

The Column, Line, and Square

BATTLE MANUAL

by
Fred H. Vietmeyer
and
Judson T. Bauman

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First Author's Preface

The idea for this Battle Manual was conceived in May 1970 very shortly after I first played the game with the New England Wargamers Association. I had become completely hooked on Column Line and Square but felt that my learning of the game was hampered by the way the rules were written. In fact the 2d edition of CLS was written by different people writing separate parts and different portions were written at different times during the evolution of the game. The result is difficult to use as a textbook and almost impossible to use as a quick table top reference. So it became my goal to present CLS in a way that is easier to learn and easy to check rules during play.

I began writing the Battle Manual in the summer of 1971. Immediately after a first draft of a few chapters was complete I contacted the games most knowledgeable authority, Fred Vietmeyer. Then there began a long extensive correspondence between Fred and myself with Fred tirelessly correcting my errors. The Battle Manual is the result of almost two years of such effort.

Thanks are due first to my co-author Fred Vietmeyer who not only corrected the work but made many constructive criticisms and suggestions and without whom the Battle Manual would be inaccurate and not authoritative. Secondly I am indebted to the members of the Led Cuirassier particulary Steve and Russ Markman, Ed Reichlein, Randy Linke, Steve Payne, John Collins, and Bill Bartlett who all read and used drafts and made valuable suggestions. Of course I owe many thanks to my wife Claudia and our kids who tolerated many hours of daddy's self imposed isolation. Also deserving of mention are some of my fellow B-52 crew members who with good humor let me take over the desk in our cramped crew quarters during two long overseas tours. My Air Force roomates at various times included Capt. Bob Priest, Lt. Dave Chicci, Capt. Allan Sabanosh, Lt. Don Burns, Lt. Sheldon Mayer, Lt. Larry Grannis, and Airman Jack Sabins.

Finally to all CLS players here's my wish: May you have many hours of enjoyable wargaming and may you always roll 6's for small arms and 1's for C.E.

Judson T. Bauman
June 73
Yuba City, Calif.

Second Author's Preface

The concept of "Column Line and Square" has been crystallizing for over a decade now with tens of thousands of model soldiers used in hundreds of table top games in cities all over the U.S.A. and now even in Europe.

The game was put together using the engineering method I learned at Purdue, i.e., taking isolated blocks of research information and game theory and developing them into a pattern which is functional.

This "Battle Manual" is the latest of a series of rules write ups, the latest previous was the 2d Edition of "Column, Line and Square". Previously the rules were written in a legalistic style of the "warp" pattern (actually a textile term).

Imagine that the actual game proper is a square patch of red that exists in my mind only, and is as traditionally now played on the table top - and that white arrows are crossing this patch in horizontal parallel lines similar to a solvent extraction process in chemical engineering. This is the original "warp" pattern which was written by me in the First Edition, outlining the game by describing the major categories such as terrain, melee, and morale and listing the standard pattern for the normal situations. Then exceptions were noted.

The Second Edition continued this process as the game gathered more adherents; again each historical building block was checked and balanced (unbalanced equality) so that it continued the thread in a coherent strain to the original theme of creating a miniature Napoleonic world - like entering a time machine.

This pattern is fine for the Table Top General who is looking at the game set-up from a hill top and wants to see generalized patterns of movement, fire, etc. and takes note of the exceptions inherent in each game's separate game conditions. However for the novice player who marches onto the table top world of "Column, Line and Square", wide eyed with the dread of lurking dangers, it might be simpler at least initially to get the Napoleonic private's view of what he can or cannot do with his own little unit, without worrying about what other units can or cannot do, that he is not involved with. "Battle Manual" is written with this in mind. It is the "woof" approach, taking that same square patch of red but putting vertical yellow parallel arrows through it. The area covered is the same and nothing is advertently left out.

Rather than use a legalistic game rules approach, "Battle Manual" is written as a "military field manual" which again I am acquainted with due to my World War II and subsequent experience in the infantry and military government in Europe and which, of course, suited my then novice co-author better.

With the "Warp and Woof" concept in mind, I wish to thank the contributors to "Column Line and Square" upon which "Battle Manual" is based, among which are: Bruce "Duke" Seifried; the late Robert P. Cory, Ph.D; Lt. Col. Louis L. Bloom, U.S.M.C.R.; Theodore J. Haskell; Lt. Col. Hugh E. Reynolds, Jr., U.S. Army Reserve; and David P. Mort.

Concerning the "Organization of Forces" section, my special thanks to Ted Haskell for his contribution of the soldier sketches, Ed Strauss and Dave Mort for their contribution of drafting skills on the diagrams and to Jack Scruby in whose Magazine "Table Top Talk" I had previously shown some of the information.

Fred H. Vietmeyer
May 73
Fort Wayne, Indiana

Address all rules inquiries to:

Fred H. Vietmeyer
3204 Tonawanda Ct
Fort Wayne, Ind. 46805

INTRODUCTION

Chapter 1. Overall Description of the Game

Column, Line and Square (CLS) is a table top wargame played with military miniatures of 30, 25, or 20 mm scale. It simulates land warfare of the Napoleonic era from 1808 to 1815. Simultaneous movement is achieved by prewritten orders or map marking. Table top movement is executed by direct measurement with tape or ruler rather than by counting off on a hexagonal or square grid.

CLS gives a comprehensive coverage of the myriad possible tactical details of the Napoleonic period. The rules provide for weather conditions, effect of numerous terrain features, battlefield obstacles, varied tactical doctrine, organization, and unit size according to nationality.

The game is intended to be played with painted figures reflecting the colorful uniforms worn in Napoleonic times. Most players prefer historically accurate painted units but CLS can be played with cardboard counters, unpainted plastic figures, or other improvisations. The figures are fastened onto stands (movement trays) for play.

CLS is very flexible in the number of players which can play. At one extreme a pair of aficionados can fight out a brigade size affair on a kitchen table. Just as easily as far as the rules are concerned, fifteen or twenty players can face each other along a 7 X 24-foot table and battle out a simulated Waterloo to find out if they could have changed the course of history. Some buffs even play CLS solo. However the typical game is probably one played on a 5 X 9-foot ping-pong size table with two to four players on a side.

Another merit of CLS is that in spite of considerable complexity the greenest novice may participate right from the start. In fact in the authors' view that is the best and most enjoyable way to learn CLS; play under supervision, read this manual, and play again, alternating until you can handle the mechanics by yourself. See Chapter 32 for a more detailed discussion of how to learn CLS.

How to use this Manual

Two Categories of Questions. The Column, Line and Square Battle Manual is intended primarily as an immediate table top reference for the player. Its organization is designed as a quick finder system. The overwhelming majority of questions which arise during play can be divided into two categories:

(1) procedures of play, such as how to measure small arms fire, or, (2) unit capabilities, "Do Hussars fire small arms?" for example.

Unit Capabilities Questions. If a question arises such as "How many operations can French Chasseurs a Cheval perform?" The player merely notes that Chasseurs a Cheval are Light Horse and goes to Chapter 20. In it he checks Movement and Operations on page 20-1. There he finds "A maximum of two operations per turn are permitted in massed formation." This example represents the unit capability approach; one works from unit to circumstance to rule.

Procedures Questions. The alternative type question centers about a procedure. Suppose after deciding the defending player must make the pre-melee morale check he wonders what defending units must check morale. He looks in Chapter 10, Melee Procedures and finds on page 10-1 "Pre-Melee Morale Check." In the third paragraph he finds...The defending player must check the morale of each unit which has a part of a stand within 6 inches of the melee contact point. In this type question he works from procedure to circumstance to rule.

Moderate familiarity with the manual will allow for very rapid rules finding and a great reduction of verbal battles to the advantage of the wargamer.

The Manual as a Textbook. The second function of the Battle Manual is to act as a home study text. Earlier versions of CIS rules were written down as they were decided upon. It was a good form to trace the evolution of CIS but a terribly frustrating form to anyone wanting a quick authoritative answer or anyone trying to brush up on "What Hussars can do" or "How to conduct a melee." A great deal of attention has been given to insuring adequate explanatory detail for the games' students.

Chapter 2. Background

CIS has evolved over a long period from about 1958 to this writing in 1972. It began with independent players each experimenting with his own rules. But Fred Vietmeyer's dream of a Napoleonic miniatures warfare world drew together these players and sparked what eventually became the Midwestern Napoleonic Wargamers Confederation. It was the leadership of Fred Vietmeyer and his associates that produced Column, Line and Square. At least within the United States it is probably the most widely and extensively played Napoleonic miniatures game. Currently Vietmeyer corresponds with about 100 persons of which many individuals represent entire clubs. Groups are spread from California to Massachusetts. Thus every rule has been widely and thoroughly tested, which is another of the game's special merits.

Technically the basis for simulating organization and firepower is one figure casting per 20 actual historical men and 1 cannon casting for 8 actual guns (approximately a battery).

The unit sizes are based on tables of organization as modified by typical field strengths emphasizing the start of the campaigns when units were newly recruited. Careful attention has been given to what the basic units of different nations were trained to do in combat. This variance in tactical doctrine gives Napoleonic warfare its special flavor. The organization of all Napoleonic era armies changed significantly one or more times during the 20 year period (1796 to 1815 inclusive). CIS best reflects the period of 1808 through 1813 when tactical doctrine was most divergent, but is reasonably accurate up through 1815. As a tactical simulation it is sufficiently accurate to cover Napoleon's entire career as a commander from 1796 onward. However the battalion level organization of the major European powers including the French underwent radical changes before 1808 and therefore CIS does not reflect the organization of the earlier times.

The CIS distance simulation is based on one inch of table top equalling ten yards of actual terrain. However this is modified by a concept of collapsing time and distance to accommodate longer range weapons and behind the lines movement. On the other hand melee procedure stretches out the time scale so what actually occurred in a few seconds to thousands of soldiers is simulated by one player in several minutes.

In practice there is no particular relation between the turn and a precise period of time. The game is "balanced", that is the relationships among fire, movement and other unit capabilities seem to work out about right. Tactical blunders seem to

produce the appropriate disasters and tactically sound plans work out about as well as one would expect. In practice, if one thinks of a turn representing one hour of real time the results seem consistent.

CIS is a tactical game where units as small as a light infantry platoon or a sapper squad are represented. However, with a few additional rules it can be used as the tactical phase of a campaign or strategic game.

Rationale for Rules

The following represent a sampling of the reasons behind some of the typical CIS rules. Wargamers desiring further explanations should write Fred Vietmeyer.

Combat Effectiveness. It is supposed that a unit which has sustained heavy casualties, 50% for CIS, may be rendered ineffective due to the grave reduction in size. The situation is checked by a die roll. If the unit stands or continues to fight, it may be thought that the officers and men elected to die to the last man rather than retreat. If they fall back two moves, the officers elected to pull the unit out of action rather than see it decimated. A rout is considered to be a retreat that could not be controlled by the officers or the troops just saw too many comrades die and were overcome by panic.

British +1 Volley Fire Increment. The British were the only infantry to train extensively with live ammunition and battle reports of the era reflect their superior volley fire capability.

Coloring of Artillery Sticks. The alternating red and white segments on the artillery sticks represent the bounces and the ground roll of ball shot. Obviously, the ball only took casualties from the ground up to head height. Therefore, the white is the portion of the ball's flight above the soldiers heads. The centers of the two short red segments represent the impact points for the beginning of the first and second bounces. The final long red portion represents the roll out until the ball is going too slow to cause casualties.

Low Ball. The "low ball" firing simulates a number of techniques and gun charges. To begin with, it represents the case where the ball shot was aimed at the ground fairly close to the cannon which resulted in the ball's entire path being close to or on the ground. But it also includes low charge ricochet fire and all manner of irregular loads such as grapeshot, bar shot, chain shot, double shot, scrap iron and so on. Keep in mind the effect

of a whole battery is being simulated by one cannon model.

Cavalry Swerve Around an Infantry Square. Historically cavalry had grave difficulty charging into a well formed infantry square. The infantry would rest their musket butts against the ground with bayonets outward. Thus charging cavalry were presented with a wall of bristling spikes to impale their horses or themselves upon. In practice the horses usually balked. Lancers are permitted to continue to melee the square because the lance was longer than the bayoneted musket.

Rules Reference

The Battle Manual presents the rules as given in "Column, Line and Square," 2d Edition published by the Midwestern Napoleonic Wargamers Confederation (Out of print). It includes all "Reviewed Referee Rulings" and other clarifications as of October 1972. Deviations from these are unintentional.

Chapter 3. How to Take Your Turn

Although CLS is a simultaneous move game the mechanics of play call for a precise sequence of steps. The turn is divided into 6 major steps. They are:

1. Mark Maps or Write Orders.
2. Artillery Fire.
 - a. Horse artillery movement if before firing.
 - b. Training of weapons, hand pushes, and artillery firing including ball shot, rockets, howitzer and canister except "Held Canister."
 - c. Horse artillery movement if after firing.
3. General Movement including infantry and cavalry charges and limbering, unlimbering or movement of foot artillery.
4. Sapper Charges Explode.
5. Small Arms Fire and "Held Canister."
6. Melee. Includes morale retreats, cavalry swerves and melee. Each melee is carried out to the first breakthrough or other termination. Then uncovered fire, breakthroughs, and new melees repeating the cycle until all melee provoked actions have been completed.

After each step which causes casualties due to fire or explosion a unit C.E. check is made if required. (See Combat Effectiveness Retreats Ch 11)

* Announcing the Steps

The host, umpire or commanders-in-chief should announce the beginning of each step after he has determined that all players have completed the last.

* Moves Contrary to Orders

Each player is required to carry out what he has marked on the map or written in his orders. No revisions or modifications are allowed after artillery has commenced. In general failure to write down an order for a unit means the unit stands but may fire. An operation taken incorrectly should be retracted and corrected. If an incorrect operation or action is not detected it becomes uncontested after the next step has begun. If a player fails to take an action actually ordered the result stands after the beginning of the next step.

General Movement

Players should take care not to spoil the simultaneous movement feature of the game and call out for opponents to declare their charges at the beginning of General Movement so that the first 6-inches rule, and proportional movement rules can be correctly applied.

Chapter 4. Artillery

SECTION I. General Procedures

* Movement and Operations

Operations Permitted. Artillery may perform the following operations: Move, Limber, Unlimber, and Fire. Horse artillery may perform three operations and foot artillery two operations per turn. In any case, no two operations may be alike. The actions of hand push and facing or training the weapon are considered part of the firing operation. Guns may be trained up to 180 degrees.

Movement. The path may curve any amount and the gun may face in any direction at the end. For the sequence, Move-Unlimber, the move distance is measured from the front face of the horse-limber stand to the front of the artillery stand. For the sequence, Limber-Move, the distance is measured from the front of the artillery stand to the front of the limber stand. The limbered condition is indicated by placing the rear edge of the artillery stand against the rear edge of the limber stand. An artillery piece may not be limbered and moved on a turn which starts with the gun and limber stand not touching.

Effect of Terrain on Movement.**

Circumstance	Distance Adjustment
1. Ascending each contour.	-1"
2. Individual trees in #1 Woods.	Go Around
3. Moving in #1 $\frac{1}{2}$ Woods.	$\frac{1}{2}$ Speed, $\frac{1}{2}$ " Hand push, No lowest contour bonus.
4. #2 Woods or denser or swamp.*	Movement not allowed.
5. Off roads during weather condition 6.	Restricted to $\frac{1}{2}$ max. dist.
6. Moving on Very Rough Hills.	$\frac{1}{2}$ Speed
7. Fences, Hedges, Works, Trenches, Saps, and Pits.	May not cross
8. Small buildings and other constructions.	May not enter except as specified in game conditions.

* May be placed in #2 through #4 Woods at set-on but not in swamp. Must travel on roads through #2 or denser woods and swamps.

** Artillery receives a greater movement allowance when operating on the lowest contour. The lowest contour is defined as level open ground where the artillery does not pass across a river, stream, or through a swamp, etc.

* Manning. The minimum figures for movement of an artillery piece are two men and one horse. However, two men alone may hand push the gun. Artillery with only one horse is limited to half distance. If the artillery horse team is replaced by two cavalry horses, movement is also halved. The minimum for firing is two artillerymen or sapper figures. They must be within 1 inch of the barrel or mounted on the cannon stand. Figures within 4 inches on one turn may, on the next turn, move to the gun and move and/or fire it.

When Operations May Be Performed. Foot artillery may fire any load during the Artillery Fire Step, but Held Canister is fired only during the Small Arms Fire Step. It must be limbered, unlimbered, or moved during the General Movement Step. For this reason, the order Unlimber and Fire cannot be performed for foot artillery. Horse Artillery also fires any load during the Artillery Fire Step and H.C. during Small Arms Fire, but may move during the Artillery Fire Step or during General Movement as the player desires. All artillery, except prolong guns, must unlimber before firing and limber before moving.

Horse Artillery Operations. Horse artillery may take three operations per turn. It may: (1) Move, Unlimber, and Fire, (2) Fire, Limber, and Move, (3) Unlimber, Fire, and Limber and add a hand push to any of the above. Of course, horse artillery may take fewer than three operations.

Forced Marches. Guard artillery may perform one forced march per game day. The forced march has a double movement allowance. Eligibility for the bonus movement, for being on the lowest contour, is determined separately for each of the two allowances. Other terrain effects are applied as given above. The artillery is allowed a free limbering and facing to begin and an unlimbering at the end of the forced march.

Prussian Prolong Gun

The prolong gun is pulled by its gun crew and may be ordered to make a Prolong Move and Fire, or Fire and Prolong move during the Artillery Fire Step. It may also move during the General Movement Step and fire Held Canister during the Small Arms Fire Step. If hitched to horses, it is moved according to the rules for a foot gun. (See Medium Foot Artillery and Prolong Gun in SEC. II)

* Firing Ball (High Ball)

1. The player declares his aiming point.
2. Then with the white end of the stick touching the muzzle, he lays the artillery stick on a line connecting the gun muzzle to the aiming point. The line of fire must clear all friendly troops unless the gun is raised one or more contours above the intervening

figures. The line of sight must lie within $\pm 45^\circ$ of the line of sight of the barrel as measured from the muzzle.

3. The windage bar is placed perpendicular to the stick with the 3, 4 mark under the red end.

4. He rolls one die.

5. The stick is now layed so that the white end touches the muzzle and the red end lies over the die score on the bar. Any range increase due to contour height is now added by moving the stick away from the muzzle the appropriate distance.

6. All living parts of figures, including horses tails, which lie directly under any red part of the stick are casualties and are marked immediately. All horse hits cause a casualty for rider and horse and all rider hits also kill the horse. Hits on non-living parts such as muskets, swords, lances, etc. are not casualties.

7. If as a result of the windage deflection, the ball shot carries over friendly troops no special penalty is invoked. However, friendly troops hit this way lose casualties as in 6 above.

* Firing Low Ball

1. The white end of the stick is placed at the muzzle and the stick is aimed as in High Ball above.

2. Range increments are added as for High Ball.

3. No deflection is applied; and casualties are taken for any living parts under the first white portion of the stick.

4. Dice are rolled as for canister. Casualties taken may not exceed the canister dice score.

5. Low Ball penetrates #2 Woods only 3 inches and denser woods not at all.

* Ball Hits on Inanimate Objects

Procedure. Once a ball hit occurs, a die is cast and the appropriate Artillery Effects Table entered to decide miss, damage or destruction. (See App II) A hits record is kept for targets which require more than one hit to destroy. Casualty markers may be used for this. Objects destroyed by ball hits are removed from

The table. Destroyed buildings and walls become rubble; whereas, fences, hedges, works, abatis, cannon, limbers and wagons once destroyed are removed and have no further effect.

Screening. Objects which are damaged or destroyed stop the ball. Missed objects do not, so targets beyond them must be assessed for damage until the ball is stopped or reaches the end of the artillery stick. (See Artillery Effects Tables App II)

Cannon, Limbers, and Wagons. Ball hits on cannon, limbers, or wagon stands do not count unless the cannon, limber or wagon model itself is hit.

Ball Stops in Water. High ball shot stops as soon as it touches water, i.e., lakes, streams and swamps, etc. High ball touches ground (water) at the midpoint of the first two red segments and at the beginning of the last long red segment. Low ball is not stopped by water.

Cannon Raised 7 Contours. Cannon raised 7 or more contours above the target will have their ball shot, including Unicorn ball, stop at the center of the second red segment.

Soft Ground. In case of soft ground (Weather Condition 6) high ball shots stop at the middle of the second red segment.

Night. Ball shot, either high or low, may not be fired at night, unless, the designer specifies such as in the case of a night bombardment of a town under siege.

Cover. Cover protects against bombshell and ball until the cover (wall, fence, hedge, works, etc.) is destroyed. However, ball shot fired within 2 inches of a normal hedge goes through without damaging the hedge. In the case of a howitzer, casualties are taken beyond the cover, within the radius of the howitzer burst. Ball hits take casualties behind fences, special stone walls, and hedges on the turn of destruction, and the ball continues on as indicated by the artillery stick. However, ball hits on works stop on the destruction turn and take no casualties beyond the works.

Ball Shot Penetrating Woods. High Ball penetrates #2 Woods only 3 inches and #3 Woods not at all. To check penetration of #1½ Woods, a die is rolled and with scores of 1, 2, or 3 the ball penetrates 6 inches and stops, with 4, 5, or 6 the ball travels full distance. Ball may be fired out of #1½ Woods up to 6 inches without penalty. For greater distances the result must be diced as indicated above.

High Buildings and Trees. These items are hit by high ball in the small white segments of the artillery stick.

* Artillery Firing Canister

When Fired and Orders. Any load, High ball, Low ball or canister may be fired during the Artillery Fire Step and need not

be specifically ordered. However, "Held Canister" (H.C.) is fired only during the Small Arms Fire Step and must be specifically ordered. In any case, fire may be withheld and the withheld load has no effect on the loading for the next turn.

Firing Procedure. To fire canister the player lays the appropriate canister pattern down so that the square end is over the target and the triangular end is at the muzzle. (Alternatively, the pattern may be measured out with a protractor and ruler.) Two or more dice are rolled depending on gun capability. (See App I) The dice score total is the maximum number of casualties. These are extracted by the target unit player starting from the closest stand and working away from the gun.

Canister Effects.

1. Flanking Fire applies except the penetration depth of the files is as listed for the particular cannon, (See Fig. 9-2)
2. Using extra dice for enfilade does not apply, but taking casualties to the full range of the pattern does. (See Fig. 9-3)
3. Screening applies. (See Fig. 9-6)
4. Small Arms Fire die score adjustments for terrain numbers 3, 4, 5, 6 and 7 apply; but they are applied to each die of the canister dice roll. (See Ch 9)
5. Superior weapons fire applies. (See Ch 9)
6. Pass through fire applies. (See Fig. 9-4)
7. Canister penetrates #1, #1½, #2 and #3 Woods and all swamps to the full depth of the pattern. It penetrates #4 and #5 Woods up to 6 inches.
8. Canister range is increased like ball shot, 1 inch for each contour above the target. Range is added at the muzzle.
9. Canister cannot be fired over a screen of friendly troops whether the gun is raised or not. However, casualties may be taken behind an enemy screen if the cannon is one or more contours above and both the screened and the screen are on the same contour. Casualties are still taken from front to rear extracting them from the screen until it is eliminated, then taking them from the screened unit. (See Fig. 9-7)
10. Canister is screened by contours like small arms.
11. Canister does not damage hedges nor does the hedge affect the pattern.
12. Canister may not be fired if the pattern includes friendly troops.

Visibility

As for small arms, cannon may be fired at invisible targets. (See Ch 9 for visibility rules) For ball shot, casualties are extracted according to the number of ranks or files penetrated, alternating 2, 1, 2, 1, etc. Alternatively, the target unit may

be revealed (placed on the table) and casualties taken in the usual way.

Concealment

Artillery concealed from opponents due to visibility rules is revealed on the firing turn. (Revealed means that the cannon casting is placed on the table.) If the cannon fires during the Artillery Fire Step, it must be revealed immediately after 2a Horse Artillery Movement Before Firing. If it is to fire Held Canister, it must be revealed immediately after 2c Horse Artillery Movement If After Firing. Howitzer firing bombshell is not subject to this rule.

* Ammunition Location

Ammunition is in the limber unless otherwise ordered. If ammunition is in the limber, the limber stand must touch the cannon stand in order to fire. If the ammunition is ordered to be on the cannon stand, the limber does not have to touch the cannon stand to permit firing. The location of the ammunition on the cannon stand must be specified exactly (eg. Trail chest or Gunner at left rear). Ball hits on these parts of the stands are rolled for, the Appropriate Effects Table entered using the loaded cannon, item, and hit results assessed accordingly.

* Interchangeability of Ammunition

Ammunition for each type is interchangeable with all other weapons of the same type. The types are: (1) Horse Artillery, (2) Medium Foot Artillery, (3) 12 Pounder, (4) Howitzer, (5) Swedish Horse Howitzer, (6) Unicorn Howitzer, (7) Prolong Gun, and (8) Rocket.

* Artillerymen

Movement. Free of the stand, artillerymen move as skirmishers up to 9 inches overland and 12 on a road.

Small Arms Fire. Artillery men may fire muskets as skirmishers if they do not fire a cannon that turn.

[C.E. Check. The C.E. Check is required for militia gunners only (See SEC III)]

Melee and Morale. The line artilleryman's melee vulnerability is 1. [Morale cast results are the same as for Light Infantry. (See Ch 16)] Guard artillerymen have a vulnerability of 2 and, of course, Guard Morale. Artillerymen do not charge. Off the stand,

single artillerymen are treated as infantry skirmishers in the event of melee. (See SEC. I)

Retreats. Artillerymen who fall back [1 or 2 moves] take their guns with them, routing gunners do not. The last artilleryman to die due to melee or fire may perform one or more destructive actions if so ordered by the gun's player. These actions are: spike the cannon, destroy the ammunition, destroy the limber (caisson) and kill the horses. Routing gunners may not perform any destruction. Destructions must be ordered before the next step of the turn. A spiked gun may not be fired for the rest of the game day, but may be repaired overnight.

SECTION II. Capabilities, Purchase and Special Procedures

Guard Artillery. Guard Artillery batteries cost 25 purchase points in addition to their respective poundage. All other capabilities are the same, except the guard artillery battery may perform a forced march and have guard morale.

* Horse Artillery (2 to 6 pound Horse Guns)

Purchase Cost. 6 pounds each.

Ball Shot Range. 30 inches + 1 inch per contour above the target.

Ball and Canister Max. Height. Fires over 2d contour above its own.

Canister. Use two dice and take casualties two ranks (files) deep.

Ammunition Supply. 7 ball and 2 canister rounds per game day.

Movement. Moving as skirmishers. (See SEC. I)

	Road Move	Road Move Lowest Contour*	Overland Move	Overland Move Lowest Contour*	Hand Push	Hand Push Lowest Contour*
Open	18"	27"	12"	18"	1"	2"
Gnd						
#1½	18"	27"	6"	6"	½"	½"
Woods						

* See Note page 4-1

Horse Guns are permitted 3 operations per turn. (See App II for effects of fire)

* Medium Foot Artillery (6, 8, 9, and 10 pounder Field Guns)

Purchase Cost. 6 pounds

Ball Shot Range. 36 inches + 1 inch per contour above the target.

Ball and Canister Max. Height. Fires over top of 4th contour above its own.

Canister. Use three dice and take casualties three ranks (files) deep.

Ammunition Supply. 7 ball and 2 canister rounds per game day.

Movement and Operations.

	Road Move	Road Move	Overland	Overland	Hand Push	Hand Push
		Lowest	Move	Move		Lowest
		Contour		Lowest		Contour
				Contour		
Open	12"	15"	6"	9"	1"	2"
Gnd						
#1½	12"	15"	3"	3"	½"	½"
Woods						

Medium Foot Artillery is permitted two operations per turn. (See App II for effects of fire, and SEC I for procedures)

* 12-Pounder Field Gun

Purchase Cost. 12 pounds

Ball Shot Range. 42 inches + 1 inch per contour above the target.

Ball and Canister Max. Height. Fires over top of 6th contour above its own.

Canister. Use four dice and take casualties four ranks (files) deep.

Ammunition Supply. 7 ball and 2 canister rounds per game day.

Movement and Operations. Same as Medium Foot Artillery. (See App II for effects of fire)

* Howitzers

Purchase Cost. 12 pounds.

Bomb Shell Range. 36 inches + 1 inch per contour above target.

Max. Height Bomb Shell. Fires over any obstacle.

Burst Circle. Burst circle is 3 inches in diameter, except British Howitzers which are 4 inches.

Ammunition Supply. Use 5 bomb shell and 1 canister round per game day.

Canister. Use five dice and take casualties five ranks (files) deep.

* Firing Procedure. Howitzer shell fire is conducted by estimating the range to the target, declaring the line of sight (by designating the sight point if necessary) then measuring the distance with a tape measure from the muzzle along the line toward or through the sighting point. The windage bar is used twice with a range and a windage cast. For the range roll, the 3, 4 mark is placed at the measured spot with the 1 mark toward the gun. The windage bar is then applied to the resulting point, perpendicular to the line of sight and the burst location determined by a second die roll. The fate of troops and other items within the burst is decided by a further dice or die roll as indicated in the Howitzer Effects Table Appendix II. All howitzer bursts are limited to a 2-inch diameter circle in soft ground as in Weather Condition 6. Howitzers may not be fired at night unless the game designer specifies.

Alternate Firing Procedure. One alternate method uses a grid. (See App II) The spot measured becomes the center for the howitzer grid. One red and one green dice are rolled. The dice score indicates the grid coordinates to place the burst circle.

Movement. Howitzers are moved as Medium Foot Artillery except for Swedish Horse Howitzers which move as horse artillery. (See App II for effects of fire)

Mortars

Purchase Cost 12 pounds. Purchase of mortars is only allowed when specified in the game conditions. Mortars move according to the rules for Siege Guns and fire according to the rules for Howitzers. They have a 4-inch burst circle. Mortars have 6 bomb shells per game day, but do not fire canister.

Prolong Gun

Ammunition, ball range, max. obstacle height, and canister characteristics are the same as for Horse Artillery.

Prolong Movement and Operations.

	Road Move	Road Move Lowest Contour	Overland Move	Overland Move Lowest Contour
Open Gnd	9"	12"	6"	9"
#1½ Woods	9"	12"	3"	3"

The prolong gun is allowed 2 operations per turn when operated as a prolong gun. When hitched to a horse team it is operated (has same movement and operations) as Medium Foot Artillery.

Effects of Fire. The effects of fire are the same as for Horse Artillery. (See App II for effects)

Rocket Batteries

Purchase Cost. Cost 6 pounds. Only British have rocket batteries.

Movement and Operations. Rocket batteries are allowed three operations per turn.

	<u>Overland</u>	<u>On Road</u>	<u>Troops Dismounted</u> <u>Leading Pack Horses</u>
Open Gnd	18"	24"	12"

Effect of Terrain on Movement. When mounted, all effects are as listed for massed cavalry in Ch 6. Dismounted, leading horses they move at full speed through #1 $\frac{1}{2}$ and #1 Woods and at half speed through #2, 3 and 4 Woods. See SEC I for procedures.

Rate of Fire and Ammunition Supply. May fire up to 6 sheafs (rounds) per turn and is supplied with 18 rounds per game day. (See App II for effects)

Operations. Rocket batteries are allowed three operations per turn. They may Move, Set-up, and Fire; Fire, Pack-up, and Move; or Set-up, Fire, and Pack-up. They conduct these operations during the Artillery Fire Step analogously to Horse Artillery. Note that rocket batteries may be moved like dismounted dragoons with the rocketeers leading the pack horses. They fire up to 6 sheafs (rounds) per turn.

Firing. The firing player merely declares his target or line of sight, then rolls two dice and enters the Deflection Table. (See App II for Deflection and Effects) Once the rocket path has been determined and distance measured with a tape, the effect of passing near or hitting units or objects is determined by additional dice rolls as indicated in Appendix II.

Siege Guns

Purchase Cost. 18 pounds. Purchase of Siege Guns is not allowed unless specified in the game conditions.

Ball Shot Range. 48 inches + 1 inch per contour above the target. For ball firing use 12-pdr artillery stick adding 6 inches at the muzzle.

Canister. Use 12-pdr pattern with 4 dice taking casualties 4 ranks (files) deep.

Ball and Canister Max. Height. Fires over 6th contour above its own.

Ammunitions Supply. 5 ball and 1 canister round per game day.
Movement and Operations. The Siege Gun is allowed up to 2 operations per game day. The allowed operations and sequences are the same as for Medium Foot Artillery.

Road Move Hand Push Note: No off road movement is allowed.

3"

1"

Effects of Fire. Effects are listed in App II. Procedures are the same as for Medium Foot Artillery, except as noted above.

Swedish Horse Howitzer

Purchase cost is 12 pounds. Shell range is 30 inches + 1 inch per contour above target. Ammunition is the same as for regular howitzers. Movement, operations, and canister characteristics are the same as for Horse Artillery. For burst effects use a 3-inch diameter circle and the Howitzer Effects Table.

Unicorne Howitzer (Licorne)

This special Russian weapon costs 12 pounds. Unicorne shell range is 42 inches + 1 inch per contour above the target. It may fire bomb shell over any obstacle. It uses howitzer canister pattern, dice, and effects, its ammunition supply is 5 rounds of shell and one of canister, and moves as Medium Foot Artillery.

Firing Procedures. Range estimation and declaring the line of sight are handled in the same way as other howitzers. However, the range is measured off on the 12-pounder artillery stick and one die is rolled for windage deflection. The shell explodes at the estimated distance, but like a ball shot causes casualties in the red areas of the stick prior to the burst. The deduction for ranges shorter than the stick is taken from the white end. The burst casualties are determined in the same way as the regular howitzer, but the burst circle is 2 inches

SECTION III. Militia Artillery

Purchase Cost and Types

Cost is 3 pounds per gun (Battery). Only Medium Foot and Horse Artillery may be purchased. Purchase is limited by total purchase points allotted to the side as follows: 1000 to 1999 up to 2 batteries may be purchased, 2000 to 2999 permits 4 batteries, and so on adding 2 batteries for each additional 1000 points. Of course, militia artillery may be forbidden by the game conditions.

Operations and Movement

Militia batteries are allowed one less operation per turn than regular units. However, all ball and canister effects are the same as their type. Movement allowances are the same as their type, except that militia artillery gets no special lowest contour movement. (See SECTION I.)

Firing

Generally, prior to firing a die is rolled to determine if the gun crew loaded the gun for firing that turn. A score of 1, 2, 3, or 4 allows firing. A score of 5 or 6 requires a wait of one turn. On the turn after the 5 or 6 score, the gun is loaded without a further die roll. If the gun was already unlimbered on set-on, the die roll is not required for the first turn firing. Likewise on the first turn after a night turn, a gun, if unlimbered, is considered loaded.

Crew Augmentation and Replacement

The crew cannot be augmented, but dead figures may be replaced. Militia morale is maintained until 3 or 4 gunners figures have been replaced. Then the unit achieves a normal artillery morale dice rating. The die roll to determine loading and the reduced number of operations allowed are maintained regardless of replacements.

Morale Cast Results

Double Dice Score	Result	
7 or larger	Stand	Note: See SECTION I. for artillery fall back and rout procedures.
6	FB-1	
5	FB-2	
4 or smaller	Rout	

C.E. Check

Die Score	Result
1	Stand
2,3	FB-2
4,5,6	Rout off Table

Adjustments. The die score is improved by one point (i.e., a 4 becomes a 3) if the personal command figure of a player of game rank, of at least field grade, who commands at least two basic units, is attached.

(See SECTION I. for artillery fall back and rout procedures as well as Ch 11)

Chapter 5. Units and Formations

General

Movements, facings, formations changes, C.E. and morale checks are ordered or made by certain basic units. The units are usually infantry battalions, cavalry squadrons and artillery batteries. The exceptions are some specified troops which operate in smaller units, or other troops such as sappers which do not usually operate in massed formations and, therefore, are ordered by the individual stand.

Units

Basic Unit. The basic unit is the battalion, squadron, or battery in its historical constituency as defined in the "Napoleonic Army Organization" (NAO) part of this book.

Converged Unit. A converged unit is formed from stands detached from several other parent units. For example, a converged French Voltigeur battalion can be formed by detaching Voltigeur companies from their parent line infantry battalions. The converged unit may not be smaller than 50% nor larger than 150% of the size of the same type basic unit. In the Voltigeur example, the converged unit may not be less than 18 figures nor more than 54 because the basic French Light Infantry battalion has 36 figures. (Voltigeurs operate as light infantry) Units must be either historical (See NAO) or the parent Battalions must also be purchased.

Provisional Unit. A provisional unit is formed during the game by merging two or more units [which have fallen below C.E. and as a result are in a FB-2 state.] These units must be of compatible type, i.e., cavalry with cavalry or infantry with infantry. [Also a provisional unit may be formed from weakened units before they reach C.E.] The resulting unit must be as large as 50% of the original basic unit. To form a provisional unit, a flag (Command Stand) or a player's personal command figure must be attached during the rallying turn. [The provisional unit automatically routs off the table if reduced to $\frac{1}{2}$ or less of new units strength by fire.]

Attachment. Small units such as companies or platoons, individual command figures, command stands, or sappers may be attached to a larger unit [and become part of that unit for C.E.] checks, morale checks, and orders.] Examples:

1. A mounted command figure of field grade or better (Major or above) is attached to a cavalry unit [improving that unit's C.E. results table.] (See Unit Capabilities) [The C.E. count is raised 1 figure, the C.E. die check score is improved one point, and morale results are unaffected.]

2. A command stand is attached to a cavalry squadron making it a "Command Squadron", [thus increasing that unit's C.E. count.] No other effects occur.

3. Two sappers are attached to an artillery battery, thereby, requiring the opponent to kill 5 figures to stop firing rather than 3. No other effects occur.

4. Independent regimental command stands must be attached to some battalion or squadron, but are usually attached to the first battalion of squadron of the regiment unless ordered otherwise. [Their figure count is added to the unit C.E. count.]

Attached unit stands must touch the basic to be considered attached. However, if the unit is in skirmisher formation, the attached stand need only be within 6 inches of another stand.

Detachment. Companies, occasionally platoons, may be operated separately from their parent units in special circumstances.

1. An infantry company or platoon may be detached to occupy a construction. [The parent unit's C.E. is reduced accordingly and] morale checks are independent.

2. Elite companies such as grenadiers or light infantry may always be detached from line infantry to operate independently. Line units detaching all their grenadiers more than 6 inches away lose the moral improvement due to them, [but retain them for C.E. count. C.E. count due to them will be lost if they are converged into a new battalion or attached to another unit.] (See Morale Checks Ch 11)

3. Detached units which are in a construction, or more than 6 inches away, or are out of sight of the parent unit due to an obstacle require separate morale checks. When a separate morale check is not required a detached elite company has the morale rating of its parent.

4. Detachment to form a converged unit reduces the parent unit's C.E. count.

5. Detached units are ordered separately.

6. Detachment is not an operation.

Other Unit Sizes. Some troops were historically operated in smaller units.

1. The Austrian division (with a small "d") is a two company unit formed from a light infantry battalion. Austrian divisions may be purchased as divisions [and have the corresponding C.E. count.] The Austrian light infantry battalion is allowed to break down into divisions during a turn and reform on another. [In this case, each division maintains its own independent C.E. count.] [When reformed, the C.E. count is again based on the original strength of the whole battalion.] It is also permissible to move as skirmishers and then reform in new divisions so as to charge particular divisions with all the casualties.

2. Cavalry unit players have the option of operating their cavalry in multisquadron units up to historical regimental size.

* REFERS TO THE UNIT THAT WILL RECEIVE THE ADDITIONAL STANDS

DETACHED UNIT WILL USE ~~UNIT~~ MORALE PLUS INCREASE OR DECREASE IN PARENTS MORALE

In addition, the player, by so ordering, may break his cavalry down into independent squadrons [which then become the C.E. and morale check units.]

3. Some units such as British Marines historically operated as independent companies and so may be purchased and operated as such.

4. Multibattalion squares and other multibattalion formations do not affect the required morale and C.E. checks of the constituent battalions.

* The Formations

The possible formations are Column, Line, Square, Oblique, Ordre Mixte, and Skirmisher. All infantry units may form Column, Line, Oblique, Ordre Mixte, and Square. Cavalry units may form Column, Line, and Oblique. Light Infantry, Light Guard, Light Horse, Hussars, and Cossacks may form as skirmishers. (See Unit Capabilities)

Column. There are two column formations, single and double. Either must be at least four ranks deep or it becomes a line by definition. A road column is a formation no more than 5 figures wide and may be less than four ranks deep. (See Fig. 5-1)

Line. The line formation is three or less ranks deep. (See Fig. 5-2)

Oblique. The oblique formation may be slanted back to the right or left but in any case the stands must all face in the direction of march. They may be staggered "by stands" so that only the corners of the stands touch or "by ranks" so that each company leads or lags its neighbor by one rank. (See Fig. 5-3)

Ordre Mixte. Ordre Mixte is a part line part column formation made up of one or more battalions. If made up of more than one battalion, each battalion must have some stand or stands at the front of the formation. It moves at line formation speed. (See Fig. 5-4)

Multibattalion Columns. Any multibattalion formation which is at least 4 ranks deep on all files moves as a column. Any multibattalion formation which is 3 ranks (or less) deep any place moves as a line.

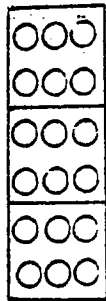
Square. The square is a four sided infantry formation with stands facing outward on all four sides. The minimum number of figures to form a square from one battalion is 16. Stands should be placed to obtain, as nearly as possible, equal numbers of figures on each side. Units in square may not move. The square has special properties for repelling cavalry. (See Cavalry Swerve Around Infantry Square Ch 6) The minimum number of figures to maintain a multibattalion square is 16 times the number of constituent battalions. Units in square formation which drop below the

minimum are considered to be in line formation for melee purposes and cavalry may melee them accordingly. However the stands of a broken square are not moved that turn. Once broken, the attacking unit may receive the melee dice advantage for enfilade by contacting a square fragment in the rear. Involuntarily retreating squares use the line movement allowance. (See Fig. 5-5)

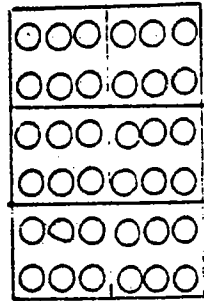
Bataillonsmasse. Only Austrian line infantry and grenadier battalions may assume the special characteristics of the bataillonsmasse. It is a double column formation with square like cavalry repelling characteristics. (See Ch. 10)

Massed Formations. Massed or closed formations are those where all stands touch one or more other stands. All of the above formations are massed. Massed formations of basic units may not be split to insert cannon or other items between the center companies. However the battalion's elite companies (grenadiers or lights) may be inserted at any position. Also formations may not deviate from their rectangular block shape to conform to hedges, river bends, or other natural curves. However, such formations may be made to conform to the line of breastworks or other formal fortifications. Elite companies in a battalion (grenadiers or lights) may refuse a wing, i.e., may be placed on the flank of a line firing outward toward the flank rather than forward. Thus, the formation may not be enfiladed by fire or melee on that flank.

Skirmisher Formation. Light infantry, Light Guard, Sappers, separate artillerymen and Light Cavalry units specified in the units capabilities chapters may operate in skirmisher formation. Unlike other formations the individual stands do not touch each other and individual stand facing may be random. (See Fig. 5-6)



SINGLE COLUMN
ONE STAND WIDE



DOUBLE COLUMN
TWO STANDS WIDE

FIG. 5-1
COLUMNS

LINE FORMATION OF 3 RANKS

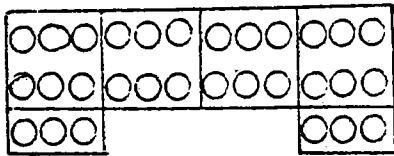
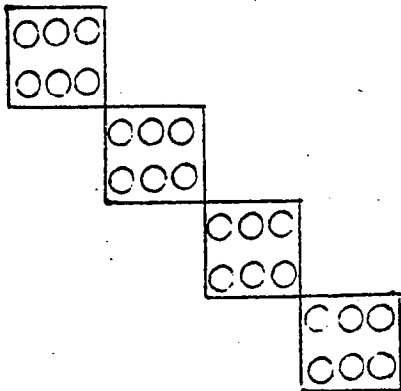


FIG 5-2
LINE

OBLIQUE STAGGERED
BY STANDS



OBLIQUE STAGGERED
BY RANKS

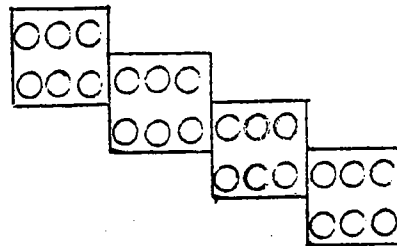
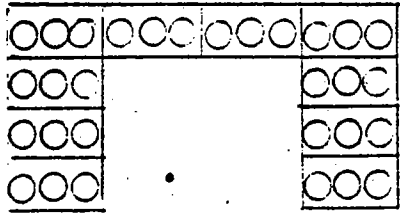
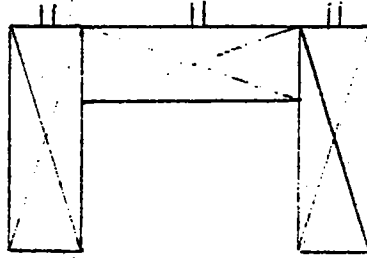


FIG. 5-3
OBLIQUES

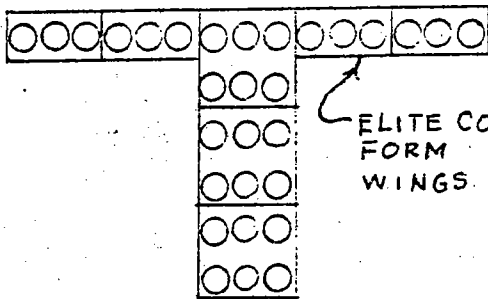
COLUMN-LINE-COLUMN
ONE BATTALION



COLUMN-LINE-COLUMN
THREE BATTALIONS



LINE-COLUMN-LINE
ONE BATTALION



ELITE COS
FORM
WINGS

LINE-COLUMN-LINE
THREE BATTALIONS

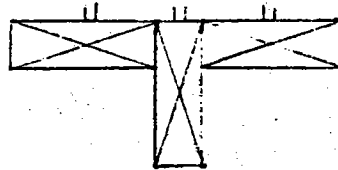
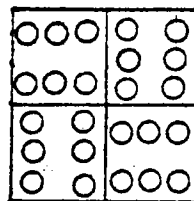
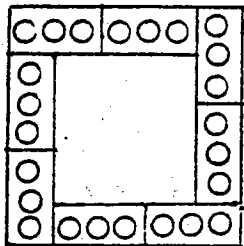
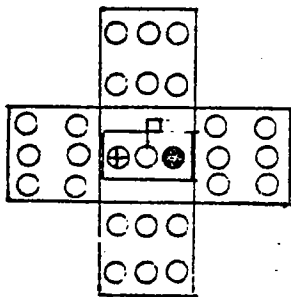


FIG. 5-4
ORDRE MIXTE

NORMAL SQUARE FORMATIONS WITH A
STAND CORNER AT EACH SQUARE CORNER.



DISTORTED SQUARE TO
ALLOW COMMAND STAND
IN CENTER.



DISTORTED SQUARE TO
ALLOW FOR MISSING
ELITES.

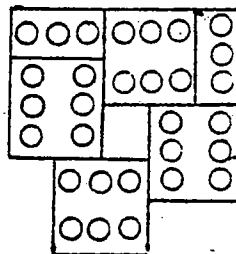
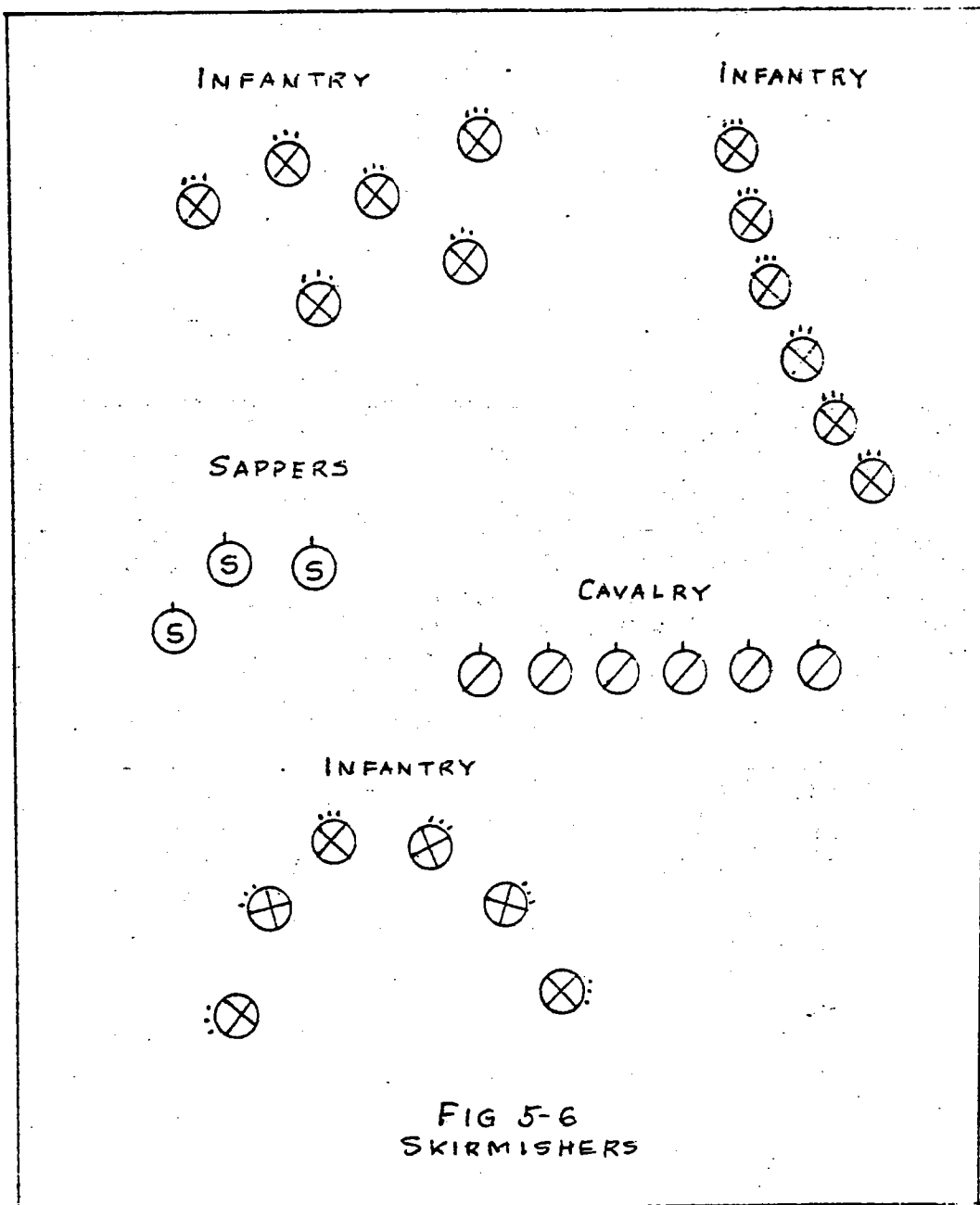


FIG 5-5
SQUARES



Chapter 6. Movement

Before we discuss any further procedures, we must define the term operation as used in CLS.

An Operation

The basic operations in CLS are Change Formation, Face, Movement, and Fire. All units are rated as to whether they may perform one, two, or three operations per turn. (See Unit Capabilities) In addition there are many special operations which may be ordered such as for infantry to Climb Ladders, or Sappers to Set Charges. (See Ch 8) Some actions are not operations such as entering a house or light infantry forming skirmishers. All these exceptions are treated elsewhere. Note that stand facing may be part of a formation change, but does not cost an additional operation.

Limitations. No unit may fire more than once during a turn nor may it move more than once. Also it may perform only one of the Facing, Formation Change pair. However, dismountable dragoons may move both mounted and dismounted during a turn. (See Ch 23)

Movement of Massed Units

Infantry. Infantry units may move straight ahead or back, obliquely, in a wheel, or may follow the bends and corners in a road.

Cavalry. Cavalry units may move straight ahead, in a curved path, in a wheel, or may follow the bends or corners of a road.

Oblique Movement. An oblique move is one where the stands constantly face in one direction while the movement is in a straight line but at some angle (up to 45°) to the facing.

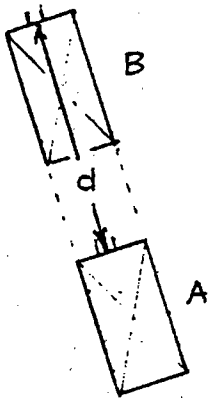
Curved Movement. Cavalry stands moving along a curved path must always face tangent to the path. Path curvature is limited to 90° per turn.

The Wheel. A wheel is a normal movement operation of a line formation pivoted about either flank. The rotation or path curvature may not exceed 45° for infantry or 90° for cavalry. The exception is elite companies in an infantry battalion may wheel 90° . A wheel may be part of a movement or constitute the whole movement.

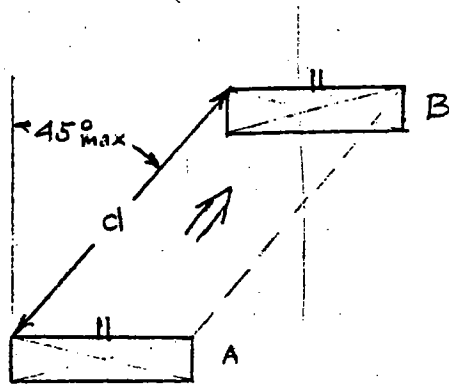
Road Column. The road column move is only allowed if the unit is in road column formation and the head of the column is on the road at the beginning of the turn, and the entire movement takes place on the road. Such units follow all bends and corners in the road keeping stands touching.

Fall Back. The Fall Back is a move of up to 3 inches to the rear with the stands still facing forward. Direction of movement is rearward $\pm 45^{\circ}$.

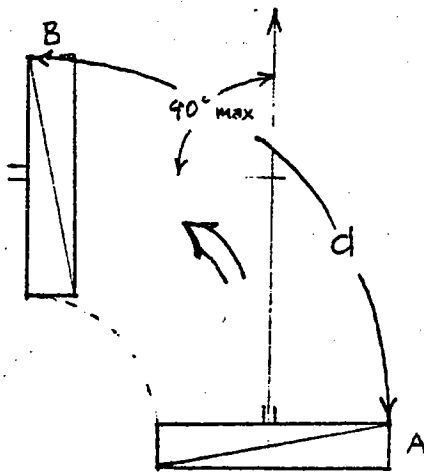
INFANTRY IN COLUMN
MOVES STRAIGHT
AHEAD



INFANTRY IN LINE
MOVES OBLIQUELY



CAVALRY MOVES ALONG
A CURVED PATH.



FOR ALL FIGURES
"d" INDICATES
DISTANCE TO BE
MEASURED.

FIG. 6-1

MASSED INFANTRY - CAVALRY MOVEMENT

Fire and Fall Back. Fire and Fall Back is a special order. Firing of small arms is allowed if the target unit is within range at the beginning and the end of movement. The fall back distance must be ordered and is limited to 3 inches. As usual firing occurs during the Small Arms Fire Step.

Measuring Movement. Straight ahead or oblique movement may be measured from any point on the front of the formation to where that point stops. Curved movement such as an infantry wheel or a curved cavalry move is always measured along the arc made by the corner of the formation which goes the farthest.

Movement Orders. Movement may be ordered to a point (eg Move to the Hedge) or for a specific distance. The distance is always measured on the table top. The point order may be taken if within the unit's movement allowance. If too far, then the unit is moved its maximum distance allowance along the indicated path.

Terrain Penalties. Terrain penalties are always applied to the unit according to the location and path of its front center point. For example, if the front center point of a battalion's lead company crosses a stream with a 3-inch penalty, the penalty is applied to the battalion immediately. The fact that the rear companies in the column have not yet touched the stream does not matter. On the following turn those companies will continue with the battalion having already paid the penalty.

Terrain penalties are additive. Units crossing a stream (eg 3-inch penalty) and going up a contour (1-inch penalty) are penalized 4 inches. However, terrain penalties are always applied to the maximum distance. That is if the allowance is 9 inches, the order calls for 6 inches, and the terrain penalty is 1 inch. The resulting adjusted movement allowance is $9 - 1 = 8$ and the 6-inch move is allowed.

In some cases the movement penalty may be difficult to apply. For example, suppose a unit has a 9-inch move order. After 9 inches of movement it arrives in the center of a stream which has a 3-inch penalty. Suppose further that a 6-inch move would be short of entering the stream. In this case, the unit moves 9 inches and the penalty is applied to the next turn's movement.

Effect of Terrain on Movement of Massed Infantry.

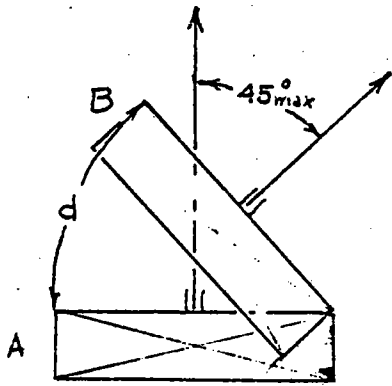
#1 Woods. (Single Trees) No penalties unless a formation change causes one or more stands to pass through or stop around a tree, then subsequent movement is limited to half speed on that turn.

#1½ Woods. Full speed in single column. Other formations move a maximum of 3 inches per turn. No limitations on facings or formation changes.

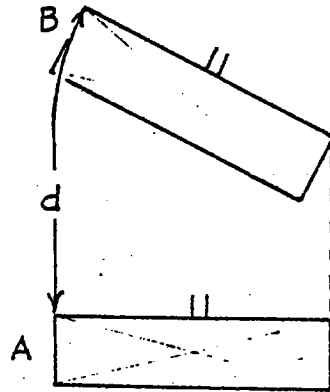
#2 Woods. (Semi dense) Any formation change reduces movement that turn to ½ maximum distance. No penalty for facings.

The charge move is not allowed. MAX DIST = full speed in single column
3" in other formations

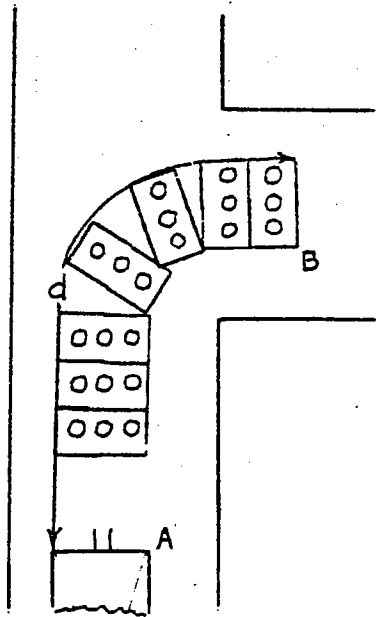
INFANTRY
WHEELS RIGHT



COMBINED
MOVEMENT AND WHEEL



INFANTRY COLUMN MOVES
AROUND CORNER ON ROAD



COMBINED OBLIQUE
MOVEMENT AND WHEEL

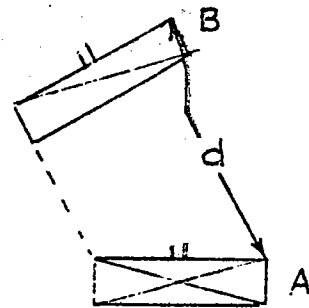


FIG 6-2
MASSED INFANTRY IN CURVED MOVEMENT

JTB

X
#3 Woods. (Dense) All restrictions of #2 Woods apply plus: all movement is at $\frac{1}{2}$ maximum distance, and infantry may perform only one operation per turn.

#4 Woods. (Very Dense) Only facing of individual stands is allowed. Formation changes are prohibited. All other restrictions of #3 Woods apply.

#5 Woods. (Very, Very Dense) Formed infantry are not allowed.

6. Swamps. All movement is restricted to $\frac{1}{2}$ speed. No charges are allowed.

7. Marshes. (Severe Swamps) All movement restricted to $\frac{1}{3}$ speed. For a unit moving through a marsh a die is cast each turn for each figure of every stand in the swamp to determine the number of figures lost. Each cast of a 1 is a lost figure. (casualty)

8. Water. A unit crossing a body of water such as a stream may not make a charge move. It suffers a movement penalty as stated in the game conditions.

9. Contours. Passing contours uphill costs 1 inch per contour. Passing contours downhill has no effect. However, contours designated as cliffs may not be climbed without ladders. A unit retreating off a cliff is destroyed. Unless specified by the game designer, a cliff exists when a 1-inch wide stand cannot be balanced on the ledge formed by adjacent contours.

10. Impedimenta. Impedimenta cause a 3-inch movement penalty. Impedimenta includes cannon, limbers, wagons, rubble from a breeched or destroyed stone wall or other construction. A unit may not charge through impedimenta.

11. Abatis. Abatis cannot be crossed. An infantry unit may remove any abatis segment which its stands contact. During the turn of removal, the unit may not move, change formation or face, fire, or melee.

12. Hedges (Normal Hedges). Hedges must be crossed within $\pm 45^\circ$ of the perpendicular. A movement penalty of 1 inch is applied.

13. Thicket Hedges (European Hedgerows). These are crossed with a 6-inch penalty. Other hedge rules apply except that a unit may stand in the hedgerow. Stands whose front or rear edge touches and lies parallel to the hedge are considered to be in the hedge.

14. Trenches and Saps. Trenches may be crossed by jumping in at the end of movement and climbing out on the next turn. To climb out a ladder is needed. It is an operation to place the ladder and climb out. Just climbing out is also an operation. Alternatively, a plank(s) or ladder(s) may be used to cross the trench. Ten figures per turn may cross (or climb) a ladder and 15 figures per turn may cross a plank. The game designer should specify which units and under what limitations ladders or planks are carried.

15. Pits. Pits are crossed by plank or ladder as trenches but the stands which jump or fall into a pit are lost.

* 16. City, Castle, and Special Stone Walls. These walls must be scaled by ladder. Procedure is the same as climbing out of a trench above. Further details should be specified by the game designer.

17. Buildings. Buildings, houses and similar constructions may be entered when the stand touches the door, with some movement allowance remaining. Entry does not constitute an operation.

18. Plowed Fields. Plowed fields have no effect on infantry movement.

* Skirmisher Movement

General. The skirmisher move may be made in any direction relative to the initial stand facing, the movement path may have any curvature, and the stands may face in any direction at the end of the move. The skirmisher move is an operation but going from a massed formation to skirmisher is not, nor is reforming into a massed unit an operation. (See Fig. 6-3)

Measuring Skirmisher Movement. Skirmisher movement is measured separately for each stand. The measurement starts at the stand corner nearest destination and the stand movement stops with its most advanced corner at the measured point. (See Fig. 6-3)

Effect of Terrain on Movement of Skirmisher Infantry.

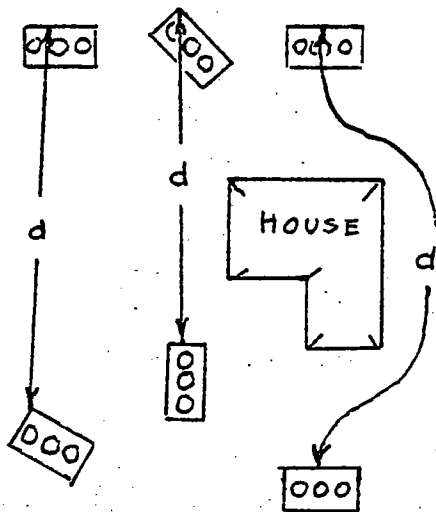
1. #1, #1½, #2, #3, and #4 Woods move at full speed.
2. #5 Woods and #6 Swamps move at half speed.
3. #7 Marshes move at 1/3 speed. The lost rule does not apply.
4. Water. Bodies of water (rivers, streams, ponds, etc.) cause penalties as stated in the game conditions.
5. Contours. Passing contours uphill costs 1 inch per contour. Passing downhill has no effect.
6. Impedimenta cause no movement penalty.
7. Abatis. Same as for massed infantry.
8. Normal Hedges cause no penalty.
9. Thicket Hedges or Hedgerows cause a 6-inch penalty.
10. Trenches, Saps, Pits, City walls, Castle walls, Special Stone Walls, Buildings, and Plowed Fields have the same effect on skirmishing infantry as they do on massed units.

Effect of Terrain on Cavalry Movement

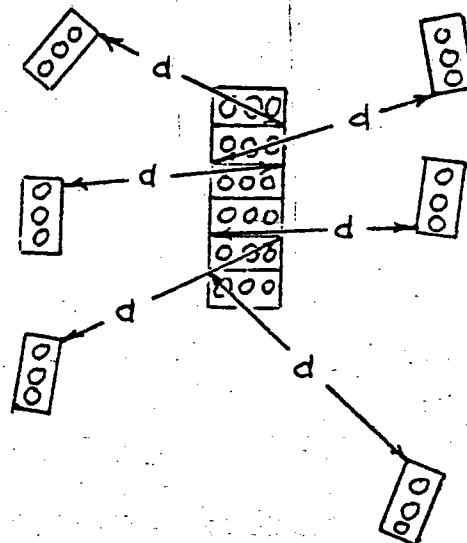
#1 Woods. (Single Trees) No massed unit may pass through trees if any stand must pass through a tree. Skirmisher formations may pass unimpeded.

#1½ Woods. Massed units move at full speed in single columns but at ½ speed in other massed formations. Skirmisher formations are unimpeded. No charge moves are allowed through or out of #1½ woods.

SKIRMISHER MOVE
MEASUREMENT



SKIRMISHER MOVE
TO FORM MASSES UNIT
IN COLUMN



MASSED UNIT MOVES AS
SKIRMISHERS AND REFORMS

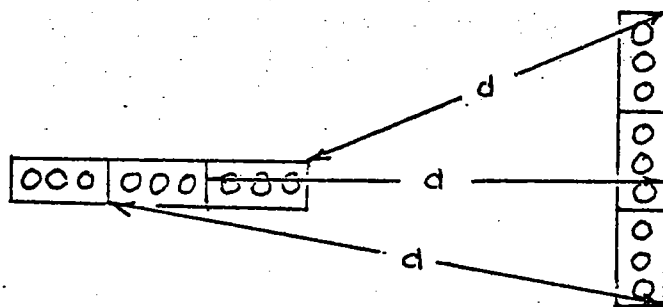


FIG. 6-3
SKIRMISHER MOVEMENT

#2 Woods. (Semi-dense) No massed cavalry formation allowed, movement as skirmishers only but at full speed. No charge move is allowed through or out of the woods.

#3 Woods. (Dense Woods) Same effect as #2 Woods.

#4 Woods. (Very Dense Woods) Cavalry move as skirmishers only, movement allowance is halved, and no charge move through or out of these woods is allowed.

#5 Woods. (Very, Very Dense Woods) No cavalry is allowed in these woods.

#6 Swamps. Movement as skirmishers only and then up to half max. distance. No charge movement is allowed.

#7 Marshes. Movement in any formation up to 1/3 max. distance. For each unit moving through a marsh, a die is cast each turn for each figure of every stand in the marsh. Each cast of 1 is a lost figure (casualty).

8. Water. Cavalry crossing a body of water such as a stream or a pond may not make a charge movement. They suffer a movement penalty as stated in the game condition.

9. Contours. Passing contours uphill costs 1 inch per contour. Passing downhill has no effect. However, contours designated as cliffs may not be climbed. A cliff occurs where contours are less than half the width of a 3-figure infantry stand apart. Units retreating off a cliff are lost.

10. Rough Hills. Cavalry may not charge uphill. No charge melee dice increment is allowed.

11. Very Rough Hills. No mounted cavalry may travel on these hills.

12. Impedimenta. Some impedimenta (Cannon, Limbers, and Wagons) cause a 6-inch penalty to massed units. There is no penalty for skirmishing units.

13. Abatis. Abatis cannot be crossed by cavalry. They may be removed by infantry, sappers or destroyed by artillery or explosive charges.

14. Fences, Normal Hedges, Trenches and Works. These items may be jumped by Light Horse, Hussars, and Cossacks without movement penalty. Other cavalry may not cross. (See Ch 10)

15. Pits and Thicket Hedges (Hedgerows). These items may not be crossed by cavalry.

16. Rubble, Breeched City or Castle Walls, or Destroyed Stone Walls. These items are crossed with a 3-inch penalty and no charge move is allowed.

17. Plowed Fields. Cavalry is limited to half speed and no charge movement is allowed.

18. Houses. Houses are not entered by cavalry, but larger buildings such as barns or castles are. In all cases where it is to be legal for horses or cavalry to enter constructions it must be specified in the game conditions.

Special Considerations in Movement

Blocking by Friendly Units. Massed units may not move through other massed units or skirmisher formations. However, skirmishers may move through massed or other skirmisher formations. In all other cases, formation changes, facings, and movements which are blocked by friendly units must be adjusted. The contact point for such a conflict is determined by the simultaneous movement technique. Then the conflict is resolved along these lines.

1. First come first use, such as crossing a bridge.
2. Shorten movement to less than ordered.
3. Rearrange stands in formation but not so as to move any closer to the enemy.
4. Allow only a partial facing.

Entering a Building or Construction. Entry is only through a door on the model. To enter the unit must reach the door and have some movement allowance remaining to enter. Entering is not an operation.

Ending Movement. Movement ends when:

1. The ordered move is accomplished.
2. The movement allowance is used up. (Objective move)
3. An enemy unit is contacted. Of course, winning the melee will allow a breakthrough if the movement was a charge.
4. The unit is blocked by an obstacle such as a house, unscaleable wall, etc.
5. The unit is blocked by a friendly unit.
6. The unit's player elects not to complete a charge after the first 6 inches. (See Ch 8)

Forced Marches. Certain units, primarily Guard, specified in the Units Capabilities Chapters are allowed to perform one forced march per game day. The formation for the forced march is the single column (Road Column) and the movement allowance is double the normal. Overland it moves up to two column movements and on a road a double road column move is allowed.

The unit performing a forced march is allowed a facing and a formation change operation before moving, in order, to get into a single column. (Artillery is allowed a limbering) The distance is adjusted for terrain as for other moves. At the end of the move the unit is allowed no other operations on that turn, except that artillery may unlimber.

No forced march may be ordered into contact with an enemy formation based on enemy positions during map marking.

