cause and yielded to them. All the forts along the Sutlei opposite Phillaur fell into the hands of the British, so that the left flank of the Sikhs was now completely exposed to danger. Under these circumstances, Colonel Chet Singh, the commander of the Ropar-Anandpur front, was also compelled to stage a retreat across the river.4

The effects of the Aliwal defeat on the policy of the Lahore Government were much worse. Raja Gulab Singh who had been appointed Prime Minister with the specific object that he would lead the Sikhs in the war, now openly refused to undertake that responsibility. Instead, he reproached the Sikhs for rashly entering upon the hostilities and opened

^{1.} Cunningham, p. 275, For: 1846 Sec. Progs. 26th Dec., 342: Memorandum of Intelligence, 27th Jan., 1846.

^{2.} For: 1846 Sec. Progs. 26th Dec., 334, 363 & 368; Cunningham, p. 276: He says that "Ranjodh also was insincere, because he headed those who fled away after firing a straggling volley only." No. 581 of the above Consultation contains letter s sent by the officers of the Ahluwalia troops from Phillaur, assuring the British of their assistance.

^{3.} For: 1846 Sec Progs. 26th Dec., 333 & 370.

^{4.} Ibid., 347 & 370.

negotiations with the English. But the English would not make any peace, unless and until the formidable Lahore army was disbanded. It was not in the power of the Raja to promise that, but an understanding was reached that the "Sikh army should be attacked by the English, that when beaten, it should be openly abandoned by its own government, and further that the passage of the Sutlej should be unopposed and the road to the capital laid open to the victors." "It was under such circumstances of discreet policy and shameless treason that the battle of Sobraon was fought," writes Cunningham.

The bulk of the Khalsa army, which had been in the meantime assembled near Sobraon for the final trial of strength with the British and which was engaged day and night on the erection of fortifications round its proposed site of battle, was also adversely affected by the tragic results of Aliwal. Their spirits were damped and several of them fled away to their homes.3 Raja Gulab Singh put them into a state of suspense and uncertainty by issuing orders for withdrawal from the left bank of the Sutlej.4 Raja Lal Singh and Tej Singh who could not be replaced for want of better leaders, were thereby encouraged in their treacherous designs. On the eve of the battle, Lal Singh sent to Lord Gough a full report "on the position and nature of the entrenchments and the account and disposition of troops and guns," through his confidential agent Shamsuddin.⁵ Sometime earlier, Tej Singh had sent a secret agent, Ram Das, to the same gentleman conveying that he was unwilling to fight and would not fight and requesting that the reply should be sent orally and not in writing.⁶ No wonder, therefore, that some valuable opportunities were lost. Mouton

- 1. Cunningham, p. 278; For: 1846 Sec. 26th Dec., 363, 367 & 370.
- 2. Cunninghan p. 279; Malleson, p. 368.
- 3. For: 1846 Sec. Progs. 26th Dec., 370—Punjab Intelligence, 4th Feb., 1846.
- 4. For: 1846, Sec. Progs. 26th Dec., 370 & 367—Punjab Intelligence, 4th Feb., 1846.
- 5. For: 1846 Sec. Progs. 26th Dec., 889. A little earlier, Raja Lal Singh had fled away. He had been arrested and brought back by them. Suri, p. 85.
- 6. For: 1846 Sec. Progs. 26th Dec., 321; Suri, pp. 83-84. Other officers showing defeatist mentality were all the time trying to demoralise the men.

complains1 that his sound advice to Tej Singh not to accept any battle with the river in the rear and either to withdraw to the right bank or to make a bold attack on the enemy before he was reinforced from Delhi or rejoined by Harry Smith, was not accepted, and a course of action was adopted which was bound to lead to the disasters which followed. The British completed their preparations and chose their own time for attack. The Sikhs were surprised,2 when the attack was made, owing to their habit of withdrawing their advance pickets during the night. All the same, they put up a gallant fight at Sobraon. But at a critical moment, their commander-inchief turned turtle and ran away from the field. says that after his flight the Sikh commander even sent orders to all his generals to abandon their troops and join him, but only one obeyed him. There is a belief that Tej Singh was also responsible for sinking the central boat in the bridge which resulted in the general slaughter of the army by the British.3

Immediately after the battle of Sobraon, the British crossed the Sutlej. Nothing was done to defend the passage of the river, though frantic appeals were made by Mouton and other like-minded people in the name of honour and fatherland.4 The army tried to rally, but strict orders were sent from Lahore, "peremptorily forbidding the troops to fight during negotiations."5 Strictest measures were also taken against the entry of any of the defeated troops into Lahore.6 Raja Gulab Singh hastened his peace parleys and concluded the Treaty of Lahore 1846, which recognised the sovereignty of Maharaja Duleep Singh over a considerably reduced Panjab. Raja Gulab Singh, Raja Lal Singh and Tej Singh were all rewarded for their meritorious services to the British.7 Gulab

^{1.} Rapport, p 7. Mouton also mentions that at his suggestion a plan of attack on the enemy on the fourth February was adopted. However, the attack could never take place, because the troops, instigated by a general who was an enemy of Tej Singh, refused to come out from the camp on the pretext that they were being led in the open country for the purpose of an easy surrender to the English. According to Ajudhya Parshad, there was utter confusion in planning on the eve of this battle. "Every scheme revealed their lack of intelligence, imprudence and folly." Suri, p. 86.

^{2.} Mac Munn, p. 207.

3 & 5. Rapport, pp. 8 & 9.

4. Cunningham, p. 284.

6. For: 1846 Sec. Progs. 26th Dec., 370—Lahore, Feb., 13, 1846.

7. For: 1846 Sec. Progs. 26th Dec., 389.

Singh was given the independent rule of Jammu and Kashmir, Lal Singh a certificate¹ and Prime Ministership of the new regime and Tej Singh an important position in the new Lahore Government.

To sum up, it may be observed that the strategy of the Sikhs in the First Anglo-Sikh War was offensive in nature, though tactically they preferred the defensive and made extensive use of topography and artificial impediments. All their principal moves, such as crossing the Sutlei without declaration of war, laying siege to the British cantonment at Ferozepore, marching upon Ferozshah and Mudki and holding out a threat to the enemy's line of communications, possessed the offensive character. But unfortunately, owing to the absence of honesty of purpose in the function of the higher command, this element of strategy could not be suitably developed. The interests of the chiefs and the men being widely divergent, they could not pull their weights together and under the circumstances, the main burden of conducting the war fell upon the regimental panchayats which were, however, seriously handicapped by the non-cooperative attitude of their Generals and their Government. The atmosphere being such, no serious thought was given to planning, whether of operations or of logistics, and the entire campaign was carried out in a haphazard manner. All sound principles of strategy were cast to the winds, the only brilliant move in the whole war being the march of Ranjodh Singh to sit astride the line of advance of Sir Harry Smith and to threaten the British line of communications with their rear, though even this fell through on account of weak execution.

Second Anglo-Sikh War (1848-1849)

The second war started as a mere rebellion against the Lahore Darbar, led by Dewan Mool Raj's troops and the Attariwala Sardars on account of their personal grievances, though later on the prevalence of a general disaffection in the country arising from various factors,2 converted it into a wide

^{1.} Rapport: "All the three generals, who conducted the army, betrayed the interest of the army." p. 10.
2. Such as the disbandment of the major portion of the earstwhile Khalsa army, the maltreatment meted out by the British to the Queen Mother, the tightening of the British control over the Lahore Kingdom, the

spread movement, aiming at expulsion of the British. And because it began as a rebellion, the Sikhs suffered from number of handicaps and limitations in organising their operations. Firstly, the resources at their disposal were extremely restricted. They did not and could not have enough arms, particularly cannon. A good part of the country was practically closed to them, and on account of monetary difficulties, they found it hard to pay their men and arrange for adequate supplies. Secondly, the presence of Englishmen here and there in the country, such as Edwardes, Abbot, Nicholson, Major Lawrence and Herbert, created great embarrassments for them. Not only were all their activities regularly reported by these gentlemen to the higher British authorities, but also the Sikhs were obstructed and set at naught almost at every step, the most typical case being that of Chatar Singh who remained stranded for several months near Attock. Thirdly, there were considerable difficulties in the matter of coordination and cooperation in their operations. The various outbreaks, which occurred at different places, could not be regulated and timed correctly, so that they remained in the nature of spontaneous and spasmodic outbursts, almost unrelated to one another, with the result that they could be easily handled in isolation by the enemy. Take the Multan affair which occurred in early 1848. Right from its inception, Dewan Mool Raj wrote letters after letters and sent emissaries after emissaries in different quarters in order to secure support for his cause, but it remained an isolated affair. Constant endeavours of several months even failed to bring any of the Sikh chiefs to his aid. Sher Singh could not decide until September as to what course he should adopt. His father, Chatar Singh, was quiet until August and after that was too much entangled in his own complicated situation to be able to do anything for Mool Raj. Similarly, there was a quiet at Peshawar for a long time and the emissaries Mool Raj sent there were awarded exemplary punishments. Like the Multan affair, the movement of the Attariwalas also, when it arose several months later, remained cut off from

belief of the Sikhs that they had not been fairly defeated in the previous war and the delay in the reduction of the Multan outbreak.

many other outbreaks such as risings of the chiefs in the Bari and Bist Jullundur Doabs and the Kohistan regions.

The handicaps above mentioned were aggravated by the bad leadership provided by Dewan Mool Raj, Sher Singh and Chatar Singh. There was certainly no suspicion of treachery¹ against them and in that respect they were much better than the leaders of the First Sikh War, but their incompetence was hardly less culpable. Col. Malleson has said: "No troops could have fought better than the Sikhs fought, no army could have been worse led than the Sikh army was led. Shere Singh's leadership was a leadership of lost opportunities."

Malleson's remarks about Sher Singh apply as well to Dewan Mool Raj. He lost his first opportunity when he evacuated Leia under a false alarm of the Bahawalpur army's march against Multan. Leia was the capital of the Doab between the Indus and the Chenab and its capture by the British struck a heavy blow to the prestige of Mool Raj and prevented hundreds of Pathan mercenaries from flocking to his standard. On the other hand, Edwardes was enabled to enlist the support of the Belochis and the Pathans against Mool Raj and he raised a big levy of them.3 The Dewan suffered his second failure, when his entire fleet of boats opposite Dera Ghazi Khan was captured by an advance party of Edwardes and General Cortlandt, with the result that he could neither cross the river to strike at the enemy nor prevent his crossing. His decision to withdraw his force from the Indus in view of the threat by a Bahawalpur force4 in his rear and to defeat the enemy in detail was a sound one, but again he failed to act expeditiously. He could have easily, were he prompt enough, crushed the Bahawalpur army before the arrival of Edwardes to its help,⁵ but he missed this golden opportunity and was himself driven back by the combined armies Edwardes, Cortlandt and Bahawal Khan and confined within the city of Multan.6 Thereafter, his whole strategy was to

^{1 &}amp; 2. Malleson, p. 434.

^{3.} Burton, p. 49.

^{4.} Burton, p. 54.

^{5.} Through the Sikh War, p. 272.

^{6.} Burton, pp. 55-57.

keep the enemy from entering this city. It may be noted that Mool Raj had superiority over the enemy in the beginning, but through "vacillation and lack of enterprise" he threw away all his chances.1 Mr. Edwardes has well said about him: "The rebel movements show occasional flashes of military skill and enterprises in their design, but they invariably fade away when it comes to execution and end in a weak retreat."2

The operations of the Dewan were, however, comparatively minor. With the declaration of Raja Sher Singh to join the uprising on 14th September 1848, the campaign witnessed the commencement of "a new epoch" and "the beginning of the real Panjab campaign."3 After revolting, first instinct of Sher Singh was to go to Hazara and join his father, but finding his troops averse to this and more disposed to join Mool Raj, he revised his idea, but Mool Raj, who had grave doubts as to his bonafides, refused to admit him into Multan, challenging him to encamp in the Hazuri Bagh under his guns or to attack Edwardes to prove his sincerity.4 Sher Singh, therefore, decided to move northwards and actually left Multan on 9th October in the direction of Gujrat where he expected to gather the Khalsa⁵ and to be joined by his father and perhaps also Maharaja Gulab Singh's troops. his haste, he cast away a golden opportunity of attacking the British camp in the rear, cutting their line of communications and supplies and capturing their siege train.6 All the same, his move northward, in which he completely outwitted General Whish,7 the British Commander at Multan, "was strategically a good one, throwing the whole weight of the Sikh force to the north-west front of the disaffected Manjha country with the Multan thorn on the British flank, the great Panjab

^{1.} For: 1848 Sec. Progs. 7th Oct., 260—Edwardes to Currie, 27th May, 1848.

^{2.} For: 1848 Sec. Progs. 7th Oct., 291.—Currie to Elliot, 22nd June, 1848.

^{3.} Gough and Innes, p. 185. 4. Gough and Innes, p. 185; For: 1848, Sec. Progs. 7th Oct., 615. Edwardes to Currie, 14th Sept., 1848.

^{5.} Gough and Innes, p. 185; For: 1848 Sec. Progs. 25th Nov., 201 (intercepted correspondence of Sher Singh).

^{6.} Panjab Papers-Napier to the Resident, September, 1848; Maj-General Newall, pp. 37 & 39; For: 1848 Sec. Progs. 7th Oct., 615. Edwardes to Currie, 14th Sept., 1848.
7. Durand, Vol. II, p. 69.

rivers to aid Sher Singh in his own warfare and his rear supported by the Afghan Power, of which Chatar Singh was securing the alliance by the cession of the much Peshawar District." Not only Multan was not a strong country in which to operate, but also it was too poor to feed the large levies which he intended to raise.2 He was already experiencing difficulty of supplies even for his small force, for wheat flour was selling there at the rate of 6 seers for a rupee.³ On his starting from Multan great pressure was exerted on him by his men that he should go to Manjha, but he could not be deviated from the course he had already selected. Similarly, his sending a small body of his cavalry towards Lahore, which burnt a few of the boats of a Ravi bridge near that city, was "a mere feint", meant only to cause some panic4 and was no indication of any design on his part to deviate from his chosen line and attack Lahore, though it has been said that there was a very good opportunity for doing so. Had he made a whole-hearted attack upon the capital with all his force, he might have achieved success, for the city was very weakly defended and its population was hostile to the British.5 However, Sher Singh did not adopt this course, thinking that his small army of 900 infantry, 3400 cavalry and some guns⁶ was hardly adequate for the task and that before making any such attempt, he must possess a much stronger force. Therefore, he devoted himself entirely to rousing the Khalsa in the name of religion through proclamations and inflammatory7 letters and to effecting a junction with his brother Avtar Singh's force and the Bannu troops, already on the way to meet him somewhere near Jallalpur. But things did not turn out to be exactly what he had expected. There were a number of impediments which hampered and slowed down the implementation of his plans.8 The

Gough and Innes, p. 185. I.

Durand, Vol. II, p. 69.
3. Panjab Papers, p. 387.
4. Fortescue, Vol. XII, p. 431.
5. For: 1848 Sec. Progs. 25th Nov., 148; Currie to Gough, 24th

Oct., 1848.
6. Gough and Innes, p. 185.
7. Panth Parkash, Part III, pp. 516-517, Panyab Papers, pp. 361, 411 and 413 (copies of letters to Bikram Singh of Una, the Sodhis of Anandpur, the Raja of Patiala and many other chiefs)—For: 1848 Sec. Progs. 25th Nov., 236. 8. Panjab Papers, p. 401.

chief among them were the hostility of the people of the area through which he passed, the delay in the arrival of the Bannu troops and the inability of his father to join him as promised, due to his entanglements near Attock. When he reached Ramnagar, he stopped his onward march and took up a strong defensive position on the banks of the Chenab. The British Resident at Lahore, who had all the time since Sher Singh's departure from Multan been fearing an attack upon Lahore, was now apprehending, because of the petty demonstrations made by Arjan Singh, Jawahar Singh and Lal Singh Morarea, that the Sikh leader would take Gujranwala into his possession and thereby would not only ensure his own supplies of men and provisions but also deprive the British of their prospective base of supplies.1 But Sher Singh did not consider it prudent and preferred to keep the bulk of his army strongly entrenched on the right bank of the Chenab, with a strong detachment at Ramnagar to serve as an advancepost and to help in drawing supplies from the fertile Rechna Doab. The reason for this preference of his was that "in this position he could intercept Gulab Singh's movements, if favourable to the British or a junction was secured, if Gulab Singh was amicably disposed to the cause of revolt. Communications with Chattar Singh were covered and reinforcements of men and guns could be looked for from Peshawar (as soon as Attock should have fallen) for the final struggle."2 It was at first the intention of Lord Gough to tempt him to cross over to the left bank of the river and to defeat his army in detail,3 but all his attempts failed. Then he with the whole of his army upon Ramnagar. Not wishing to risk any action there, Sher Singh withdrew his detachment from the town of Ramnagar.4 However, the English troops, who tried to follow their retreat, provoked an action. action, known as the battle of Ramnagar, was won by the Sikhs and heavy casualties were inflicted on the British ranks, with the result that the passage of the river by the British by the ford in front of the Sikh army was prevented. Frustrated

4. Malleson, p. 396.

For: 1848 Sec. Progs 25th Nov, 113 & 137.
 Durand, Vol. II, p. 69; Rait, p. 181.
 Rait, p. 176; Fortescue, Vol. XII, p. 432.

here,1 Lord Gough planned to cross the river by some other ford higher up and make a flanking move and despatched a division of his army under General Thackwell for this pur-Sher Singh had taken sufficient precautions to guard the fords of Ghurriki, Runniki and Ali Shah ki Chuk, but unfortunately, had left that of Wazirabad undefended.2 The inability of the Sikhs to get timely information about this move and to adopt requisite measures for countering it was indeed one of their greatest strategical failures. There was so much din created by the marching British troops and their camp followers that but for their faulty habit of trusting too much to the darkness of the night and withdrawing their guards during nights,3 they could have easily discovered this move. Similarly later on when the enemy was crossing the river by the ford of Wazirabad, they could have, without much effort, rendered "the attempt fatal, had they been on the alert."4 The flanking move of Thackwell was a complete surprise for Sher Singh who learnt about this only when the enemy had a considerable distance towards him. already covered Malleson says that "the idea which now flashed across his mind, was an idea worthy of a great commander. He resolved to march at once to crush Thackwell before Gough could possibly come to his support. He could then deal with But soon his courage failed him. Instead of leading the bulk of his army to an immediate and vigorous attack on Thackwell-a measure most essential to his success-he left the bulk behind to guard his rear against any possible crossing by Lord Gough and marched with only 10,000 men (failure to apply the principle of concentration). It was a half-measure which had the least chance of success.6 though he showed an utter lack of audacity and missed one of his rarest opportunities on this occasion,7 the rapidity with which his move was conducted and the skill with which he selected a strong position against the enemy have been greatly

Rait, p. 188.
 Mac Munn, p. 241.
 & 4. Malleson, p. 403.
 Malleson, p. 405.
 Malleson, pp. 405-406.
 Gough and Innes, p. 213; Malleson, pp. 405 & 408; Calcutta Review, Vol. XV, p. 266; Henty, p. 310.

admired by military historians like Fortescue, Col. Burton and Malleson. After their failure at Sadulapur, it was impossible for the Sikhs to stay there any longer, unless they wanted to be between the two fires of Thackwell and Gough's forces.2 Hence their falling back upon the strong natural ground on the left bank of the Jhelum was imperative, even though the barrenness of the new place was bound to involve them in serious difficulties of supplies. The retreat was carried out with commendable mobility. The Sikhs were already "composedly taking up new positions", when Lord Gough was still crossing the Chenab.3 However, the manner of the retreat was rather disorderly4 from the fact that it had been conducted stealthily and hurriedly under the cover of darkness.

After crossing the Chenab the British halted at Heylah, a long way off from the camp of the Sikhs. The situation for them was indeed very grave. Their commissariat arrangements had run into difficulties and their communications had been rendered insecure by certain risings of Sikhs in the Jullundur and Bari Doabs.⁵ Moreover, there was no available reserve and Gough had doubts whether he had sufficient strength to attack the Sikhs on the Jhelum until the fall of Multan. For all these reasons, Dalhousie had absolutely forbidden further advance, "except for the purpose of attacking Sher Singh in his present position, without permission sought and gained from the Governor General."6 Sher Singh took advantage of this forced mactivity of the British by securing the fords and boats of the Jhelum and by building up defensive works of an extraordinary character. When free from this, he advanced 10,000 men to Dinga, as if to threaten the British communications by way of Wazirabad, but it was just a feint,7 for in a few days the Sikhs retired. It was not followed by any other such attempt, for Sher Singh's policy at this time was,

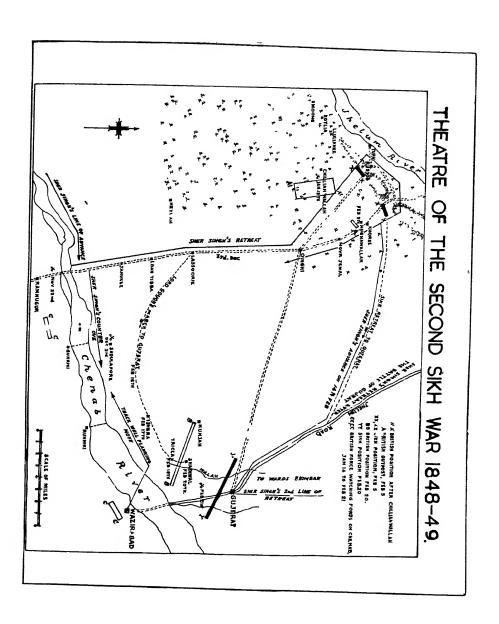
Gough and Innes, p. 213.
 Through the Sikh War, p. 312; Rait, p. 197.

Durand, Vol. II, p. 75; Gough and Innes, p. 213; Rait, p. 202.

^{4.} Panjab Papers-Gough to Governor General, Dec. 5, 1848.

^{5.} Panjab Papers, p. 535; Burton, p. 119; For: 1848 Sec. Progs. 30th Sept., 104, 188, 218, 250.

Fortescue, Vol. XII, pp. 442-443.
 Fortescue, Vol. XII, p. 448.



as far as possible, not to have a fight until the arrival of his father's force. His feeler communicated to the Governor General through Major Lawrence, one of the prisoners with him, was nothing more than a device to gain time.1 This policy of Sher Singh was not unwise, because the fall of Attock was imminent and he could reasonably look forward to an early junction with his father. The fort of Attock which surrendered to the Sikhs on the 10th January 1849, however, very much excited the British Commander who suddenly became anxious to abandon his inactivity and attack Sher Singh before he was reinforced by the Peshawar force.² Sher Singh thus got the fight on his own chosen ground and fully justified the soundness of his policy by practically crippling the enemy in this battle known as the battle of Chillianwala.3 This time the Sikhs had been very alert. There was no surprise for them. They were already drawn up in battle array, when the British arrived at Chillianwala and successfully provoked them to an afternoon action.4

After Chillianwala, there were many favourable opportunities for Sher Singh. The British had been given a sound thrashing and Lord Gough was no longer in the fighting mood. On the contrary, he thought it "impolitic to attack until reinforced from Multan" and decided to sit still in a strongly entrenched camp at Chillianwala. His supply difficulties were even greater than at Heylah, while the rear of his army was still insecure on account of the Sikh risings at Pathankot, Una, Kangra and Nurpur. As regards Sher Singh, he received, only a day after the battle, reinforcements from his father and the Afghans and as the result thereof attained the maximum possible concentration of troops under him. It was therefore high time that he had made a bold and vigorous attack upon the enemy. Bur unfortunately, he wasted all his chances. His

- 1. Panjab Papers, p. 456.
- 2. Durand, Vol. II, p. 75.

- 5. Fortescue, Vol. XII, p. 461.
- 6. Mac Munn, p. 262.

^{3.} Fortescue, Vol. XII, p. 458. "In England it was set down by the official mind as a disaster and within 48 hours it was determined to send Sir Charles Napier to command the Indian army."

^{4.} Durand, Vol. II, pp. 78-79; Fortescue, Vol. XII, p. 451; Annual Register, 1849, p. 378.

career after Chillianwala was a series of failures. "He had two courses before him; the first, by a rapid movement across the Chenab to turn Lord Gough's position and fall upon Lahore; the second, to strengthen his position at Rasul and to tempt the English leader to attack him." Subsequent events proved that he should have taken to the first course. Had he acted promptly, he might have turned the flank and crossed the Chenab, thereby forcing a retreat upon the British as well. This might have also saved him from the supply difficulties then being experienced at Rasul. But unfortunately, he did not think along these lines and preferred the second course from his knowledge of Lord Gough's character and the ease with which that General had succumbed to his temptations on earlier occasions.2 And taking this line, he devoted himself to the further strengthening of his works at Rasul and to the provocation of the English Commander. Skirmishes were an every-day feature, as their ghorchurra patrols carried on a ceaseless campaign of harassment against the enemy.3 After the fall of Multan on 22nd January 1849, these activities were intensified with the object of bringing Lord Gough to an immediate battle. "Like Massena before Torres Verdras, Sher Singh used every wile to lure Gough to a pitched battle," but all in vain.4 The failure seems to have made him rather desperate, because, in utter disregard of considerations of security, he now released his British prison ers on parole to carry his terms to Lord Gough. But this move also failed, as the British demanded nothing short of an unconditional surrender.⁵ All these failures plus his increasing inability to feed his large host in the barren regions of Rasul ultimately obliged him to give up his extraordinarily strong position⁶ and make a bid to turn the British flank and cross

^{1.} Malleson, p. 423.

Malleson, p. 423.
 Subaltern, pp. 119, 129 & 133; Archer, p. 83; Durand, Vol. II,

<sup>95.
4.</sup> On 11th Feb., Sher Singh actually attacked Gough's right with his horse, but the attack was not developed. It proved only to be a feint for his march towards Gujrat next morning. Earlier, he had made for Khori and moved southward upon Dinga, as if to threaten Gough's communications.
—Mac Munn, p. 266; Rait, p. 265; Fortescue, Vol. XII, p. 461.
5. Subaltern, p. 124; Archer, p. 81; Gough and Innes, p. 241.
6. Subaltern, p. 139; Mac Munn, p. 262; Rait, pp. 262 & 267;

Archer, p. 84.

the Chenab at Wazirabad. But it was too late. He did succeed in giving a slip to the enemy, but then could not ford the Chenab, because the enemy had already posted a very strong detachment there, thus making any passage "too dangerous and problematical an operation to be attempted." He consequently caught in a trap. 1 As the Multan force not yet joined Lord Gough and as the latter had given up his entrenchments and was moving towards him by short marches, the best policy for him would have been to make an attack himself.2 But he did nothing of the sort and sat idle at Gujrat, so that Lord Gough could safely unite with his Multan reinforcements and choose his own time of attack without any interruption. Sher Singh's decision to have the engagement in the open plain of Gujrat was also a great strategical blunder, no less than "madness" according to Thackwell.3 Henty has attributed it to the little success of Chillianwala that had made the Sıkhs vain and over-confident.4 As feared, the battle proved to be disastrous and the Sikhs fled away in utter confusion, leaving their entire camp standing. The Sikh commanders effected their escape across the Jhelum where Avtar Singh with a few guns had been left to guard the ford and the boats to cover their retreat in the eventuality of defeat⁵ and made a show of rally, but the prospect of a continued struggle in the country beyond the Jhelum, inhabited by the unfriendly population of Pathans, being absolutely bleak and hopeless, surrender was made at Rawalpindi. Thus came to an end the Second Sikh War which offered several chances to the Sikhs to secure victories over the British arms, all of which had been thrown away by their weak and incompetent leadership, which had excellent fighting material but did not know how to utilise it.6

To sum up, the Second Sikh War, despite several handi-

^{1.} Rait, p. 267; Thackwell, p. 203; Durand, Vol. II, p. 98.
2. Rait, p. 269; Malleson, p. 427. "They had the opportunity, because now the positions were reversed, and they occupied the point in the centre of the circle. But they could not nerve themselves to the enterprise."

^{3.} Thackwell, pp. 195-196.

^{4.} Henty, p. 350; Rait, p. 284.

^{5.} Durand, Vol. I, p. 127.

^{6. &}quot;Unlike their followers, it is said that the majority of the Sikh chieftains early in the day deserted the field and fled away towards Jhelum." Archer, p. 99 (Battle of Gujrat).

caps and limitations, was on the whole better conducted than the First Sikh War, the Sikh leadership during the second war possessing undoubted honesty of purpose and integrity—qualities which were lacking in its counterpart during the first war. There was, for instance, in the Second Sikh War, a better system of control and command, a more organised manner of troop movement and a more efficient organisation of security arrangements. However, there were some serious shortcomings in the organisation and conduct of the operations by the Sikhs, which made their defeat inevitable. Their strategy was, like their tactics and unlike their strategy in the First Sikh War, of a defensive character, which, no doubt occasionally useful, deprived them of initiative to make full use of their opportunities. At the outset of the campaign, Lahore was most weakly defended and Sher Singh could have reduced it, had he planned out a bold offensive. Similarly, at Sadulapur there was an excellent opportunity for the Sikh leader to exploit the division of the enemy force into two parts, separated by a broad river and with no prospect of an early reunion, by concentrating the bulk of his army against Thackwell. But lacking self-confidence requisite for a bold action, he merely made a demonstration so as to provide a cover for his precipitate retreat during the following night. Similarly, the defensive position of Sher Singh on the eastern bank of the Jhelum may be justified before the battle of Chillianwala, but there seems to be no such justification for his passivity after this battle. Lord Gough at that time was on the defensive, anxiously waiting for the Multan troops to arrive. On the contrary, Sher Singh had been strongly reinforced by his father, so that he was in a position to make an attack, but he wasted his opportunity, contenting himself merely with harassing tactics and empty threats which produced no effect on the determined British Commander. The only move which had the appearance of a strategic offensive was the march of the Sikhs in the direction of Wazirabad in a bid to cross the Chenab and threaten the rear of the enemy, but even this move was executed so unskilfully that instead of gaining an advantage, they were entrapped at Gujrat, the British having forestalled them and blocked the passage of the river beforehand. the organisation of operations in regard to cooperation, coordination, security and secrecy etc. also left much to be desired. There was no cooperation between Dewan Mool Raj the Attariwala Sardars, with the result that the two principal theatres of war remained unrelated, with consequences disastrous for both. Moreover, the desertion of General Ilahi Baksh in the midst of the war shows that all was not well with the mutual relations of the commanders. Similarly, there was no proper coordination between the various uprisings that occurred at Pathankot, Nurpur and Una and the operations pursued by Sher Singh. Properly timed and coordinated, these uprisings might have offered a far more serious threat to the British rear. The security arrangements of the Sikhs also suffered from a serious flaw. Their habit of withdrawing their advance posts during the night was known to the enemy who tried to exploit it, whenever he could. The surprise sprung upon the Sikhs by the British at Sadulapur was directly the outcome of this shortcoming of theirs. Besides, the release of the British prisoners on parole by Sher Singh in the course of the campaign may prove that he was a good man, but it in no way adds to his reputation as a general, as the released prisoners used, rather misused, the opportunity to acquaint their fellow-countrymen about the weaknesses and difficulties of the Sikhs. In respect of mobility, however, the campaign was undoubtedly noted for a number of brilliant feats, though even in this case, much of the credit would vanish, when it is recognised that this element of strategy was seldom harnessed to the purpose of any bold and vigorous scheme of attack.

CHAPTER X

IN RETROSPECT

The military system of the Sikhs in its ultimate shape may be termed the Franco-British system in an Indian setting. Once he was convinced of the superiority of the European mode of warfare, Ranjit Singh applied himself with zeal to the building up of an armed force similar to that of a European nation and was successful in raising a huge corps comprising infantry, artillery and cavalry, which he called by the name "Ain" (regular) to distinguish it from the rest of The interior economy of his regiments, battalions and batteries was wholly European. The entire regular army was divided into brigades, as was the custom in Europe. training system employed was borrowed from both the French and the British, mostly from the former. The same weapons were introduced as were in use in European armies, and for their supply the advanced western technique was adopted to avoid any dependence upon foreigners. Having a similar training system and similar weapons as the Europeans had, it was but natural that the Sikh tactics should also conform to the ones adopted by their European counterparts. All such tactical formations as squares, lines, columns and echelons were borrowed from the west. Other aspects in which Franco-British influence was most pronounced were clothing, equipment and the system of payment. Not only the idea of uniformity of dress and equipment was copied from them, but the very pattern in vogue among the Europeans was over with a few modifications. The system of calculating the pay on the monthly basis was also a western institution. European influence is further noticeable in the layout of the camps, the marching order, the barrack system and the mess practice of the Sikhs. The notion of having an organised and efficient supply system was also west-inspired, organisation actually introduced bore the imprint of Ranjit

Singh's genius. Other institutions taken over by the Maharaja from the west were emblems such as the Star of Prosperity of the Panjab and the Napoleonic tri-colour.

In addition to the regular army, the irregular force was also affected in some of its branches by European ideas. Trained battalions and European weapons were introduced in the jagirdari contingents, whereas several of the units of irregular infantry had a great deal in common with the battalions of its regular counterpart.

But while the bulk of the Sikh army was constituted of the regular troops trained and disciplined on the western model, the major portion of their irregular army, several aspects of their army administration, their strategy and a part of their tactics remained unaffected by European thought. Inspite of his fondness for everything European, Ranjit Singh could not, for reasons of history, completely cut himself adrift from the art of warfare prevalent in the country before him, and making virtue of a necessity, he retained and improved upon some of its important aspects which were skilfully blended with the western technique of fighting. To take the irregular army first, leaving aside certain units of irregulat infantry, which were supplied their requirements by the government, all troops belonging to this branch had to find their own horses, weapons, clothing and equipment. In the matter of training, they were left to their own initiative, as they were not prepared to benefit from the European system of military instruction. As regards army administration, there was no western impact on the systems of recruitment and discipline. No written military code was in use in the Sikh army. In the matter of payment, the tankhwah system, the land assignment system, the practice of keeping men long in arrears and the custom of making heavy deductions were wholly indigenous practices which had widely prevailed in the 18th century. The practice of granting rewards and titles was inherited from the Mughals and Marathas and not from any western power. Similarly, the practices of granting leave to an entire during the rainy season and remobilisation of the entire fighting force on the occasion of the Dusehra Festival every year were vestiges of the old system forming part of the heritage of the Sikhs. In the matter of supply services, Ranjit Singh evolved his own system and owed very little to the west. In the field of tactics, there was an attempt at a combination of tactics of the east and the west, while in the sphere of strategy, the Maharaja followed the dictates of his own conscience and intellect and seldom consulted his European officers who were "kept more as drills (drill masters?) than as advisers."

The military system thus built up by marked a distinct improvement upon the 18th century systems as pursued by the Mughals or the Marathas. The indigenous systems had lost their original vigour and efficiency and showed symptoms of a creaking weakness particularly in the field of control and command. The Mughal central authority was cracking and the governments, whether in Delhi or elsewhere, constituted as they were, were not strong enough to ensure unity of control or command, with the result that they were unable to enforce discipline on their soldiery which indulged freely in acts of arson and brigandage. For the same reason there was little coordination in their tactical or strategical manoeuvres and the component units largely went their own way. Besides, there were no administrative services worth the name and the troops were usually left to themselves make whatever arrangements they could for the supply their clothing, equipment, arms, food and fodder. Nor was it always easy for them to buy all their requirements, because of the casual and irregular manner in which their salaries were paid to them. No wonder, therefore, that they exhibited a great propensity for plunder, particularly during their marches in a campaign where they had generally to live on the country. The whole warfare had become, so to say, disorganised and unscientific. Another serious defect in the local military systems of the 18th century was that the armies had generally come to be manned by mercenaries, on whose allegiance little reliance was placed. Yet another defect, which marred the efficiency of these systems, lay in the constitution of the army itself. With cavalry as the major arm in which the horse and weapons, being the private property of the soldier, were a source of great weakness in the battle-field and with a weak artillery and no infantry worth the name, the Indian forces soon failed to be

a match for the Europeans who possessed better arms and relied for their strength on a combination of efficient infantry and artillery. Subsequent attempts of some of the Indian states to strengthen their fighting machines by raising a few trained battalions and batteries on the model of their western opponents proved abortive and the situation, instead of showing any improvement, grew worse. They had come to possess thus, not the best, but the worst of the two systems, Indian and European. The reason for this was that these states were deficient in the most essential requisites of the newly introduced European system, such as a strong, effective and centralised government, efficient instructors, and scientific technique of the manufacture of weapons.

Ranjit Singh, ambitious as he was, did not feel satisfied with the state of affairs he found at the threshold of his reign. He built up a formidable armed force under his own direct control and command. All military matters, organisational, administrative, tactical and strategical, were conducted under his personal and direct supervision, with the result that his wars, as compared with those of the 18th century, were waged in an orderly and organised manner. He set up an efficient system of training and grudged neither money nor time to make his prople have the maximum benefit out of it. He also established a number of workshops where an advanced technique was employed for the manufacture and repair of arms, ammunition and equipment, which, when ready, were properly stored in magazines and arsenals. Moreover, a well-regulated system of food supply was organised, so as to eliminate the element of predatoriness from his warfare. 1 Moreover, the composition and organisation of the army were greatly improved. An overwhelming majority of the soldiery was drawn from amongst the Sikhs who were not mercenaries, but who, on the contrary, regarded themselves as co-sharers in the glory which was symbolised in the establishment of the Sikh rule at Lahore, so that the morale of the army rose

^{1.} It may, however, be remembered that the efficiency of Ranjit Singh's system suffered heavily after his death, because then there was none strong enough to control and manage the powerful army he had built up.

tremendously high.¹ In point of organisation, Ranjit Singh remedied the shortcomings of his predecessors and amalgamated the best in the Indian systems with that in the foreign military systems. Such innovations as these greatly elevated the status of the army and rendered its appearance exceedingly impressive.²

But though vastly superior to the Indian systems of the 18th century, the Sikh military system suffered from a number of imperfections. Regular infantry was the best of all arms, "pick of the youth of the country" and "not surpassed by the Indian army." But it was not accompanied by equally efficient arms of artillery and cavalry, which constituted an element of weakness in their warfare. The guns were heavy, very good for fire-effect, but rather difficult for open manoeuvre. Moreover, the Sikh artillery suffered, as Baron Hugel has remarked, from deficiency in gunners.4 Also, though the best horses were assigned to this branch, fault has been found with the carriages which have been described as somewhat rickety. As regards cavalry, the regular regiments, with the exception of Allard's cuirassiers, were, as Steinbach has put it, "very inferior in every respect to the infantry." "While the latter are carefully picked up from large bodies of candidates for service," adds the same writer, "the former composed of men of all sorts and sizes and ages, who get appointed solely through the interest of the different Sardars."5

^{1.} This shows the Maharaja's awareness of the importance of morale, the psychological or moral factor in war, (about the same time this was being stressed by Clausewitz in Europe) in which particular respect, the Sikh army resembled the citizen army of France during the period of the French Revolutionary Wars and was superior to the Indian section of the British army, which was inspired by no higher sentiment than the one of regimental pride.

^{2.} Soltykoff, a Russian, who happened to visit the Panjab and the Simla Hills in 1842 and witnessed a general parade of the Sikh army at Amritsar, describes it as "a magnificent Sikh army", while Sir Henry Durand, writing about the review of a body of 30,000 men by his father and Sir Keene, Commander-in-Chief, in 1842 at Lahore, says: "My father was surprised by its efficiency and soldierly appearance. I did certainly not expect," he wrote, "to see so respectable a force, so good an imitation of European organisation." Monograph 18, Part II, p. 98; Sir Durand, Vol. I, p. 64.

^{3.} For: 1832 Sec. Cons: 21st May, 9-10; Griffin, p. 134.

^{4.} Baron Hugel, p. 329.

^{5.} The Panjab, p. 97.

According to Griffin, it was "as a rule miserably mounted and armed." The horses in this branch have been described by the Adventurer as "undersized and wanting weight, either for charge or for efficiency in draught."2 In the irregular forces of the Sikhs, the best troops were ghorchurras who were much better mounted than the regular horsemen and have been admired by many writers such as John Lawrence, Orlich, Burnes and Baron Hugel. John Lawrence had actually to "confess that they are both better-mounted and finer men than our irregular cavalry." But it must be remembered that these ghorchurras were fit only for the role of light cavalry and could hardly serve the purpose of heavy cavalry which was needed so badly by the Sikhs. Unlike the irregular cavalry, the irregular infantry and the jagirdari levies of the Sikhs were of inferior quality. The latter were, in the words of Lord Gough, "neither in armament nor in discipline at all on a level with the regular army,"4 while in the opinion of John Lawrence the force was "in a great degree both useless and expensive, invariably illpaid, half-armed and unorganised."5 Griffin found its value chiefly in the element of picturesqueness that it possessed in abundance.7 Similarly, there were imperfections in the aspects of training, discipline, control, command, disbursement and provisioning of the troops. Though training was quite intensive, adequate attention was not paid to instruction in the use of the bayonet, which considerably detracted from the tactical efficacy of the infantry. Likewise, in the field of discipline there were some serious shortcomings, on account of which it earned the reputation of "a mushroom military discipline never harmonised parts."7 This, though the weakness in discipline was somewhat compensated by the high spirit permeating the troops, had an adverse effect on the tactics of the Sikhs, with the

^{1.} Griffin, p. 134

^{2.} Adventurer, p. 44.

^{3.} For: 1848 Sec. Progs 25th Feb., 42; For: 1847 Sec. Progs. 31st July, 123.

^{4.} Sikhs and Sikh Wars, p. 66.

^{5.} Panjab Papers, p. 106; For: 1846 Sec. Progs. 26th Dec., 647.

^{6.} Griffin, p. 143.

^{7.} Adventurer, p. 237.

result that they fought rather tumultuously as compared with their European rivals. As regards control, it suffered a severe setback after the death of Ranjit Singh, when the army practically assumed a sovereign role, while command was far from perfect even in the time of the great Maharaja. The inferior quality of the commanders posed more or less a permanent challenge which the Maharaja endeavoured to meet by appointing foreigners and giving special training to the sons and relatives of his Sardars. The state of affairs in this regard grew even worse under the weak successors of Ranjit Singh. mode of disbursement, notwithstanding certain improvements effected by Ranjit Singh, was, on the whole, rather arbitrary and capricious. There was no uniform system of payment and the troops paid by cash were kept long in arrears, which gave rise to disaffection and created frequent mutinies, thereby greatly undermining discipline. The supply system of the Sikhs, though efficient in its working, also left much to be desired. There was no well-established commissariat and the function of the whole supply mechanism hinged on the personality of a single individual, the head of the state. Moreover, the foraging practice of the Sikhs was a serious handicap, which introduced an element of disorderliness into the marches of their troops. In the matter of strategy, the Sikh leaders, like the Marathas before them,1 chiefly depended upon their personal experience of war. There was no treatise on this subject, as also no record of the military experience of the Sikh generals, to provide any guidance. Moreover, the Sikh generals, with their limited or little education, seldom showed keenness to study the science of war as such, though Ranjit Singh personally and some of his generals had a fair understanding of the main principles of strategy.

The imperfections of the Sikh army mentioned above have dismayed some European writers so much that they have wished that the Sikhs had not taken to the European system at all and had given all their thought to the improvement of the indigenous system. One of them has thus observed: "I am inclined to consider that the Maharaja would have shown more foresight, if he had devoted the same attention that he

did to European tactics, to rendering his troops really efficient after their own fashion." But this view is rather exaggerated and reactionary: exaggerated, because it is based on magnification of a few weaknesses in the Sikh system, and reactionary, for it would amount to saying that they should have refused to march abreast of the times. The western military ideas had entered India long before and already the atmosphere was surcharged with them, when the Sikhs established their monarchy at Lahore at the end of the 18th century, so that it is too much to assume that they could have kept themthe influence of the new ideas. selves aloof from Ranjit Singh's instinct to modernise his fighting machine in the light of the rapid changes already taking place in the art of warfare in the country appears to be perfectly logical. He erred not in deciding to go in for them-rather as pointed out earlier he made a contribution by accepting and promoting them—but in failing to assimilate them thoroughly, the failure being due to the equalitarian character of the Sikh community, which rendered the growth of healthy traditions of discipline among its members a bit difficult and lack of competent and sincere commanders. In their final contest with the British the Sikhs were defeated not because they had taken to a foreign mode of warfare, but partly because they were led, rather misled, by commanders of limited ability and doubtful allegiance who were unable to employ the new machine to their fullest benefit and partly because their army, even at its best, was never free from certain serious flaws.

But taking an over-all view, although the Sikh military system suffered from several imperfections, the value of their achievement may be found to lie in that they carried much further the process of reorganisation of the Indian modes of warfare under the impact of the western military thought and practice that had started from about the middle of the 18th century. Indeed, among the whole mass of the Indian powers that attempted to advance this process in the face of the European challenge, the first and foremost place may be accorded to the Sikhs who went far ahead of any other Indian 'country' power in building up, after the fashion of the Europeans them-

selves, a fighting mechanism very nearly equal to the well-trained and disciplined army of the English East India Company. And in this sense, they may be credited with having evolved as powerful an instrument of defence against the continued westward march of British imperialism as perhaps could have been attempted by any of our rulers in the situation of the backward knowledge of science and technology which existed in the India of those days.

GLOSSARY

Afrin A term of applause. Afzal Didar - Of pre-eminent look. Akal God the Timeless. Akali A member of a militant sect of the Sikhs. Literally meaning "an immortal." Akhbar A newspaper or a despatch of news. Akramahi 11-monthly. Amanat Panah Most faithful or trustworthy. Amin-ul-Daula — The trustee of the state. Amir A title denoting a Muslim of high rank. Ard The name of a pulse. Aspi Horse-driven. Astbal Stable. Baisakhi The chief festival of rural Panjab, celebrating the advent of harvesting season, generally falling in the second week of April. Bakhshi A paymaster of troops. Banat Woollen cloth, broad cloth. Bandukchi - Matchlockman. Barawurd Estimate. Barbardari Transport of goods. Bargir A horse soldier who has his horse found him. Basant A seasonal festival of India marking the decline of severe winter and heralding the advent of spring, falling generally towards the end of January or the beginning of February.

A market place.

Spades-man.

- Forced or unpaid labour.

Bazar

Begar Beldar

Bhai Literally 'a brother'. Used also to spiritual denote communal orbrotherhood. A brother, generally applied to the Bhayya people of East U.P., chiefly employed in low-paid jobs in the big cities of Bombay and Calcutta. Bheestees Water carriers. Chaudhari — The chief man of the village, usually rich and distinguished for his sense of justice. Chehra-Nawisi - Preparation of a descriptive roll. Daftari A worker in an office. Here it means a clerk. Daftar-i-Mualla - Exalted or royal secretariat. Dagh A mark branded on a horse. Dahmahi — 10-monthly. Dak - Mail. Dal — Pulse. Darbar A court; an audience hall presided over by the king or the premier or a person of note. Darogha A superintendent of a department. - Home of recovery; hospital. Darulshafa Derah Camp; abiding place. Diwali The Indian festival of lights celebrated in commemoration of the return of Lord Rama from his exile and usually falling towards the end of October or the beginning of November. The head of the finance department, Dewan also a minister, a steward. Dilawar Jang A veteran of proven gallantry. Dharamarth Charity or for charitable purposes. Dhaunsanawaz Drummer. Doaba A territory lying between two rivers which join. Inhabitants of the "Dugar Desh", Dogras situated in the lower hills of Jammu.

Dusehra An Indian festival commemorating the victory of Lord Rama over the forces of Ravana, celebrated by burning the effigies of the latter, generally falling in October. Dwab Cattle, beasts, reptiles. Fakir A mendicant; a religious-minded person devoted to meditation. Farrash A servant whose business it is to spread and sweep carpets and to pitch tents etc. Farrashkhana means the stores of carpets and tents etc. Clearance certificate. Faragkhati Farzand-i-Dilband Son dear to the heart. Farzand -i- Khasulkhas — Most favourite among the sons. Fasalandari Based on harvests. Fatch Jang Victor of battles. Fatch-o-Nusrat Nasib Destined victor. Fauj-i-Khas - Royal Corps. Here it refers to the French Brigade. The corps of irregular cavalry; Fauj-i-Sawari ghorchurras. — The corps without training. Train-Fauj-i-Beqawaid ing here means European training. Elephants. Filan Gharyalees Bell-strikers; time keepers Gazanfar Jang — The lion of war. Ghee Butter clarified by boiling. Ghorchurras Literally horse-riders; cavalrymen who formed the bulk of the irregular divisions in the Sikh army. A gunner; a cannoneer. Golandaz Govi Ox-driven. Literally a book; here used for the Granth sacred book of the Sikhs. Granthi is the reciter of Sikh scriptures. A preceptor; the Sikhs have Guru hierarchy of ten Gurus, beginning with Guru Nanak and ending with

Guru Gobind Singh.

Hakim	 Physician.
Hall	 Present.
H arkara	 A messenger carrying news and
	despatches.
Hazooree	 Attendant upon the king.
Hazbar Jang	 The lion of war.
Hindustan	 India; the land of the Hindus;
	generally referring to the U.P. in
	the 18th and 19th centuries.
H owdah	 A litter; a seat on an elephant.
Ijaradar	 Contract-holder.
Iqbal	Good fortune.
Itmad-ud-Daula	 The stay of the empire.
Jagir	 A fief; land given by government as
	a reward for services or as a fee.
Jaidad	 Property; jagir.
Jazair, Jazail, Jinjal	 Wall piece or swivel mounted on
	a tripod.
Jinsi	 Mixed.
Jhandabardar	 Standard bearer.
Jhool	 A rough quilt used in winter for
	animals.
Kalan	 Big; large.
Kama	Servant, menial.
Kamin	 Low-caste person, menial.
Kanwar	 A Prince; generally denoting princes
	other than the heir-apparent.
Kardar	 An important officer in charge of
	the revenue and local administra-
	tion of a district or taluqa.
Karkhana	 Workshop, place of manufacture.
Kasrat or Kattyanee	 1
Kaukab	 D LAT .
Kerka Basafa	 The purest pupil of the state's eye.
Khalasees	 Tent-pitchers.
Khachran	 Mules.
Khalifa	 A caliph; particularly applied to a
	successor of Mohammad; here
	applied to a Muslim of repute.
Khalsa	 Literally land held immediately

from the government; here used to
denote the fighting brotherhood of
the Sikhs, particularly the followers
of Guru Gobind Singh.

Kharif — Crops of the rainy months.

Khazana — Treasury. Khidmatgar — Servant.

Khilat — A robe of honour generally conferred by princes on persons of rank or distinguished visitors.

Khurd — Small, opposite of Kalan.

Kiladar — Garrison-master.

Kimkhob or kinkhob — Gold cloth.

Kohistanis — Highlanders; generally used to describe the Dogras.

Koh Shikan — Mountain-smasher.

Kos — A measure of distance, variously estimated at about one and a half

or two miles.

Kotwal — The chief officer of the police for a

city or town or camp.

Mahdari — Monthly.

Makki — Name of an Indian crop grown in

the rainy season.

Manjha — Literally the middle country, usually referring to the territory of

Lahore and Amritsar districts.

Mansabdar — Holder of a rank, a Mughal officer.

Maujudat — Things present.

Mir-i-Atish — Commander of the artillery.

Misar — A title or form of address for

Brahmins. Also written as Mishar

or 'Mishra.'

Mistri — An artificer in various ways,

a mason or bricklayer etc. A cobbler, a shoe maker.

Mochee — A cobbler, a shoe maker.

Modi — Officer in charge of food provisions.

Mohitsib — A censor of public morals among

Musalmans.

Mubarzulmulk — Champion warrior of the state.

Munshi

preter or language-master; also title of respect for a literary person. - Officer in charge, one deputising Mukhtarkar for somebody else. Musaidat - Aid, help. — An accountant, clerk or comptroller. Mutsaddi Salaries, rewards, wages. Muwajib Nanakshahi A coin current in the Sikh times of the value of 16 annas. Nazarana An offering or present made to a superior, or a kind of tribute, gifts etc. offered or received by the people of rank or a prince. — The governor of a province. Nazim Nihangs A fanatical sect of the Akalis, devoting their lives to the cause of their religion. Nirmalbudh Of unalloyed wisdom. Nishanchee — Flagbearer. Panchayat A village council consisting of five members for the purpose of adjudication forming the lowest rung in the hierarchy of judicial administration; here used for the executive council of a Sikh regiment elected by the troops. - Pieces of cloth. Parchas Parwanah — An order, a passport, license, command, warrant, grant etc. usually issued by a sovereign or a chief to his subordinates. A kind of fine wool; woollen goods. Pashmina Patraj Bahadur — The honour of the state. Peadah - A foot soldier. Pugree — A turban; a kind of head-gear. Qabuliyat - A deed of acceptance. **Oiladar** A commandant of garrison; the superintendent of a fort.

— A writer, a scribe, secretary, inter-

Q.ilajat Forts. Rabi Name of the Indian crop harvested after the winter. Raja-i-Rajgan Chief of chiefs. Risala A unit of irregular horse. Risaldar is the commander of such a unit. Pertaining to the system of daily Rozinadari wages. Past. Sabiqa Safdar Jang Bahadur - A warrior who breaks through the enemy's ranks. Sair Sipahi Other soldiers, here the term denotes irregular infantry soldiers. . Sair Jamaāt Other groups; here the term denotes constabulary and guards. Samsam-ud-Daula The sword of the state. — Water carrier. Sagga Sarban Camel driver A leader of men, a chief. Sarkund A chief, commander; a form of Sardar address for all respectable Sikhs and Afghan chiefs. A descendant of Hussain, the grand-Sayyed son of Prophet Mohammad. Shahzada Prince. Shamiana A big tent. Shamsher Jang The sword of battle. Sher Dahan Lion-mouthed. Camels. Shutran The horseman who rides on his Silahdar own horse. Turban Surpech Tamburchee Trumpeter. — State expenditure. Taujihat Tehlia Servant, menial. Thanadar The officer-in-charge of a subordinate police station or a petty civil and military officer. Topkhana Arsenal or magazine. - Of resplendent mien.

Ujal Didar

Vakeel — Literally an attorney; an authorised representative of a chief.

Wala Iqtdar — Of exalted dignity.

Wuzarat — The office held by a Wazir or

Yom minister.

— Day.

Zafar Jang — Winner of battles.

Zakhirajat — Stores.

Zanankhana — Ladies' quarters

Zakhmiana — Compensation paid for receiving

wounds.

Zeega (Jeega) — An ornament of jewels worn in the

turban.

BIBLIOGRAPHY

English Records (Unpublished)

National Archives of India

Foreign Department Secret Consultations

Years 1806, 1810, 1814, 1824, 1825, 1832, 1834, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1847.

Foreign Department Secret Proceedings

Years 1813, 1823, 1824, 1825, 1828, 1833, 1837, 1838, 1839, 1840, 1842, 1844, 1845, 1846, 1847, 1848.

Foreign Department Secret and Separate Consultations Year—1808.

Foreign Department Political Consultations

Years 1807, 1810, 1811, 1813, 1815, 1816, 1817, 1819, 1822, 1823, 1827, 1831, 1834, 1835, 1836, 1837, 1838, 1840, 1841.

Foreign Department Political Proceedings

Years 1813, 1814, 1819, 1822, 1823, 1827, 1831, 1835, 1836, 1837, 1838.

Foreign Department Miscellaneous Consultations

No.	128	 C. M. Wade s' report on the Panjab
		and adjacent provinces forming the
		territories of Maharaja Ranjit Singh,
		together with a historical sketch of
		that chief, 1824.

- 206 A geographical sketch of the Panjab together with a history of the origin, life and progress of Ranjit Singh, 1830.
- 269 A geographical and military memoir on the Indus and its tributary rivers

	from the sea to Lahore together
	with cursory remarks on the people,
	history and antiquities of this classic
	tract, by Lt. A. Burnes, 1831.
258-260	- Correspondence with the Resident
	or Political Officers at Delhi,
	Ambala, Ludhiana and others,
	October, 1830-1833. Vols. I—III.
	The first two volumes mostly contain
	papers about Ambala, Ludhiana,
	and Sabathu and the third those
	about Sind. In all three, there are
	numerous references to Ranjit
	Singh.
310-17	 Copies of correspondence with Capt.
510-17	F. Mackeson, Political Agent at
	Peshawar, 1833-43.
331-335	— News-letters, being precis of in-
501 000	telligence received from various
	quarters about the state of the
	countries in the western part of
	India and Kabul, April 1839—
	March 1842, compiled in the camp
	of the Governor General during
	his tour in the Upper Provinces.
	Vols. I—V.
349	- Abstract of Panjab Intelligence.
351	- Elliot's note on the revenues and
002	resources of the Panjab.
352	- Elliot's supplement to his manu-
	script No. 351, dated 1849.

Panjab Government Records Office, Patiala

Years 1809, 1810, 1813, 1815, 1817, 1822, 1823, 1824, 1825, 1829, 1831, 1834, 1835, 1836, 1839, 1840, 1841, 1842, 1844, 1845.

Printed Materials (English)

Abdul Ali, A.F.M. — Notes on the Life and Times of Ranjit Singh. Indian Historical

		Records Commission, Proceedings
		Vol. VIII, 1925.
Aitcheson, Sir Charles		A Collection of Treaties, Engage-
		ments and Sannads relating to
		India.
Ajudhia Parshad,		Waqai-i-Jang-i-Sikhan (Pheroshehr
Dewan		and Sobraon, 1846). Rendered
		into English by V. S. Suri.
Annual Registers		1830, 1845, 1846, 1848, 1849.
Annual Asiatic Register	rs	1800, 1802, 1809.
Archer, Major J. H.		Commentaries on the Panjab
		Campaign, 1848-49. London, 1878.
Arnold, Edwin		The Marquis of Dalhousie's Admi-
		nistration of British India. London,
		1862.
Anonymous		History of the Panjab and of the
•		rise, progress and present condition
		of the sect and nation of the Sikhs.
		2 Vols. London, 1846.
Baden Powell		Handbook of Manufactures and
		Arts of the Panjab, Vol. II.
		Indian Arms and Armour.
Bannerjee, Indubhusha	n	Evolution of the Khalsa—2 Vols.
,		Calcutta, 1936.
Baron Hugel, Charles		Travels in Kashmir and the Panjab,
0		with Notes by T.B. Jervis.
		London, 1845.
Barrere, Allert		Dictionary of French and English
•		Terms.
Barr, Lieut. William		Journal of a March from Delhi to
,		Peshawar and from thence to Kabul
		with the Mission of LtCol.
		Sir C.M. Wade. James Maddon,
		London, 1844.
Bell, Major Evens	-	Annexation of the Panjab and
		Maharaja Duleep Singh. London,
		1882.
Bool Chand		The North-West Question of Indian
		History, 1798-1830. Cal. University,
		1940.

300	
Bowring —	Haider Ali and Tippu Sultan. Oxford, 1893.
Broadfoot, Major W. —	The Career of Major Broadfoot. London, 1888.
Briggs, Maj. Gen. —	What are we to do with the Panjab? London, 1849.
Broom —	History of Bengal Army—Calcutta, 1850.
Brown, James —	History of the Origin and the Progress of the Sikhs. London, 1788. India, Tracts.
Burne, Lieut-Col. —	Art of War on Land. London, Methuen and Co. Ltd.
Buckle, Capt., E. —	Memoirs of Bengal Artillery.
	Travels into Bokhara. 3 Vols.
	John Murray, London, 1834.
	Reports and Papers: Political,
	Geographical and Commercial.
	<u> </u>
	Calcutta, 1838.
	Political Power of the Sikhs beyond
D . T. G.1.D.G	the Indus. Calcutta, 1839.
Burton, LtCol. R.G. —	First and Second Sikh Wars.
	Government Central Branch Press,
	Simla, 1911.
Calcutta Review —	Vol. I, May to Aug., 1844
	II, Oct., Dec., 1844
	V & VI, 1846
	IX, Jan., June, 1848
	X, July ,, Dec., 1848
	XI, Jan., ,, June, 1849
	XII, December, 1849
	XIII, 1850
	XIV, December, 1850
	XXVI, 1856
	XXVII, Sept. to Dec., 1856
Campbell, Col. —	Memorandum on the Part taken
Sir Golin	by the Third Division of the Army
	of the Panjab. London.
Centenary Volumes of —	Amritsar, Lahore and Kanpur
Ranjit Singh,	publications, 1940.

Chakarvarti, Dr. P.C.	. —	The Art of War in Ancient India. Ramna, 1941.
Chopra, G.L.		
Chopra, G.L. and Garrett, H.L.O.	-	Events at the Court of Ranjit Singh, 1810-1817. Translation. Mono- graph 17. Lahore, 1935.
Clausewitz	_	On War. 3 Vols. 1949 Principles of War. 1952.
Cole		Sketch of the Siege of Multan.
Colchester, Lord		History of the Indian Administra- tion of Lord Ellenborough—letters to the Duke of Wellington. 1847, London.
Compton		Particular Account of European Adventurers of Hindustan. London, 1892.
Conolly, Arthur.	-	Journey to the North of India. 2 Vols. Richard Bentley, London, 1838.
Cotton, J. J.		Life of General Avitabile. Calcutta Review, Oct., 1906.
Court, Henry		History of the Sikhs (Translation of Sikhan de Raj di Vithya), 1888.
Cunningham, J. D.	_	History of the Sikhs. The Sun Printing Works, Lahore, 1897.
Cust, R.N.	-	History of the Conquest of the Panjab.
	_	Linguistic and Oriental Essays, Written from 1840 to 1903. London, 1887.
David, Alfred		Indian Art of War. 1953.
Dikshitar, V. R. R.		War in the Ancient Period.
		London, 1944.
Durand, H.M.		Life of Major-General Sir Henry Marion Durand. 2 Vols. 1883.
Earle, E. M.		Makers of Modern Strategy. 1952.
Edwardes, Sir Herbert		A Year on the Panjab Frontier, 1848-49. London, 1851.

Edwardes, Sir Herbert and Herman, Merivale Egerton, W.		Life of Sir Henry Lawrence. 2 Vols. London, 1872. An Illustrated Handbook of Indian
Egonon, W.		Arms. 1880.
Elphinstone, Mount- stuart		History of India. Vol. 1. London, 1866.
200000		An Account of the Kingdom of
		Caubul. 2 Vols. London, 1842.
Emily, Eden		Up the Country. Letters written
		to her sister from the Upper Pro-
		vinces of India. Richard Bentley,
7 T		London, 1846.
Emma, Lady		Memorials of the Life and Letters of Sir Herbert Edwardes. 2 Vols.
		London, 1886.
Fane, Sir Henry		Five Years in India. 2 Vols. 1842.
The First Panjab		Administration Report (1849-51)
Forster, George		A Journey from Bengal to England.
, G		2 Vols. London, 1798.
Fortescue, J. W.	-	History of the British Army.
		Vols. XI & XII. London, 1923,
		1927.
Franklin, LtCol. W		Military Memoirs of George
		Thomas. Calcutta, 1803.
		History of the Reign of Shah
Frank Carron		Aulum II. Reprint, Allahabad, 1915
Frank Gaynor		The New Military and Naval Dictionary.
Frazer, J. B.		Military Memoirs of James Skinner.
110201, J. D.		Two Vols. London, 1851.
French, Charles J.		Journal of a Tour in Upper Hindus-
, , , , , , , , , , , , , , , , , , , ,		tan, 1838-39. Published in 1854.
Galloway, Archibald		Sieges in India.
Ganda Singh		A Short History of the Sikhs. Orient
		Longmans, India, 1956
		Panjab in 1839-40. Sikh History
		Society, Amritsar-Patiala, 1952.
		Private Correspondence Relating to
		the Anglo-Sikh Wars. Sikh History

Society, Amritsar-Patiala, 1955.

Garrett, H. L. O.

Gordon, General Sir Gough, Gen. Sir Charles and Innes,

Arthur D. Grey, C.

Griffin, L. P.

Gupta, H.R.

Hardinge, Viscount Charles

Harlan, G

Henty Hodgson, Col. J. S.

Honigberger, John Martin

Humbley, W. W. W.

Panjab A Hundred Years Ago.
 Monograph 18. London, 1935.

— The Sikhs. London, 1904.

— The Sikhs and the Sikh Wars. 1897.

 European Adventurers of Northern India, 1785-1899. Edited by Garrett. Panjab Government, 1929.

 Ranjit Singh (Rulers of India Series). Oxford, 1911. Clarendon Press, MCM XI

— The Rajas of the Panjab. Lahore, 1870.

History of the Sikhs. 3 Vols.
 Minerva, Lahore, 1939, 1944.

- Panjab on the Eve of First Sikh War, 1956.

Hardinge (Rulers of India Series).
 Oxford, 1892.

The War in India. Despatches of of the Rt. Hon'ble Lt. General Viscount Hardinge, G. C. B., Governor General of India, the Rt. Hon'ble General Lord Gough, G. C. B., C-in-C, Major General Sir Harry Smith and other documents comprising the engagements of Moodki, Ferozshah, Aliwal and Sobraon. London, 1876.

Memoirs of India and Afghanistan.
 London, 1842.

- Through the Sikh War.

— Opinions on the Indian Army. 1850.

— Thirty Five Years in the East. London, 1852.

 Journal of a Cavalry Officer, Including the Memorable Sikh Campaign of 1845-46.
 London, 1854.

Hutchison, J. &		History of the Panjab Hill States
Vogel, J.		and Agency (1807-1857). 2 Vols. Lahore 1933.
Indian Historical		Vol. 18, 1942.
Quarterly		VOI. 10, 15-12.
Indian Historical		Vol. VIII, Nov., 1925
Records Commission		Vol. XVIII, Jan., 1942
Proceedings		Vol. XXXI, Part II, 1955
Indra Krishen		An Historical Interpretation of the
India Terisiicii		Correspondence of Sir George
		Russel Clark, Political Agent of
		Ludhiana and Ambala.
Irvine, William		Army of the Mughals. London, 1903
Jacquemont, Victor		Letters from India, 1829-1832.
Juoque Lieuri, Vierei		Translation with an introduction
		by Catherine Alison Philips.
		London, 1836.
James Coley		Journal of the Sutlej Campaign.
3		London, 1856.
Jocelyn		History of the Royal and Indian
		Artillery.
Johnstone, H. M.	*******	History of Tactics.
Journal Asiatic Society	7 —	Vol. XVI, Parts I & II, 1847
of Bengal		Vol. XVII, Part I, 1848.
Journal of Panjab		Vol. VI, 1917
University Historical		" VII, 1918
Society.		" IX, Part II, 1933
		,, IV, Part II, 1835
		" V, 1938
		,, VI, 1940
		,, X, 1947
Journal of Indian	-	Parts I & II, 1921-22.
History		Volume XXIX, 1951, Parts I-III.
Kaye, J. W.		History of the War in Afghanistan.
		3 Vols. Bentley, London, 1851.
		Selections from the Papers of
		Lord Metcalfe. M D C C C L V
		The Life and Correspondence of
		Charles Lord Metcalfe. 2 Vols.

London, 1854.

Kiernan, V. G.		Metcalfe's Mission to Lahore,
Khilnani, N.M.		1808-09. Lahore, 1943. Panjab under the Lawrences.
Latif, Syed Mohd.		Simla, 1951. History of the Panjab. Calcutta,
		1891.
T 3		History of Lahore. Lahore, 1892.
Lawrence, Major		Adventures of an Officer in the
H. M. L.		Service of Ranjit Singh. 2 Vols.
		London, 1846.
		Some Passages in the Life of an
		Adventurer in the Panjab.
		Delhi, 1842.
		Essays, Military and Political.
τ ~		Serampore, 1859.
Lawrence, George		Forty Three Years in India.
T	_	London, 1875.
Leaves from the Journ	nal c	of a Subaltern during the Campaign
		in the Panjab, Sept. 1848-March,
T 1 1 11 YY		1849. London, 1849.
Liddell Hart		Indirect Approach. Faher and
T 11 T 1		Faher Ltd., London.
Ludlow, John		British India (I, II). Cambridge,
3.6		1858.
Macpherson	-	Rambling Reminiscences of the
3.5 3.5 6. 6		Panjab Campaign. 1889.
	e	Lure of the Indus. London, 1934.
Malcolm		A Sketch of the Sikhs. London,
		1812. (Based on Bakht Mal's
		Khalsa Nama).
Malleson		Decisive Battles of India. London,
		1883.
Masson, Charles		Narrative of Various Journeys in
		Baluchistan, Afghanistan and the
3.E.		Panjab. 3 Vols. London, 1842.
Massy		Chiefs and Families of Note in
		the Delhi, Jullundur, Peshawar and
		Derajat Divisions of the Panjab.
		3 Vols. 1890, 1909,

Mazmudar	***************************************	Military System in Ancient India.
Mc Gregor, W. L.		History of the Sikhs. 2 Vols. J. Maddon, London, 1846.
Mitchell		Outlines of the World's Military History.
Mohd. Naqi of Peshawar		Sher Singh Nama—Translated by V. S. Suri.
Mohan Lal, Munshi		Travels in the Panjab, Afghanistan and Turkistan to Balkh, Bokhara and Herat—London, 1846.
Moorcroft, W & Trebeck, G.	-	Travels in the Himalayan Provinces of Hindustan and the Panjab. 2 Vols. John Murray, London, 1848.
Morison, J. L.		Lawrence of Lucknow. London, 1934
Mouton		Rapport Sur Les Derniers Evenements Du Panjab Par le Colonel Mouton. 1846-Translated by Ganda Singh.
Murray, Hugh		History of British India.
Napier, Sir Charles		Report on the Military Occupation of India. Nov., 27, 1849.
Newall, Major-Genera	al —	
Ney, Marshall		Military Studies. 1833.
Officer's Diary, An		War and Sport in India. 1803.
Orlich, Capt. L. V.		Travels in India including Sindh and the Panjab. 2 Vols. Translated from German by H. Evens Lloyd. London, 1845.
Orme, Robert	43/477-1-1-1-1	History of the Military Transactions of the British Nation in Indostan. London, 1763.
		Historical Fragments of the Mughal Empire. London, 1905.
Osborne, W.G.		Court and Camp of Ranjit Singh. London, 1840.
Pancroft		A Narrative of the Sutlej Campaign.

Papers Relating to the Panjab, 1847—1849. Paniab Government Vol. II, 1808-1815. Ludhiana Records. Agency. Lahore, 1911. III, 1847-1848. Lahore Political Diaries. IV, 1846-1849. Lahore Political Diaries including that of Major George P. Lawrence. VI, 1847-1849. Diaries of Lt. R. G. Taylor, P. Sandys, Pandit Kanhaya Lal, Mr. P.A. Vans Agnew, Lt. Nicholson, Mr. L. Bowring, Mr. A. H. Cocks, and Lt. H.B. Edwardes. Panjab District Attock, Amritsar, Gujranwala, Gujrat, Gurdaspur, Gazetteers Hoshiarpur, Hazara, Jhelum, Jullundur, Lahore, Peshawar, Rawalpindi, Shahpur, Mianwali, Kohat, Multan. Essentials of Military Knowledge. Palit, Major D. K. 1950. Gulab Singh Maharaja. London, Pannikar, K. M. 1930. Organisation Militaire des Sikhs. Parkash, K. Shastri Paris, 1932. Payne, C. H. A Short History of the Sikhs. Nelson and Sons, London. Memoirs of Alexander Gardener. Pearse, Hugh London, 1898. The Origin of the Sikh Power in Prinsep the Panjab. Calcutta, 1834. History of Fire Arms. Pollard, H. B. O. Proceedings of the Indian History Congress, 1940. Life and Campaigns of Lord Gough. Rait, R. S. London, 1913. French-English Mlitary Vocabulary. Russell, H. T. Side Lights on Lord Auckland's Sajun Lal, K.

Foreign Policy.

Calcutta, 1928.

Military System of the Marathas.

Sen, Dr. S. N.

Shahamat Ali

Silananiat III		the Journal of an Expedition to Kabul through the Panjab. London, 1847.
Sethi, R.R.		The Lahore Darbar, 1823-1840. 1950.
Sinha, N.K.		Ranjit Singh. Calcutta University, 1933.
Sita Ram Kohli		Catalogue of Khalsa Darbar Records. 2 Vols. Lahore, 1919.
Smith, Sir Harry	-	Autobiography.
Smyth, Major G.		The Reigning Family of Lahore.
Garmichael		Calcutta, 1847.
Smyth, Capt. R.		Plans of Ordnance Captured by the Army of Sutlej in 1845-46.
Caltrida #		An Account of His Visit to Lahore
Soltykoff		in 1842, (Monograph 18) being
		a Brief Account of the Country of
~		the Sikhs.
Steinbach, LtCol.		The Panjab. Smith and Elder,
		London, 1845.
Suri, Vidya Sagar		Some Original Sources of Panjab
		History—Analytical catalogues of
		some outstanding Persian manu-
		scripts and annotated translations
		into English of contemporary
		chronicles. Edited by V. S. Suri.
		Chronicles of the Reign of Maha-
		raja Ranjit Singh, Daftar III, 1831-
		39 by Sohan Lal Suri. Translated
		by V. S. Suri. S. Chand and Co.,
		Delhi, 1961.
Thackwell, E.J.		- A Narrative of the Second Sikh
1 11001111 011, 111, 11		War. London, 1851.
Thomson, Edward		The Life of Charles Lord Metcalfe.
a accessioning and only one of		London, 1937.
Thornburn		The Panjab in Peace and War.
		London, 1904.
		•

Maratha System of Administration.

- The Sikhs and the Afghans. From

Calcutta, 1925.

Torrens, W. M.		Empire in Asia. How We Came by It. A Book of Confessions.
Thornton, Capt. Edward	estaturini (London, 1872. A Gazetteer of the Countries adjacent to India on the North-West. 2 Vols. London, 1844.
Tucker, LtGen.		Pattern of War.
Vigne, Godfrey		,
T177111 C C T		Iskardo etc. 2 Vols. London, 1842.
William, G.C.R.		Calcutta Review, 1875—an article.
Willoughby		Manoeuvre in War. 1951.
Williams, Capt.		A Historical Account of the Bengal Native Infantry—1757 to 1796.
Wolff, Dr. Joseph	_	Travels and Adventures. London, 1846,
Persian and Urdu Pra	inted	and Unprinted Materials
Ahmad Yar		Shahnama-i-Ranjit Singh.
		Edited by Dr. Ganda Singh.
Amar Nath, Dewan		Zafarnama-i-Ranjit Singh. Edited by Sita Ram Kohli. Lahore, 1928.
Bute Shah (Ghulam		Tawarikh-i-Panjab—A comprehen-
Mahyyuddin)		sive history of the Sikhs up to the end of Ranjit Singh's reign. ms.
Harbhagat Rai,		Zafarnama (drill manual of Ranjit
Munshi		Singh's army with illustrations).
Kanhaya Lal, R. B.		Tarikh-i-Lahor (Urdu)
Kamaya Lai, K. B.		Tarikh-i-Panjab (Urdu)
Khushwaqat Rai		Tarikh-i-Sikhan or Kitab-i-Tarikh-
Kiiusiiwaqat Kai		i-Panjab. 1834. A history of the
		Sikhs upto 1811, written at the
		desire of Col. Ochterlony.
N. 36 L	_:	
Nur Mohammad, Qaz	<u></u>	Ganda Singh.
C 1 . T -1 3 41 *		Umdat-ul-Tawarikh. 5 Daftars—
Sohan Lal, Munshi		
		an account written by the historio-
		grapher of Ranjit Singh. Published

at Lahore, 1885.

376 A pamphlet on gunnery. Patiala Atish Nama Archives. Khuda Baksh Library, Bankepore Hisab Nama Fauj-i-Ranjit Singh (ms. 622) [Patna]. Panjab Government Records Office, Khalsa Darbar Records Patiala. This is a diary of the daily routine News of Ranjit Singh's — Court for 1825 of Ranjit Singh's life for 1825. National Archives of India. Tarikh-i-Sikhan--Anonymous Part I. Panjabi Publications Sham Singh Attariwala. Ganda Singh, Dr. Amritsar, 1942. Sikh Ithas Bare. Amritsar, 1946. Sikh Ithas Wal. Lahore, 1946. Panjab Dian Varan. Edited Dr. Ganda Singh. Ram Dyal's Jang Nama Sardar Hari Singh. Kadar Yar's Var Sardar Singh, Nihal Singh's Baintan Sher Singh Kian, Shah Mohd.'s Angrezan Te Singhan Di Larai, Matak's Jang Singhan Te Farangian Da. Fatehnama Guru Khalsa Ji Ka. Ganesh Das Edited by S. R. Kohli, Patiala, 1952. Tawarikh Guru Khalsa, including Gyan Singh Khalsa, 6 Vols. Shamsher Α detailed history of the Sikhs from

the Sikh Empire. Amritsar.

— Panth Parkash—from Guru Nanak
to the Namdharis. Amritsar, 1880.

Prem Singh, Hoti — Maharaja Ranjit Singh Jiwan

Maharaja Ranjit Singh Jiwan
 Bartant. 10th edition. Lahore
 Book Shop, Ludhiana, 1959.

Guru Nanak to the dissolution of

— Hari Singh Nalwa. 8th edition. Lahore Book Shop, Ludhiana.

- Maharaja Nau Nihal Singh.
 Lahore Book Shop, Ludhiana, 1958.
- Maharaja Sher Singh. Lahore Book Shop, Ludhiana, 1951.
- Baba Phula Singh. Lahore Book Shop, Ludhiana, 1950.
- Khalsa Raj De Badeshi Karinde. 2nd edition, Patiala, 1945.
- Rattan Singh Bhangu Prachin Panth Parkash. Amritsar, 1914.
- Sita Ram, Kohli Shardha Ram Phalauri,— Pandit
- Maharaja Ranjit Singh. Delhi, 1953.
 Sikhan de Raj di Vithya. Edited by Pritam Singh. Hind Publishers Ltd., Jullundur, 1956.

INDEX

Bentinck, L. William—76, 224. Bhai Lal Singh—47. Bhagat Ram, Bakshi—179. Abbot, Capt.—204, 209, 210, 213. Material and Pre-Accoutrements, Bharmar—235. Bhowani Das, Dewan—30, 174. paration of—229, 230.. Afghanistan—88, 208. Bhyrowal, Treaty of-105. Afghans—49, 62, 263, 264, 266, 273, Brigade, Constitution of—63, 78, 109, Ajit Singh of Ladwa—330. Ajudhya Parshad—186. Budh Singh—272, 318. Akalis-6, 48, 141, 226. Budowal--329. Burnes, Capt.—67, 70, 75, 88, 133, Akbar-134. Alexander, Col.—287. 148, 160, 218, 302. Aliwal, Battle of-188, 281, 282, 324, Burton, Col.—147, 217, 281. 330, 331. Allard, General—56, 63, 64, 66, 70, Camp Lay-out-197, 198. 89, 98, 133, 138, 151, 163, 205, Campbell, General—289, 290, 293, 294. 225, 236, 243, 258, 269, 350. Ambala—323, 324. Carbine—236. Cavalry of India, 18th century—8, 9. Ammunition—240. Cavalry, Growth of—38, 39, 51, 52, Amritsar—37, 53, 73, 215, 216, 230, 64, 65, 79, 80, 93, 94, 95, 350, 351. Chand Kaur, Maharani—97, 99. 240, 241, 242 Anarkalı—194. Arms, Manufacture, Repair of-240, Chattar Singh Attariwala—294, 334, 335, 337-Armour, Chain and Plate—231, 232. Chehra—74, 134, 135. Chet Singh—203. Chet Singh, Col —323, 330. Chillianwala, Battle of—188, 288, 290, Army, Growth of—47, 48, 61, 75, 90, 91, 104, 105. Army, Classification of—108, 109. Artillery of India, 18th century—6, 7. 291, 341, 343. Chuch, Battle of—263, 264, 266. Artıllery, Growth of-4, 42, 53, 54, 65, 66, 67, 81, 82, 95, 96, 350. Cis-Sutley States—325, 328. Attock-124, 208, 209, 242, 263, 267, Clerk, Major—200. Clive, Lord—29, 30,. 295, 341. Auckland, Lord—88, 214 Clothing, Development of-57, 72, 75, Avitabile—67, 98, 156, 174, 182, 186, 228, 269, 282. Azam Khan, Wazir—264. Clothing and Equipment—223-230. Code of Discipline—149, 150, 151. Columns-253, 254, 255. Company, Constitution of—111, 112. Bahawalpur-328, 335. Composition, Development of-47, Barakzais-143, 299. 58, 59, 71, 72, 86, 102. Bargir-Silahdar System—21, 22, 123. Control, Strategical—317, 318. Control and Command, Growth of-Barr, Lt -81, 83, 85, 117, 133, 185, 43, 44, 55, 68, 69, 83, 84, 97, 98, 200, 214, 221, 237, 259. Bassein, Supply Depot-324. 99, 352. Coordination—318, 319. Cortlandt, General—335. Battalion, Constitution of—110, 111, 112, 113.
Battery, Horse—115, 116, 117, 118.
Battery, Heavy—118, 119.
Battery, Zamburak—120. Court, General-67, 88, 98, 228, 259, 26q. Cunningham, J. D.—90, 96, 99, 123, Begar-212, 213. 145.

Cureton, Col.—281. Currie, Frederick—206.

Begum Sumru—38, 44.

Beli Ram, Misar—137, 153.

Dag System—14, 136. Daggers—233. Dak System—204. Dalhousie, Lord—340. Dalip Singh, Maharaja-105, 150, 214. Darogha-i-Topkhana-6. Deductions—171, 172, 173, 174. Delhi—328, 329. Derahs of Ghorchurras—39, 44, 65, 80, 95, 122. Desa Singh Majithia—263. Dewan Chand, Misar-65, 141, 171, 181, 189, 319. Dhani-Pothohar—209. Dhian Singh, Raja-83, 97, 100, 102, 134, 137, 150, 182, 185, 204. Dhonkal Singh, General-63, 137, 142, 145, 185. Dina Nath, Dewan—189. Disbursement, Procedure of—174, 175, 176, 177, 178. Discipline, Growth of—45, 56, 70, 71, 85, 86, 89, 99, 100, 106, 351, 352. Division, Evolution of—92. Dogra Rajas—82, 141, 171, 241. Dost Mohammad, Amir—77, 264, 273,300,301, 319. Double-barrelled Gun-237. Drill without Arms—244, 245. Drill with Arms—245—248. Dupleix—28, 30. Durand, Sir Henry-162, 288.

Edmonstone—56. Edwardes, Maj. General—335, 336. Elephants, their role in war-2, 3, 4, European ideas, their impact on India (18th century)—30, 31, 32, 34 European officers in India (18th century)-33. European officers in the Sikh Army— 77, 98, 138, 139, 143, 144, 170, 171, 228, 276, 348. European ideas, their impact on Ranjit Singh—346, 347, 348.

Falling in, Procedure of—243, 244. Fane, Sir Henry—77, 85, 87, 183, 227. Faqir Brothers—188. Faqir Nuruddin—195, 215. Fatch Khan, Wazir—263, 264. Fatch Khan Tiwana—322. Fauj-i-Khas—63. Ferozepur—259, 322, 324, 325, 327. Ferozshah, Battle of—278, 279, 280, 324, 326, 327.

Fighting Technique, 18th century— 18, 19, 20, 24, 25, 32, 33, 34. Firing Drill-248, 249. First Anglo-Sikh War—320-333. Flintlocks—235. Foraging-221, 222, 223. Francese Campoo-63.

Ganga Ram, Dewan—30. Gardener—77, 129, 203, 269. Gause Khan, Darogha—264. Gear of Animals—210, 211. Ghazis—264, 265, 266, 273. Ghorchurras—120, 121, 122, 225, 226, 260, 351. Gilbert, Maj. General—280, 284, 290, 292, 293, 294. Gobind Garh—124, 242, 324. Gobind Ram, Bhai—182. Gough, Lord—101, 147, 235, 284, 287, 289, 292, 297, 327, 338, 339, 340, 341, 342. Guerilla Warfare—24. Gujrat, Battle of-291, 292, 343. Gulab Singh, Raja—90, 96, 127, 155, 185, 237, 299, 321, 322, 328, 330, 332, 333, 336, 338. Guns-237, 238. Gurkhas—71, 72, 132, 140, 141, Guru Gobind Singh—131.

Hardinge, Lord—104. Haider Alı—32, 34. Hari Singh Nalwa-68, 82, 128, 130, 171, 273, 274, 318. Havelock, Col.—287. Helmits—231. Hindus in the Army—141. Hira Singh, Raja—93, 94, 95, 97, 99, 100, 102, 126, 150, 153, 156, 181, 185, 190, 195, 196, 203, 211, 212, 219, 230, 243, 294. Hoggin—289. Holkar, J. R.—31, 37. Honigberger, Dr.—77, 151, 241. Horse, role in war—2, 3, 23. Howitzers—238, 239. Hugel, Baron—77, 85, 88, 133, 204, 226. Hurrike-322.

Ilahi Bux, General—63, 96, 143, 345. Indian Armies, 18th century-348, 349, 350. Infantry, Growth of-39, 40, 41, 50, 51, 63, 64, 78, 79, 92, 93, 350.

_	Mainew, Capi39, 42, 40.
Jacquemont—77, 195, 234, 237, 297	Mc Gregor—106, 172, 173, 210, 219,
298, 299.	228, 297.
Jagirs—125.	
Tamindani Fassi Cassadh of to to	Meeruth—328.
Jagirdari Fauj, Growth of-42, 43, 54,	Mercenaries—22.
55, 68, 82, 127, 128, 129, 156, 226,	Metcalfe, Sir Charles—37, 40, 41, 43, 44, 45, 46, 47, 48, 138, 205, 262,
351.	44, 45, 46, 47, 48, 138, 205, 262,
Jalla, Pandit—92, 98, 100, 139.	
Jamrud, Fort of—273.	302, 303.
Jamiuu, Fort or—2/3.	Military System of Sikhs, a com-
Jawahar Singh—93, 94, 95, 98, 119,	parison—250, 348.
120, 190, 191, 195, 196, 203, 211,	Military Systems of East and West, a
219, 230, 243,	comparison—1, 107, 108, 348, 349.
Jazair or Jazail—239.	Military System of Ancient India-2.
Jodh Ram, Dewan—182, 186.	Military System of Ancient India—2.
	Military Camps and Marches of
Jullundur—196.	India, 18th century—9, 10, 11.
K	Military Discipline, 18th century—12,
Kangra—124, 215, 242, 267, 341.	13.
Kashmir—124, 176, 180, 229, 240,	
	Military Training, 18th century—13,
319.	19.
Kaukab-i-Iqbal-i-Panjab—182, 183,	Military Control and Command,
184.	18th century—14, 15, 16, 17.
Kesree Singh, Rai—80, 221.	Military Strength, Growth of-38, 55,
Kharak Singh, Maharaja—69, 93, 94,	
itilatak biligii, ivialiaraja 109, 95, 94,	83, 97.
95, 97, 174, 190, 191, 195, 196,	Military Expenditure, Total242, 243.
211, 212, 219, 230, 243, 319.	Mir Atish—6.
Khushal Singh, Jamadar—65, 90, 137,	Misals—12, 34.
142, 171, 241,	Mohkam Chand, Dewan-141, 171,
Kilajat Fauj—123, 124.	
	263, 264.
Kulu—322.	Mool Raj, Dewan—143, 294, 321, 328,
L	333, 334, 335, 336.
Labh Singh, Mian—150.	Moorcroft—126, 263, 266
Lahore, Treaty of—105.	Morale, Growth of-45, 56, 57.
Lahore—53, 173, 196, 203, 215, 216,	Mortars—239.
	Mantan 294 200
240, 241, 267, 337	Mouton—284, 332.
Lake, Lord—37.	Mudki, Battle of-277, 278, 279, 324.
Lal Singh, Raja—94, 99, 141, 143, 146,	Mughals—3, 4, 5, 6, 348.
161, 186, 190, 191, 219, 278, 280,	Multan—124, 160, 176, 177, 215, 229,
320, 321, 323, 325, 326, 327, 328,	949 968 918 910 994 996 997
340, 344, 343, 343, 344, 347, 344,	242, 268, 318, 319, 334, 336, 337 Murray, Dr.—62, 68, 69, 70, 71, 214
331, 332, 333. Lal Singh, Morarea—186, 217, 288. Lowrence, Sir Henry—80, 81, 93, 95,	Murray, Dr.—02, 06, 09, 70, 71, 214,
Lai Singh, Morarea—100, 217, 200.	258.
Lowrence, Sir Henry—80, 81, 93, 95,	Muslims in the Army—142.
119, 161, 171, 178, 206, 243.	Mysore—32, 34.
Lawrence, Major G.—99, 142, 208,	N
219, 221.	Napier, Sir Charles—328.
Lawrence, John.—122, 126, 133, 217.	Nau Nihal Singh, Prince—97, 104,
Lehna Singh Majithia—65, 81, 130,	132, 173, 183, 203, 217, 222, 319.
145, 182, 241.	Naushera, Battle of-263, 264, 265
Littler, General—279, 280, 327.	266.
	Nicolson, Capt.—325.
Ludhiana—329. M	Nilal Circle Alleralia and and
	Nihal Singh Ahluwalia—126, 146.
Macnaughten—84, 85, 88.	0
Mackeson—319.	Ochterlony, Col.—56, 267.
Mahadajı Sindhia—31, 223.	Officers, Recruitment and
Majithias—171.	Rank Distinctions—137, 229.
	Orlich Capt77 140 150 100 -00
Malwa—140.	Orlich, Capt.—77, 149, 159, 198, 199
Mandi—212, 217.	227, 259, 272,
Mansabdars—14, 125.	Osborne—85, 88, 225.
Marathas -5 , 6, 30, 31.	P
Masson, Charles—160	Pay System, 18th century—20, 21.
Matchlocks—234.	Pay System, Growth of—45, 46, 47
14TW10TTTOOP2 704.	1 w, 0,500m, 010 wm 01-45, 40, 47

Smith, Harry—280, 281, 284, 329. Smyth, Col.—127, 157, 179. 59, 60, 74, 75, 88, 89, 102, 103, 105, 106, 352. Payment, Modes of—23, 165, 166. Sobraon, Battle of-162, 283, 284, Payment, Time of—166, 167. 28<u>5</u>, 324_, 331, 332. SohanLal, Munshi—147, 188, 204,260. Payment, Abuses of—178, 179. Panchayats—157, 158, 328, 333. Spears—234. Peshawar-77, 124, 176, 198, 203, Squares—255, 256, 257. Col.—77, 96, 97, 131, 208, 215, 229, 242, 273, 319, 334, Steinbach, 133, 188, 194. Strategy, 18th century—25, 26, 27. Percussion Cap System—236. Strategy—298-352. Pindaris—22, 23. Suchet Singh, Kaja-65, 80, 185, 228. Pistol-237 Sukh Dayal, Misar—185. Phillaur—329, 330. Phula Singh Akali—166, 265. Supply Problem, 18th century—20. Supply System, Development of-Punishments—151, 152, 153, 155, 156. 47, 60, 61, 73, 89, 90, 104. Tankhwah System—176, 177. Ranjit Singh-35, 36, 37, 38, 48, 49, Tej Singh, Misar—130, 141, 142, 145, 61, 62, 63, 76, 77. Ramnagar, Battle of-286, 287, 338. 101, 174, 182, 241, 285, 320, 321, Ram Singh, Bhai—321. 322, 326, 327, 328, 331, 332. Thackwell, General—287, 290, 293, Rani Jindan—321, 322, 328. Ranjodh Singh-281, 282, 322, 328, 339, 344. Thomas, George—9. 329. Rawalpindi—343. Tipu, Sultan—32, 34, 223. Recruitment, Development of-47, 58, Titles—181, 182. Training, Regular Infantry—243-258. 72, 102. Training, Regular Cavalry—258. Regiment, Constitution of-110, 113, Training, Regular Artillery—259. 114, 115. Richmond, Col.—101, 119. Training, Combind Manoeuvres— Risala, Constitution of—114. 259, 260. Training, Tactical—253, 258. Training System, Growth of—44, 56, Rohtas-196, 215, 242. Sadulapur, Battle of-287, 288, 339, 69, 70, 75, 84, 85, 99, 106. Transport—206-214. Salary Rates—167, 168, 169, 170, 171. Troops, Health of—187. Sandhawalias—65, 80, 171, 181. Troops, Care of the Dead—188. Sansar Chand, Raja-299, 300. Troops, Recreation—192. Sarbat Khalsa—17, 98. Turks—3. U Sawan Mal, Dewan—143, 146, 186. Sayed Ahmad of Bareilly-272. Usafzais—174. Second Sikh War—344. Sepoy Army—29, 30, 325. Shah Shujah—299, 300, 302. Shahamat Alı—82, 90, 128. Ventura, General—56, 63, 66, 70, 83, 98, 138, 163, 186, 205, 218, 243, 258, 269, 294. Sham Singh Attariwala—39, 146, Vigne-77, 140, 201, 213, 227, 236. 221, 284, 285, 322. Sher Singh, Maharaja—93, 94, 95, Wade, Capt.—62, 69, 70, 73, 83, 86, 97, 100, 104, 182, 190, 191, 195, 89, 90, 138, 144, 147, 179, 183, 197, 258, 298. Wallace, Maj. General—280. 196, 211, 212, 219, 230, 243, 295. Sher Singh, Raja-206, 335, 336, 337, 338, 339, 340, 341, 342, 343, 345. Sher Shah Suri—134. War Equipment, 18th century—20,23. Wazirabad—196, 240, 339, 340, 343. Sherbacha—236. Weapons, Development of—57, 58, 73, Shields—232. 87, 103. Siegecraft-26, 27, 28, 266, 267, 268, Whish, General—336. 269, 274, 275, 294. Zamburaks—54, 55, 67, 96, 239. Sikhs in the Army—140. Zamzam—237. Sipah-i-Kilajat—51. Zaman Shah—17. Skinner, Lt.- Col. 79. Zorawar Singh—225.

APPENDIX II

Foreign Secret Consultations 26th December, 1846, No. 677

Return of the Sikh Guns in the City of Lahore, under charge of the Troops of the British Government, Lahore, 2nd April, 1846.

No		s- Pou on de	n- Me rs	tal] Ft.	Leng In.	th C		e Br	the eech	Met M	ess of tal luzzle
19 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Guns ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	6 6 6 6 6 6 6 6 9 12 .)	5554544556667878642677596511	22811422721160 37 86164805166 1051612	33343323334444443144445437	6750377834337575278 ,58 , , , , , , , , , , , , , , , , ,	333232232234433332234524334	2117282095 ,, 339991617 ,462717	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21535315764134995 ,18922581 ,,

^{*} The nearest approximation to the weight of shot in the English Service.

Return of the Sikh Guns in the City of Lahore, under charge of the Troops of the British Government, Lahore, 2nd April, 1846.

Contd.

•						, OA				Met	al^{-}
No.	Des-	Poun-	Metal	Len	igth	C_{ℓ}	alibre	Bre	ech	M	uzzle
	criptic	on ders		Ft.	In.	In.	Tenths	In.	Tenths	In.	Tenths
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Guns ,, ,, ,, ,, ,, ,, How-itzer ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	42 " 3 " 6 " 12 " 18 " 18 " 12 " 12 " 12 " 12 " 24 " 12 " 12 " 12 " 12 " 12 " 12 "	Brass ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	10 36 35 34 4 13 75 45 74 34 22	3 12 13 12 12 13 14 8 8 70 12 12 8 79 ——————————————————————————————————	6333425394444432454544768888487	52557826 , 36 , 36 , 35267 , 38 , 327	51223222622334325223 ","	65527133 25679175266298	3 11 11 11 11 13 11 12 21 21 11 11 11 11 11 11 11 11 11	58517 ,237 ,11 ,6 ,613 ,89 8572272622

Contd.

Return of the Sikh Guns in the City of Lahore, under charge of the Troops of the British Government, Lahore, 2nd April, 1846.

								The thicks	ress Mete	-
No.	Des-		Metal	Let	ngth	Ca	libre	Breech	I	Muzzle
	criptio	n ders		Ft.	In.	In.	— — Tenths	In. Tenths	In.	Tenths
1	Mortar					7	9		1	2
1	,,					8	,,		1	2
1	,,					7	8		1	2
1	,,					7	9		1	2
1	Guns	l ½,,		2	$2\frac{1}{2}$	1	7	l <u>1</u>	1	33
1	,,	1 ,,	Iron	3	101	, 1	5	1 1/2	14 34	,,
1	,,	2,,	Brass	3	,,	2	,,	2 1	34	,,
1	,,	2,,	Iron	4	5	2	2	21/2	8	,,
88										

(A True copy)

Sd/-V. A. Burroughs, Captain Sd/-I. H. Littler, Sd/-Illegible, Deputy Assistant Adjutant Major General, Captain, General of Division Comdg. Panjab Dy. Commissary Division. of Ordnance.

(True Copy) Sd/- Illegible.

Under Secretary to the Govt. of India with the Governor General