

APPENDIX No. 6.

GUNNERY CERTIFICATES.

PROVINCE OF ONTARIO.

LIST of the names of Officers, Non-Commissioned Officers and others of the Active Militia, who have obtained Certificates at "A" Battery, School of Gunnery, Kingston, during the Year 1876.

Rank and Name.	Corps.	Certificates.		Long or Short Course.
		1st Class.	2nd Class.	
		1876.	1876.	
Adams, Gunner Geo.....	Kingston Field Battery.....	Oct. 7	.....	Short.
Allan, Sergeant Wm.....	Hamilton do.....	April 11	.....	do
Anderson, Corporal F.....	New Brunswick Brigade Garrison Artillery.....	.....	April 11	do
Barron, Bombardier W.....	Toronto Field Battery.....	.....	.....	do
Beasley, Gunner J. F.....	"A" Battery.....	.....	Dec. 30	do
Beers, Gunner J.....	Toronto Garrison Battery.....	Mar. 9	.....	do
Benson, Sergeant T.....	Durham Field Battery.....	April 11	.....	do
Boddlie, Gunner R.....	Wellington Field Battery.....	.....	Mar. 6	do
Blaney, Gunner G. H.....	do do.....	.....	Jan. 22	do
Bridgeford, Gunner J.....	do do.....	.....	do 22	do
Bruce, Sergeant W. C.....	Hamilton do.....	Mar. 6	.....	do
Coleman, Gunner S.....	Toronto do.....	.....	April 9	do
Cruise, Bombardier W.....	do do.....	.....	Oct. 7	do
Davies, Gunner T.....	do do.....	.....	May 13	do
Davidson, Gunner Wm.....	St. Catherine's Garrison Battery.....	.....	Sept. 6	do
Dunlop, Sergeant J.....	New Brunswick Brigade Garrison Artillery.....	April 11	.....	do
Dunlop, Bombardier S.....	Ottawa Field Battery.....	Mar. 6	Jan. 22	do
Echardt, Gunner W.....	St. Catherine's Garrison Battery.....	.....	Nov. 23	do
Fox, Gunner W.....	Cobourg, Garrison Battery.....	.....	Jan. 22	do
Galbraith, Sergeant F.....	Durham Field Battery.....	.....	do 22	do
Hall, Gunner A.....	Kingston Field battery.....	April 11	.....	do
Hartnett, Gunner T.....	Wellington do.....	.....	Nov. 23	do
Hawthorne, Gunner G.....	Ottawa Brigade Garrison Artillery.....	.....	Mar. 6	do
Hope, Gunner James.....	Kingston Field Battery.....	.....	Jan. 22	do
Hutchins, Gunner James.....	do do.....	.....	Nov. 23	do
Kennedy, Sergt.-Maj. J. H.....	Winnipeg do.....	Mar. 6	.....	do
Kennedy, Gunner J.....	Hamilton do.....	Jan. 22	.....	do
Lanagan, Sergeant C. F.....	New Brunswick Brigade Garrison Artillery.....	.....	Nov. 23	do
Langman, Gunner H.....	"A" Battery.....	Jan. 22	.....	do
Moore, Major Allen H.....	13th Battalion, Active Militia.....	.....	May 13	do
Morley, Sergeant Nelson.....	Welland Canal Field Battery.....	Sept. 6	.....	do
Munroe, Actg. Bombr. J.....	"A" Battery.....	Jan. 22	.....	do
		do 22	.....	do

PROVINCE OF ONTARIO.

LIST of Candidates for Commissions, &c.—Continued.

Rank and Name.	Corps.	Certificates.		Long or Short Course.
		1st Class.	2nd Class.	
		1876.	1876.	
McGaw, Bombardier E.....	New Brunswick Brigade Garrison Artillery.....	.....	April 11	Short.
McIntyre, Bombardier W.....	Collingwood Garrison Battery.....	.....	May 13	do
McLeod, Gunner M.....	Kingston Field Battery.....	Jan. 22	.....	do
McNaughton, Sergeant D. G.....	New Brunswick Brigade Garrison Artillery.....	do 22	.....	do
Newman, Gunner C.....	Toronto Field Battery.....	.....	Oct. 7	do
O'Brien, Gunner Patrick.....	"A" Battery.....	Mar. 6	.....	do
O'Donnell, Gunner C.....	St. Catharine's Garrison Battery.....	.....	May 13	do
Percy, Corporal W.....	Ottawa Field Battery.....	Mar. 6	.....	do
Pettigrew, Corporal S.....	Toronto do.....	Oct. 7	.....	do
Raines, Gunner Isaac.....	do do.....	Jan. 22	.....	do
Roberts, Corporal E. W.....	New Brunswick Brigade Garrison Artillery.....	.....	April 11	do
Scheuermann, Gunner John.....	Welland Canal Field Battery.....	.....	Dec. 30	do
Schofield, Gunner C.....	"A" Battery.....	.....	Mar. 6	do
Stewart, Sergeant John.....	Goderich Garrison Artillery.....	.....	May 13	do
Stobart, Gunner E. H.....	Wellington Field Battery.....	.....	Mar. 6	do
Stobart, Bombardier E. H.....	Toronto do.....	May 13	.....	do
Tolton, Gunner W.....	Hamilton do.....	Jan. 22	.....	do
Underhill, Major J. D.....	New Brunswick Brigade Garrison Artillery.....	Mar. 9	.....	do
Walton, Gunner R.....	Kingston Field Battery.....	.....	April 11	do
Williams, Gunner John.....	St. Catherine's Garrison Battery.....	.....	May 13	do
Workman, Gunner J.....	Durham Field Battery.....	.....	Mar. 6	do

RECAPITULATION.

First Class Certificates (Long Course).....	.....
do do (Short Course).....	24
Second do do.....	28
Total.....	52

RESUME.
PROVINCE OF ONTARIO.

REGIMENTAL DIVISION.	ACTIVE MILITIA.	
	First Class Certificates.	Second Class Certificates.
Addington (<i>vide</i> Lennox).....		
Bothwell.....		
Brant.....		
Brockville (<i>vide</i> Leeds).....		
Bruce.....	1	
Cardwell.....		
Carleton and City of Ottawa.....		
Dundas.....	14	9
Durham.....	8	4
Elgin.....	5	3
Essex.....		
Frontenac and City of Kingston.....	4	1
Glengarry.....	31	18
Grenville.....	1	
Grey.....		
Haldimand.....		1
Halton.....	1	
Hamilton, City of (<i>vide</i> Wentworth).....	1	
Hastings.....		
Huron.....	16	3
Kent.....	5	3
Kingston, City of (<i>vide</i> Frontenac).....		
Lambton.....		
Lanark.....	5	2
Leeds and Brockville.....	3	
Lennox and Addington.....	7	2
Lincoln.....	8	3
London (<i>vide</i> Middlesex).....	11	5
Middlesex and London.....		
Niagara.....	6	3
Norfolk.....	1	
Northumberland.....		
Ontario.....	8	2
Ottawa, City of (<i>vide</i> Carleton).....	2	
Oxford.....		1
Peel.....		
Perth.....	1	
Peterborough.....	2	
Prescott and Russell.....	1	
Prince Edward.....	1	
Renfrew.....		
Russell (<i>vide</i> Prescott).....		
Simcoe.....		
Stormont.....	9	5
Toronto, City of (<i>vide</i> York).....		
Victoria.....		
Waterloo.....		
Welland.....		
Wellington.....	5	7
Wentworth and City of Hamilton.....	8	13
York and City of Toronto.....	8	3
Town of Winnipeg, Manitoba.....	91	23
St. John, N.B.....	2	1
	5	4
Grand Total.....	272	114

Officers of the Active Militia Artillery, and Candidates for Commissions therein, who have obtained Certificates at the Schools of Gunnery, in the Province of Ontario, since their first opening.

PROVINCE OF QUEBEC.

LIST of Names of Officers, Non-Commissioned Officers and others, in the Active Militia, who have obtained Certificates at "B" Battery, School of Gunnery, Quebec, during the year 1876.

Rank and Name.	Corps.	Certificates.		Long or Short Course.
		1st Class.	2nd Class.	
		1876.	1876.	
Baugh, Gunner George.....	"B" Battery.....		Dec. 4	Short.
Billman, Gunner Thomas	do		Sept. 20	do
Barns, Gunner James.....	do		do 20	do
Chamberlain, Gunner W. W.	do		do 20	do
Courtney, Gunner George.....	do		Dec. 4	do
Craig, Gunner James.....	do		do 4	do
Croteau, Gunner Maurice.....	do		do 4	do
D'Allaire, Sergeant André.....	Quebec Field Battery.....		April 6	do
DeMulder, Gunner A.....	"B" Battery.....		Sept. 20	do
Dennison, Corporal W.....	Digby, Nova Scotia, Garrison Battery.....		Aug. 4	do
Donnelly, Gunner John.....	"B" Battery.....		April 24	do
Duffy, Gunner J.....	Newcastle Field Battery.....		Dec. 29	do
Girel, Gunner F.....	"B" Battery.....		Sept. 20	do
Hammon, Acting Bom. O.....	do		do 20	do
Harris, Gunner Sidney.....	do		do 20	do
Hay, Sergeant Andrew.....	Chatham New Brunswick Garrison Artillery.....		April.	do
Holland, Acting Bom. Thos.....	"B" Battery.....		Sept. 20	do
Irving, Lieutenant James.....	Charlottetown Garrison Artillery.....		Feb.	do
Jackson, Sergeant E. L.....	Woodstock New Brunswick Field Battery.....		Sept. 29	do
Kennedy, Gunner Martin.....	"B" Battery.....		April 24	do
Leray, Sergeant A.....	Quebec Field Battery.....		Dec. 29	do
Mason, Gunner Wm.....	do		April 24	do
Matheson, Gunner J.....	Newcastle Field Battery.....		Dec. 29	do
May, Corporal Mathew.....	Chatham New Brunswick Garrison Artillery.....		April.	do
Molson, Lieutenant J. A.....	Montreal Garrison Artillery.....		Sept. 16	do
Morrice, Gunner C.....	do		April 24	do
McCartney, Bombardier.....	"B" Battery.....		do 24	do
Nelan, Gunner Michael.....	do		do 24	do
O'Neill, Gunner J. D.....	do		do 24	do
Preston, Gunner E.....	Newcastle Field Battery.....		Dec. 29	do
Rackley, Acting Bom. J. H.....	"B" Battery.....		Sept. 20	do
Rouleau, Gunner C.E.....	do		Dec. 4	do
Ruthven, Gunner John.....	do		do 4	do
Stevens, Bombardier George.....	do		April 24	do
Stock, Gunner Edward.....	do		Nov.	do
Swanson, Gunner John.....	do		April 24	do

PROVINCE OF QUEBEC.

LIST of Candidates for Commissions, &c.—*Concluded.*

Rank and Name.	Corps.	Certificates.		Long or Short Course.
		1st Class.	2nd Class.	
Vince, Major D. McLeod.....	67th Regiment Light Infantry.....	1876.	1876.	Short.
Walmsley, Gunner David.....	" B " Battery.....	Sept. 20		
Waters Corporal.....	Digby, Nova Scotia, Garrison Artillery.....		April 24	
Weldon, Bom. Frederick.....	Newcastle Field Battery.....		Aug. 4	
Wheelock, Gunner J.H.....	Quebec Field Battery.....		Sept. 29	
Williams, Bombardier L. J.....	do do.....		April 24	

The following obtained Cavalry and Infantry Certificates:—

		<i>Cavalry.</i>		Long or Short Course.
Gray, Major F. Wood.....	Quebec Squadron.....	Nov. 29			Short.
		<i>Infantry.</i>		
Brunet, Capt. Z.....	Portneuf Provisional Battalion.....	Sept. 27		do
Pacquette, Capt. J. A.....	do do.....	Nov. 18		do
Taché, Lieut. E. J.....	Kamouraska Provisional Battalion.....	do 18		do

RECAPITULATION.

First Class Certificates (Long Course).....	0
do do (Short Course).....	5
Second do (do).....	41
Total.....	46

RESUME.
PROVINCE OF QUEBEC.

REGIMENTAL DIVISIONS.	ACTIVE MILITIA.	
	First Class Certificates.	Second Class Certificates.
Officers of the Active Militia Artillery, and Candidates for Commissions therein, who have obtained Certificates at the Schools of Gunnery, in the Province of Quebec, since their first opening.		
Argenteuil and Two Mountains.....		
Arthabaska and Drummond.....		
Assomption and Montcalm.....		
Bagot.....		
Beauce.....	5	6
Beauharnois and Laprairie.....	1	
Bellechasse and Dorchester.....		
Berthier.....		
Bonaventure.....		
Brome and Stanstead.....		
Chambly and Verchères.....		
Champlain.....		
Charlevoix and Montmorency.....		
Chateauguay.....	1	
Chicoutimi and Saguenay.....		
Compton and Sherbrooke.....	1	3
Gaspé.....	1	3
Hochelaga and City of Montreal.....	29	66
Huntingdon.....	2	
Iberville.....		
Jacques Cartier and Laval.....	2	
Joliette.....		
Kamouraska.....		
Lévis.....		
L'Islet and Montmagny.....		
Lotbinière.....		
Maskinongé and St. Maurice.....		
Megantic.....	1	
Missisquoi.....		
Napierville and St. Johns.....	3	
Nicolet and Yamaska.....		
Ottawa and Pontiac.....	2	
Portneuf.....		
Quebec, City of.....	13	129
Richelieu.....	1	
Richmond and Wolfe.....	2	
Rimouski.....		
Rouville.....		
St. Hyacinthe.....	2	
Shefford.....	2	15
Soulanges and Vaudreuil.....	1	
Temiscouata.....		
Terrebonne.....	1	
Victoria, Province of British Columbia.....	1	
Carleton, Province of Nova Scotia.....	1	1
Digby, do do.....		2
Halifax City, do do.....	1	
Northumberland, Province of New Brunswick.....		6
Queen's, Province of Prince Edward Island.....		1
Total.....	73	232
Quebec City, Cavalry Certificate.....	1	
Kamouraska, Infantry do.....	1	
Portneuf, do do.....	2	
Grand Total.....	77	232

APPENDIX No. 7.

MILITARY SCHOOL CERTIFICATES.

PROVINCE OF NEW BRUNSWICK.

LIST of Officers and Non-Commissioned Officers in the Active Militia, and Candidates for Commissions therein at the School of Military Instruction during the year, 1876.

Rank and Name.	First Class Certificate and date.	Second Class Certificate and Date.	Regimental Division.
	1876.	1876.	
Alexander, Sergt. John, 71st Battalion.....	8th Feb.	.....	Sunbury.
Alexander, William E.....	2nd March	.....	do
Alexander, Thomas.....	4th do	.....	do
Armstrong, John B.....	2nd do	.....	Charlotte.
Atkinson, Ensign, Wm. F., 67th Battalion.....	15th do	.....	Carleton.
Atkinson, Sergeant W. W., do.....	15th do	.....	do
Baird, Charles W., 74th Battalion.....	15th April	.....	King's.
Barrett, Edward C., 67 Battalion.....	7th do	.....	Carleton.
Biggar, George.....	18th March	.....	Northumberland
Blain, Alexander, 62nd Battalion.....	26th April	.....	St. John.
Boyce, Calvin, 71st Battalion.....	15th March	.....	York.
Brown, James, Sergeant-Major, New Brunswick Garrison Artillery.....	27th April	.....	St. John.
Buchanan, James, Sergeant, 62nd Battalion.....	26th do	.....	do
Burpee, George F., 67th Battalion.....	18th March	.....	Carleton.
Burpee, Charles, Captain, 67th Battalion.....	30th do	.....	do
Burton, William R., do.....	7th April	.....	do
Caldwell, John.....	7th do	.....	Queen's County.
Cameron, Allan, Sergeant, 73rd Battalion.....	2nd Feb.	.....	Northumberland
Cameron, Hugh, Captain, do.....	18th March	.....	do
Carmichael, David L., Sergeant, New Brunswick Engineers.....	18th May	.....	St. John.
Christy, Elbridge, 71st Battalion.....	5th April	.....	York.
Connelly, David, Sergeant, 62nd Battalion.....	18th May	.....	St. John.
Coster, George, do.....	27th April	.....	do
Courtenay, John T., do.....	26th do	.....	do
Culins, Jeremiah H., 71st Battalion.....	8th Feb.	.....	York.
Currie, Horace T., do.....	15th March	.....	do
Daniels, F. W., 62nd Battalion.....	17th May	.....	St. John.
Davis, Richard.....	17th Feb.	.....	York.
Dollard, John, 62nd Battalion.....	17th May	.....	St. John.
Edwards, Matthew B., 62nd Battalion.....	26th April	.....	St. John.
Estey, J. Hats, 71st Battalion.....	15th March	.....	York.
Fitzrandolph, Allan H., 71st Battalion.....	17th May	.....	York.
Garden, Julius F., 67th Battalion.....	15th April	.....	Carleton.
Grimmer, W. E. Hazen.....	23rd March	.....	Charlotte.

PROVINCE OF NEW BRUNSWICK.

LIST of Candidates for Commissions, &c.—Concluded.

Rank and Name.	First Class Certificate and date.	Second Class Certificate and Date.	Regimental Division.
	1876.	1876.	
Haley John.....	15th April	.....	King's.
Hart, J., Twining, New Brunswick Engineers.....	27th do	.....	St. John.
Howland, Benjamin.....	8th Feb.	.....	York.
Hoyt, Silas F., 67th Battalion.....	8th do	.....	Carleton.
Kickham, Thomas, 62nd Battalion.....	26th April	.....	St. John.
Libby, Charles F.....	17th Feb.	.....	York.
Lindsay, William, Sergeant, 62nd Battalion.....	18th May	.....	St. John.
Long, Charles A., 67th Battalion.....	15th April	.....	Carleton.
Magee, William C., Ensign, 62nd Battalion.....	26th April	.....	St. John.
Milledge, James W., do.....	2nd Feb.	.....	do
Mitchell, William A., 71st Battalion.....	30th March	.....	York.
Mitchell, William, do.....	30th do	.....	do
McDonald, Norman.....	17th Feb.	.....	do
McKenzie, John T.....	2nd March	.....	Kings County.
McKenzie, Lewis J.....	2nd do	.....	Charlotte.
McKinlay, John.....	17th Feb.	.....	York.
O'Brien, Dennis, 71st Battalion.....	30th March	.....	do
Peel, William B., 62nd Battalion.....	17th May	.....	St. John.
Peppers, Robert.....	17th Feb.	.....	York.
Phillips, Matthew L., 67th Battalion.....	15th April	.....	Carleton.
Rand, Stephen, 62nd Battalion.....	27th April	.....	St. John.
Risteen, Frank N., 71st Battalion.....	5th do	.....	York.
Rosborough, William.....	2nd March	.....	do
Scovil, William G., Sergeant, 8th Regiment Cavalry.....	30th do	.....	Kings.
Scovil, John, 71st Battalion.....	5th April	.....	York.
Sharp, Moses, do.....	2nd Feb.	.....	do
Smith, William D., do.....	5th April	.....	Sunbury.
Stephens, John, do.....	17th May	.....	York.
Thompson, George F., New Brunswick Engineers.....	28th April	.....	St. John.
Watson, James, jun., Mr., Sergeant 67th Battalion.....	7th do	.....	Carleton.
Wilkinson, Charles G. S.....	17th May	.....	York.
Wood, Lambert, Sergeant, 71st Battalion.....	15th March	.....	do
Wood, John, do.....	4th do	.....	do

RECAPITULATION.

First Class Certificates.....	0
Second do.....	67
Total.....	67

RESUMÉ.

PROVINCE OF NEW BRUNSWICK.

REGIMENTAL DIVISIONS.	ACTIVE MILITIA.		Number of Cadets attending the Schools of Military Instruction, on the 1st of Jan., 1877.
	1st Class Certificates.	2nd Class Certificates.	
Albert		3	
Carleton	2	54	
Charlotte		11	
Gloucester		3	
Kent		5	
Kings		42	
Northumberland		6	
Queen's		9	
Restigouche		2	
St. John (first, second and third)	9	138	
Sunbury		14	
Victoria		3	
Westmoreland		13	
York	4	184	
Grand Total	15	487	

Officers and N.C.O. in the Active Militia, and Candidates for Commissions therein, who have obtained Certificates at the Schools of Military Instruction, since their first opening.

PROVINCE OF NOVA SCOTIA.

LIST of Officers and Non-Commissioned Officers in the Active Militia, and Candidates for Commissions therein, who have obtained Certificates at the School of Military Instruction, during the Year 1876.

RANK AND NAME.	First Class Certificate and Date.	Second Class Certificate and Date.	Regimental Division.
	1876.	1876.	
Archibald, George H., Private, 63rd Battalion.....		May 4.....	Halifax City
Billman, James, Private, 66th Battalion.....		May 23.....	do
Billman, Thomas, 66th Battalion.....		April 10.....	do
Bishop, W., Ensign, 63rd Battalion.....		March 21.....	do
Black, G. Howard, Corporal, Cumberland, Provisional Bat.		April 10	Cumberland.
Bowes, Wm., Gunner, 1st Halifax Brigade, Garrison Artl'y		May 12.....	Halifax City.
Cameron, Charles S.....		May 23.....	Victoria.
Carter, G. C., Sergeant, Cumberland Provisional Battalion		April 10.....	Cumberland.
Carter, Job, Sergeant, 66th Battalion.....		May 23.....	Halifax County.
Cassidy, P. J., Private, 63rd Battalion.....		do 12.....	Halifax City.
Charlton, J. H., Sergeant Major, 69th Battalion.....	May 2.....	March 21.....	Annapolis.
Clay, H. P., Lieut., 2nd Halifax Brigade, Garrison Artl'y		April 10.....	Halifax City.
Connors, James, Sergeant, 63rd Battalion.....		May 2.....	do
Corbin, W. E., B.S. Major, 1st Halifax Brigade Gar. Artl'y	May 23.....	April 10.....	do
Cornwall, Charles B., Sergeant, 69th Battalion.....	do 2.....	March 21.....	Annapolis.
Crisp, Fred, Gunner, 1st Halifax Brigade, Garrison Artl'y		May 12.....	Halifax City.
Dewar, H. G., Private, 63rd Battalion		May 23.....	do
De Wolfe, C. E., Corporal, 63rd Battalion.....		April 10.....	do
Egan, J. T., Ensign, 63rd Battalion	May 23.....	March 21.....	Halifax City.
Elliot, L. W., Ensign, 69th Battalion.....		May 29.....	Annapolis.
Fortune, James, Private, 63rd Battalion		April 10.....	Halifax City.
Fraser, Donald, Sergeant, 66th Battalion.....		March 21.....	do
Givens, John, Gunner, 1st Halifax Brigade Garrison Artl'y		May 12.....	do
Gough, Richard, Sergeant, 63rd Battalion.....		do 4.....	do
Graham, John, Gunner, 2nd Halifax Brigade Garrison Ar'y		do 2.....	do
Graham, George, Private, 66th Battalion		do 23.....	do
Harrison, O. L., Bugler, Cumberland Provisional Battalion		April 10.....	Cumberland.
Healey, Philip G., Private, 63rd Battalion.....		May 31.....	Halifax City.
Hickey, John P., Private, 63rd Battalion.....		do 2.....	do
Hills, John E., Gunner, 1st Halifax Brigade Garrison Artl'y		do 4.....	do
Holder, Henry A., Gunner, 1st Halifax Brigade Gar. Artl'y		do 12.....	do
Horneman, Frederick, Private, 66th Battalion.....		do 31.....	do
Howard, John, Ensign, 66th Battalion.....		April 10.....	do
Kaizer, A. F., Private, 63rd Battalion.....		May 31.....	do
Lambert, Thomas, Private, 66th Battalion.....		April 10.....	do
Locke, Reuben, B.S.M., 2nd Halifax Brigade Garrison Artl'y		May 12.....	do
Lockhart, Archibald, Private, 63rd Battalion.....	May 23.....	March 21.....	do
Lomas, John, B.S.M., 1st Halifax Brigade Garrison Artl'y..		do 21.....	do

PROVINCE OF NOVA SCOTIA.

LIST of Candidates for Commissions, &c.—*Concluded.*

RANK AND NAME.	First Class Certificate and Date.	Second Class Certificate and Date.	Regimental Division.
	1876.	1876.	
Macintosh, George H., Private, 63rd Battalion	May 23.....	do	do
Mahoney, John, Gunner, 1st Halifax Brigade Garrison Art'y	do 4.....	do	do
Menger, John, Private, 63rd Battalion	do 23.....	do	do
McKinnon, Alexander, Private, Victoria Provisional Batt... ..	do 23.....	Cape Breton.	
McNeil, E. F., Sergeant Major, 68th Battalion	May 23.....	Kings County.	
McPhaile, Hugh, Sergeant, 63rd Battalion	May 31.....	Halifax City.	
Palmer, Ed., Gunner, 1st Halifax Brigade Garrison Artily.	May 4.....	do	do
Payne, William, Private, 63rd Battalion	do 31.....	do	do
Ridgeway, Lewis, Gunner, Halifax Field Battery	May 4.....	do	do
Sanford, Harding B., Private, 63rd Battalion	May 23....	do	do
Silverthorne, David, Gunner, 1st Halifax Brigade Gar. A... ..	do 23.....	do	do
Vaughan, James F., Corporal, 63rd Battalion	May 2.....	do	do

RECAPITULATION.

First Class Certificates.....	6
Second do	49
Total.....	55

RESUMÉ.

PROVINCE OF NOVA SCOTIA.

REGIMENTAL DIVISIONS.	ACTIVE MILITIA.		Number of Cadets attending the Schools of Military Instruction on the 1st of Jan., 1876.
	First Class Certificate.	Second Class Certificate.	
Annapolis	4	43	
Antigonish			
Cape Breton	1	5	
Colchester		10	
Cumberland	1	12	
Digby		3	
Guysboro'		6	
Halifax City	27	231	
Halifax County	1	32	
Hants		2	
Inverness		4	
Kings	1	8	
Lunenburg	2	10	
Pictou		23	
Queens			
Richmond		2	
Shelburne			
Victoria		14	
Yarmouth			
Ottawa City, Ontario	1		
Grand Total.....	38	405	

APPENDIX No. 8.

CERTIFICATES, BOARDS OF EXAMINERS.

LIST of Officers of the Active Militia, and of Candidates for Commissions therein, who have obtained Certificates from Boards of Examiners, during the year 1876.

Rank and Name.	First Class Certificates and Date.	Second Class Certificates and Date.
PROVINCE OF ONTARIO.		
	1876.	1876.
Armstrong, Adam, Ensign, 26th Battalion		2nd March.
Bethune, Norman, Captain, 2nd Battalion, Queen's Own.....		7th April.
Bryant, John C., Lieutenant, 34th Battalion		7th April.
Buchan, Lawrence, Captain, 2nd Battalion, Queen's Own.....	7th April.	
Cleverdon, Thomas, Sergeant, 34th Battalion.....		7th April.
Cockburn, John, Lieutenant, 38th Battalion.....		7th April.
Cook, Christopher, Lieutenant, 35th Battalion.....		7th April.
Dixon, John R., Captain, 7th Battalion.....	20th May.	
Dunn, H. C., Sergeant, 34th Battalion		16th May.
Elliot, William R., Ensign, 7th Battalion.....		20th May.
Evans, George T., Ensign, 36th Battalion		7th April.
Griffin, Henry Wilmot, Ensign, Governor General's Foot Guards.....		26th May.
Hartley, Gilbert, Corporal, 13th Battalion.....		7th April.
Hunt, Charles B., Ensign, 7th Battalion.....		20th May.
Johnson, George S., Ensign, 26th Battalion.....		2nd March.
Mahon, James A., Lieutenant, 7th Battalion.....		20th May.
Mead, Joseph H., Ensign, 10th Battalion, Royals	7th April.	
Mercer, Richard, Sergeant, 34th Battalion.....		7th April.
Musson, William, Captain, 37th Battalion		7th April.
McGill, S. G., Lieutenant, 34th Battalion.....		7th April.
MacMillan, John, Captain, 25th Battalion	12th April.	
Nelles, R. L., Captain, 37th Battalion.....		7th April.
O'Brien, Thomas, Captain, 7th Battalion.....	20th May.	
Patterson, Norman F., Captain, 34th Battalion.....	7th April.	
Pattullo, George R., Captain, 38th Battalion.....	8th May.	
Phipps, William Arthur, Lieutenant, 10th Battalion.....	7th April.	
Rankin, William R., Ensign, 35th Battalion.....		7th April.
Rolph, Thomas Taylor, Captain, 10th Battalion.....	7th April.	
Smith, John J., Captain, 34th Battalion	7th April.	
Stuart, John J., Sergeant		16th May.
Toller, Frederick, Ensign, Governor General's Foot Guards.....		26th May.
Wastie, Thomas, Ensign, 7th Battalion.....		20th May.

LIST of Officers of the Active Militia, &c.—Continued.

Rank and Name.	First Class Certificate and Date.	Second Class Certificate and Date.
PROVINCE OF QUEBEC.		
	1876.	1876.
Allen, John, Ensign, 52nd Battalion.....		11th April.
Anderson, Alexander, Ensign, 3rd Battalion.....		15th May.
Crawford, J. D., Lieut.-Col., commanding 5th Battalion.....	20th May.....	
Doherty, Henry J., Major, Commanding St. Hyacinthe Provisional Battalion	13th May.....	
Geddes, Charles G., Captain, 5th Battalion.....		15th May.
Grant, John G., Lieutenant, do		15th do
Grindrod, Adam L., Ensign, 53rd Battalion.....		25th October.
Hunt, Arthur F., Ensign, 8th Battalion.....		20th May.
Hutchins, J. R., Ensign, 5th Battalion.....		15th do
Jackson, F., Arthur, Ensign, 3rd Battalion.....		15th do
Lindsay, Robert, Lieutenant, 5th Battalion.....		15th do
MacDougall, Campbell, Captain, do		19th May.
Mackinnon, James, Ensign, do		15th do
Morgan, James, Captain, 8th Battalion.....		
McLaren, W. D., Ensign, 6th Battalion.....		15th May.
McLennan, James A., Ensign, 5th Battalion		15th do
Sixby, Horatio N., Captain, 60th Battalion.....	1st September....	
Stewart, Samuel D., Ensign, 6th Battalion.....		15th do
Thomson, William, Captain, 55th Battalion.....	1st March.....	
Whyte, A., Lieutenant, 5th Battalion.....		15th do
PROVINCE OF NEW BRUNSWICK.		
McLean, Hugh Havelock, Captain, 62nd Battalion.....	4th August.....	
Thomas, Albin, Ensign, do		6th August.
CAVALRY CERTIFICATES.		
The following cavalry certificates were obtained from a Board of Examiners in the Province of Quebec, in 1872:—		
		1872.
Blackburn, John F		30th March.
Bolduc, Alfred.....		30th do
Flanagan, William.....		30th do
Fraser, August.....		30th do
Kent, William.....		30th do
Lawlor, Michael.....		30th do
Letellier, Joseph.....		30th do
Tierney, Michael.....		30th do

APPENDIX No. 9.

REPORT OF DIRECTOR OF STORES, &c.

DEPARTMENT OF MILITIA AND DEFENCE,

STORE BRANCH, OTTAWA, 1st January, 1877.

SIR,—I have the honor to submit, for your information, the following statement in relation to the Militia Stores and Properties in my charge.

Clothing.

This, in the past year as in the previous one, was made in the country from cloth of Canadian manufacture. Owing, it is presumed, to the fact that the Militia Force generally was not called out to perform its annual drill under canvas, as has been heretofore the practice, the demand for issues of clothing has been much less than in any previous year when encampments prevailed. There is now consequently a larger supply of clothing remaining on hand than was the case last year.

Ammunition.

The issue of Snider ammunition for practice, has last year amounted to 320,973 rounds of ball and 345,184 rounds of blank.

There has also been sold to the different Rifle Associations, and for individual target practice 511,302 rounds of Snider ball ammunition, for which deposit receipts have been received to the amount \$9,004.11. In this amount, however, is included sums received for the sale of gunpowder to the Post Office and other Departments for the service of the time guns at Ottawa and Quebec.

To the Field Batteries and different corps of Garrison Artillery, there has been issued for service and practice 18,421 lbs. of gunpowder and 10,044 friction tubes, with the usual proportions of shot, shells, fuzes, &c.

Arms.

The balance of the Spencer carbines (300) remaining unsold were disposed of at the same rate as was obtained for those sold last year. The amount realized for them being \$2,700.

Twelve more M.L.R. 9-pr. guns with carriages complete, as also ten additional carriages for those unmounted, remaining in store, have been received and distributed.

Twelve Field Batteries are now completely armed with these new pattern guns, as also the "A" and "B" Batteries. Two additional guns and carriages to the two previously sent to Manitoba, were forwarded to Winnipeg *via* the Dawson Route, in September last. Thus making a complete Battery of this description of guns for service in that District. There are now sixty of these 9-pr. guns in use.

The four 7-pr. rifled mountain guns at Winnipeg, with all their appurtenances and stores, including ammunition, shot, shell, &c., have been sold, and issued to the North-West Police Force for the service of that body. The amount to be reimbursed to this Department, for the guns and stores thus disposed of, will be \$4,468.40.

Boards of Survey

Were held in the different Districts in accordance with the General Orders on the subject. The obsolete and unserviceable stores condemned by those Boards were afterwards sold by public auction, and the amount realized by such sales amounted to \$1,406.10.

The aggregate amount received by the Store Branch for sales and rents was \$20,522.41. The detailed statement underneath shows the different items for which this amount was received.

DEPOSIT receipts from 1st January, to December 31st, 1876.

Ammunition.		Clothing.		Rent.	Arms and Accoutrements	Miscellaneous.	Total Amount.
Rounds.	Amount.	Officers'.	Mens'.				
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
511,302	9,004 11	7 70	1,272 16	5,615 73	3,100 78	1,521 93	20,522 41

Tenants and Rental.

The list underneath gives the number of Departmental tenants, the different localities and amount of rental. The arrears of rent at the close of the present year amounted to \$164.50

Localities.	Tenants.	Rental.
		\$ cts.
Chatham, Ont.....	1	5 00
Niagara.....	5	86 00
Toronto.....	3	240 00
Kingston.....	25	592 51
Ottawa.....	1	1 00
Montreal, &c.....	4	251 75
Isle aux Noix.....	2	54 00
Quebec, &c.....	20	3,130 71
Point Levis.....	33	1,154 25
New Brunswick.....	14	133 49
Nova Scotia.....	5	169 71
Prince Edward Island.....	1	1 00
Total.....	114	\$5,819 42

THOS. WILY, Lieut.-Colonel,
Director of Stores and Keeper of Militia Properties.

To the Honorable
The Minister of Militia and Defence,
Ottawa.

APPENDIX No. 10.

ENCAMPMENTS.

(Memorandum.)

The following extracts from the "Regulations and Instructions for Encampments" of Her Majesty's troops are published for information of the militia. It is, however, not to be understood that their publication changes the "Regulations and Orders for the Active Militia, &c., 1870."

By order.

WALKER POWELL, Colonel,
Adjutant-General of Militia,
Canada.

HEADQUARTERS, OTTAWA,
January 1st, 1877.

QUARTER-MASTER GENERAL'S OFFICE,
HORSE GUARDS, WAR OFFICE,
1st May, 1875.

The Field Marshal Commanding-in-Chief has been pleased to direct that a new edition of the instructions for the encampment of Her Majesty's troops be prepared and promulgated for the information and guidance of the Army.

Although troops must be guided in the position and form of their encampments by the shape and nature of the ground, the proximity of wood and water, and, in actual warfare, by a variety of considerations that defy all rules, it is nevertheless desirable that certain definite forms of encampment should be established by authority, to be modified as occasion may require for the convenience of the troops and efficiency of the Force encamped.

By Command of His Royal Highness the
Field Marshal Commanding-in-Chief,

C. H. ELLICE, Q.M.G.

REGULATIONS AND INSTRUCTIONS FOR ENCAMPMENTS.

GENERAL PRINCIPLES.

1. *Camps.*—Camps may be formed of huts or of tents, or they may be mere bivouacs made of brushwood, straw, branches of trees, or anything soldiers can find ready to hand.

Hut encampments are chiefly used when an army occupies a defensive position for a long time, or during a siege; they are rarely made during a campaign.

Of whatever materials a camp may be formed, it is evident that its position and form must, to a great extent, be governed by either strategical or tactical reasons.

2. *The Selection of a Site.*—The site for a "standing" camp is selected chiefly because it presents certain strategical advantages. The site for a "flying" camp is chosen on account of some tactical advantage the ground may offer.

The principle formerly laid down that troops when encamped are to occupy the same front as in line of battle is in the present day considered inadvisable. It assumes that the enemy is coming from one particular direction in which it is necessary to be ready for him, but as the army so encamped is less ready in every other case, such a mode of encamping can therefore be only necessary when from sanitary considerations it is desirable to open the tents out as much as possible. The encamping of troops in the field is nothing more than their location in such a manner that they can be rapidly formed in a good position for action. This does not involve the necessity of encamping on the very position itself. On the contrary, it is preferable to encamp under cover in rear of, but so near to the position that it can be immediately occupied. It is most desirable that such a position should be selected as can neither be commanded nor turned. Such a happy combination of circumstances cannot, however, always be found. Before an enemy, purely strategical and tactical considerations are of the first importance, but in determining between two sites, in which these may be equal or nearly so, it should be remembered that the comfort of the troops in reference to the nature of the ground they may have to lie on, should, in conjunction with sanitary conditions, be the next consideration. For if men are on very rough, steep, damp, or stony ground their rest and therefore their health and efficiency will suffer.

Circumstances may sometimes render it necessary to encamp a force in a position commanded by a neighbouring height, in which event such height should be occupied by a piquet, or a detached body of troops, or according to circumstances be entrenched so that it may be successfully held by a small force.

The next points to be considered are the facilities which the site selected offers for obtaining water, wood, forage, and straw; the relative importance of these things being shown by the order in which they are named. Very often they cannot be obtained on the site chosen as being a good defensive position; in which case they must be carried to the ground at great cost and labour, or a position inferior in a defensive point of view must be selected. The want of water compelled the Duke of Wellington to occupy the ground on which his army was encamped, prior to the action at Vimiera, in a manner which had to be altered almost at the moment of the French attack.

The site of a camp should be sandy or gravelly, and dry; clay is usually damp. The side or top of a hill is much to be preferred to the ground immediately at its base. Wet ground surrounded by marshes should be avoided as much as possible. If troops have to be encamped on such a piece of ground for more than one night, drains should be cut through it to allow the water to flow away. The presence of moss generally indicates marshy ground.

Wood must usually be obtained by cutting down such trees as are most convenient for the purpose. It is unwise, however, to encamp in a forest or wood of any extent, if it can be avoided, the accumulation of decaying leaves under the trees being often so great as to produce attacks of fever. A division of the French army which encamped in a forest the night before the battle of Raab was almost decimated by fever. Newly ploughed ground should be avoided. Grass is always healthy to encamp on. Brushwood is bad, unless on a gravelly or sandy soil: it is perhaps better not to disturb it if the camp is merely for a night or two; but in the case of a standing camp, it should be cut down.

Ravines and water-courses must be carefully avoided. A sudden fall of rain will often, in a mountainous country, convert a dry ravine into a large stream.

[By the Medical Regulations, camping ground should be inspected by the Sanitary Officer.]

It will thus be apparent that the site of an encampment has to be viewed from two distinct points, viz., *military* and *sanitary*; and this is the case with every encampment, whether of a division, of a picket, or of an outpost. The movements, or position, of the enemy must, of course, decide whether military or sanitary reasons shall weigh most in the selection of a site.

For a camp to be used for one night, and where the enemy is close at hand,

military reasons must be all important; while, if the camp is to be used for a longer period, or the enemy is not close at hand, sanitary reasons should be allowed due weight in the selection of the position.

In every case, the form of the camp must be suited to the ground, and the different arms of the service should be encamped on that ground best adapted for them. Thus, infantry may, if necessary, be encamped on ground with a considerable slope; mounted corps, on the contrary, should be encamped so that the horses may stand on nearly level ground. Wet spots must be avoided as much as possible; this may generally be obtained by slightly altering the line of encampment, throwing battalions back in echelon, encamping battalions by half-battalions, or adopting such other methods as a little ingenuity may suggest.

3. *Form of Encampment.*—The following are the principles which have mainly led to the establishment of the forms of encampment laid down in the following pages; and, however troops may be encamped, these principles should govern the disposition of the camp.

1st. The means of passing freely through the camp should be maintained.

2nd. The tents, bivouacs, or huts should be disposed with a view to the greatest amount of order, cleanliness, ventilation, and salubrity.

3rd. The camp should be as compactly arranged as possible, consistently with the above considerations.

With large bodies of troops a straggling camp with a wide front is to be avoided, such an encampment is not only tactically disadvantageous, but increases all the necessary labour of fatigue duties, delays the delivery of supplies, and impedes the circulation of orders. When the military telegraph is available, camps when separated by half a mile or more should be connected by wire. This saves both men and horses from much orderly duty.

4. *Precautions to be taken.*—Whenever troops remain in camp more than three days, tents should be struck every two days. All arms, straw, and blankets should be removed from the ground covered by the tent, and the ground should be swept clean with a broom, or branches of trees, and left exposed to the sun and wind. Blankets, clothes, &c., should be spread out to air, and the tent roughly pitched in the intervals of the camp with slack ropes, and the fly loose to allow it to be well blown about: tents should never be pitched for occupation in the intervals. Men invariably at night urinate round the tent and consequently pollute the ground.

If troops remain more than one night in camp, the tent flies should be rolled up the first thing every morning; in rainy weather, the fly may always be rolled up on the leeward side of the tent.

As a rule, the doors of the tent should face the head of the column, but this rule should never prevent their being turned away from the prevailing wind when necessary.

Trenches should be dug round tents, and a drain should connect these trenches so that the water may not lodge in them, but may run freely off. The first wet day after the camp is formed, officers commanding companies should personally examine the ground on which their companies are encamped, and should see that proper drains are constructed:—half-an-hour's work on a wet day, when the natural run of the water can be seen, will do more to keep the camp healthy than a day's labour in dry weather.

5. *Position of the different Arms.*—In encamping large bodies of troops, it is very desirable that a sketch of the ground, no matter how rough, showing the place to be occupied by each corps, should be prepared beforehand; by this means the officer charged with forming the encampment can in a few minutes place the whole of the camp-colour men, so that when the regiments arrive they may proceed at once to the position assigned to them. Cavalry and Artillery should never be placed on a flank, unless the latter may be necessary for defensive purposes, in which case the guns should be protected by a strong guard of Infantry. The reason for this is that, in case of attack, mounted corps take longer to turn out, and the horses, if frightened, are apt to produce much confusion.

The Engineers usually encamp close to Head Quarters of the Division.

The Telegraph wire should be laid from Head Quarters to the nearest point on the main line, and, if the camp is large, to the wings of the camp. As soon as the pickets and outposts are placed, arrangements should be made for communicating from them to Head Quarters by signal, either by day or night.

The Depôts both of provisions and munitions should be placed in a central position, with easy access to all parts of the camp.

The site for the Depôts should be selected close to a good road, by which the supplies can be brought up. Space should be allowed for the Army Service Corps to encamp near the depôt. If the camp be large, it may be convenient to divide the depôt into two portions, one for the issue of bread and meat, the other for forage. A sufficient space should be allowed for fatigue parties who come for rations to halt without crowding. The hours when rations of bread, meat, and forage are issued are named in orders, and the Brigade captain of the day should attend to see that there is no crowding or confusion. It may be sometimes convenient to form rough counters for issuing rations; these can be easily made of the tail-boards of wagons placed upon stones or banks of earth. A way in and out should be made, so that the two parties, those who are coming and those who are going, may not interfere with one another.

6. *Camp Equipment.*—When troops are ordered either for active service in the field, or to encamp at home, the various articles termed generally *camp equipment* are issued to them. These articles are supplied by the Ordnance Store Department on requisitions being made on it; such requisitions have to be examined and approved by the Ordnance Store Officer of the division prior to the issue being made, and must state the exact number of the troops for whom camp equipage is required. At the time appointed for making the issue, an officer, with a fatigue party and the transport detailed for the purpose, should attend at the military stores and take over each article; this duty should be very carefully performed. If broken or damaged articles are taken over by the officer so employed, not only may the regiment have to pay for the articles, but very serious inconvenience may result, there being many cases when it is difficult to get things replaced; it is therefore of considerable importance that the officer should be acquainted with the use of each article. When the issue is completed, the officer gives a receipt, and receives a delivery voucher from the storekeeper.

As the officer detailed to draw camp equipage receives it, he should be careful not to pack the articles just as he gets them:—he should pack the equipment by companies, marking on the outside of each wagon the number of the company to which it belongs; the articles for general service being packed quite distinctly. The equipment should be handed over to the officers commanding companies by the quartermaster, who will retain the articles for general service. In packing the wagons, care should be taken that those articles that are likely to be wanted first should be put in last. Thus, the blankets should be put in first, as, if the weather be wet, they may with advantage be left in the wagons until the tents are pitched; the intrenching tools, being required first, should be put in last.

In packing the wagon, one man should get in, and the cover may be taken off; but the wagon is in no case to march without its cover being on and properly secured. When the wagon is being loaded, the driver should dismount and stand to his horses' heads. The wagons, numbered according to the companies, should march as the companies stand on parade; the baggage guard of each regiment marching together in rear of the last regimental wagon, the first wagon being preceded by one corporal and two men, with as few men as possible distributed along the line.

7. *Appointment of Baggage Masters and their Duties.*—When one or more divisions of an army are marching there will usually be appointed:—

i. A divisional baggage master.—A field officer.

ii. A brigade baggage master for each brigade of cavalry and infantry.—A captain.

The divisional baggage master will take his orders from and be responsible to

the A. Q. M. G. of the division, who will give him distinct instructions as to the route or routes which the baggage of the division or of the several brigades is to follow, and the order in which it is to move as well as the time of march. The divisional baggage master will also be responsible for the regularity in movement and for the safety of the baggage. The baggage guards will be under his command.

The divisional baggage master will instruct the baggage masters of brigades, arranging with them the points at which the baggage of their respective brigades is to enter the column of route and the order to be observed. These instructions should be given in writing as well as personally on the ground.

The brigade baggage masters will similarly make arrangements with officers commanding regiments, as to the time at which wagons are to be ready, and where they are to be packed. Commanding officers will be responsible that the wagons are loaded in good time, and that they are not overloaded. This chain of responsibility, and the zealous personal efforts of all concerned, will alone insure order and regularity in the performance of a duty which involves consequences of vital importance to the comfort and well being of the troops, and to the success of the operations.

Care should be taken that canteen carts when provided for regiments from private sources are properly horsed and the harness in good order. Such carts should be paraded and move with the regimental baggage. If this be not strictly enforced, the drivers will probably precede the troops in order to arrive early on the next camp ground, and will thus interfere with their free movement along the road, or if a break down takes place, will, in a narrow road, obstruct the whole baggage of the column. Officers commanding regiments will be responsible that these cautions are observed.

Corps usually take it in rotation to march at the head of the column; hence, as the order of march of the convoy must be changed each day, it will greatly facilitate matters if a small flag the colour of the facing, and with the number of the regiment, be attached to each wagon; a little arrangement and care in observing this order in the march of the convoy will prevent much confusion when the camp is being formed, and keep the men a shorter time waiting for their tents,—a matter of great importance, as soldiers are apt to stiffen when halted after a hard march, and it is desirable to get the camp pitched before they do so.

FORMATION OF THE CAMP.

8. *The different Orders to be adopted in encamping Troops.*—Camps will be formed in one or other of the following orders:—

Infantry and Cavalry:

- No. 1, or open order.
- No. 2, or half order.
- No. 3, or close order.

Artillery:

- No. 1, or open order.
- No. 2, or half order.

Engineers:

- No. 2, or half order.
- No. 3, or close order.

Army Service Corps:

- No. 2, or half order.
- No. 3, or close order.

The No. 1, or open order, of the cavalry and infantry will only be used when there is plenty of space, and when medical considerations require the tents to be widely spread.

No. 2, half order, for the infantry, cavalry, engineers, and No. 1 for artillery, will be that usually ordered.

No. 3, or close order, represents the smallest space on which the several corps should encamp.

When the frontage space does not admit of the troops or companies being encamped even in close order, the regiments may be encamped by squadrons or double companies, should the depth of ground allow of it, but this is not advisable, as some of the officers are thus further separated from their troops or companies.

The following intervals will be observed as a rule, but they may be reduced when found necessary:—

Between battalion of infantry and battalion of infantry, 30 yards.

Between battalion of infantry and regiment of cavalry, 30 yards.

Between battalion of infantry and battery of artillery, 34 yards.

The plans for divisional head-quarters only indicate what will be found convenient under ordinary circumstances.

No plan is given for the camp of brigade head-quarters, as from the few tents composing it, no difficulty will be found in placing them according to the ground near centre of the brigade.

The plates above mentioned are intended to show camps for battalions, squadrons, &c., at their full war strength. When the regiments, &c., are on the peace establishment, the staff officer charged with the arrangements for encamping the troops will make a proportionate reduction in the size of the camps.

9. *Marking out the Camp.*—Two privates of each corps will be detailed for the purpose of marking out the site to be occupied by the camps of the regiments to which they belong. One should know and have in writing, the number of files of his corps in line, and the number of paces required for its front.

These men, provided with camp colours,* will parade with the advance guard and move off with its support.

On their reaching the ground on which the quarter-master or other mounted officer of each regiment should arrive with them, the staff officer (who, as previously stated, should, if possible, have a knowledge of the ground, and a rough sketch of it) will proceed to mark off the camp, as follows:—

Where the ground is sufficiently extensive to enable a brigade to encamp in line, he will place a marker as a base point for the line of tents; the other marker of the same battalion will measure the distances ordered for its front in the given direction (marching on some fixed point), halt, and turn about, the staff officer correcting his covering. The inner marker of the next battalion will take whatever interval may be ordered by the staff officer, turn about, and cover; the outer marker will measure the distance required for its front, turn about, and cover; and so on.

When the markers are covered, they will fix their camp colours in the ground firmly between their feet.

All intervals should be measured from tent pole to tent pole. When camp colours are used the poles of the flank tents of the front line should exactly replace the staffs of the camp colours on front line.

After tents are pitched the camp colours, if used, will be fixed in the prolongation of the line of poles of the tents of the flank companies, and between the last pegs of the front tents of these companies and dressed.

In order to fix the other two points which mark the rear of the ground occupied by the corps, a right angle must be laid out. This can be done with a tape as follows:—One man holding the 24th foot, and the end, will place himself in the alignment, six feet from the base camp colour; a second man will then pass the tape round the staff of the colour, and, holding the 14th foot, will tighten the tape,—he will then be at right angles to the front of the encampment (Pl. III.). If a tape is not at hand, a right angle may be pretty accurately laid out thus:—Place two men

* When, on service, camp colours are not issued, the ground must be marked simply by the men, or by other means improvised on the spot.

facing one another at the base camp colour, give the words *Right-about Turn, Quick March*, and, when they have marched about 10 or 12 paces to the front and rear of the alignment, *Halt. Right-about Turn*; if these men and the camp colour they started from are in line, the direction will be nearly correct (Pl. II.) The depth of the camp is then measured off.

10. *Troops arriving on the Ground*.—On approaching the camping ground, a field officer, or the adjutant, should ride on and ascertain from the markers of his corps (who should be on the look-out) the position the corps to which he belongs is to take up; he should then return to his corps and conduct it to its ground.

Infantry.—On arriving on the ground, each battalion of infantry will be formed in column of companies, at wheeling or any other ordinary distance in front of the line of camp colours, dividing the space between the front and the rear camp colours. When pressed for room, the column may be formed on the ground it is to occupy, but this is not desirable if it can possibly be avoided.

The quarter and rear guards should be mounted immediately the regiment arrives on the ground, and placed by the major.

Band, drummers, pioneers, &c., should join their companies, which should be at once told off in squads of one non-commissioned officer and 14 privates to each tent.

The colour-serjeant of the company should be told off for the rear tent, so that his captain may know where to find him.

The arms will be piled, and accoutrements taken off and placed in rows on the ground or hung on the piles of arms,

One non-commissioned officer and six men (one file as polemen, one as packers, one as pegmen) per squad or tent will be told off to be ready to pitch the tents when the wagons arrive† (Pl. I.).

The following parties should then be told off and paraded by the adjutant:—

Cooking party:—Two men per company under the serjeant cook.

Latrine party:—All the pioneers who carry pick-axes and shovels, and two men per company.

Water party:—One non-commissioned officer and two men per company, under a serjeant.

Ration party:—A non-commissioned officer and two men per company, or more if the company is strong, under the quartermaster serjeant.

Wood party:—Two men, or more if requisite, and a non-commissioned officer per company.

The remainder will sit down close to the pile of arms.

The Serjeant Cook will select the place for the kitchen, within the space marked out by the camp colours, and will make the kitchen as soon as the tools can be procured.

The Corporal of Pioneers will at once begin the latrines, it being essential that the ground should not be fouled; for this purpose he will dig a narrow trench some 15 feet long and about 1 ft. 6 in. deep. If the camp be only for one night, this will suffice; if for a longer period, this trench may be filled in and a deeper and larger one made, brushwood, branches, or grass being used to give a little shelter. The positions of the latrines must be left to the discretion of the staff or other officer encamping the troops. They should be at a distance from the water supply, and usually in rear of the lines.

The Ration party, under the quartermaster serjeant, will go to the Depot and receive the rations.

The Wood party will, if no fuel is issued, seek for, and bring it to the kitchen.

As soon as the convoy of wagons makes its appearance, an officer from each corps should be on the look out for the regimental wagons, and conduct them to the rear of the camping ground. Care should be taken that they do not drive over the space within the colours, but pass through the intervals. They should be parked with

† In cavalry, tents can be pitched by three or even two men when more are not available. The method of pitching a tent with two men is described at page 250.

the tail-boards towards the camp, and they should not halt near any ground where tents are to be pitched, as horses stale when halted, and pollute the ground.

On the wagons being halted, the whole of the tent party, with the exception of one pole man per tent, will march off, under a subaltern from each company, unpack the wagon, and bring up the tents.

The captains will parade the waiting pole men, in single rank, on the reverse flank of their companies at the ordered intervals, the polemen of the leading company being on the spot marked by the camp colour. The pole men will then receive the word of command, "*From the left (or right).—paces, Extend.*" The captains will dress the men from *left to right* of companies (or *vice versa*), a mounted officer covering them in succession from the *FRONT*. Each tent squad will bring up a tent, pegs, and pole, open the tent bag, and drive a peg between the heels of the pole man, who will grasp the pole; the tent will then be opened and placed on the pole. If the tent has storm guys, they will be fixed, and the ends placed over four pegs driven at right angles to one another five yards from the pole, marking four corners; if the tent has no storm guys, the four red runners will be held each by a man; the non-commissioned officer seeing that the door points the proper way and that the fly is hooked. On all being reported ready, the bugle will sound one G and the whole will be raised at once, the guys fixed, and the pegging down completed.

The officers' tents will then be pitched in a similar way.

Captains of companies should now examine the tents, to see that they are properly pitched; the arms, accoutrements, and blankets should be brought in; and a trench dug round each tent with a proper drain to carry off the water.

It may be desirable to encamp a regiment by half battalions, in which case each major will encamp his half-battalion as has been described for the entire regiment.

The space between the company tents in plans for No. 1 and No. 2 Infantry, is for the private parade of the company, which files out on the general parade ground clear of the camp colours.

11. *Cavalry*.—The regiment having arrived upon the ground for encamping will be formed in columns of troops in front of the camp. The quartermaster and camp colour men (who, if possible, will be sent on beforehand) will dismount and measure out the ground, each troop serjeant-major will stand at the head of his own horse lines, the outside rows of tents will be on the camp colours; the regiment will then receive the command "*File to your lines,*" upon which each troop will be marched, *Files right*, to its lines and be formed up to the reverse flank in single rank, at one foot interval from knee to knee, the horses' heads facing the line of tents. (By this method the ground near the tents does not become saturated with urine, the manure is kept together, and the men can easily get to their horses' heads.)

The regiment will then be dismounted, with carbines, without any reining back; the horses will be linked from the flanks to the centre, but if they are accustomed to the work and will stand steady, it may not be necessary to link them, in which case the reins will be placed over the front part of the saddle; each horse will be picketed separately. The men will lay down their carbines and swords between the lines for the tents and the horse lines, take off their accoutrements, strip the saddle, rolling everything up in the sheepskin; the pegs will then be driven in 4 feet apart, and the horses unbitted as soon as each horse is fastened up; three stable guards per troop will be told off, and the remainder will fall in and be told off for drawing tents, forage, rations, fuel, &c.

The tents will then be pitched in accordance with the tent pitching instructions.

The forage is to be kept in the centre of the lines between the two central tents.

The horses will be unsaddled when the backs are cool, and the saddles placed near each horse and raised, if possible, off the ground. The bits will be taken off, the headstalls left on. So soon as the camp is pitched, the horses, when cool, may be taken to water, and on their return, fed. If the horses are not used to being picketed, it is advisable that they should be picketed as they stand in the stables, and not as they stand on parade. It may also be desirable to leave the bridoon reins on while

feeding, so that if a horse gets alarmed and struggles there may be some command over him. In order to give the horses confidence, the men should be kept as much as possible among them; and, if the weather be fine, all cleaning of accoutrements should be done close to them. If, however, horses are used to being picketed, in a little time they stand as quietly as in a stable, and these precautions need not be taken. Kickers and vicious horses should at all times be picketed at a distance from others.

12. *Staff*.—The head-quarters of a general commanding an army corps are indicated by a flagstaff with a union jack.

The head-quarters of a general of division are indicated by a flagstaff with a square red flag.

The head-quarters of a brigadier are indicated by a flagstaff with pointed (triangular) red flag.

The commissariat and ordnance store officers' positions at divisional or brigade head-quarters are indicated by blue flags.

At night the above points are indicated by red and blue lamps respectively.

13. *Standing Camps*.—The foregoing remarks give the general principles on which camps are made. With reference to standing camps of tents, the following remarks may be useful:—

1. When straw is issued for the use of troops, it should be made into mats and not left loose in the bottom of the tent. Mats may be best made as follows:—The straw is twisted into ropes; two rows of tent-pegs are driven into the ground parallel to one another, and two feet apart, and the ropes passed round the pegs to form the web. Other straw ropes are interlaced, so as to form the woof, and an excellent mat is made in a short time. Each man should have two mats, one for his head and shoulders, the other for his legs. Four men will make the mats for an entire tent in one day, two twisting the ropes and two weaving. Mats may also be made with twine and straw, as shown on Plate 13, Fig. 1; but this method is not so good as the other.

2. When troops are in standing camp, it is very desirable to make a place for drying clothes when wet. A small piece of ground, about 30 feet long and 5 feet wide, is surrounded by a wall made of earth and sods; a trench 12 inches wide, and about 6 feet long, is dug, passing under the wall into the open space, which is roofed with brushwood, earth, branches of trees, and sods, and the clothes are hung up in it; a fire is lighted in the trench, and all orifices but one opposite the fire are closed; a current of hot air will then pass through the hut and dry the clothes.

3. Bathing places should be made for the men: if the water is obtained from a stream, these should be below the point where both men and horses obtain their supply. A hole may be excavated in the stream and allowed to fill, or a small dam may be made; or bathing places may be made by excavating holes on the bank, lining them with the tarpaulins covering the wagons, and filling them with water. Wherever practicable, some means for bathing should be adopted.

4. Arm racks should be made for each company; they should be formed of uprights 3 feet high, either of wood, earth or stones, a pole being laid along the top, and secured to the uprights. Each company should place its racks close behind the tents of the company immediately in front of it, so as to leave its private parade clear. These arm racks will be found very useful for cleaning accoutrements and resting arms against.

5. At night, and in rainy weather, the tent-ropes should be slackened, to prevent the tent-pegs being drawn or the pole broken.

6. When the women of a regiment are encamped, some sheltered place should be selected; the tents should, if possible, be placed at double intervals; and a rope, if it can be procured, fixed on stakes about 2 feet 6 inches high, should be used to surround the encampment. A washing shed, made of poles and branches of trees, should be constructed, and well drained. If a few old damaged tents can be obtained, they may be cut up for this purpose, and will afford a comfortable shelter from sun and rain for the women when washing. Very often such a shed can be conveniently made under the shelter of a wall or fence.

Sentry boxes may be made either of turf, or, if branches of trees can be obtained, by forming a rough wicker-work, 6 ft. 6 in. high, and 3 feet square—this should then be thatched with straw. Three men will make a sentry box in two days.

14. *Bivouacs*.—Bivouacs are encampments formed without huts or tents.

A slight amount of shelter will protect a man from wind, and a very small piece of canvas or waterproof judiciously placed will protect him from rain.

In a mild climate in fine weather, a bivouac may be formed with the men's blankets only. Of four men the blankets of two may be used for shelter as *tente d'abri*; the blankets of the other two men being used to cover all four who lie under the shelter thus provided.

Two short sticks are cut to form uprights and stayed by short strings attached to pegs driven into the ground, the ridge formed by the inner edges of the two blankets is supported by a string attached to the two uprights, the blankets are pinned together by thin skewers of wood. The troops in New Zealand encamped in this manner for six weeks.

When troops bivouac, the ground should be occupied on exactly the same principles as if a tent encampment were being made. When space is available, the best method is to dig a circular trench about 15 feet in diameter. The turf should be carefully cut and placed so as to revet the interior slope; the earth should be thrown against it, and a bank some two or three feet in height formed, a way in should be left, and the fire lighted in the middle; the men will lie down like the spokes of a wheel, with their feet to the fire. If *tentes d'abri* are issued to the men, they may be buttoned together and pegged down to the top of the bank, and supported on their poles over the men's feet; an excellent encampment may be thus made. Each bivouac will accommodate from 25 to 35 men.

It is not advisable to bivouac under single trees, as there is always an eddy of wind under a tree:—it is better to trust to the means above described.

15. *Information to be detailed in Orders*.—The following should be detailed in orders:—

1. The hour at which tattoo and *reveillé* will sound.

The hour when orders will be issued daily.

The hour at which rations and forage will be issued, and the places where the Commissariat depôts are formed.

2. The position of Head Quarters.

The position of the various Staff-officers' tents.

The position of the Commanding Officer Royal Artillery tent.

The position of the Commanding Royal Engineer's tent.

The position of the tents of the Officers of the Commissariat and Ordnance Store Departments.

When, and where, letters are posted.

When, and from whence, telegrams can be sent.

[The positions of all the above offices should be indicated by sign-posts.]

The direction of the march, and the number, composition and strength of the picquets, had better be kept out of orders, only those persons who are actually interested being informed by memoranda.

STRIKING CAMP.

16. *Striking Camp*.—The hour for assembly and the hour for *reveillé* are named in orders, and it is very desirable that the men should not be disturbed one moment sooner than requisite. The practice of knocking tent-pegs to loosen them, drawing picket posts, &c., which young soldiers, in their desire to be smart, often resort to, should never be allowed; no man should stir until the *reveillé* is sounded, which should be from the head-quarters of the Division, and taken up by the brigade and regimental bugles in succession.

The moment *reveillé* has sounded, the cooks should proceed at once to light the fires and make coffee; for which purpose the firewood, water, and all requisite

materials should be prepared overnight. It being a matter of great importance that men should not march on an empty stomach, this should not be left to the serjeant cook alone, but officers commanding companies must see that all preparations are made overnight. While breakfast is being got ready, the blankets will be rolled up and packed in the wagons, the trenches round the tents filled in, and the refuse round the kitchen collected. When the men have had their breakfast, the fires will be extinguished, the refuse thrown into the trenches, the trenches filled, and chimneys levelled. The latrine party will fill in the latrines; and the tents will be struck, rolled up, and put into their bags. No violence should be used in getting out the tent pegs; they should be struck gently and carefully collected. Picket posts should be drawn in a similar way. Officers commanding companies should remain in the company lines and see the camp struck; one officer per company should personally see each article of his company equipment put into the wagons, the intrenching tools being put in last. As each company strikes camp, and packs its equipage, it will fall in on its private parade, and the men will put on their accoutrements, unpile arms, and file on to the regimental parade.

A mounted officer should ride over the ground to see that nothing is left behind, and that the latrines and kitchens are filled in, and the bones, offal, and rubbish buried. As the corps move off to the place of assembly, a staff-officer, generally of the Quartermaster General's Department, should ride over the ground to see that nothing is left behind, and the ground left fit for the next column to encamp on; he should report to the general officer commanding any neglect on the part of corps. He should also see that the baggage moves off as directed; having done this, he will ride rapidly to the front of the column and report accordingly.

No private vehicle of any kind should be allowed to join the column without authority. Sattlers, canteen keepers, &c., should be compelled to march at the end of the convoy and not be allowed to mix up with it. The camp police should remove all such persons.

WATER SUPPLY.

17. *Water Supply.*—Few things are of more importance to the well-being of troops when encamped, than a plentiful supply of pure water.

Water is usually obtained from streams, ponds, or existing wells. When troops are encamped for a considerable time, or when stationary depôts are formed on the line of communications, it may be necessary to sink wells, make reservoirs, and lay pipes.

From whatever source the water supply is derived, it is absolutely requisite that it should not be polluted. The officer entrusted with the duty of forming the encampment will therefore post sentries over it, taking them from the first troops that arrive on the ground; when the camp is completely formed, a regular guard will be posted over the water supply. If the supply is from a stream, great care should be taken that the watering place for the men should be distinct from that for the animals. The latter must be lower down the stream than the former, and it is advisable to send patrols up the stream to prevent men washing or bathing in it.

All washing in the neighbourhood of wells or watering places used for drinking, should be strictly forbidden, as the foul water percolates through the soil.

If the stream have a muddy bottom, great care should be taken not to stir up the mud by dipping vessels into it; small field pumps, which form an article of Engineer equipment, should be fixed and the supply obtained in that way. If the stream be shallow, dams should be made on it; these are easily constructed with a few pickets and sods,—a small piece of tarpauling may be used with great advantage for the purpose of making them water tight. A barrel sunk in the bed of the stream affords a convenient place into which to dip the sucker of the pump, or collect water.

Filters can be easily made by placing two barrels one within another, and ramming the space between with clean straw, coarse sand, and charcoal if it can be

procured, or branches of trees with the bark taken off. The water is allowed to flow into the outer barrel and rises through holes pierced in the bottom of the inner barrel. In a standing camp, if the water is not good, charcoal should be made, and the water regularly filtered; an average of 1 gallon per head is sufficient for troops when encamped; if in standing camp, this allowance should be increased, as men should be encouraged to wash themselves as much as possible.

If the banks of the stream or pond are steep, they must be cut down so as to allow the animals to drink easily. If the soil is muddy, branches of trees, fascines, and stones should be laid down to prevent the animals sinking in the mud. A horse, bullock, or mule drinks about $1\frac{1}{2}$ gallons at a time, and takes about 2 minutes to drink, or, if unavoidable confusion be allowed for, about 3 minutes. The time requisite to water any number of animals may therefore be easily calculated if the number that can drink at one time is known. If many animals have to be watered, and the frontage is small, the hours at which each corps is to water should be laid down to avoid unnecessary crowding.

An officer should invariably accompany all cavalry water parties, and instructions should be given that each horse as soon as he has drunk should leave the water, and the party should fall in at a little distance clear of the next comers.

If animals have to be watered from a very shallow stream, it should be deepened, either by making dams or by excavating the bottom; animals drink more rapidly when the water is from 4 to 5 inches deep than if it be shallower.

There are three kinds of pumps generally used for military purposes.

1. A small hand, lift and force, pump with flexible hose. This will draw water from 18 feet and throw about 16 feet, working with a lift of 18 feet and a throw of 7 feet (the height of an ordinary water cart); it will yield 7 gallons per minute.

2. The Norton tube well. This consists of tubes driven into the ground with a monkey, and with a pump screwed on the top. One of these wells take about 3 hours to fix; it will yield about 7 gallons per minute, and will keep three horses drinking at one time. *These pumps are very useful in searching for water.*

3. The "Bastier Pump" is a pump with an endless chain, working over a wheel; it yields from a depth of 45 feet (worked with two men), 2,200 gallons per hour.

If the water supply is from wells, troughs must be provided for the animals to drink out of. These may be made by simply excavating the ground and roughly paving it with stones, or they may be made of wood or sheet iron if it can be procured.

LATRINES.

18. *Latrines.*—Latrines should, as has been said, be made as soon as the troops arrive on the ground; a small shallow trench will suffice for one night, and should be invariably filled in, in the morning, before the troops march off. In standing camps, latrines may be made with seats.

The seat being a simple rough pole, additional comfort may be given by adding a top pole to form a back, but this is quite needless. The trench should be made as narrow as possible and from 3 to 4 feet deep. *A fatigue party should throw a couple of inches of earth over the soil every day. This, if carefully done, will prevent all smell.* When the trench is filled up, a fresh one should be dug near it. In camps for women and children, the open space under the seat should be closed by roughly nailing rails along, and a lower seat should be provided for children.

Too much care cannot be bestowed in selecting the site of the latrine, and placing it so that no filtration from it may reach the water supply.

A small piece of canvas may be carried to give some shelter to the latrines.

The strictest orders should be given to prevent men committing nuisances in the camp or its intervals; men doing so should invariably be confined.

In a standing camp, a urinal should be established.

COOKING.

19. *Cooking.*—To cook rapidly and well is an art which can be easily acquired, and which every soldier should learn. Officers commanding companies should see that there are a certain number of men (at least 8 or 10) in their company who have been instructed in cutting up meat, in making field kitchens, and in cooking.

The Serjeant Cook is specially trained for the purpose of instructing men in this essential portion of their duty, and officers commanding companies should see that the company cooks *really* learn these things. It is a matter of paramount necessity that soldiers' food should be carefully looked after. This duty should never be left to a non-commissioned officer, but should be carefully attended to by the company officers themselves.

When a regiment encamps, the cooking party, consisting of the serjeant cook, the assistant cook, and two men per company, will proceed to make the kitchen. If the encampment is only for a night, one trench per company should be dug 6 feet long, 9 inches wide, and 18 inches deep at the mouth, and continued for 18 inches into the trench then sloping upwards to 4 inches at the back, with a splay mouth pointing towards the wind, and a rough chimney 2 feet high at the opposite end formed with the sods cut off from the top of the trench; it will be advantageous if these trenches are cut out on a gentle slope.

This trench will hold 6 Flanders or 9 Torrens' kettles, and will cook for about 50 men.

All brushwood and long grass should be carefully cut for a circle of 20 feet round the kitchen, and may be used to light the fire with.

The water party must bring up the requisite water in camp kettles, which are of two kinds; the Flanders, or large pattern, which will cook for 8 men, or, without vegetables, for 15; and the Torrens, or small, which will cook for 5 men, or, without vegetables, for 8. The former kettle weighs $8\frac{1}{2}$ lbs., the latter 3 lbs. The Flanders kettle is generally used where transport is provided, the Torrens when the men themselves have to carry the kettle. Each company should mess by kettles, that is to say, the mess should be composed of a number of men according to the kettle used.

The serjeant cook should divide the meat, potatoes, &c., to the various companies, and the company cooks should cut it up into conveniently sized pieces and place it in the kettles. When a regiment encamps for more than one night he should be careful every evening to see that the kettles are filled with clean water and placed upon the trenches ready for next morning, and also that the wood is cut up into slips and laid in the trenches, so that in the event of rain during the night the interior of the trenches and wood may be kept dry.

Lighting the fires is often not an easy task, and should be performed by a man used to the work. Small pieces of dry wood should be sought for, and, if possible, carried by the cooks from one encampment to another: these pieces should not be larger than lucifer matches, and the first light being obtained, the fire should be gradually fed with larger pieces, until pieces of wood three or four inches in diameter are used. The moment the fires are well lighted the kettles should be laid on the trench, and be brought to a boil, after which they should be allowed to simmer gently. The dinners ought to be ready in an hour after the kettles are put on the fire.

If there is no time to dig a trench or the ground be hard, the kettles may be placed in rows 10 in. apart, and the fires lighted between them, the heat being thus applied to the sides in place of the bottom. By this means, however, the cooking takes a little longer, and requires a little more fuel. *Troops should, under all circumstances, have their dinners ready one hour and a half after the rations are issued.*

If troops remain in camp more than a day or two it is advisable to make a regular Field Kitchen; of these there are two kinds in use in the service, the broad arrow and the triple arrow kitchens.

1. *The Broad Arrow Kitchen.*—The broad arrow kitchen consists of three trenches converging to a point, with their mouths connected by a semi-circular

trench, and a chimney from 5 to 6 feet high, formed from the turf cut from the top of the trenches, and other sods obtained from a little distance for this purpose. (Plate 16.)

This kitchen is constructed as follows:—

The site having been selected a picket is driven to mark the centre of the chimney, and a square of 3 feet is marked off on the ground with the picket as a centre for the base of the chimney. The trenches are next traced, the centre one towards the quarter from which the wind is blowing. The centre trench is traced 12 feet long and 9 inches broad, with a mouth as shown on plan: the two other trenches are traced of similar dimensions, one on either side, converging on the chimney with their outer ends at a distance each of 5 feet from the central one. A semicircular trench, 2 feet wide, is then traced to connect their mouths, the inner and outer edges at radii of $15\frac{1}{2}$ and $17\frac{1}{2}$ feet respectively from the centre of the chimney.

One man excavates each trench, commencing from the base of the chimney, each trench is 18 inches deep at the mouth, and for 18 inches inwards, then slopes gradually up to 6 inches in depth to where it enters the chimney. Another man cuts out the bottom of the chimney and then commences building it with sods cut by a fifth man; as soon as these trenches are dug one man bores a tunnel from the head of each into the chimney, while the other two men excavate the semicircular trench connecting their mouths; this trench is 21 inches deep. The men in the trenches having completed them, are employed respectively in providing and mixing clay, carrying water, and covering the trenches for the reception of the kettles. Great care must be taken in the construction of the chimney, all holes and interstices being plastered up with clay. The inside of the trenches may be rendered with clay if it be plentiful, in which case the dimensions should be slightly increased; if the clay be scarce, the trenches should be cut smooth. Each trench will accommodate 9 Flanders or 11 Torrens' kettles, the holes for which should be moulded from one, in clay, if procurable, the intervals across the trench being covered by turfs, placed grass side down, or with stones, hoop iron or sticks plastered with clay, all interstices being closed with clay or sods.

Such a kitchen will cook for 220 men with the Flanders' kettle or for 165 men with the Torrens' kettle, and will last a fortnight when not rendered with clay. In using Torrens' kettles a greater number of men's dinners can be cooked, as well as a great saving in time effected by placing them close together without intervals and banking in the whole with sods and clay; by this arrangement a trench 12 feet long will accommodate 16 kettles. It is desirable to add other branches to such a kitchen, so that the men may stand out of the smoke.

One non-commissioned officer will superintend the construction of the kitchen by a party of five men, whose duties are as follows, viz:—

One man to cut one trench, temper clay, and tunnel flues.

One man to cut one trench, and half semicircular trench, and carry water.

One man to cut one trench and half semicircular trench and make moulds for kettles.

One man to build the chimney and one man to cut turf.

The tools, &c., required, are—

Axes, pick	-	-	-	-	-	-	-	-	3
Hooks, bill	-	-	-	-	-	-	-	-	1
Kettle, camp	-	-	-	-	-	-	-	-	1
Pickets, bundle of	-	-	-	-	-	-	-	-	1
Spades	-	-	-	-	-	-	-	-	4

Time to construct, 4 hours: time to cook, 1 hour.

2. *The Triple Arrow Kitchen.*—The triple arrow kitchen is a combination of three broad arrows connected by long trenches with a central chimney 5 to 6 feet high (Plate 17). This kitchen is better adapted for a standing camp than the broad arrow, will last in use for several months, cook for a greater number of men, and

owing to the long draughts given it, will, when once heated through, always draw in whatever quarter the wind may prevail.

This kitchen is constructed as follows:—

The site having been selected a picket is driven to mark the centre of the chimney, and a square of 3 feet is marked off on the ground, with the picket as a centre for the base of the chimney. The main trench, 26 feet long, is next traced, and a picket driven at a distance of 14 feet from the centre of the chimney, to mark the head of the central arrow, from this point along a line which cuts it at right angles, with the direction of the main trench, two other pickets are driven at distances each of 17 feet 3 inches to mark the heads of the central trenches of the outer arrow; from these pickets the latter trenches are next traced, 12 feet long and parallel with the main trench. On either side of each of the three central trenches other two trenches are traced, as shown on plan, converging on the central one, thus forming three arrows, each trench is given a splay mouth 2 feet long and 2 feet wide, and a transverse trench 54 feet long is traced to connect these, and lastly two trenches connecting the outer arrows with the main trench and chimney are traced. All the trenches, with the exception of the transverse one, have a uniform width of 9 inches, those connecting the arrows with the chimney have a depth of 6 inches; those forming the arrows are of the same dimensions as regards depth as already given in the description of the broad arrow kitchen, and the transverse trench is 21 inches deep and 2 feet wide. A party of 12 men under a non-commissioned officer are sufficient for the construction of the kitchen.

One man cuts out the bottom of the chimney and builds it, two men cut sods, and the remainder excavate the trenches as follows:—One man cuts out the main trench, and the other eight men each one of the trenches forming the arrows; when the latter are completed, two men are set to work to excavate the two trenches leading from the outer arrows to the main trench and chimney, while six men are employed in excavating the transverse trench; the men in the trenches having completed them, four men provide and mix clay, two carry water, and the remainder cover the trenches with sods and the loose earth already excavated, and construct moulds for the kettles.

The transverse trench should be drained according to the slope of the ground to carry off the water in wet weather.

Such a kitchen will cook for 700 men.

The tools, &c., required are:—

Axes, pick	-	-	-	-	-	3
Hooks, bill	-	-	-	-	-	2
Kettles, camp	-	-	-	-	-	3
Pickets, bundle of	-	-	-	-	-	1
Spades	-	-	-	-	-	11

Time to construct, 10 hours; time to cook, one hour.

3. *The Aldershot Field Oven.*—The Aldershot field oven is constructed of sheet iron and consists of seven pieces, viz:—

- 4 sections forming an arch,
- 2 doors or end pieces, and
- 1 bottom plate.

It is erected as follows:—

The bottom plate is first laid on the ground, the sections forming the arch are then hooked together, and adjusted over the plate, a small trench is next dug in front and rear, and the excavated earth is thrown over the arch to a thickness of about 12 inches, and the rear of the oven is then closed by one of the doors or end pieces and banked up with earth.

This oven, which is now ready for use, can be heated in about three hours, and when heated, will bake 90 ration loaves of $1\frac{1}{4}$ lbs. each, in about $2\frac{1}{4}$ hours,

This oven weighs about 300 lbs., and when erected for use measures 6 feet 10 inches in length, 3 feet 4 inches in width, and 1 foot 8 inches in height.

Baking bread is generally performed by the Commissariat. But it is very desirable that troops should have a change of food when possible, and also that, if requisite, they should bake their bread.

A field oven consists of a hearth sunk below the surface, with an arch formed by a hurdle, and can be made as follows:—

The lines to be traced are the cutting lines of the hearth, its doorway, and those for the ramp. A rectangular space 5 feet long and 3 feet 6 inches broad is excavated to a depth of 6 inches, to form the hearth of the oven. It is levelled and covered with a layer of clay mixed with cow-dung, which is also plastered on the sides of the excavation. At the mouth of the oven a sod-work flue, 9 inches square inside, is constructed, a square hole, one foot high and broad, being left in the lower part of it, on a level with the hearth, for a door to the oven. At the other end of the oven a wall of sod work plastered with clay is built up to the height of the top of the arch, and a hole dug 3 feet deep, 3 feet 6 inches wide, 9 inches in front of the chimney, connected with the ground level by means of a ramp 18 inches wide; this hole is for the baker to stand in.

While the above work is being done, the arch of the oven is made:—An arc is struck on the ground with a radius of 1 foot 10 inches, and nine pickets rather more than 5 feet long, are driven into the ground, and a brushwood hurdle 5 feet in height formed on the pickets; the concave surface is then covered with a mixture of one part cow-dung to three parts clay, and, having been dried in the sun, is coated over with another thin coat of the same mixture. The arch so prepared is laid over the hearth already levelled, and is then well coated over externally with the clay mixture, and finally covered over with the earth from the ramp to a thickness of 1 foot 3 inches at the top, the slopes projecting 18 inches beyond the hearth. The entrance to the oven is closed, either by a door made of hurdle work covered with clay, or simply by sods.

One non-commissioned officer and seven men are required to construct each oven; two men being employed in cutting out, and preparing the hearth, building the flue and end walls, and excavating the ramp, two more men in procuring and mixing the dung and clay, while three men cut the brushwood, make the hurdle and plaster it. Plate 18 shows the oven complete.

The following tools are required:—

Axes, pick	-	-	-	2
Hook, bill	-	-	-	1
Knives, gabion (or bill hooks)	-	-	-	3
Line, tracing	-	-	-	1
Mallet	-	-	-	1
Shovels, field	-	-	-	4

The oven might be completed in four hours, but as the putting on of the second coat of plaster on the arch must be delayed until the first is dry, the time will depend much on the heat of the sun.

This oven will contain from 70 to 80 two-pound loaves, and would therefore bake, each time it was heated, bread enough for from 140 to 160 men. The time for heating such an oven on the first occasion would be from one hour to one hour and a quarter.

A kneading trough, of the dimensions shown in Plate 18, should be constructed near the oven.

An excellent oven may also be made by intertwining hay bands together, bending them into a semi-circle, and covering the arch so formed with earth. The bands of Jones's gabion also answer the same purpose.

CAMP POLICE.

20. *Camp Police.*—No traffic of any kind should be allowed along the front of a camp, or through the tents. All carts, wagons, and horses should pass through the intervals and along the rear. A place for a market should be selected and named in orders. All persons coming to the camp to sell articles of any kind must be confined to this place, and not allowed to wander about the camp. The camp police should arrest all persons found wandering, and a picquet under arms should remain in the market until it is cleared. The staff-officer should arrange a tariff of prices at which various articles may be sold, and no departure from this should be allowed, all articles being paid for in ready money.

Women of loose character should be carefully excluded from the camp; they are often employed as spies.

The camp police should make rounds at uncertain intervals through the camp, and summarily arrest all who may contravene the orders.

HUT ENCAMPMENTS.

21. *Hut Encampments.*—Encampments made of huts are generally used during the siege or blockade of a fortress, or when troops are occupying a position in which they remain for some time, or during the winter.

Huts may be made simply of clay, mixed with grass and rushes to bind it together, and roofed with rough timber and thatched.

They may be formed of what is termed "wattle and daub," that is, the walls are composed of hurdles daubed over with clay, the roof being composed of hurdles and straw thatch.

They may be formed of circular or rectangular shape as may be found easier to build.

Huts may be formed of planks fastened together by what is termed a Malay hitch. They may also be made partly underground. These huts are said to be unhealthy, but if a drain is made round the hut much of the unhealthiness is got rid of.

Huts are extremely easy to build; a few nails and rough timber, or some rope and timber, are all that is requisite; and, if care is taken to provide for ventilation by leaving small openings under the eaves, there is no reason why the health of the soldier should suffer.

METHOD OF PITCHING A TENT WITH TWO MEN.

No. 1 to be told off as pole man.

No. 2 " " tent man.

No. 1 falls in with a pole in his left hand and mallet with five pegs in his right. No. 2 to cover him with tent and pin bag. When No. 1 is moved to the position his tent is to occupy, No. 2 will follow with the tent and fall in five paces in rear of him. No. 1, after being dressed and having the words "Eyes front" given, will drive a peg upright between his feet into the spot of ground occupied by the bottom of the pole, dropping the pole to his front to do so, he will then take $3\frac{1}{2}$ paces from the centre peg to his front (the way the door is to face), and drive in "the front peg" at an angle of 45 degrees; turn about, station himself at the centre peg, take $3\frac{1}{2}$ paces to

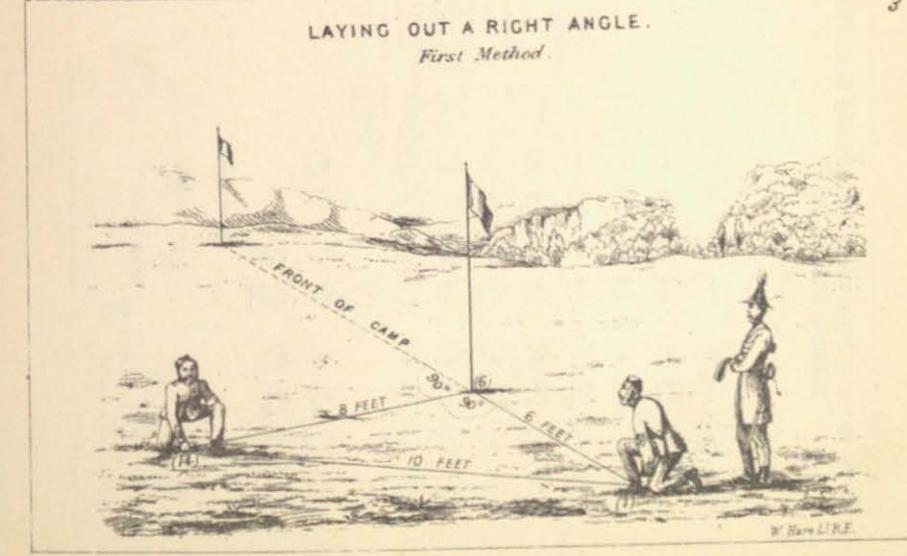
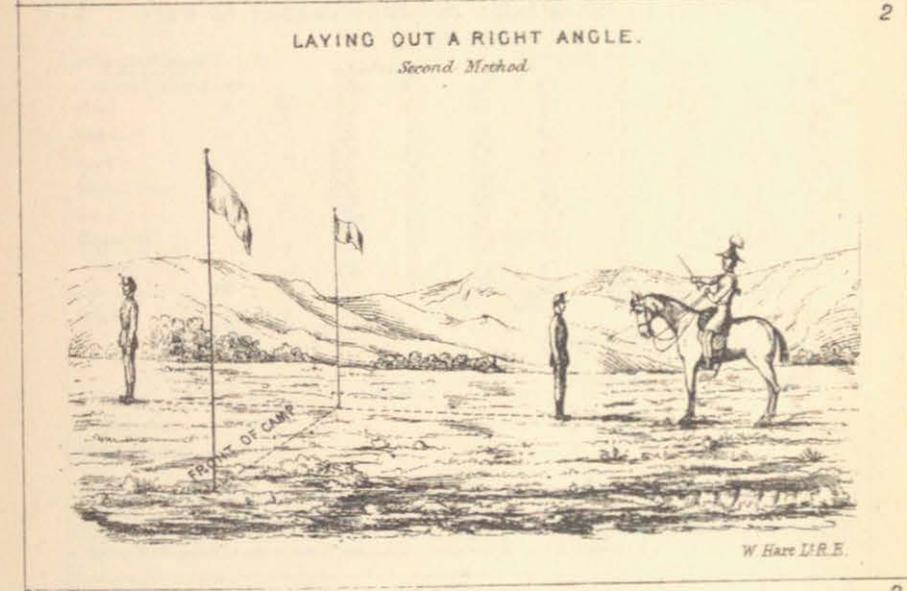
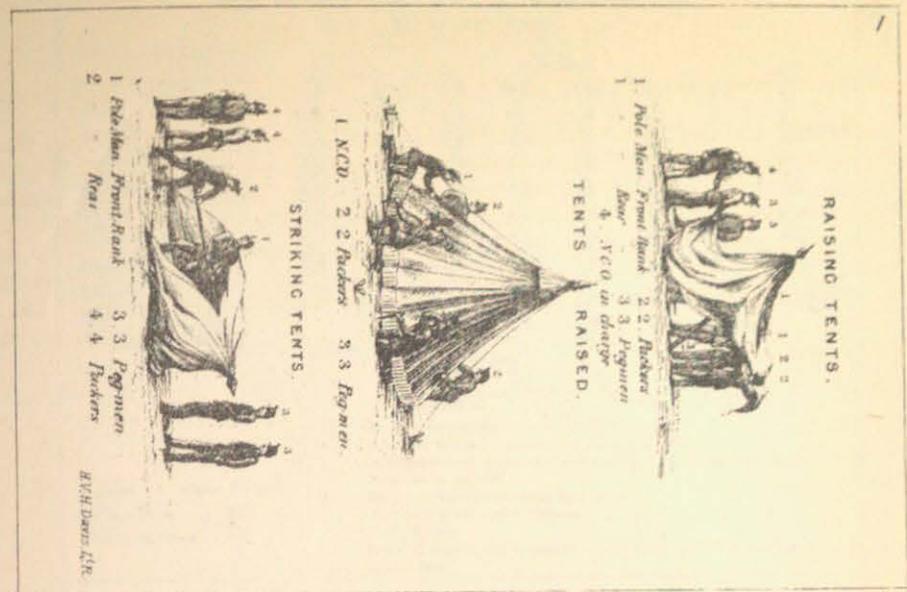
the rear, drive in another, "the rear peg" in a similar manner, returning to the centre and following a like course to the right and left; during this time number two will shake the tent out of its bag and spread it out on the ground, door uppermost, top to the rear; he will then unroll the whole of the ropes and see that the door is unhooked, after which he will take the peg bag and distribute its contents in a circle round the four pegs which have been driven in by No. 1, and arrange his mallet, both men will now proceed to the tent, one to the right, and the other to the left of the door, each will take the second rope, counting from the door on each side, and draw the tent on to the ground which it is to occupy, these ropes will both be attached at full length to the "front peg," the men will then count the ropes until they come to the sixth on each side of the door, or the fourth from the ropes already fastened to the front peg, and attach them to the right and left pegs, at full length. No. 2 will then count five more ropes, and fasten the last (*i. e.* fifth) to the rear peg at full length. No. 1 will in the meantime take up the pole and fit the round end of it in the cap of the tent, the bottom of the pole being to the front. No. 2 will take a mallet and drive the cap on to the pole, when No. 1 will put his head under the door and raise the tent working the bottom of the pole inwards until it comes against the centre peg, he will then run out of the door, mallet in hand, to the assistance of No. 2, who in the meantime will have tightened the five ropes already fastened to the four pegs, and have driven in two or three pegs on the windward side, and fastened ropes thereon; both men will then proceed to drive pegs, and fasten the remainder of the ropes, the pegs being invariably driven in, in line with the seam of the tent, which can be only ascertained by pulling each rope and taking the line accordingly; in all cases the ropes should be tightened when they are put on the pegs. The right, left, and rear pegs will require to be adjusted when all the others are fixed.

Pegs should be driven as follows:—Determine the spot, turn with back to the tent, stoop, with peg in left hand, and mallet in right, place the peg with point on the ground and head inclined outwards, at an angle of 45 degrees, give a couple of taps with the mallet, then place left toe against the bottom of the peg, stand up and give two or three hard blows with the mallet, which in ordinary ground will be sufficient to drive the peg well home. Should trenches be ordered to be made, make a straight cut into the ground with spade, close to the curtain, all round the tent, and then, at a distance of a foot, cut towards the curtain at an angle of 45 degrees, lift the piece of earth out with the spade, and lay it on the ground close to the trench; the curtain of the tent should always be pegged down into the side of the trench to prevent the water running from the canvas along the floor of the tent rendering the trench comparatively useless.

TO STRIKE A TENT WITH TWO MEN.

Both men will take off all the ropes but those attached to the front, right, left, and rear pegs. No. 1 will place himself inside the tent at the pole and wait for the bugle when it sounds, he will lift the pole from the ground and run out of the door with it, bottom end first, after which he will separate the pole into two pieces and tie them together. No. 2 in the meantime will have taken up all the pegs other than those to which the five ropes are attached and placed them in the pin bag, and when the tent has dropped, he will take up the remainder of the pegs, and put them with the mallets in the bag and fasten it up; both men will then roll up the ropes, tying each roll close up to the canvas. No. 2 will take the cap of the tent and draw it to the rear, door upwards, both will spread it out neatly in this form . The sides will then be folded to the centre until they meet, and folded again until the breadth required for the depth of the tent bag is arrived at, when No. 2 will fold the head down to the front, about half way, and both will proceed to roll from the head to the bottom, placing their knees on the tent as they roll it. When rolled up tightly No.

2 will hold the bag, No. 1 will lift one end of the roll until it is got into the mouth of the bag, when it will be lifted into a perpendicular position, and both men holding the top of the bag will shake the tent into it, the peg bag will be put inside, and the whole secured at the top, when both men (No. 1 with the pole, and No. 2 with the tent,) will march to the wagon for loading. Much time is wasted by following the red runners on the tent ropes as guides, for pitching a tent neatly, they often come off, and are not properly replaced, whereas by counting from the doors to the back of the tent as herein laid down, the tent must stand true to the front when raised, and also be properly dressed.

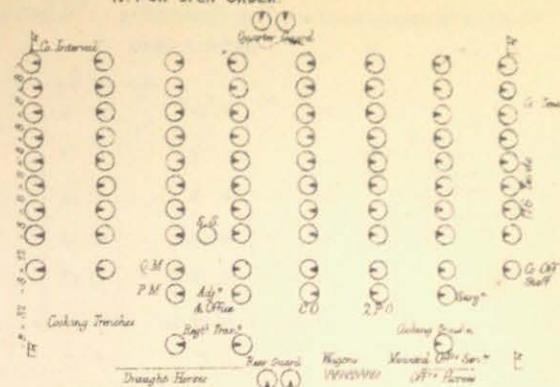


PLAN OF ENCAMPMENT FOR A BATTALION OF INFANTRY. N° 1 OR OPEN ORDER

BATTALION OF INFANTRY.

WAR STRENGTH & DISTRIBUTION

Officers	31	73
Staff Serg ^m	10	1
Guard		4
Reg ^t Transport	24	2
Cook to do	1	
Mounted Off ^r	7	1
Servants		
8 Companies	960	64
Cavalry	64	5
Total 1087		90 Tents
Off. Men		



17 Wagons allowed 9 ft each
 11 Officers Horses 6 ft
 48 Draught Horses 4 ft

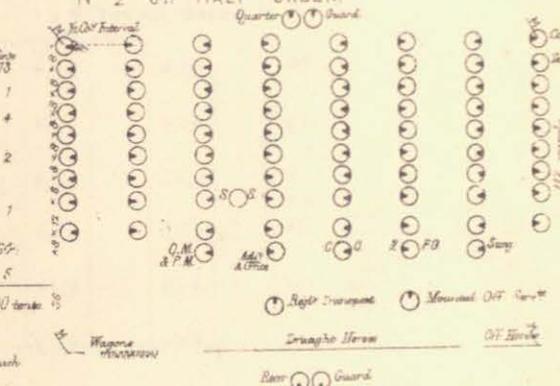
The measurements are in yards from Tent pole to Tent pole.
 As seen in the interval between the rows of tents to show the intervals.
 The circles represent the circumference of the space occupied by the Tents & their pegs in order to show the intervals.
 Latrines according to ground clear of the Tents.
 Front according to strength of Companies.
 Depth 16 yards.
 Should the depth of Camp be measured in paces 112 paces will be the distance between Companies Tents.

PLAN OF ENCAMPMENT FOR A BATTALION OF INFANTRY. N° 2 OR HALF ORDER

BATTALION OF INFANTRY.

WAR STRENGTH & DISTRIBUTION

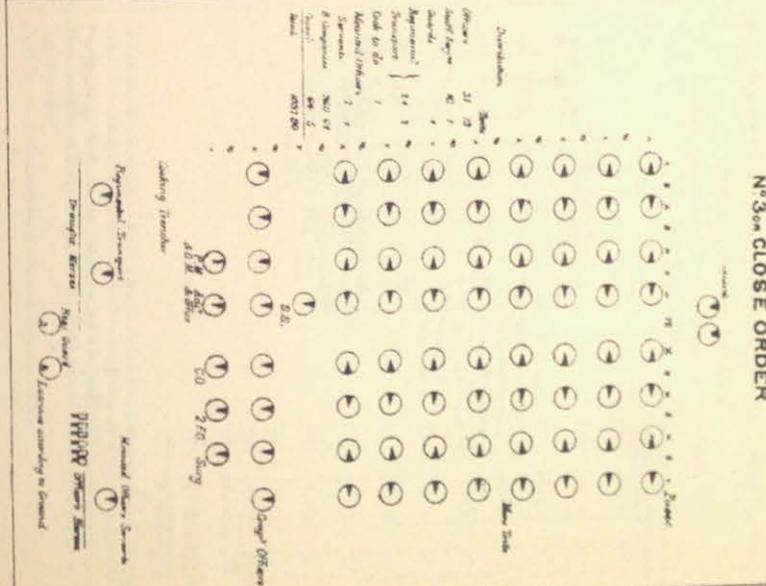
Officers	31	73
Staff Serg ^m	10	1
Guard		4
Reg ^t Transport	24	2
Cook to do	1	
Mounted Off ^r	7	1
Servants		
8 Companies	960	64
Cavalry	64	5
Total 1087		90 Tents
Off. Men		



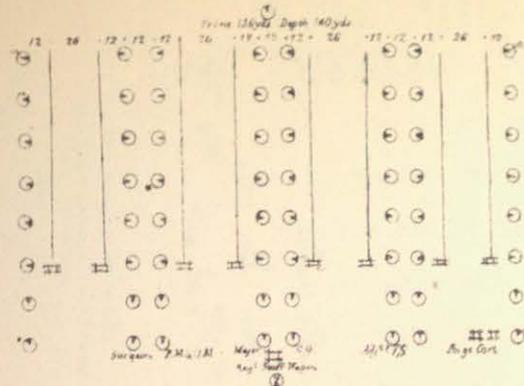
17 Wagons allowed 9 ft each
 11 Officers Horses 6 ft
 48 Draught Horses 4 ft

The measurements are in yards from Tent Pole to Tent Pole. At half order the interval between the rows of tents is 1/2 Co distance. The circles represent the circumference of the space occupied by the Tents & their pegs to show the intervals. Latrines according to ground clear of the lines. Front according to the strength of the Companies depth 112 yards. Should the depth of the Camp be measured in paces 112 paces will be the distance between the Companies Tents.

6 PLAN OF ENCAMPMENT FOR A BATTALION OF INFANTRY N° 3 OR CLOSE ORDER



7 ENCAMPMENT OF A CAVALRY REGIMENT ON A WAR FOOTING
IN COLUMN OF TROOPS
FRONT OF CAMP SAME AS FRONT OF A REGIMENT OF FOUR SQUADRONS OF 50 FRONT
N^o 1 OPEN ORDER

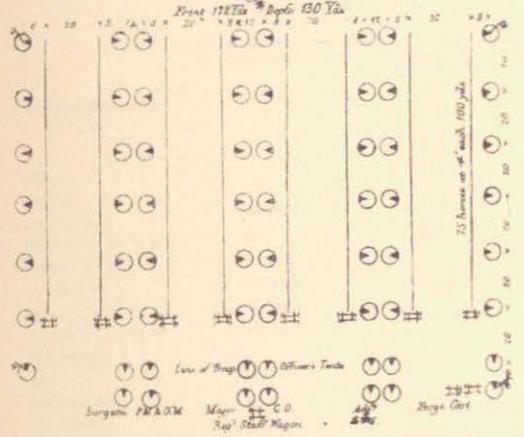


Summary

Officers	27	Chargers	78
Sergeants & A.D.C.	600	Drummers	480
Drivers	22	Drummers	44
Total	699		602
Wagons	11		
Trails	56		

The measurements are in yards from the front rank to the last file. The lines drawn for horses are where the head-pieces are to be drawn. The depth of camp must always be determined by the number of horses to stand in each troop line allowing 4 feet for each horse. Distance from head to tail 12 to 15 yards. Draught horses & drivers, Officers' horses & servants, S. Major & S. Surg. should be ranged at the end of the line nearest to the line of Officers' tents. The circles represent the positions described by the Tent-Boys of each Troop.

8 ENCAMPMENT OF A CAVALRY REGIMENT ON A WAR FOOTING
IN COLUMN OF TROOPS
FRONT COMPRESSED TO 122 YDS THE PROPER FRONT FOR A REGIMENT WITH 4 SQUADRONS OF 34 FRONT
N^o 2 OR HALF ORDER

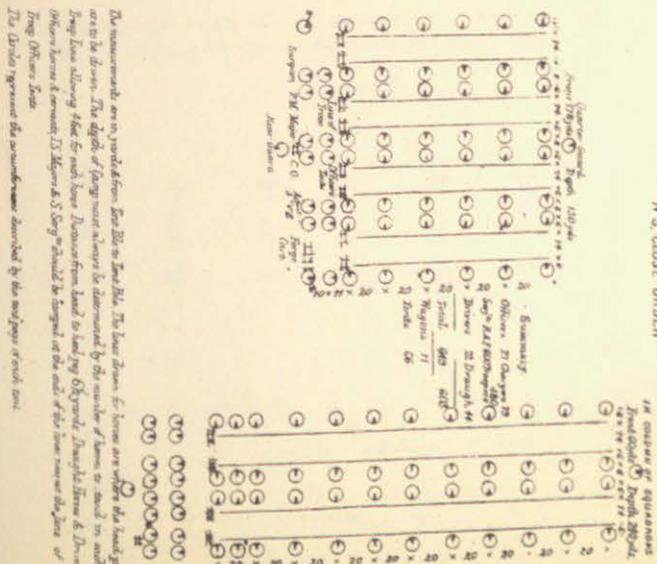


Summary

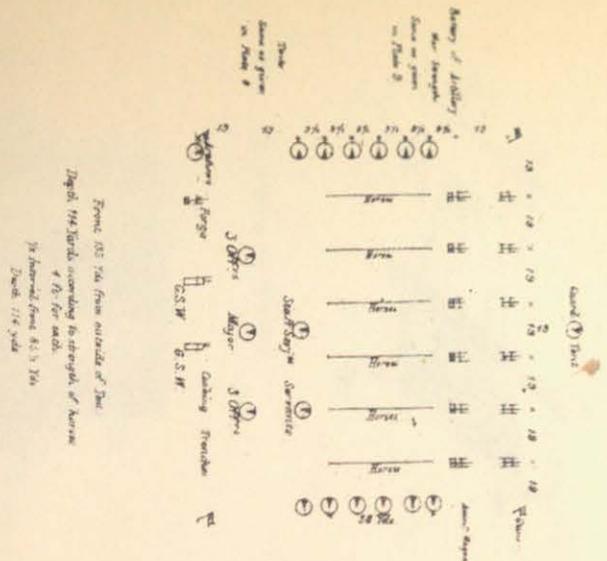
Officers	27	Chargers	78
Sergeants & A.D.C.	600	Drummers	480
Drivers	22	Drummers	44
Total	699		602
Wagons	11		
Trails	56		

The measurements are in yards from the front rank to the last file. The lines drawn for horses are where the head-pieces are to be drawn. The depth of camp must be determined by the number of horses to stand in each troop line allowing 4 feet for each horse & distance from head to tail 12 to 15 yards. Draught horses & drivers, Officers' horses & servants, S. Major & S. Surg. should be ranged at the end of the line nearest to the line of Officers' tents. The circles represent the positions described by the Tent-Boys of each troop so that the space for circulation may be shown.

9 ENCAMPMENT OF A CAVALRY REGIMENT ON A WAR FOOTING
IN COLUMN OF TROOPS
FRONT COMPRESSED AS MUCH AS POSSIBLE
N^o 3 CLOSE ORDER

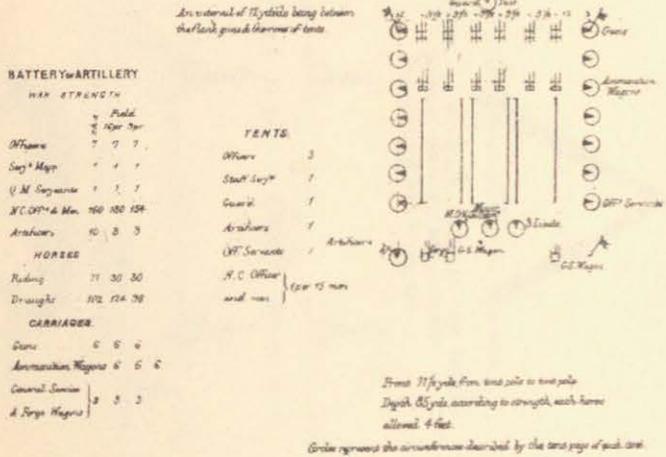


The measurements are in yards from the front rank to the last file. The lines drawn for horses are where the head-pieces are to be drawn. The depth of camp must always be determined by the number of horses to stand in each troop line allowing 4 feet for each horse. Distance from head to tail 12 to 15 yards. Draught horses & drivers, Officers' horses & servants, S. Major & S. Surg. should be ranged at the end of the line nearest to the line of Officers' tents. The circles represent the positions described by the Tent-Boys of each troop.



From 100 Yds. from outside of "Line"
 Dig 14 Trenches according to strength of horse
 4 ft. for each.
 15 fathoms front, 4 1/2 ft. 1/2
 Depth 1 1/2 yds.

11
PLAN OF ENCAMPMENT FOR A BATTERY OF ARTILLERY.
 No 2 HALF ORDER



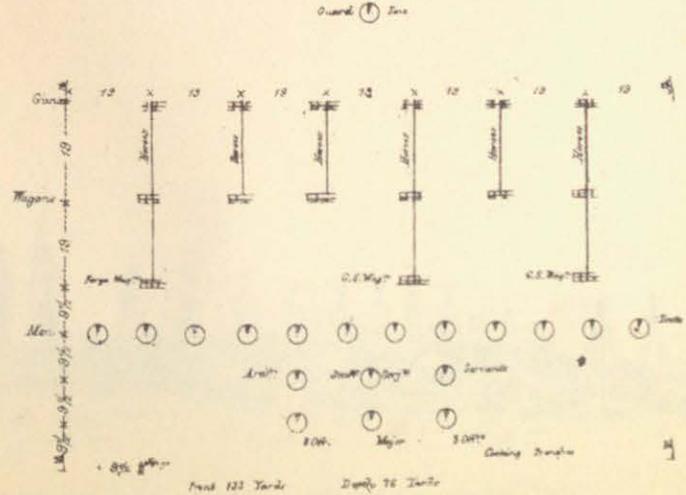
An interval of 10 yds. being between the back guns & those of tents

BATTERY & ARTILLERY	
MAN STRENGTH	
	Field
Officers	7 7 7
Serg't Major	1 1 1
Q. M. Sergeant	1 1 1
N. C. O. & Men	100 100 100
Artificers	10 8 3
HORSES	
Trucks	11 30 30
Drays	102 124 20
CARRIAGES	
Wheeled	6 6 0
Artificers' Wagons	6 6 6
General Service	3 3 3
4 Forge Wagons	3 3 3

*From 7 1/2 yds. from tent pole to tent pole
 Dig 14 Trenches according to strength, each horse
 allowed 4 feet.*

Grubs represent the circumference described by the tent pole of each gun.

12
SKETCH OF PLAN FOR ENCAMPING A BATTERY OF ROYAL ARTILLERY IN A COLUMN OF SUBDIVISIONS



From 100 Yds. from outside of "Line"
 Dig 14 Trenches according to strength of horse
 4 ft. for each.
 15 fathoms front, 4 1/2 ft. 1/2
 Depth 1 1/2 yds.

Fig. 1. MAKING STRAW MATS

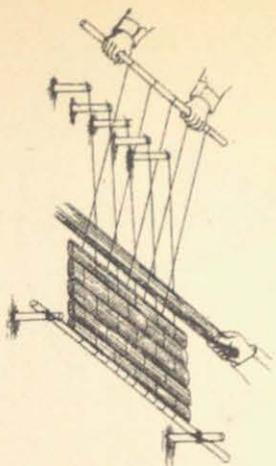


Fig. 2. WALL OF STRAW

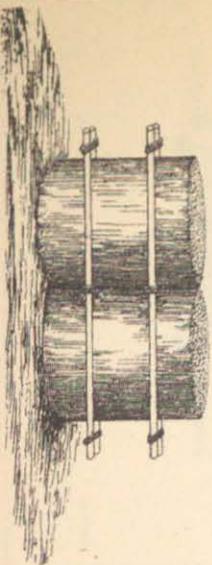


Fig. 1. BIVOUAC OF BRANCHES OF TREES.

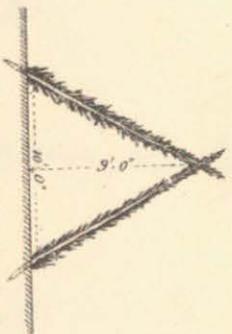


Fig. 2. SECTION OF BIVOUAC USED BY THE FRENCH DURING SORTIES FROM PARIS. THIS ARRANGEMENT IS BAD.

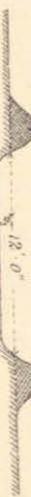


Fig. 3. SECTION OF BIVOUAC SHEWING A BETTER FORM.

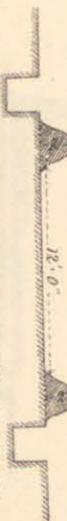


Fig. 4. SECTION OF BIVOUAC MADE BY THE FRENCH DURING SORTIES FROM PARIS.



No. 4 would be improved by the trench being outside and the ground not disturbed.

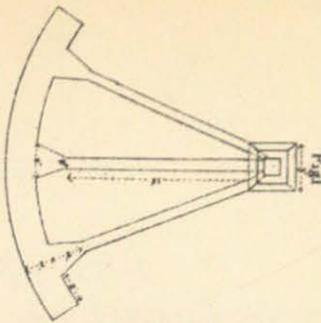
BIVOUAC IN COLUMN OF COMPANIES ON THE GROUND OCCUPIED BY THE COLUMN.



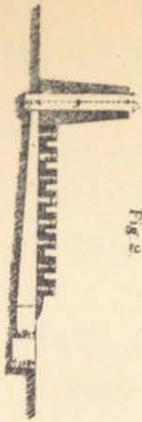
PLATE I

BROAD ARROW KITCHEN

Fig. 1



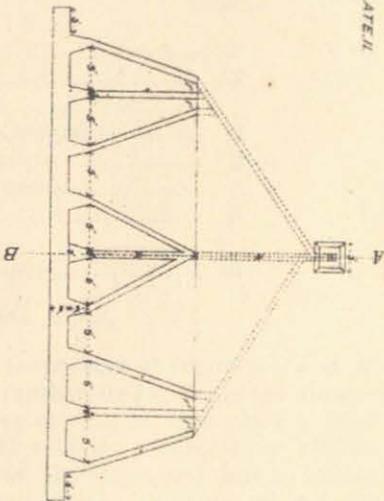
SECTION OF ABOVE



SCALE 10 20 30 Feet

PLATE II

TRIPLE ARROW KITCHEN

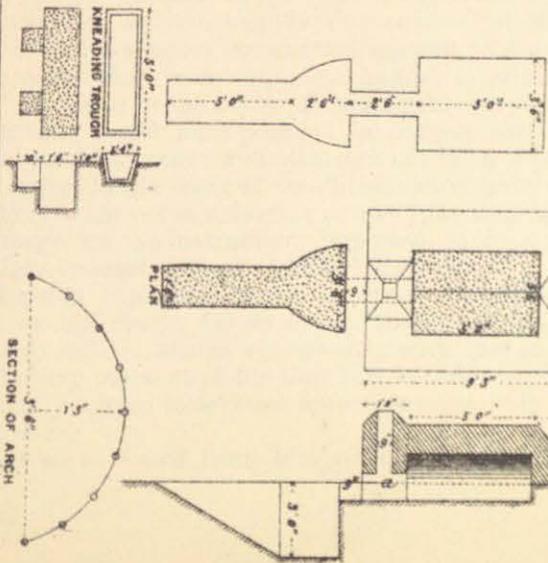
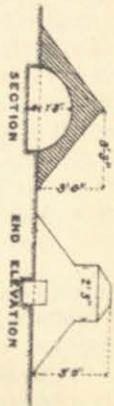


SECTION ON A. B.



SCALE 10 20 30 Feet

FIELD OVEN



SECTION OF ARCH

Addition to Appendix No. 1.

MILITARY DISTRICT NO. 11.

DEPUTY ADJUTANT GENERAL'S OFFICE,
VICTORIA, B. C., January 10th, 1877.

SIR,—I have the honour to transmit herewith my Annual Inspection Report of Military District No. 11, for the information of the Major-General Commanding.

The corps which constitute the militia force in this Military District are as follows, viz :—

	Officers.	Non Com. Officers and Privates.
Victoria, No. 1 Company.....	3	40
“ No. 2 “	3	40
“ Band		10
New Westminster Rifles, No. 1 Company.....	3	40
“ “ Seymour Artillery.....	2	30
“ “ Assistant Surgeon.....	1	0
Nanaimo Rifles, No. 1 Company.....	3	40
Total.....	15	200

Nanaimo Rifles.

I purposed commencing my annual inspection at Nanaimo, and with that view wrote to Captain Bryden on the 20th November, 1876, fixing the date of my inspection for the 29th of that month, but on my arrival at that place I regret to have to state that I found the matter had entirely escaped his memory, and that no notice had been given to either officers or men of the corps, and that, in consequence, it was utterly impossible for me to obtain a fair muster in the time at my command, and I was, therefore, obliged to leave Nanaimo without having obtained the object of my visit. Captain Bryden excused himself on the grounds that, owing to the sickness of one of his principal assistants in the Vancouver Coal Mining Company, of which he is one of the head managers, an unusual amount of duty had devolved upon him, and frankly admitted that, in consequence, he had totally forgotten to even mention the purport of my letter to the other officers of the corps, who assured me that, had he done so, the men would have paraded in considerable strength, the corps being nearly up to its establishment; and although not having performed any drill during the past year, owing to the want of an efficient instructor, they were still desirous of showing that they were yet in existence actually, as well as on paper, and that they had not quite forgotten the instructions imparted to them upwards of two years ago by Gunner's Mate Samuel Gill, of H.M.S. "Myrmidon."

Captain Bryden expressed a wish to resign his position as captain of the company, stating, as his reason for so doing, that he could not possibly devote the necessary time to militia affairs consistently with justice to his employers, whose work occupied every moment of his time and left him but little leisure.

I consequently agreed to forward his resignation, with a recommendation that it be accepted at once.

I have not since heard from him, on the subject but expect to do so immediately.

Victoria Rifles.

I inspected the two companies of Victoria Rifles on the 2nd December, in the Drill Shed at Victoria, and although the muster was rather a poor one numerically, I cannot but speak highly of the efficiency of the men who were present on that occasion, as the drill was most satisfactory, and the arms, accoutrements and clothing everything that could be desired.

The term of service of these companies having now expired, I have placed service rolls in the hands of the officers commanding, and I have much confidence in stating that, by the 28th February proximo, they will be re-organized to their full strength, as most of the men now present have signified their readiness to re-join for another term, and there are many young men desirous of enrolling themselves upon the new list.

Unless instructed by the Major General to the contrary, I purpose allowing these companies to return to their original strength of fifty (50) men each on the new enrolment, as, owing to the migratory nature of the class who chiefly constitute the militia of this District, but more especially of Victoria, it is almost impossible to secure fair musters unless the nominal establishment of the corps is somewhat in advance of its actual requirements in the point of numbers. This may be readily observed by a glance at the Inspector's report herewith enclosed, as well as on reference to the previous ones forwarded from time to time.

While on the subject of the Victoria Corps, I may take this opportunity of mentioning, that the band has made considerable progress during the last year, and that it now comprises eleven very fair performers. It was up to the strength of twelve a short while ago, but I regret much to say that one of the principal performers, Mr. Bushell, died recently, and we have not yet replaced him.

New Westminster "Rifles."

I was unable to reach New Westminster in time to make my inspection there on the days first arranged, for reasons explained in my letter of the 4th instant, and I was consequently a week later in completing my tour, than I had at first anticipated.

I inspected the rifle corps at that place on the 14th December, and have to report most favourably on the appearance and efficiency of the company, as well as upon the state of their arms and accoutrements.

Numerically, however, I was scarcely satisfied with the muster, as there were only twenty non-commissioned officers and men present on parade on that occasion.

The corps, however, is some ten men below its authorized strength of forty, and as those even who were present expressed their intention of resigning at the end of their term of three years' service, which expired yesterday, I need scarcely report further on that corps at present, but refer you for particulars and explanation on this point to my letter of the 2nd instant.

I am bound, however, to state that I have always considered the New Westminster Rifle Company second to none in the district, and I regret exceedingly the circumstances which have led to its dissolution.

As I informed you in the letter above referred to, I have every confidence that the men will again enrol if a new company be formed, the officers of which shall be selected, if not by themselves, at least with their full approval and I know of no fairer test that could be possibly applied to the solution of the difficulty existing at present, as the men constituting the corps principally consist of the most respectable citizens of New Westminster, and are thoroughly capable of forming a correct judgment in such matters as those brought confidentially to the notice of the Major General commanding in my report of the 2nd January.

Seymour Artillery.

I ordered the Seymour Artillery to parade at the guns on the 15th December, and with a view to judging of their proficiency, I instructed Lieutenant commanding,

J. T. Scott, to provide a target on the Fraser River, at a selected point, and to provide his half-battery with shot and shell, of each five rounds. He did so, but unfortunately a dense fog prevailing the entire day, and in fact during the whole of my stay at New Westminster, I was unable to carry out my project in this respect.

Lieutenant Scott, however, at my request first put the detachment through garrison gun drill without ammunition, and then fired six rounds of blank, all of which was performed in a very fair manner, considering the slight opportunities they have had for practising, no ammunition having been supplied to them until very recently, and the friction tubes, the only ones procurable, being entirely unsuited to the guns.

I directed Lieutenant Scott to carry out his practice as soon as the weather would permit, and furnish me with a report on the subject. This he promised to do, but as the weather has since continued unfavorable at New Westminster, he reports that he has not yet been able to carry out my instructions, but that he will do so as soon as possible.

General Subjects.

The target practice has not been carried out this year in a very satisfactory manner by any of the companies in this district; only two at Victoria, in fact, having even attempted it, and they only to a very limited extent indeed.

I need scarcely state that the principal cause to which this is attributable has been the reduction of the allowance of ammunition from forty to fifteen rounds per man.

I must also remark that on the whole I have not been quite satisfied with the slack musters, both at inspection this year, and also at the ordinary company's drills; but I think I am justified in attributing this also in a great measure to a similar cause. I may also add with truth, that in this Military District at least, the uniform is most distasteful to the men, the forage cap being particularly so, and the trousers, also, though perhaps not quite to the same extent.

The want of a drill shed and an instructor for a short time, are much felt at Nanaimo, and the fact of the cost of the construction of the rifle range at that place having been left upon the shoulders of the officers of the corps, without any assistance from the Dominion Government, has no doubt militated considerably against the popularity, and therefore success of the militia organization of that locality; and so far as the rifle range is concerned, the same may be stated as the cause of much dissatisfaction at New Westminster, where a capital rifle range has been constructed, the whole expense of which has fallen upon the corps fund, amounting to somewhat over one hundred dollars in each case.

Were these sums refunded to them, I have not the slightest doubt that it would engender a much more friendly feeling than that which now exists; and I feel satisfied that such trivial sums would be well expended in that direction.

The introduction of gas into the drill shed at Victoria has been a marked improvement, and has caused general satisfaction amongst the militia here, and the two hundred dollars expended upon the drill shed at New Westminster has been sufficient, at all events, to thoroughly secure the foundation and render the building practically useful, which, I may say, it was not previously.

I have the honor to be, Sir,

Your obedient servant,

C. F. HOUGHTON, *Lieut.-Colonel,*
D. A. G., Military District No. 11.

The Adjutant General,
Head Quarters, Ottawa.