

## CHAPTER 1

# INTRODUCTION

*Hand-to-hand combat is an engagement between two or more persons in an empty-handed struggle or with handheld weapons such as knives, sticks, and rifles with bayonets. These fighting arts are essential military skills. Projectile weapons may be lost or broken, or they may fail to fire. When friendly and enemy forces become so intermingled that firearms and grenades are not practical, hand-to-hand combat skills become vital assets.*

### 1-1. PURPOSE OF COMBATIVES TRAINING

Today's battlefield scenarios may require silent elimination of the enemy. Unarmed combat and expedient-weapons training should not be limited to forward units. With rapid mechanized/motorized, airborne, and air assault abilities, units throughout the battle area could be faced with close-quarter or unarmed fighting situations. With low-intensity conflict scenarios and guerrilla warfare conditions, any soldier is apt to face an unarmed confrontation with the enemy, and hand-to-hand combative training can save lives. The many practical battlefield benefits of combative training are not its only advantage. It can also—

- a. Contribute to individual and unit strength, flexibility, balance, and cardiorespiratory fitness.
- b. Build courage, confidence, self-discipline, and esprit de corps.

### 1-2. BASIC PRINCIPLES

There are basic principles that the hand-to-hand fighter must know and apply to successfully defeat an opponent. The principles mentioned are only a few of the basic guidelines that are essential knowledge for hand-to-hand combat. There are many others, which through years of study become intuitive to a highly skilled fighter.

- a. **Physical Balance.** Balance refers to the ability to maintain equilibrium and to remain in a stable, upright position. A hand-to-hand fighter must maintain his balance both to defend himself and to launch an effective attack.

Without balance, the fighter has no stability with which to defend himself, nor does he have a base of power for an attack. The fighter must understand two aspects of balance in a struggle:

(1) **How to move his body to keep or regain his own balance.** A fighter develops balance through experience, but usually he keeps his feet about shoulder-width apart and his knees flexed. He lowers his center of gravity to increase stability.

(2) **How to exploit weaknesses in his opponent's balance.** Experience also gives the hand-to-hand fighter a sense of how to move his body in a fight to maintain his balance while exposing the enemy's weak points.

b. **Mental Balance.** The successful fighter must also maintain a mental balance. He must not allow fear or anger to overcome his ability to concentrate or to react instinctively in hand-to-hand combat.

c. **Position.** Position refers to the location of the fighter (defender) in relation to his opponent. A vital principle when being attacked is for the defender to move his body to a safe position—that is, where the attack cannot continue unless the enemy moves his whole body. To position for a counterattack, a fighter should move his whole body off the opponent's line of attack. Then, the opponent has to change his position to continue the attack. It is usually safe to move off the line of attack at a 45-degree angle, either toward the opponent or away from him, whichever is appropriate. This position affords the fighter safety and allows him to exploit weaknesses in the enemy's counterattack position. Movement to an advantageous position requires accurate timing and distance perception.

d. **Timing.** A fighter must be able to perceive the best time to move to an advantageous position in an attack. If he moves too soon, the enemy will anticipate his movement and adjust the attack. If the fighter moves too late, the enemy will strike him. Similarly, the fighter must launch his attack or counterattack at the critical instant when the opponent is the most vulnerable.

e. **Distance.** Distance is the relative distance between the positions of opponents. A fighter positions himself where distance is to his advantage. The hand-to-hand fighter must adjust his distance by changing position and developing attacks or counterattacks. He does this according to the range at which he and his opponent are engaged. (For a more detailed discussion of the concepts of distance and range, see Chapter 6.)

f. **Momentum.** Momentum is the tendency of a body in motion to continue in the direction of motion unless acted on by another force. Body mass in motion develops momentum. The greater the body mass or speed of movement, the greater the momentum. Therefore, a fighter must understand the effects of this principle and apply it to his advantage.

(1) The fighter can use his opponent's momentum to his advantage—that is, he can place the opponent in a vulnerable position by using his momentum against him.

(a) The opponent's balance can be taken away by using his own momentum.

(b) The opponent can be forced to extend farther than he expected, causing him to stop and change his direction of motion to continue his attack.

(c) An opponent's momentum can be used to add power to a fighter's own attack or counterattack by combining body masses in motion.

(2) The fighter must be aware that the enemy can also take advantage of the principle of momentum. Therefore, the fighter must avoid placing himself in an awkward or vulnerable position, and he must not allow himself to extend too far.

g. **Leverage.** A fighter uses leverage in hand-to-hand combat by using the natural movement of his body to place his opponent in a position of unnatural movement. The fighter uses his body or parts of his body to create a natural mechanical advantage over parts of the enemy's body. He should never oppose the enemy in a direct test of strength; however, by using leverage, he can defeat a larger or stronger opponent.

## CHAPTER 2

# TRAINING

*This chapter discusses the trainer's role in teaching and sustaining effective hand-to-hand combat. It also discusses unit training training areas, teaching techniques, and safety precautions that must be considered before conducting combatives training.*

### Section I

#### TRAIN THE TRAINER

Professional instruction is the key to success in combative training. Instructors must be physically fit and highly proficient in the demonstration and practical application of the skills described in this manual. Confidence, enthusiasm, and technical expertise are essential for success in teaching hand-to-hand combat. Assistant instructors must also be properly trained to help supervise and demonstrate maneuvers. Highly trained assistant instructors under supervision may also provide supplementary combative training during off-duty hours.

#### 2-1. IMPORTANCE OF SKILLED TRAINERS

Diligent effort is needed to perfect the various hand-to-hand combat techniques, to apply them instinctively, and to teach others to safely master them. The following instructor responsibilities are the core of planning and executing combative training.

- a. Seek maximum efficiency with minimum effort. Continually strive to reduce all unnecessary explanations, movement, and activity. Streamline the training without compromising content, efficiency, or safety.
- b. Stress cooperation and technical mastery. Minimize hostile behavior but promote *aggressiveness* and *power*.
- c. Reinforce the details of each technique, and provide positive feedback when warranted. Use occasional humor to motivate soldiers, but avoid degrading or insulting them.

d. Ensure serviceable training aids are present to use in sufficient quantities for all soldiers being trained. Ensure training areas are well maintained and free from dangerous obstructions.

e. Ensure instructors and assistant instructors are well rehearsed and prepared before all training sessions. Conduct instructor training at least five hours weekly to maintain a high skill level.

f. Develop as many skilled combative instructors for each unit as possible. Instructor-to-soldier ratios should not be less than 1 instructor for 20 soldiers. Encourage after-duty training and education for instructors.

g. Require strict discipline of all soldiers.

## **2-2. SAFETY PRECAUTIONS**

To prevent injuries, the instructor must consider the following safety precautions before conducting combative training.

a. Supervise all practical work closely and constantly. Never leave a group unsupervised.

b. Familiarize the soldiers with each maneuver by a complete explanation and demonstration before they try the moves.

c. Do not allow the soldiers to get ahead of the instruction.

d. Ensure the training partner offers no resistance, but allows the maneuver to be freely executed during the learning stages and while perfecting the techniques.

e. Ensure there is adequate space between soldiers during all practical work—for example, allow at least an 8-foot square for each pair of soldiers.

f. Ensure that soldiers empty their pockets, and remove their jewelry, identification tags, and glasses before training.

g. Stress that only simulated strikes to vital points, such as the head, neck, and groin area, are executed. Soldiers may use light blows to other vulnerable areas; however, they must exercise caution at all times.

h. Establish a signal to indicate to the partner when to stop the pressure in grappling and choking techniques. Two handclaps or tapping the training partner with a free hand are examples.

i. Make sure soldiers warmup and stretch properly before practical work.

j. Teach and practice falls before conducting throws.

k. Ensure protective eye wear is available when executing training with practice bayonets, knives, or any sharp weapons.

l. Ensure that the soldier to be disarmed does not place his finger in the trigger guard during rifle and bayonet disarming.

m. Make sure soldiers keep scabbards on knives and bayonets firmly attached to rifles while learning bayonet disarming methods.

n. Use bayonet scabbards or rubber knives during knife disarming training.

o. Inspect all sandbags on retaining walls before conduct of instruction so that all bags are serviceable with at least 75 percent fill and that entire retainer wall is covered with sandbags. Any bag placed where personnel are likely to fall will be filled with the same consistency filler as the sawdust in the pit and will also provide a minimum of 6 inches of sawdust.

p. Maintain a buffer zone of 6 feet from retainer wall and demonstration area during all training, especially training requiring throws and takedowns by students.

q. Rake the training pit to loosen sawdust and remove all sharp objects. Properly inspect the pit so that all safety hazards are removed before instruction/demonstrations are executed.

r. Perform inspections on training pits two days before use to ensure that there is at least 6 inches of sawdust throughout the training pit area. This will allow time to acquire sawdust to resurface pit area if there is not 6 inches of surface sawdust.

## **Section II UNIT TRAINING**

Although combatives are not likely to become part of a unit's mission-essential task list, commanders cannot overlook the importance of soldiers' skills in hand-to-hand combat. Hand-to-hand fighting is a possibility in any conflict, and a basic proficiency in combative may save soldiers' lives. Entry-level soldiers receive a training base in combative during basic training and in OSUT. Advanced individual training commanders should consider using hand-to-hand combat as part of the physical training program. They should review the training presented during basic training and, as time permits, expand into the more advanced techniques discussed in this field manual. Regular units must incorporate combative into an organized training program for soldiers to achieve and sustain proficiency levels.

### **CAUTION**

WHEN PLANNING COMBATIVES TRAINING, INSTRUCTORS MUST TAKE PRECAUTIONS ACCORDING TO THE TIME OF DAY SEASON, AND ACCLIMATIZATION OF SOLDIERS. THEY MUST ALSO CONSIDER MODIFICATION OF THE UNIFORM, BREAK TIMES, AND OR THE AVAILABILITY OF WATER.

**2-3. BASIC OR ONE-STATION UNIT TRAINING**

Combative training in the basic or one-station unit training program is based on 10 hours of available training time, divided into five periods of 2 hours each. The following is a suggested POI for introductory-level combative training.

**a. Period 1 - 2 Hours.**

- (1) Introduction to combatives—safety.
- (2) Combat demonstration performed by instructors or trainers to gain attention and to motivate soldiers.
- (3) Vital points and vulnerable points.
- (4) Warm-ups.
- (5) Stretches.
- (6) Stances.
- (7) Elbows and knees.
- (8) Short punches and strikes.
- (9) Kicks.
- (10) Drills. Twenty-five repetitions for each strike—that is, elbows, knees, punches, and kicks—using vital and vulnerable points.
- (11) Combinations of strikes.

**b. Period 2 - 2 Hours.**

- (1) Warm-ups and stretches.
- (2) Review of strikes.
- (3) Falls.
- (4) Throws.
- (5) Proficiency development of falls and throws through repetition.

**c. Period 3 - 2 Hours.**

- (1) Warm-ups and stretches.
- (2) Review of falls.
- (3) Grappling.
- (4) Chokes.

**d. Period 4 - 2 Hours.**

- (1) Warm-ups and stretches.
- (2) Defense and counters against weapons.
  - Angles of attack and defenses of each angle.
  - Knife defense.
  - Knife attacks.
  - Three-foot stick defense.
  - Three-foot stick attacks.
  - Drills. Twenty-five repetitions of defenses against each angle of attack, knife attacks, and 3-foot stick attacks.

**e. Period 5 - 2 Hours.**

- (1) Warm-ups and stretches.
- (2) Overall review.

**2-4. UNIT SUSTAINMENT TRAINING PROGRAM**

Unit combative training is best done at company and platoon level. It is difficult for commanders to find time to conduct hand-to-hand combat training in typical training schedules. Combative training can be conducted during the times allotted for unit physical readiness training. Most units have at least one day a week when organized athletics are conducted for PT; this is a good time to train in hand-to-hand combat.

a. When the unit begins combative training, it starts with the basic training/OSUT program. After each soldier in the unit has attained the same basic skill level, the training can then progress to more advanced techniques and drills. If conducted once a week, this program takes 10 weeks to complete. A typical progression might be as follows:

- Defense and counters against weapons: 3 hours
- Field-expedient weapons: 3 hours.
- Sentry removal, silent kills, and quick kills: 2 hours.
- Advanced knife drills: 3 hours.

b. Once the unit has basic proficiency of the topics in Chapters 3 through 7, the commanders can easily plan future combative training. Unit trainers will know where emphasis should be placed in the unit's hand-to-hand training, and they can also create more advanced training exercises and drills based on soldier skill levels.

**Section III  
TRAINING AREAS**

An advantage of combative training is that it can be conducted almost anywhere with little preparation of the training area. (See Appendix A.)

**2-5. TRAINING FORMATIONS**

Physical training formations may be used for combative training. (See FM 21-20.) If the extended rectangular formation is used, the first and third ranks should face the second and fourth ranks so that each soldier has a partner directly across from him.

a. When practicing throws or disarming techniques, soldiers need twice the normal interval between ranks. Instructors also try to pair soldiers according to height and weight.



b. A large, grassy outdoor area free of obstructions is suitable for training. Each pair of soldiers should have an 8-foot square training space. Indoor areas, such as gymnasiums, are also appropriate; however, sharp or hard weapons are not used on gymnasium floors or on mats.

## **2-6. PIT CONSTRUCTION**

The most common area for teaching hand-to-hand combat is a sawdust pit. Figure 2-1, shows a training area for 200 soldiers with a sawdust pit surrounding an instructor and demonstrator platform.

a. To construct the pit, dig out and level an area 50 meters wide and build a retaining wall at least 24 inches high. The wall can be cinder blocks, sandbags, or dirt if other materials are not available. To prevent injuries from a cinder block retaining wall, cover the wall and the top of the wall with sandbags. Place a layer of plastic sheeting on the ground to prevent the growth of grass and weeds, and place a sand base up to 12 inches deep on top of the plastic. Then, place a layer of sawdust at least 6 inches deep on top of the sand.

b. Build a 14-foot square demonstration area (Figure 2-1) in the center of the pit with the same type of retaining wall described in paragraph a. This area is large enough for two demonstrators and the primary instructor.

## **2-7. BAYONET ASSAULT COURSE**

The bayonet assault course provides the commander a unique training opportunity. It allows his soldiers to employ rifle-bayonet fighting skills under simulated combat conditions. The course can be built and negotiated so that demands placed on the soldiers' abilities and on their endurance approach those experienced under combat conditions. Realistic sights and sounds of battle—fire, smoke, confusion, and pyrotechnics--can also be created to enhance realism. (See Appendix B.) The training objectives of the bayonet assault course include:

- Improving rifle-bayonet fighting skills.
- Improving physical fitness and soldier aggressiveness.
- Improving speed, strength, coordination, and accuracy.
- Providing realistic rifle-bayonet fighting under near combat conditions.
- Challenging the soldiers' determination and stamina, which are needed in combat.
- Providing an opportunity for team and squad leaders to develop their leadership and control measures.

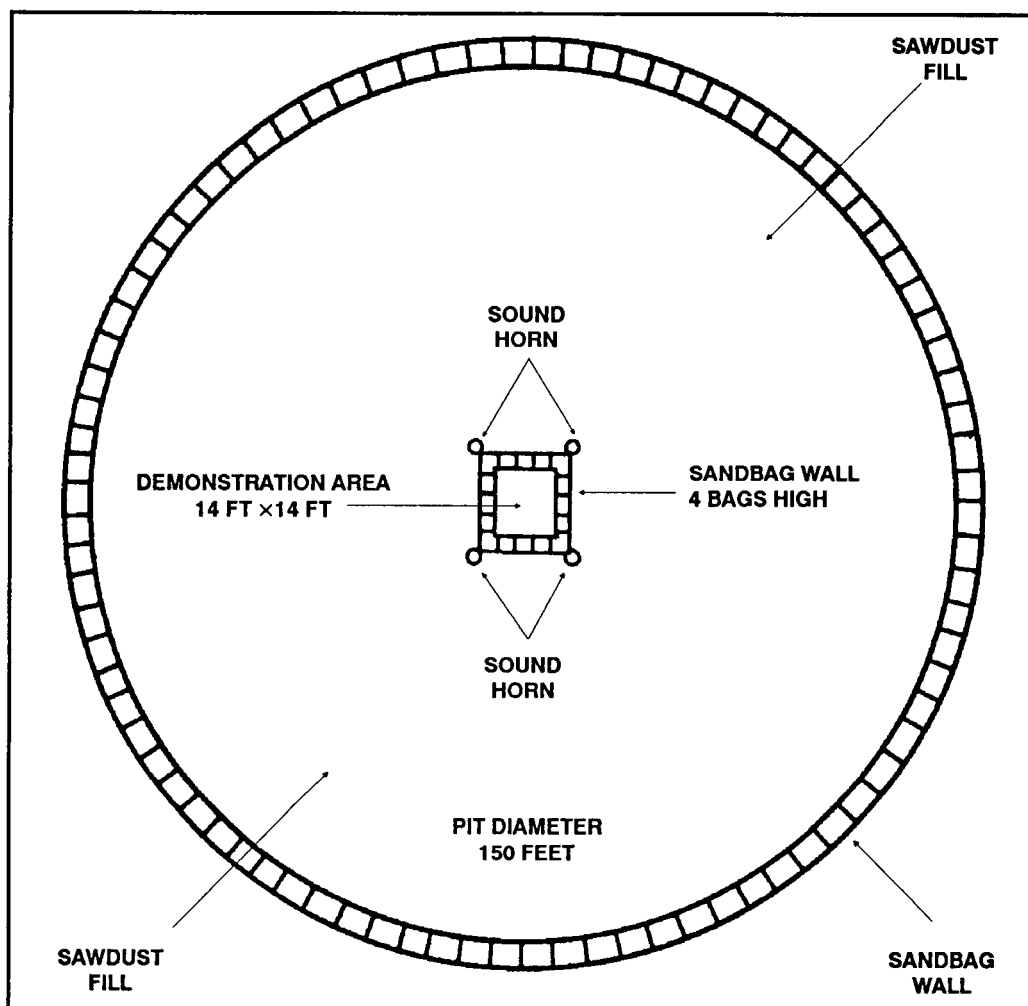


Figure 2-1. Combatives training pit.

### CAUTION

SOLDIERS MUST CARRY AND USE THE PROTECTIVE MASK WHILE PARTICIPATING IN TRAINING THAT INCLUDES THE USE OF SMOKE.

a. **Safety.** The safety of the soldiers should be a constant concern of the instructor and his assistants. The best safety aids are constant control and supervision. In addition, instructors should brief soldiers at the beginning of each class on the requirements for safety during rifle-bayonet training. Instructors use the following safety measures:

(1) Bayonets must be fixed and unfixed only on command.

(2) Rifles should be grounded near the targets when the soldiers are ordered to move to the instructor's platform for explanations or demonstrations.

(3) A level surface that does not become slippery when wet should be provided for the training court.

(4) Left-handed soldiers should be positioned so that they are opposite another left-handed soldier when working against the targets. This type of arrangement prevents possible injury when executing a series of movements.

(5) When using the M16 rifle against a target, the force of contact during the thrust movement may drive the hand, gripping the small of the stock, into the forward assist assembly (on the right-hand side of the weapon near the stock). To prevent injury to the hand, the soldier must maintain a firm grip on the small of the stock; gloves should be worn as part of the training uniform when weather dictates.

**b. Layout.** The 300-meter-long course consists of a series of targets to attack and obstacles to negotiate. Lay it out over natural terrain, preferably rough and wooded areas. Include natural obstacles, such as streams, ravines, ridges, and thick vegetation. Build artificial obstacles, such as entanglements, fences, log walls, hurdles, and horizontal ladders (Figure 2-2).

**c. Targets.** Use a variety of targets to provide experience in different attacks. The local TSC can build the targets. Those composed of old tires are appropriate as well as the ivan-type targets used by range control—that is, the E-type silhouette, three-dimensional personnel target (large), FSN 6920-01-164-9625 or the F-type silhouette, three-dimensional personnel target (small), FSN 6920-00-T33-8777. Targets should be durable but should not damage weapons. Place a sign near each target to indicate the type of attack to be used.

**d. Usage.** An example of how to conduct the bayonet assault course is as follows:

(1) **Task.** Negotiate the bayonet assault course.

(2) **Conditions.** Given nine lanes on a 300-meter bayonet assault course over irregular terrain with four types of targets: thrust; parry thrust target; parry, butt stroke to the groin target; and parry, butt stroke to head target (Figure 2-3, page 2-10). The targets are marked with a sign to indicate the required attack. Given seven types of obstacles as shown in Figures 2-4 through 2-10, pages 2-11 through 2-14. Given a soldier in battle dress uniform with load-carrying equipment and a rifle with a fixed bayonet.

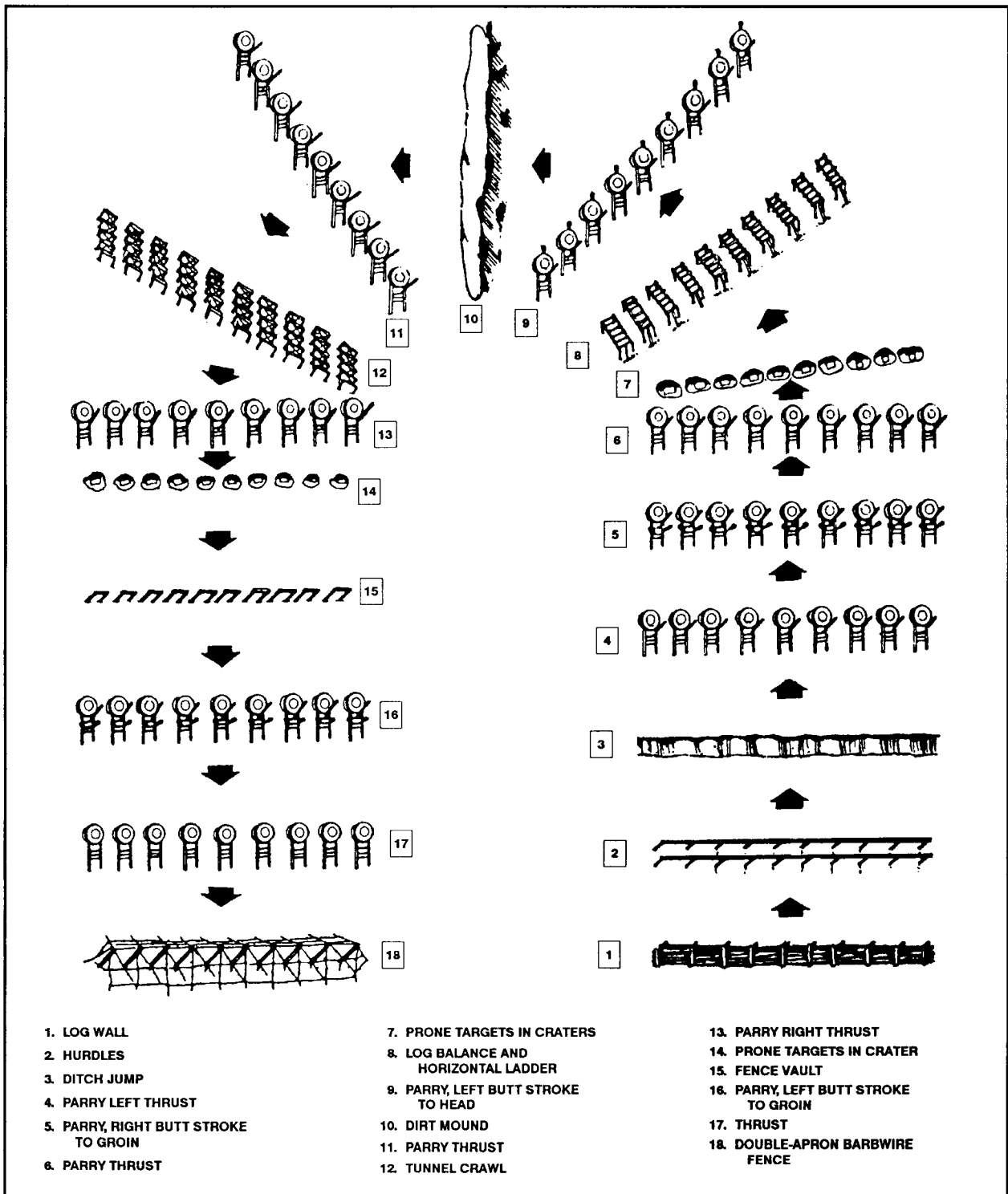


Figure 2-2. Example of nine-lane, 300-meter bayonet assault course.

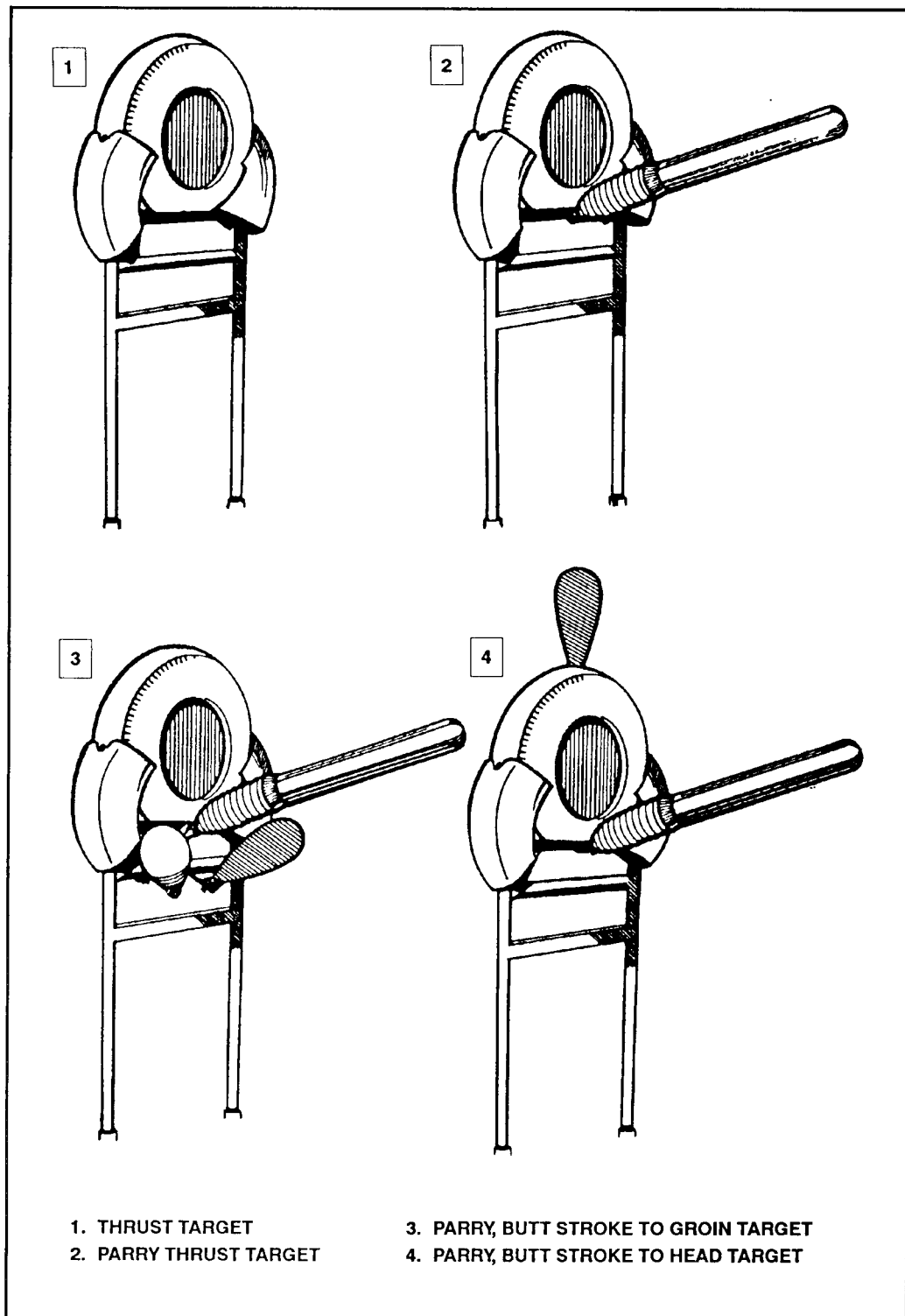


Figure 2-3. Types of targets.

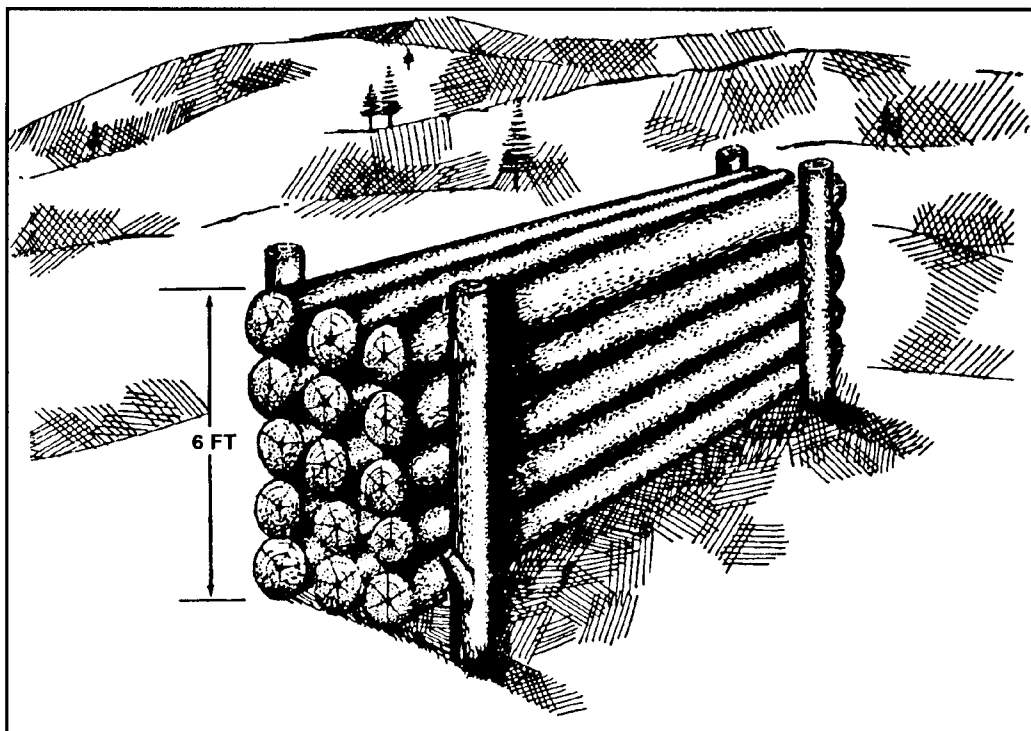


Figure 2-4. Log wall.

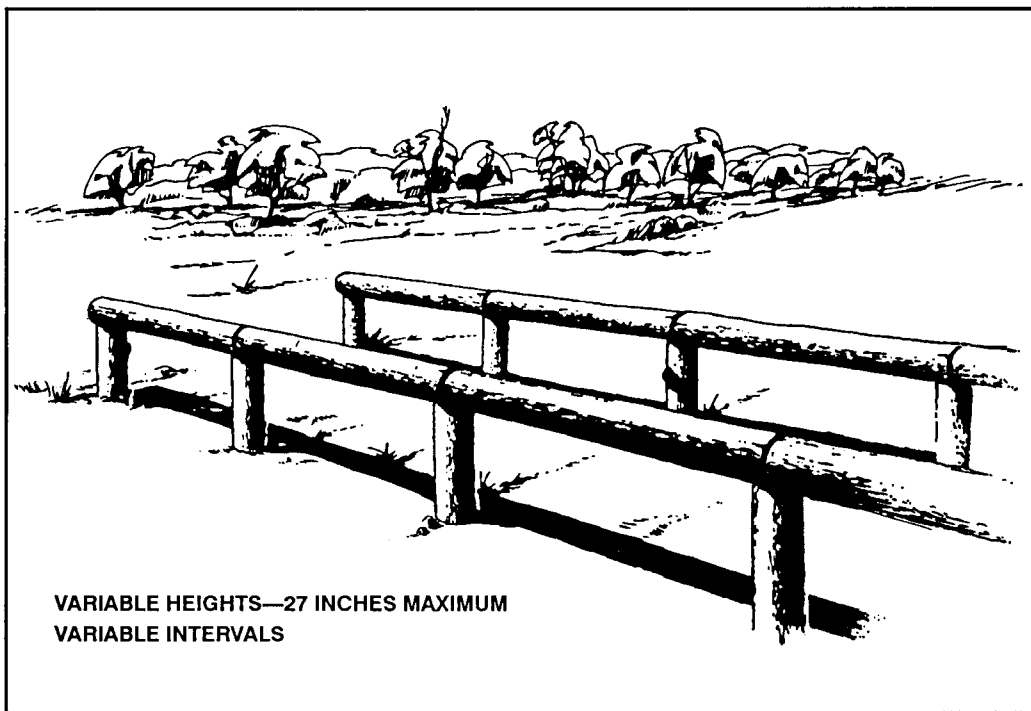


Figure 2-5. Hurdles.

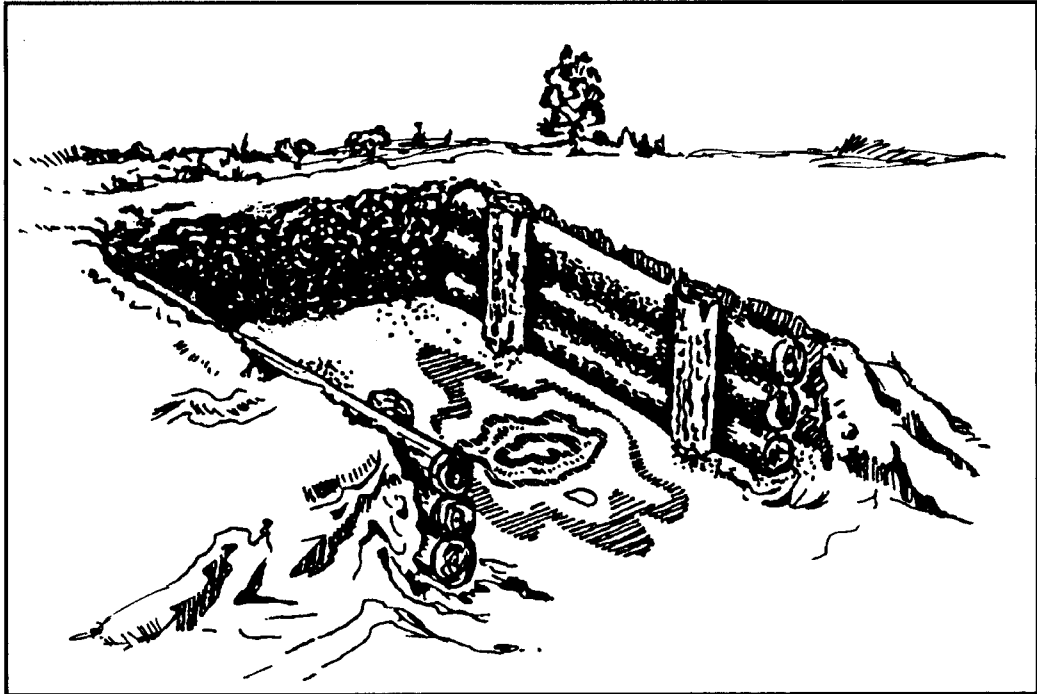


Figure 2-6. Ditch jump.

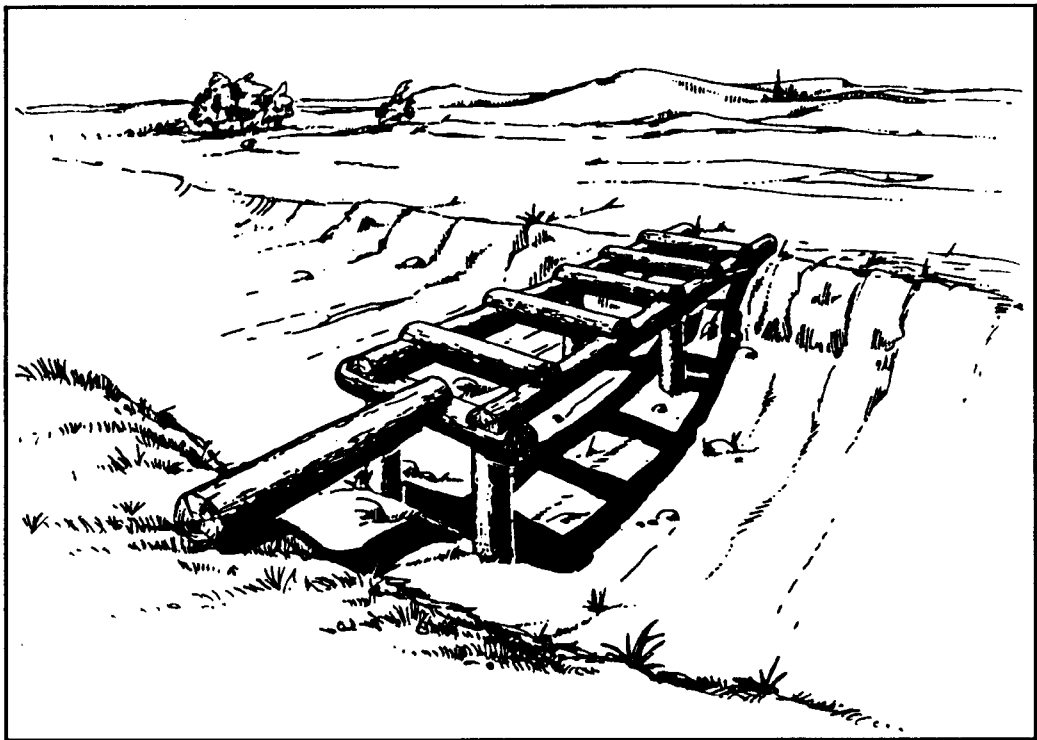


Figure 2-7. Log balance and horizontal ladder.

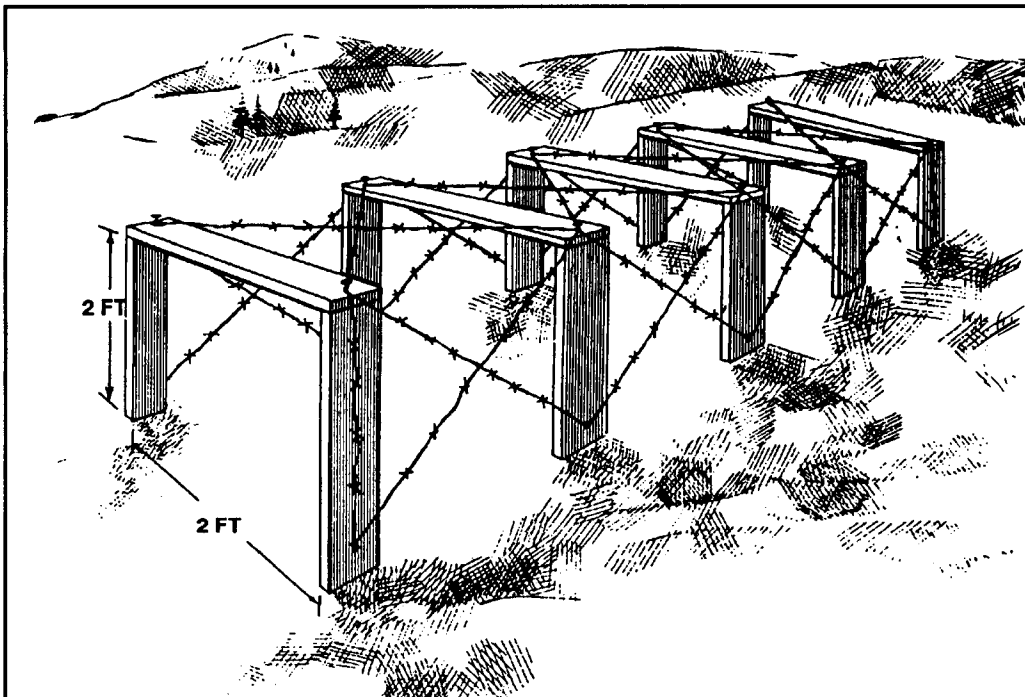


Figure 2-8. Tunnel crawl.

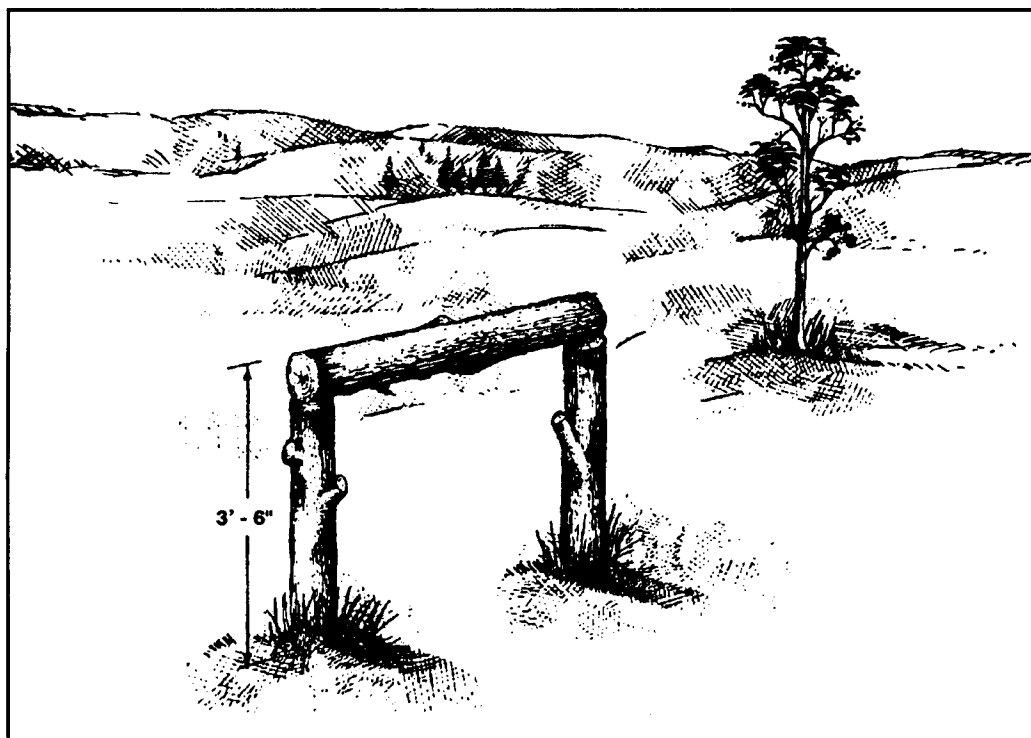
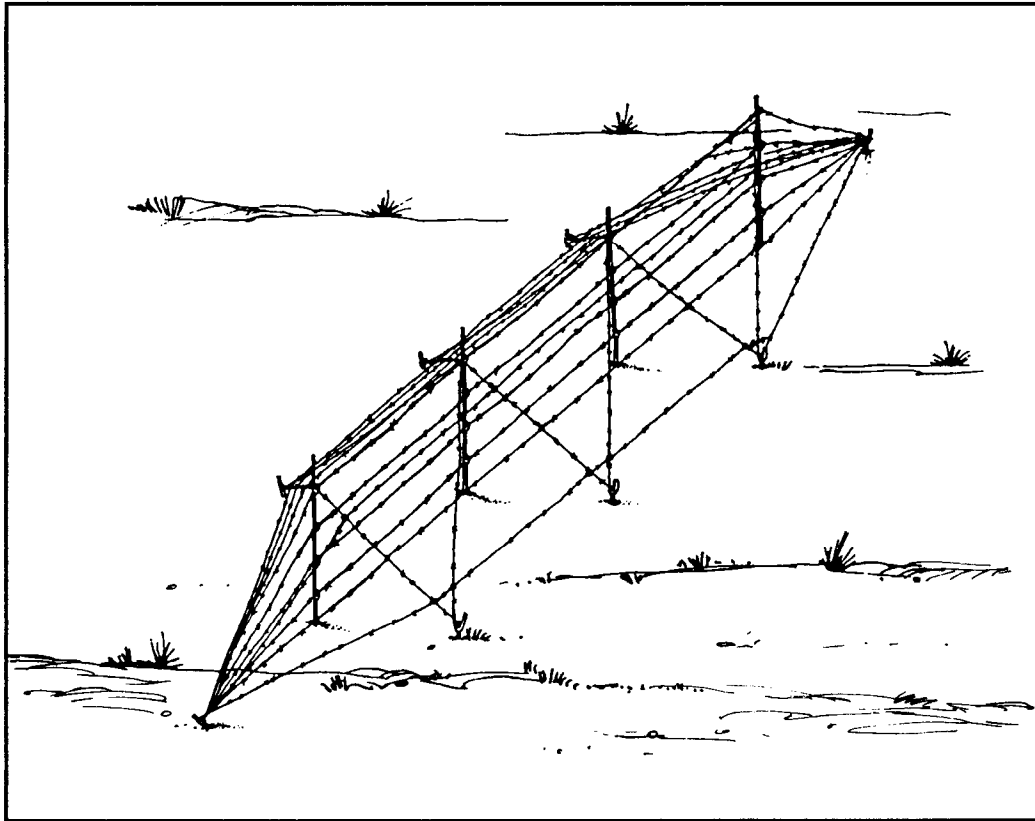


Figure 2-9. Fence vault.





**Figure 2-10. Double-apron barbwire fence.**

(3) **Standards.** The course must be successfully negotiated by all soldiers in the class with each soldier obtaining kills on 75 percent of the total targets in his lane. The course must be negotiated in 5 minutes or less (about 30 seconds for each 50 meters and time to attack and negotiate obstacles).

**WARNING**

**TO AVOID INJURY, INSTRUCTORS ENSURE THAT THE PROPER INTERVAL IS CONSTANTLY MAINTAINED.**

**Section IV  
TEACHING TECHNIQUES**

This section discusses a variety of effective teaching techniques to use while conducting combative training.

## 2-8. WARM-UPS AND STRETCHES

Before combative training, the soldier must be prepared for the upcoming physical stress. A warm-up period gradually increases the internal temperature of the body and the heart rate. Stretching prepares the ligaments, tendons, muscles, and heart for a workout, decreasing the chances of injury.

a. **Warm-up Exercises.** To begin warm-up exercises, rotate the major joints—neck, shoulders, hips, and knees. The warm-up should at least include 7 to 10 minutes of stretching, running in place or jogging around the training area, and calisthenics. Grass drills and guerrilla exercises are a good approach as a warm-up for combative training. They condition the body through motion in all ranges, accustom the soldiers to contact with the ground, and promote aggressiveness.

b. **Stretching Exercises.** Any of the stretching exercises in FM 21-20 are recommended for hand-to-hand combat training. Five other exercises that increase flexibility in areas of the body that benefit hand-to-hand combat movements are as follows:

(1) **Backroll stretch.**

(a) **Position:** Lay on ground on back with legs extended and arms by sides, palms down.

(b) **Action:** Raise legs over head and roll back as far as possible, trying to place toes on the ground behind head. Keep knees locked and feet and knees together; hold for 20 seconds (Figure 2-11). Gradually, return to starting position. Repeat two or three times.

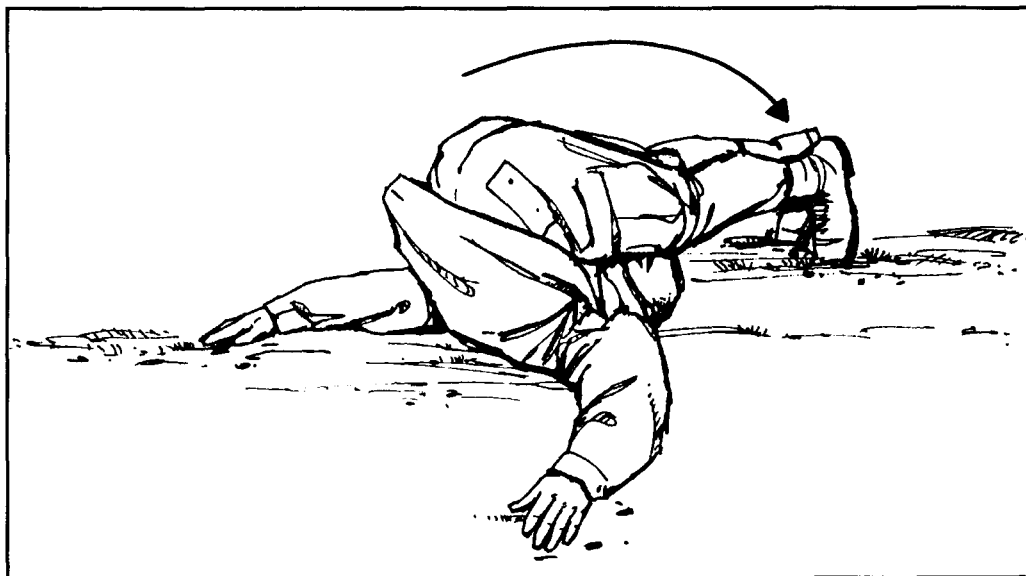


Figure 2-11. Backroll stretch.

(2) **Buddy-assisted splits (leg spreader).**

(a) **Position:** Sit on ground facing buddy with legs extended and spread as far as possible. Position feet inside ankles.

(b) **Action:** Interlock hands with buddy and alternate pulling one toward the other, causing the buddy to bend forward over the hips until a stretch is felt (Figure 2-12). Hold this position for 20 seconds, then alternate and have him pull you into a stretch. Do sequence two or three times each.

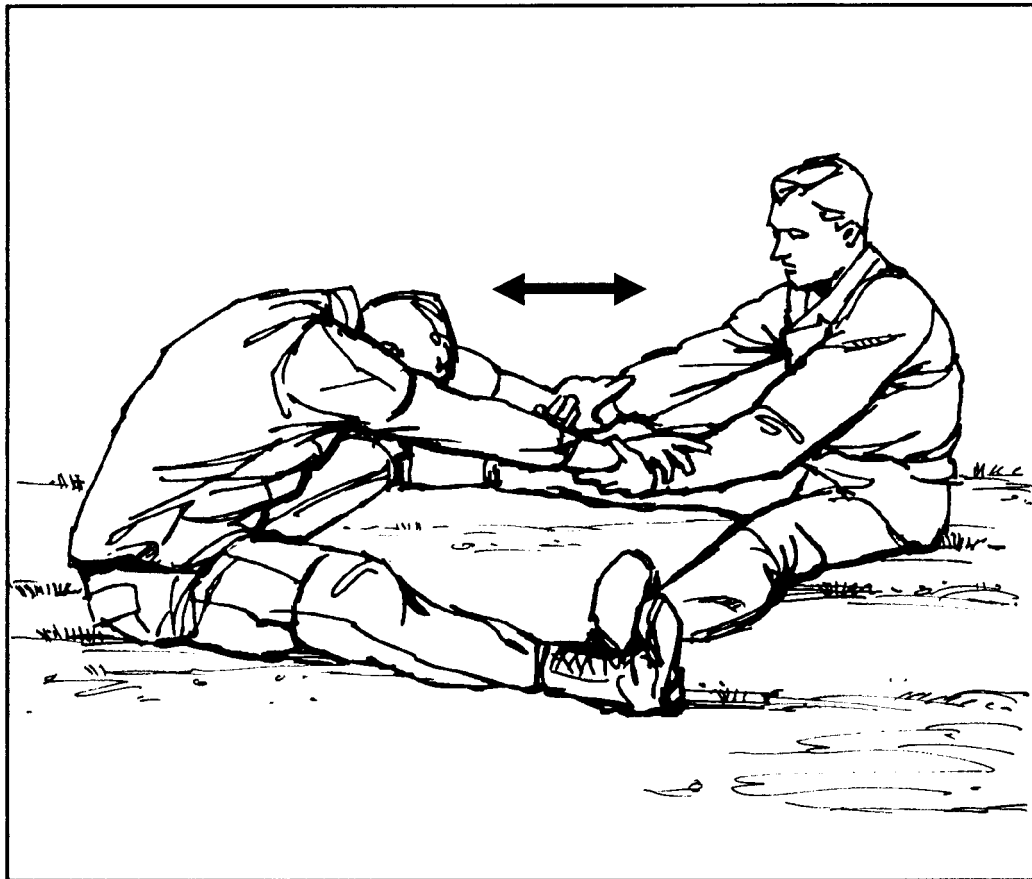


Figure 2-12. Buddy-assisted splits (leg spreader).

(3) **Buddy-assisted hamstring stretch.**

(a) *Position:* Sit on ground with right leg extended to front and foot pointing up. Bend left leg with sole touching to inside of right thigh. Have buddy kneel behind you with his hands on your shoulders (Figure 2-13).

(b) *Action:* Slowly bend forward from hips over the right leg and reach your hands toward ankles until stretch is felt (Figure 2-13). Hold this for 10 to 15 seconds. The buddy then applies downward pressure and allows you to adjust your stretch. Hold for 10 to 15 seconds and repeat. Alternate legs and positions after two or three sequences.



Figure 2-13. Buddy-assisted hamstring stretch.

(4) **Buddy-assisted groin (butterfly) stretch.**

(a) *Position:* Sit on ground with the soles of your feet together, close to the torso. Hold ankles with hands. Have buddy kneel behind you with his hands on your knees.

(b) *Action:* The buddy places his hands on top of your thighs at the knees. The buddy's weight is supported by your shoulders while little weight is placed on the thighs. Then, the buddy increases downward pressure on your thighs until stretch is felt (Figure 2-14). Hold for 20 seconds, then alternate positions.



Figure 2-14. Buddy-assisted groin (butterfly) stretch.

(5) **Buddy-assisted back stretch.**

(a) **Position:** Stand back-to-back with buddy and interlock arms at your sides.

(b) **Action:** Bend forward at the waist and pull buddy up on your back over your hips. The buddy allows his back to arch and tells you when an adequate stretch is felt (Figure 2- 15). Hold this position for 20 seconds, then, change places.



Figure 2-15. Buddy-assisted back stretch.

## 2-9. STANCES

A fighter's stance (Figure 2-16) is the position he takes in readiness for an unarmed fight. He may launch an attack or defend from this stance.

a. A fighter's stance not only places his body in a good position from which to attack or defend, but it influences his mental attitude and aggressiveness.

b. He holds his hands high to protect his head and face. His fists are clenched, but relaxed. His elbows are close to his body and his weight is evenly distributed on both feet, creating a stable base. He is light on his feet with his knees slightly flexed to allow quick movement in any direction.



Figure 2-16. Fighter's stance.

## 2-10. FALLS

A soldier must learn how to fall to the ground without getting hurt, both during training and during combat. If he loses his balance or is thrown during a fight, his use of basic fall techniques enables him to escape injury or to quickly recover to protect himself.

### WARNING

**TO HELP PREVENT ACCIDENTS DURING FALLS, IT IS IMPORTANT TO EXHALE UPON IMPACT WITH THE GROUND. THIS HELPS THE BODY ABSORB THE IMPACT**

a. **Laying Side Fall.** The laying side fall is a training exercise that teaches the basic movements for executing a side fall. To be safe, the fall is learned from the squatting position until soldiers can fall properly. From the

squatting position (Figure 2-17, Step 1), the soldier extends one leg across the front of the body and raises his arm on the same side across his face (Figure 2-17, Step 2).

Then he rolls onto the exposed side, allowing the extended leg and side to absorb the shock of the fall. He slowly lowers his arm to stabilize his body. He raises his other hand to guard against future strikes (Figure 2-17, Step 3).

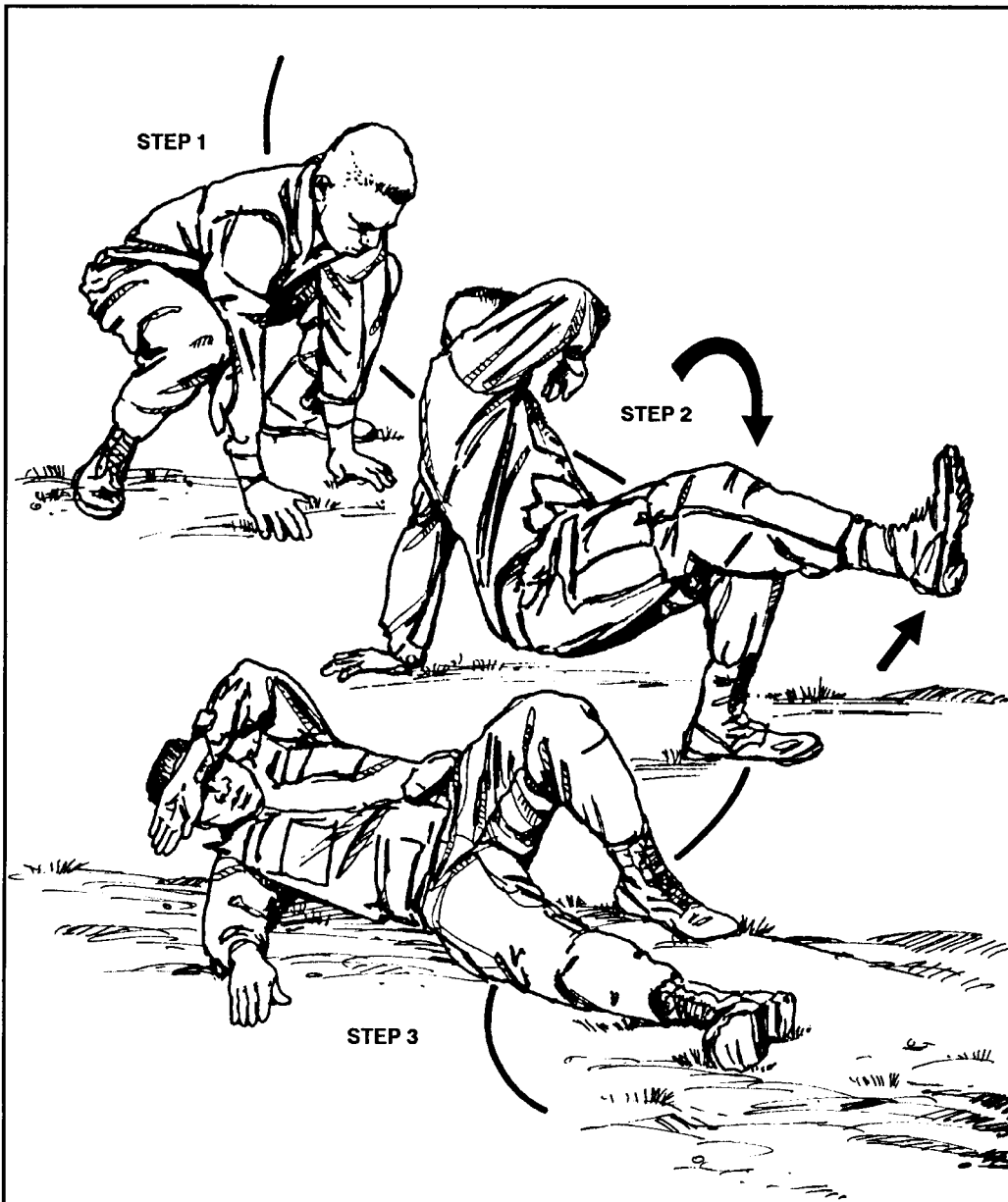


Figure 2-17. Laying side fall.



b. **Standing Side Fall.** The soldier starts the fall from the standing position (Figure 2-18, Step 1).

He lowers his weight on the supporting leg and extends the other leg across the body (Figure 2-18, Step 2).

He then distributes his body weight by rolling along the exposed side from the ankle of the extended leg to the back muscle. The arm on the ground is used to stabilize himself; the other hand is used to guard the body (Figure 2-18, Step 3).

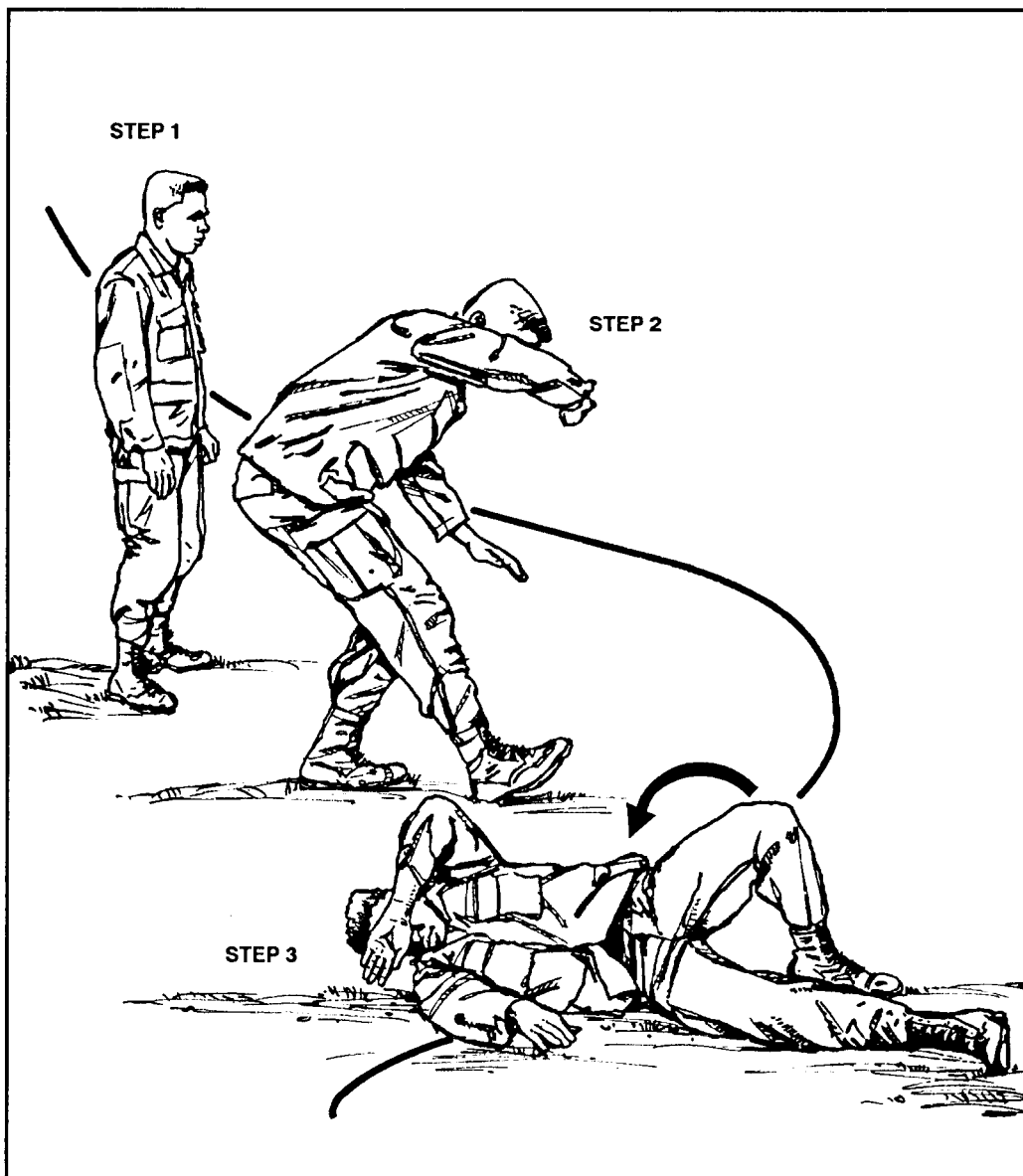


Figure 2-18. Standing side fall.

c. **Forward Rolling Fall.** The soldier starts the fall from the standing position (Figure 2-19, Step 1). He raises one arm to expose his entire side, places both hands on the ground, and bends both knees.

He rolls forward across the body along the hand, arm, and back to the opposite hip (Figure 2-19, Step 2) and ends in a good side fall position (Figure 2-19, Step 3).

He keeps his left leg flat on the ground, knee slightly bent. His right knee points upward and bends inward to help protect the groin. He keeps his right heel and sole flat on the ground behind the left leg.

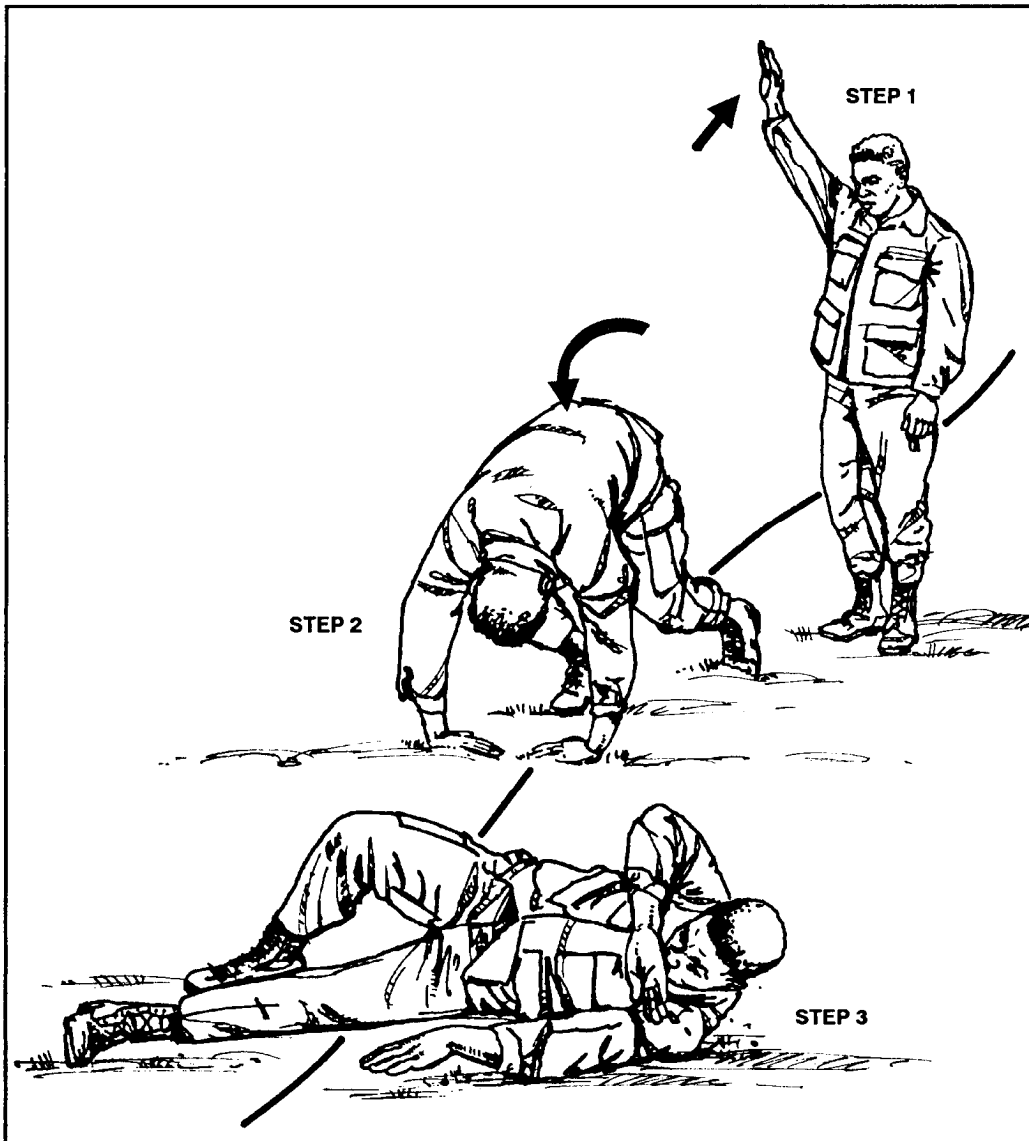


Figure 2-19. Forward rolling fall.

d. **Rear Fall.** The soldier starts the fall from the standing position and keeps his head forward to reduce the chance of head and neck injuries (Figure 2-20, Step 1).

He then falls backward and lowers his center of gravity by bending both knees. As his buttocks touch the ground, he rolls backward to absorb the momentum of the fall (Figure 2-20, Step 2).

He keeps his hands cupped and slaps his hands and arms down to help absorb the shock of impact and to stabilize his body (Figure 2-20, Step 3). He keeps his chin tucked on his chest.

Then, his legs come down slowly with knees bent and make contact with the ground (Figure 2-20, Step 4). He raises his hand to protect his face from kicks or blows. The soldier can kick his opponent from this position.

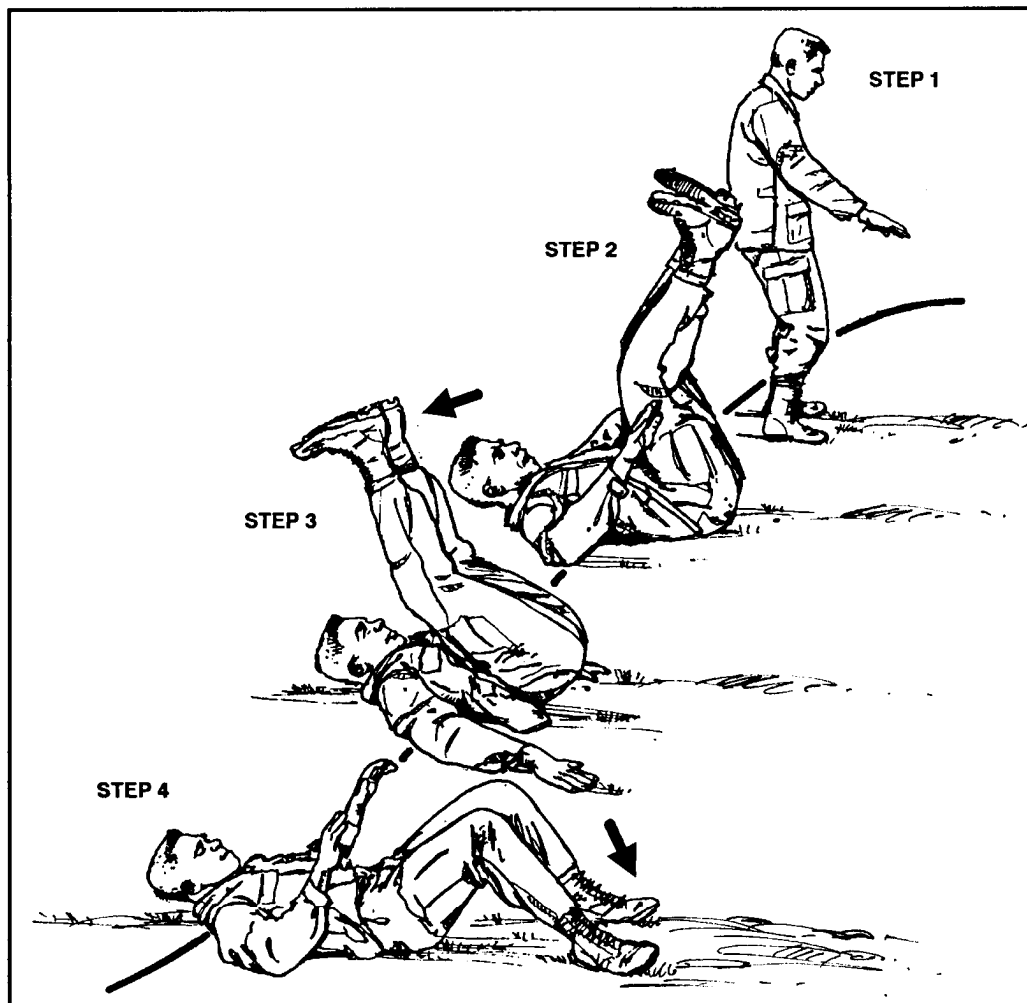


Figure 2-20. Rear fall.

## 2-11. CRAWL, WALK, AND RUN

Training can be conducted using the crawl, walk, and run techniques, which may be applied on two levels.

a. **First Level.** The instructors use these techniques during each initial training session.

(1) **Crawl phase.** New techniques should be introduced, taught, demonstrated, and executed by the numbers.

(2) **Walk phase.** During this phase, soldiers practice the new techniques by the numbers, but with more fluid movement and less instructor guidance.

(3) **Run phase.** Soldiers execute the techniques at combat speed with no guidance.

b. **Second Level.** The instructors use these techniques when developing unit combatives programs. Before conducting combatives training, the instructor considers the abilities and experience level of the soldiers to be trained. During training, those soldiers with prior martial arts experience can be a great asset; they may be used as demonstrators or as assistant instructors. The crawl, walk, run approach to unit training ensures a high skill level throughout the unit and minimizes the risk of training injuries.

(1) **Crawl phase.** During the crawl phase, the instructor introduces combatives to the unit. Here, the basic skills that set the standards for advancement to other levels are mastered. Emphasis is placed on proper technique when executing stances, falls, and hand-and-foot strikes. Studying the new techniques in this method ensures that the movements are correctly programmed into the soldiers' subconscious after a few repetitions. It also develops the flexibility of soldiers.

(2) **Walk phase.** Once a unit has developed a sufficient proficiency level in basic skills, begin the walk phase. Instructors introduce soldiers to throws, combination strikes with body weapons, reaction drills, knife/bayonet fighting, grappling, and expedient-weapons training.

(3) **Run phase.** In the run phase, unit soldiers engage in full sparring, advanced-weapons fighting, and sentry removal.

## 2-12. DEMONSTRATIONS

A well-coordinated demonstration and professional demonstrators are crucial for successful learning by soldiers. Unrehearsed presentations or inadequately trained demonstrators can immediately destroy the credibility of the training. There are two methods appropriate for the demonstration of combative techniques to soldiers. These are based on the size of the group to be taught.

a. **Company-Size Formation or Larger.** The instructor or demonstrator uses the talk-through method. The primary instructor talks the

demonstrators through the techniques by the numbers, and then the demonstrators execute at combat speed. The soldiers can see how to apply the move being taught in relation to the instructor or demonstrator. The primary instructor is free to control the rate of the demonstration and to stress key teaching points. The demonstrators must be skilled in properly applying the techniques so soldiers can adequately grasp the intended concepts.

**b. Platoon-Size Formation or Smaller.** A good method for demonstrating to a smaller formation is for the primary instructor to apply the technique being taught to an assistant instructor. The primary instructor talks himself through the demonstration. He stresses correct body movement and key teaching points as he does them.

### **2-13. EXECUTION BY THE NUMBERS**

Instructors use execution by the numbers to break down techniques into step-by-step phases so soldiers can see clearly how the movements are developed from start to finish. Execution by the numbers also provides soldiers away to see the mechanics of each technique. This teaching method allows the instructor to explain in detail the sequence of each movement. For example: on the command PHASE ONE, MOVE, the attacker throws a right-hand punch to the defender's face. At the same time, the defender steps to the inside of the attacker off the line of attack and moves into position for the right-hip throw. Assistant instructors are able to move freely throughout the training formation and make on-the-spot corrections.

### **2-14. EXECUTION AT COMBAT SPEED**

When the instructor is confident that the soldiers being trained are skilled at executing a technique by the numbers, he is ready to have them execute it at combat speed. Executing movements at combat speed enables soldiers to see how effective a technique is. This builds the soldier's confidence in the techniques, allows him to develop a clear mental picture of the principles behind the technique, and gives him confidence in his ability to perform the technique during an actual attack. The command is, THE RIGHT-HIP THROW AT COMBAT SPEED, MOVE. The soldiers then execute this technique from start to finish.

### **2-15. DRILLS**

Drills are used to maintain soldiers' skills in executing techniques through repetition. During these drills, techniques or phases of techniques are repeated as often as necessary to ensure programmed learning by the soldiers. Subconscious programming usually occurs after 25 repetitions of movement.

Technique drills help soldiers retain their skills, and they are a good tool for reviewing techniques already learned.

### 2-16. FOAM PADS

Foam pads (Figure 2-21) are highly recommended to enhance training. The pads allow full-forced strikes by soldiers and protect their training partners. The pads enable soldiers to feel the effectiveness of striking techniques and to develop power in their striking. Instructors should encourage spirited aggressiveness. Pads can be tackle dummy pads or martial arts striking pads.

a. The use of pads is especially recommended for knee-strike practice drills, kicking drills, and 3-foot-stick striking drills. The pad is ideally placed on the outside of the training partner's thigh, protecting the common peroneal nerve. Pads can also be held against the forearms in front of the head and face to allow practice knee/elbow strikes to this area.

b. Training pads can be requisitioned through supply channels or purchased locally.

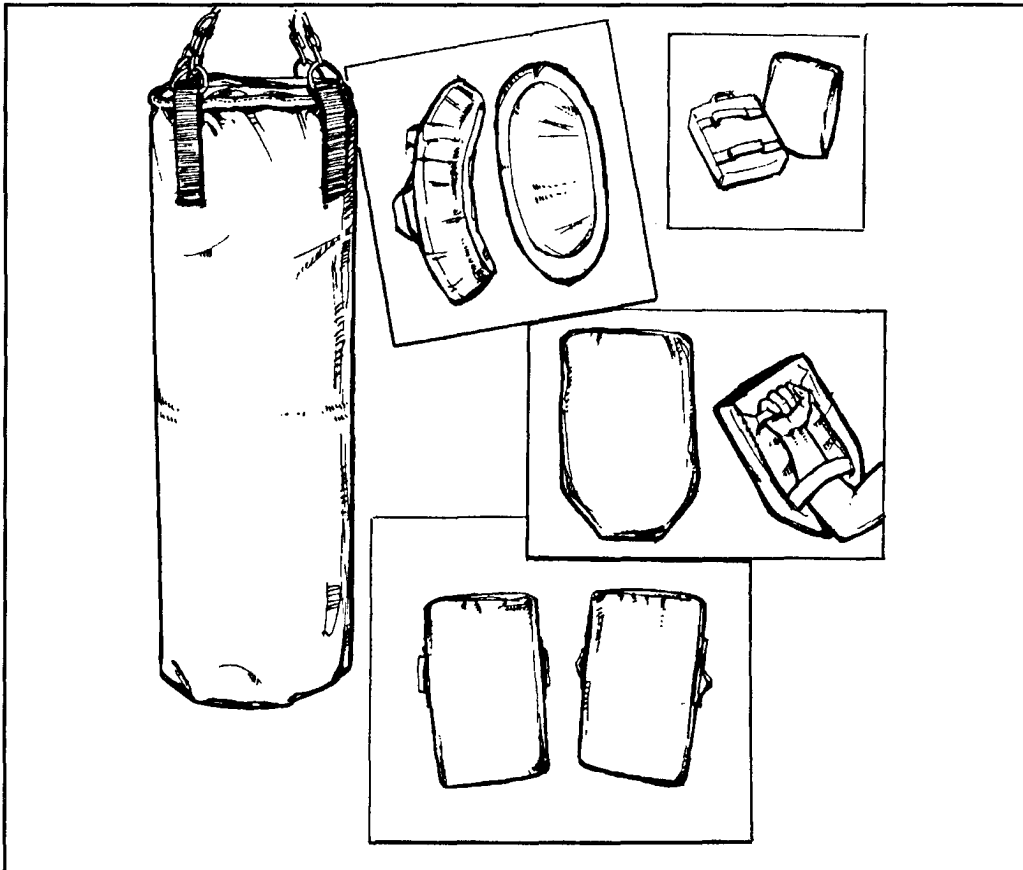


Figure 2-21. Training pads.

## CHAPTER 3

# CLOSE-RANGE COMBATIVES

*In close-range combatives, two opponents have closed the gap between them so they can grab one another in hand-to-hand combat. The principles of balance, leverage, timing, and body positioning are applied. Throws and takedown techniques are used to upset the opponent's balance and to gain control of the fight by forcing him to the ground. Chokes can be applied to quickly render an opponent unconscious. The soldier should also know counters to choking techniques to protect himself. Grappling involves skillful fighting against an opponent in close-range combat so that a soldier can win through superior body movement or grappling skills. Pain can be used to disable an opponent. A soldier can use painful eye gouges and strikes to soft, vital areas to gain an advantage over his opponent.*

### 3-1. THROWS AND TAKEDOWNS

Throws and takedowns enable a hand-to-hand fighter to take an opponent to the ground where he can be controlled or disabled with further techniques. Throws and takedowns make use of the principles involved in taking the opponent's balance. The fighter uses his momentum against the attacker; he also uses leverage or body position to gain an opportunity to throw the attacker.

a. It is important for a fighter to control his opponent throughout a throw to the ground to keep the opponent from countering the throw or escaping after he is thrown to the ground. One way to do this is to control the opponent's fall so that he lands on his head. It is also imperative that a fighter maintain control of his own balance when executing throws and takedowns.

b. After executing a throw or takedown and while the opponent is on the ground, the fighter must control the opponent by any means available. He can drop his weight onto exposed areas of the opponent's body, using his elbows and knees. He can control the downed opponent's limbs by stepping on them or by placing his knees and body weight on them. Joint locks, chokes, and kicks to vital areas are also good control measures. Without endangering

himself, the fighter must maintain the advantage and disable his opponent after throwing him (Figures 3-1 through 3-5).

NOTE: Although the five techniques shown in Figures 3-1 through 3-5 may be done while wearing LCE—for training purposes, it is safer to conduct all throws and takedowns without any equipment.

(1) **Hip throw.** The opponent throws a right punch. The defender steps in with his left foot; at the same time, he blocks the punch with his left forearm and delivers a reverse punch to the face, throat, or other vulnerable area (Figure 3-1, Step 1). (For training, deliver punches to the solar plexus.)

The defender pivots 180 degrees on the ball of his lead foot, wraps his right arm around his opponent's waist, and grasps his belt or pants (Figure 3-1, Step 2). (If opponent is wearing LCE, grasp by the pistol belt or webbing.)

The defender thrusts his hips into his opponent and maintains a grip on his opponent's right elbow. He keeps his knees shoulder-width apart and slightly bent (Figure 3-1, Step 3). He locks his knees, pulls his opponent well over his right hip, and slams him to the ground. (For training, soldier being thrown should land in a good side fall.)

By maintaining control of his opponent's arm, the defender now has the option of kicking or stomping him in the neck, face, or ribs (Figure 3-1, Step 4).



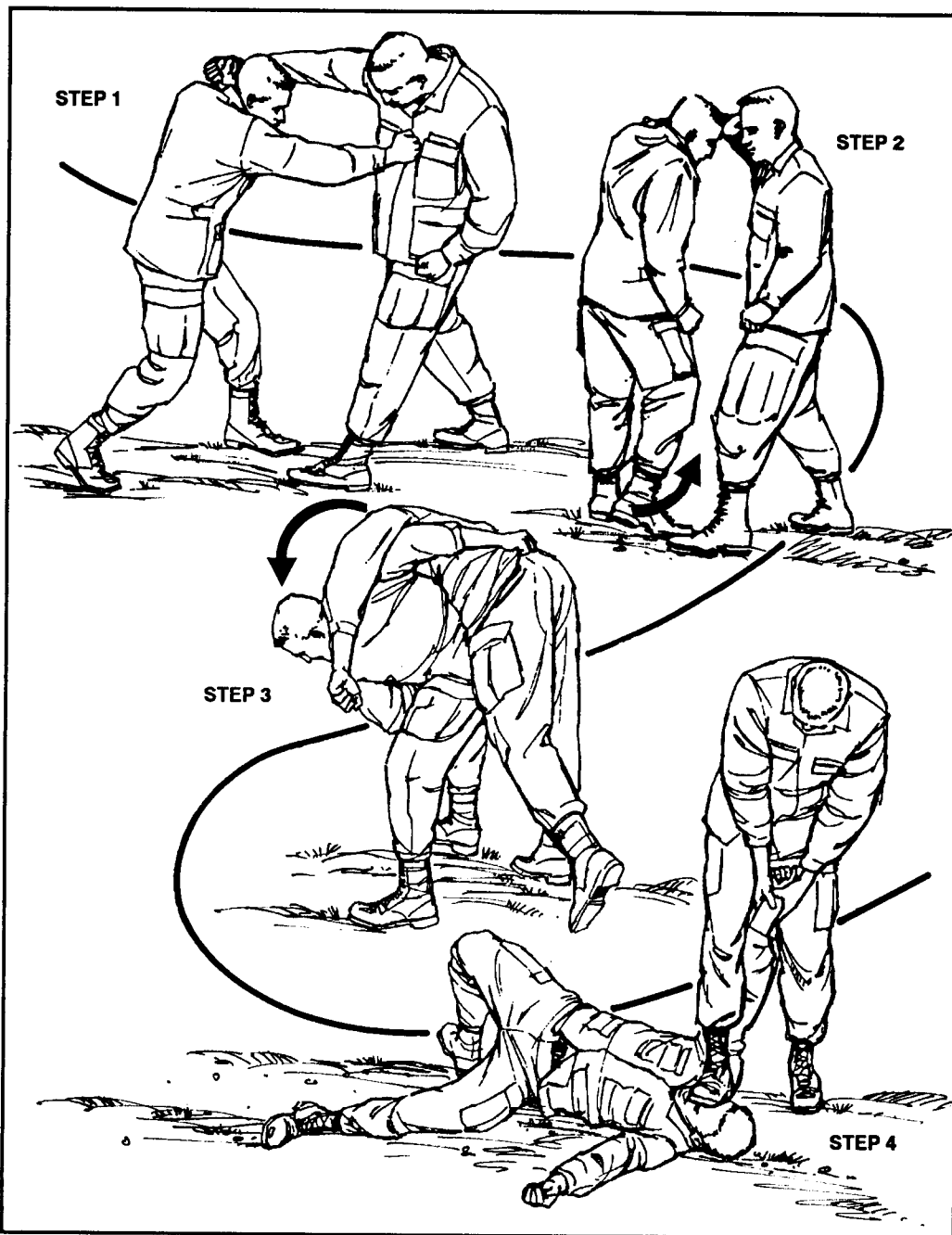


Figure 3-1. Hip throw.

(2) ***Over-the-shoulder throw.*** The opponent lunges at the defender with a straight punch (Figure 3-2, Step 1).

The defender blocks the punch with his left forearm, pivots 180 degrees on the ball of his lead foot (Figure 3-2, Step 2), and gets well inside his opponent's right armpit with his right shoulder.

He reaches well back under his opponent's right armpit and grasps him by the collar or hair (Figure 3-2, Step 3).

The defender maintains good back-to-chest, buttock-to-groin contact, keeping his knees slightly bent and shoulder-width apart. He maintains control of his opponent's right arm by grasping the wrist or sleeve (Figure 3-2, Step 4).

The defender bends forward at the waist and holds his opponent tightly against his body. He locks his knees, thrusts his opponent over his shoulder, and slams him to the ground (Figure 3-2, Step 5). He then has the option of disabling his opponent with kicks or stomps to vital areas.

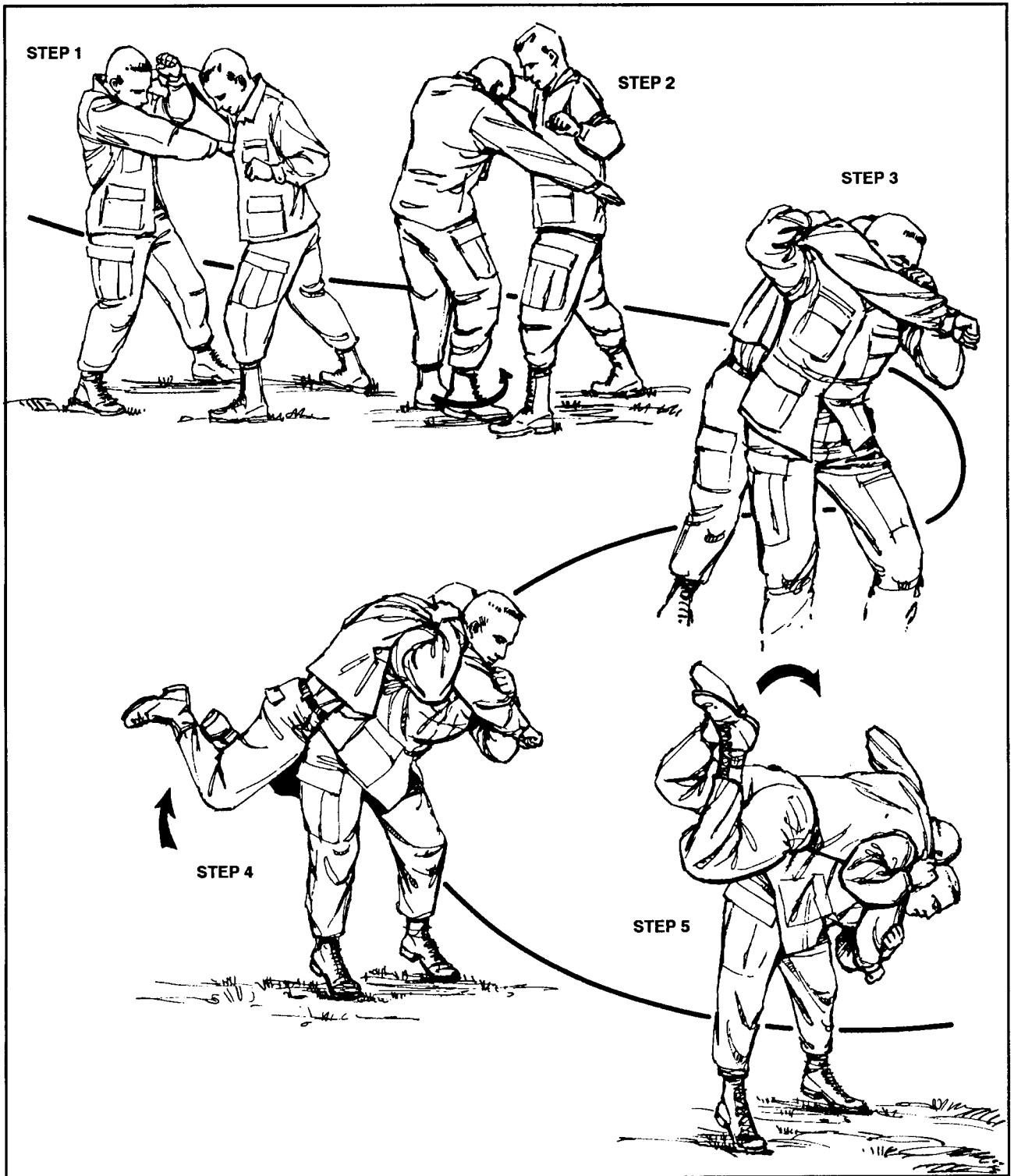


Figure 3-2. Over-the-shoulder throw.

(3) **Throw from rear choke.** The opponent attacks the defender with a rear strangle choke. The defender quickly bends his knees and spreads his feet shoulder-width apart (Figure 3-3, Step 1). (Knees are bent quickly to put distance between you and your opponent.)

The defender reaches as far back as possible and uses his right hand to grab his opponent by the collar or hair. He then forces his chin into the vee of the opponent's arm that is around his neck. With his left hand, he grasps the opponent's clothing at the tricep and bends forward at the waist (Figure 3-3, Step 2).

The defender locks his knees and, at the same time, pulls his opponent over his shoulder and slams him to the ground (Figure 3-3, Step 3).

He then has the option of spinning around and straddling his opponent or disabling him with punches to vital areas (Figure 3-3, Step 4). (It is important to grip the opponent tightly when executing this move.)

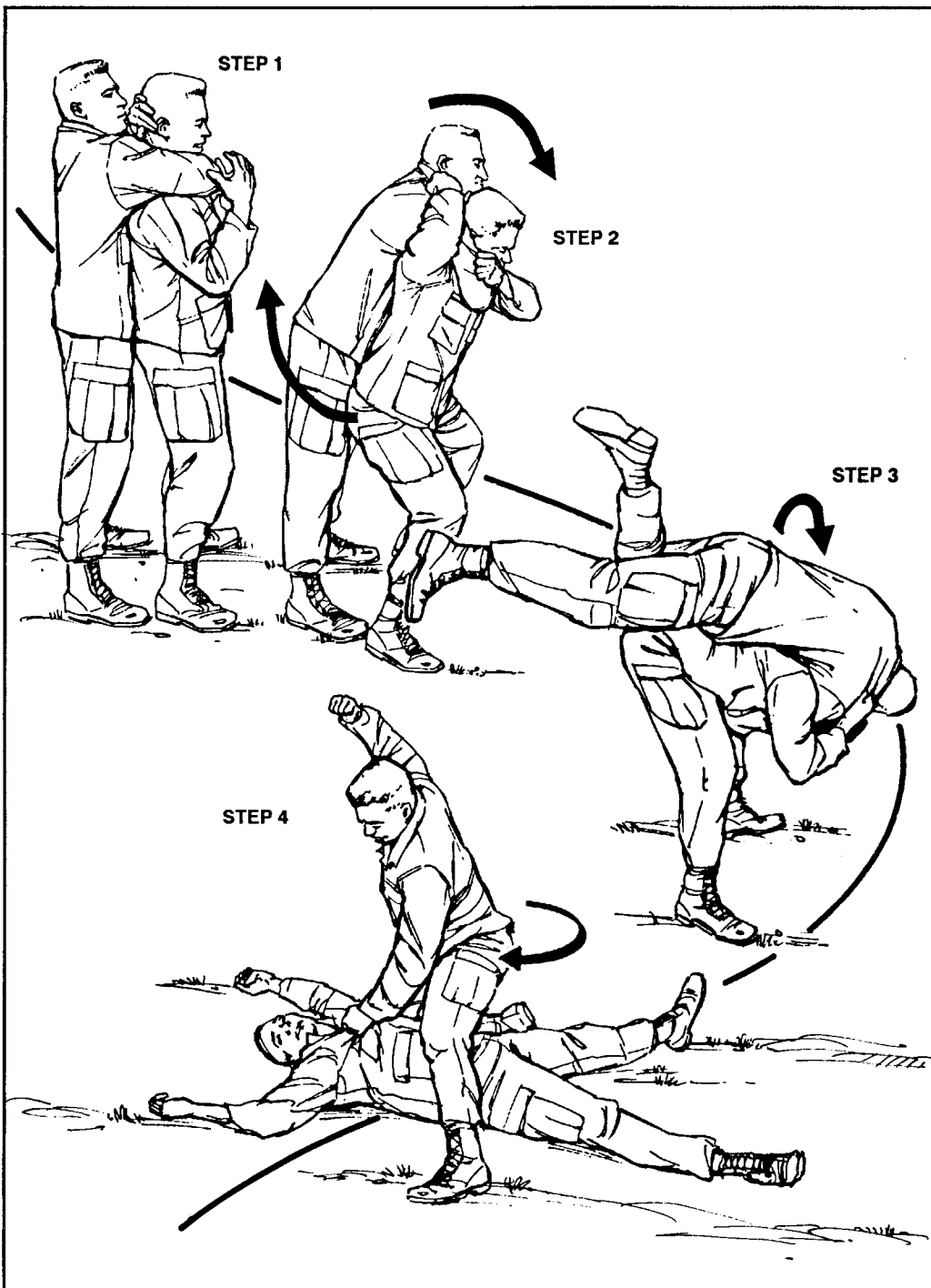


Figure 3-3. Throw from rear choke.

(4) **Head butt.** The head butt can be applied from the front or the rear. It is repeated until the opponent either releases his grip or becomes unconscious.

(a) The opponent grabs the defender in a bear hug from the front (A, Figure 3-4, Step 1).

The defender uses his forehead to smash into his opponent's nose or cheek (A, Figure 3-4, Step 2) and stuns him.

The opponent releases the defender who then follows up with a kick or knee strike to the groin (A, Figure 3-4, Step 3).

(b) The opponent grabs the defender in a bear hug from the rear (B, Figure 3-4, Step 1).

The defender cocks his head forward and smashes the back of his head into the opponent's nose or cheek area (B, Figure 3-4, Step 2).

The defender turns to face his opponent and follows up with a spinning elbow strike to the head (B, Figure 3-4, Step 3).

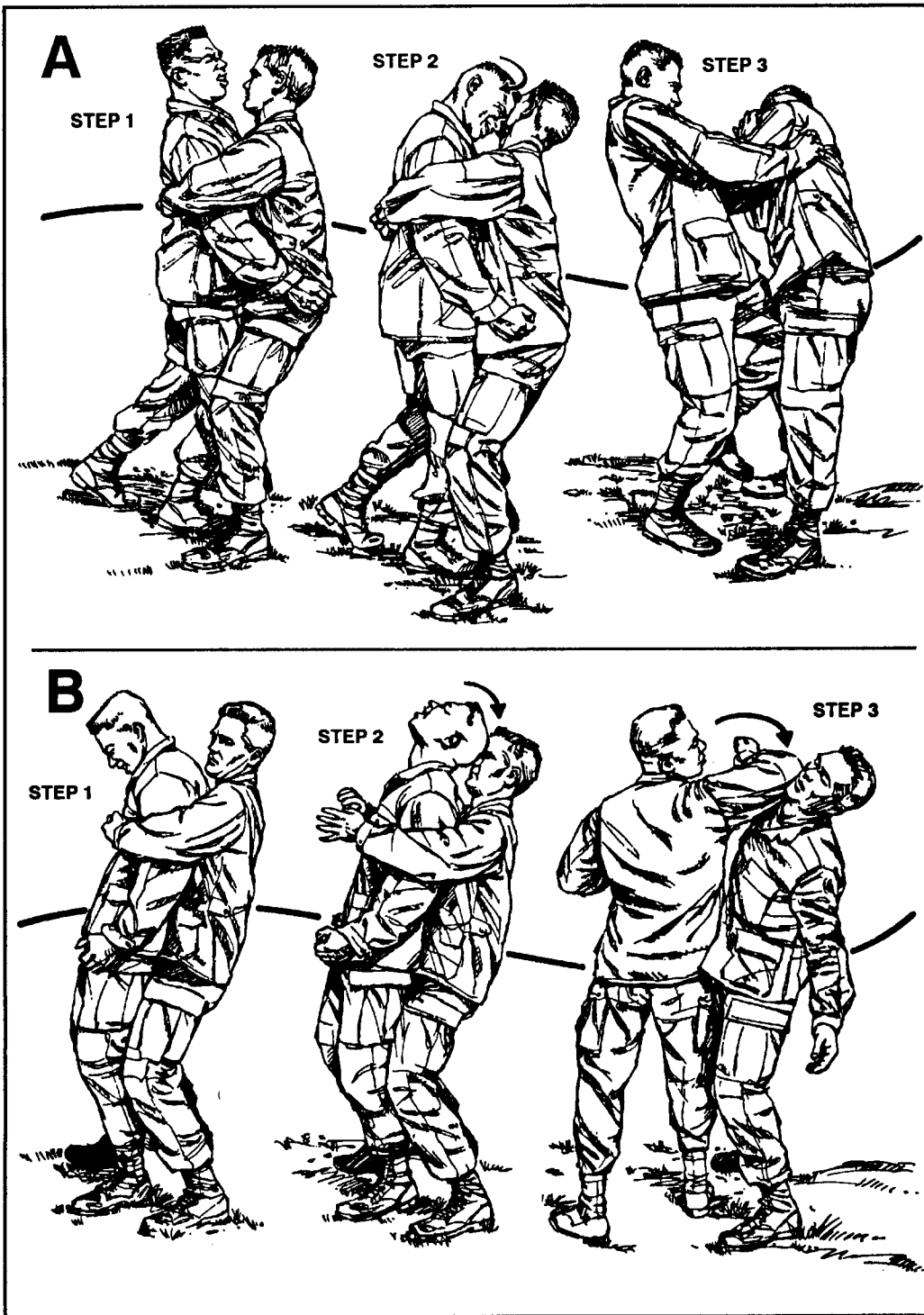


Figure 3-4. Head butt.

(5) **Rear strangle takedown.** The defender strikes the opponent from the rear with a forearm strike to the neck (carotid artery) (Figure 3-5, Step 1).

The defender wraps his right arm around his opponent's neck, making sure he locks the throat and windpipe in the vee formed by the his elbow. He grasps his left bicep and wraps his left hand around the back of the opponent's head. He pulls his right arm in and flexes it, pushing his opponent's head forward (Figure 3-5, Step 2).

The defender kicks his legs out and back, maintains a choke on his opponent's neck, and pulls his opponent backward until his neck breaks (Figure 3-5, Step 3).



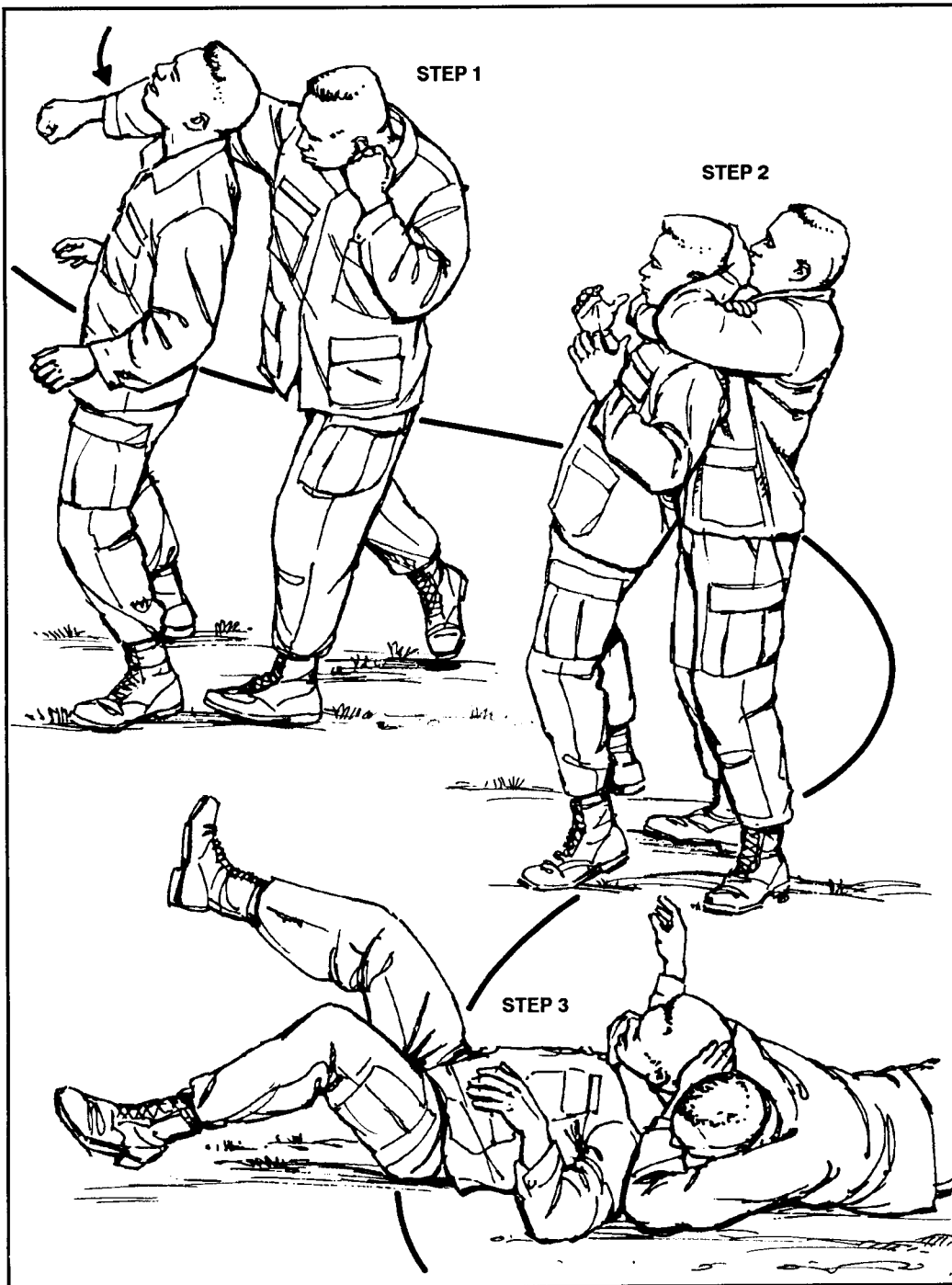


Figure 3-5. Rear strangle takedown.

### 3-2. STRANGULATION

Strangulation is a most effective method of disabling an opponent. The throat's vulnerability is widely known and should be a primary target in close-range fighting. Your goal may be to break the opponent's neck, to crush his trachea, to block the air supply to his lungs, or to block the blood supply to his brain.

a. **Strangulation by Crushing.** Crushing the trachea just below the voice box is probably one of the fastest, easiest, most lethal means of strangulation. The trachea is crushed between the thumb and first two or three fingers.

b. **Respiratory Strangulation.** Compressing the windpipe to obstruct air flow to the lungs is most effectively applied by pressure on the cartilage of the windpipe. Unconsciousness can take place within one to two minutes. However, the technique is not always effective on a strong opponent or an opponent with a large neck. It is better to block the blood supply to weaken the opponent first.

c. **Sanguineous Strangulation.** Cutting off the blood supply to the brain by applying pressure to the carotid arteries results in rapid unconsciousness of the victim. The victim can be rendered unconscious within 3 to 8 seconds, and death can result within 30 to 40 seconds.

### 3-3. CHOKING TECHNIQUES

There are several choking techniques that a soldier can use to defeat his opponent in hand-to-hand combat.

a. **Cross-Collar Choke.** With crossed hands, the fighter reaches as far as possible around his opponent's neck and grabs his collar (Figure 3-6, Step 1). The backs of his hands should be against the neck.

The fighter keeps his elbows bent and close to the body (as in opening a tightly sealed jar), pulls outward with both hands, and chokes the sides of the opponent's neck by rotating the knuckles into the neck (Figure 3-6, Step 2). The forearm can also be used.

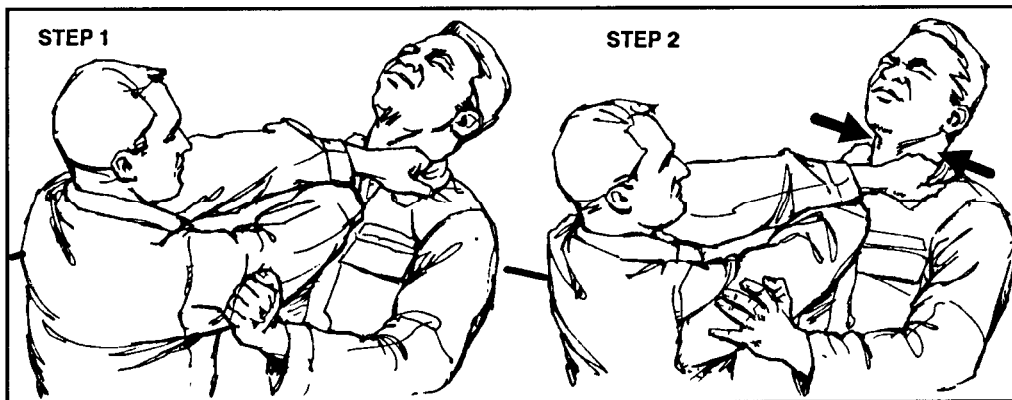


Figure 3-6. Cross-collar choke.

b. **Collar Grab Choke.** The fighter grabs his opponent's collar with both hands straight-on (Figure 3-7). He then rotates the knuckles inward against the neck to quickly produce a good choke. He also keeps the elbows in front and close to the body where the greatest strength is maintained.

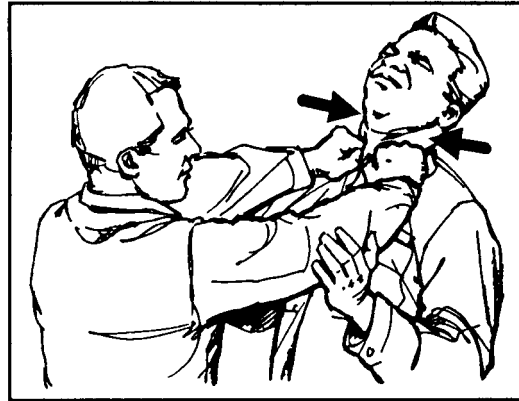


Figure 3-7. Collar grab choke.

c. **Carotid Choke.** The fighter grabs the sides of the opponent's throat by the muscle and sticks his thumbs into the carotids, closing them off (Figure 3-8). This is a fast and painful choke.



Figure 3-8. Carotid choke.

d. **Trachea Choke.** The fighter grabs the opponent's trachea (Figure 3-9) by sticking three fingers behind the voice box on one side and the thumb behind the other. He then crushes the fingers together and twists, applying pressure until the opponent is disabled.

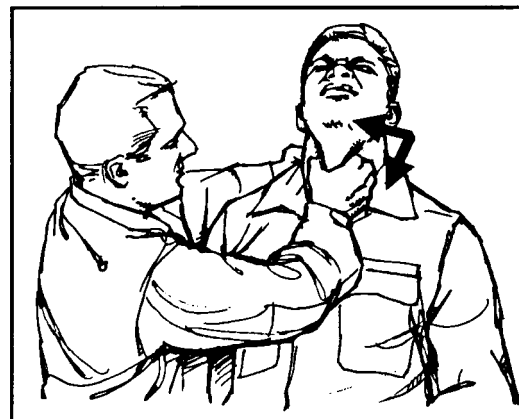


Figure 3-9. Trachea choke.

### 3-4. COUNTERS TO CHOKES

A soldier must know how to defend against being choked. Incapacitation and unconsciousness can occur within three seconds; therefore, it is crucial for the defender to know all possible counters to chokes.

a. **Eye Gouge.** The opponent attacks the defender with a frontal choke. The defender has the option of going over or under the opponent's arms. To disable the opponent, the defender inserts both thumbs into his opponent's eyes and tries to gouge them (Figure 3-10). The defender is prepared to follow-up with an attack to the vital regions.

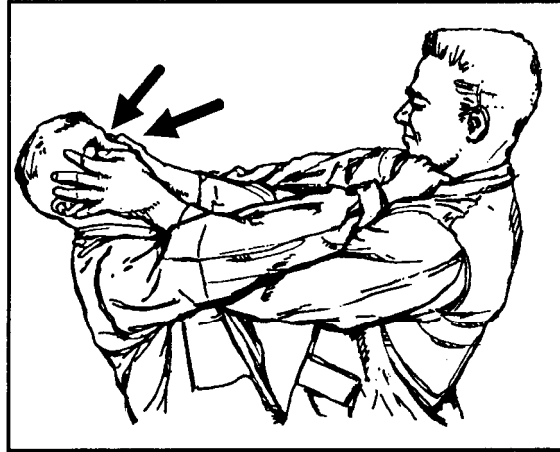


Figure 3-10. Eye gouge.

b. **Shoulder Dislocation.** If the opponent applies a choke from the rear, the defender places the back of his hand against the inside of the opponent's forearm (Figure 3-11, Step 1).

Then, he brings the other hand over the crook of the opponent's elbow and clasps hands, keeping his hands close to his body as he moves his entire body around the opponent (Figure 3-11, Step 2).

He positions his body so that the opponent's upper arm is aligned with the opponent's shoulders (Figure 3-11, Step 3). The opponent's arm should be bent at a 90-degree angle.

By pulling up on the opponent's elbow and down on the wrist, the opponent's balance is taken and his shoulder is easily dislocated (Figure 3-11, Step 4). The defender must use his body movement to properly position the opponent—upper body strength will not work.

He drops his body weight by bending his knees to help get the proper bend in the opponent's elbow. The defender must also keep his own hands and elbows close to his body to prevent the opponent's escape (Figure 3-11, Step 5).

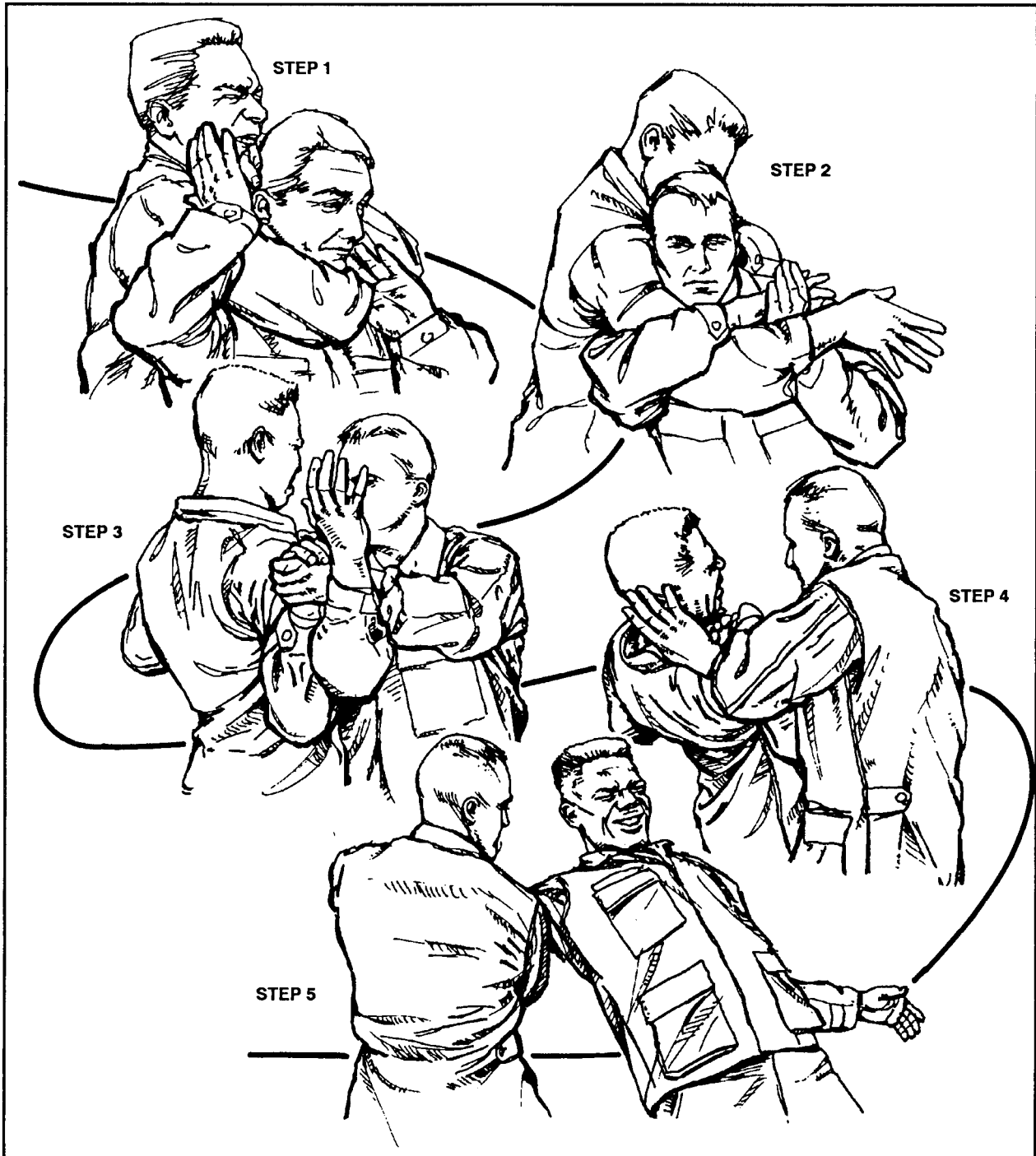


Figure 3-11. Shoulder dislocation.

c. **Weight Shift.** To counter being choked from above while lying on the ground (Figure 3-12, Step 1), the defender places his arms against his opponent's elbows and locks the joints.

At the same time, he shifts his hips so that his weight rests painfully on the opponent's ankle (Figure 3-12, Step 2).

The defender can easily shift his body weight to gain control by turning the opponent toward his weak side (Figure 3-12, Step 3).

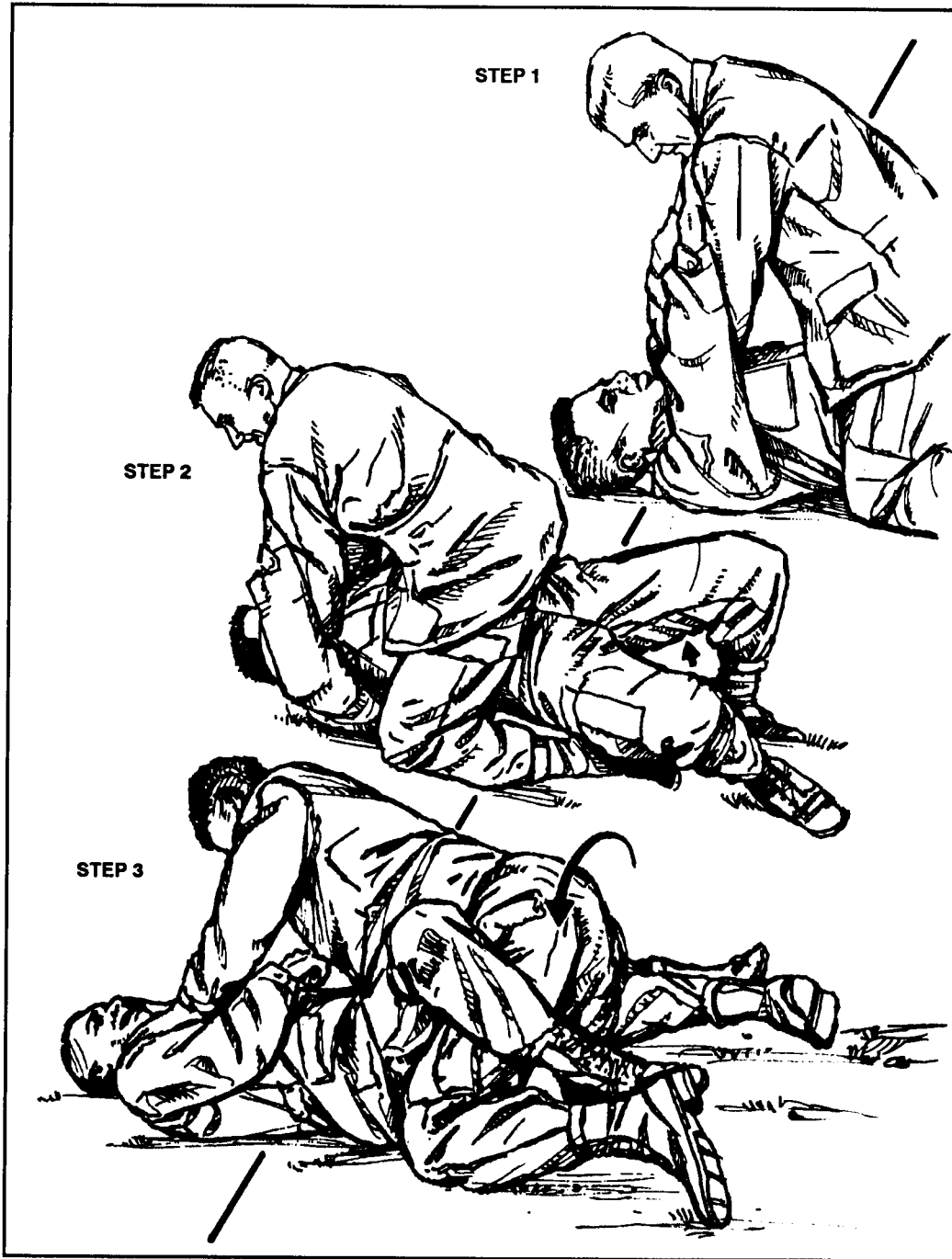


Figure 3-12. Weight shift.

**d. Counterstrikes to Rear Choke and Frontal Choke.** As the opponent tries a rear choke (A, Figure 3-13, Step 1), the defender can break the opponent's grip with a strong rear-elbow strike into the solar plexus (A, Figure 3-13, Step 2).

He can follow with a shin scrape down along the opponent's leg and stomp the foot (A, Figure 3-13, Step 3).

He may wish to continue by striking the groin of the opponent (A, Figure 3-13, Step 4).

As the opponent begins a frontal choke (B, Figure 3-13, Step 1), the defender turns his body and drops one arm between the opponent's arms (B, Figure 3-13, Step 2).

He sinks his body weight and drives his own hand to the ground, and then explodes upward with an elbow strike (B, Figure 3-13, Step 3) into the opponent's chin, stomach, or groin.



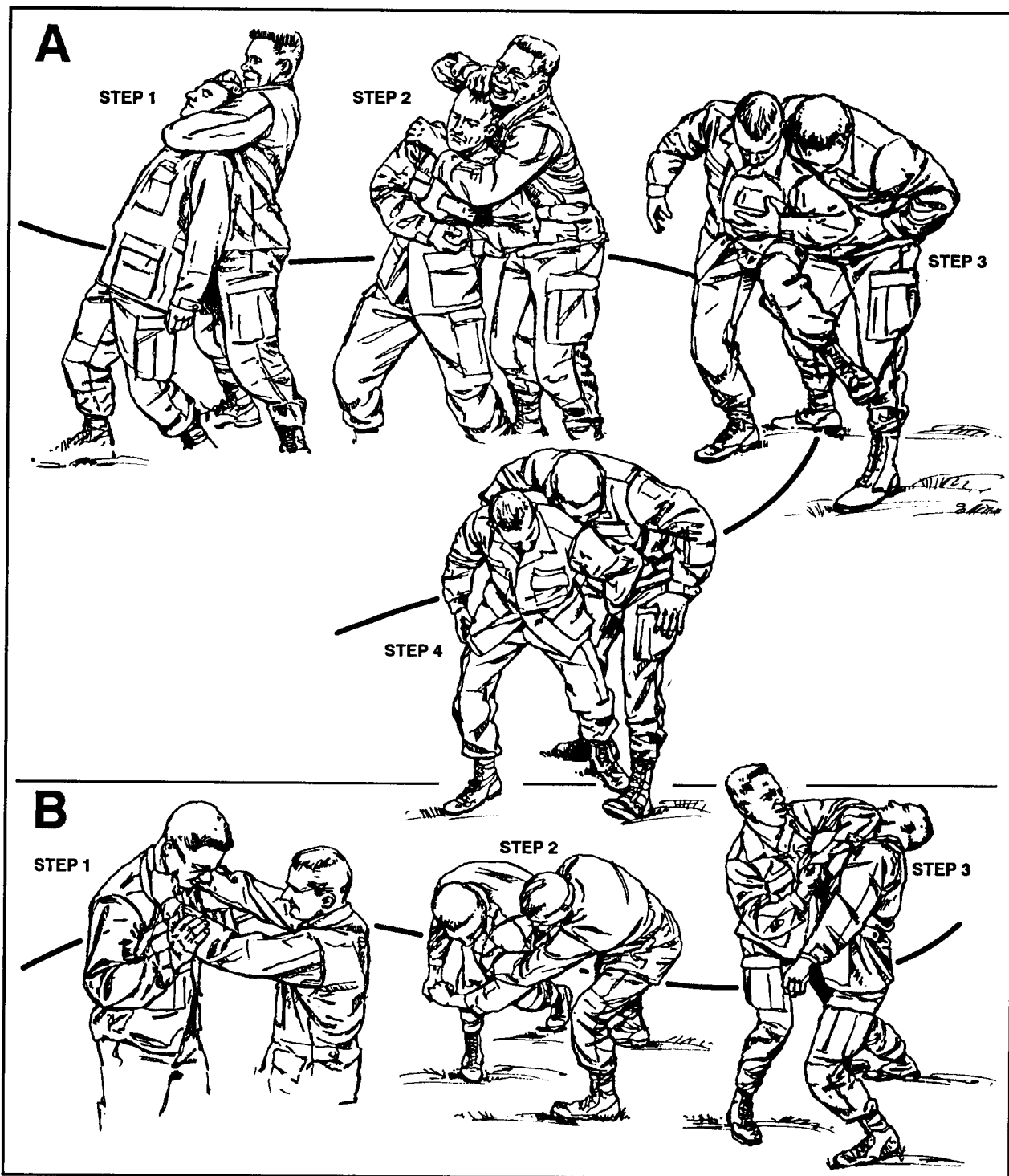


Figure 3-13. Counterstrikes to rear choke and frontal choke.

e. **Headlock Escape.** If a defender is in a headlock, he first turns his chin in toward his opponent's body to prevent choking (Figure 3-14, Step 1).

Next, he slides one hand up along the opponent's back, around to the face, and finds the sensitive nerve under the nose. He must avoid placing his fingers near his opponent's mouth, or he will be bitten (Figure 3-14, Step 2).

The defender can now force his opponent back and then down across his own knee to the ground and maintain control by keeping pressure under the nose (Figure 3-14, Step 3). He can finish the technique with a hammer fist to the groin.

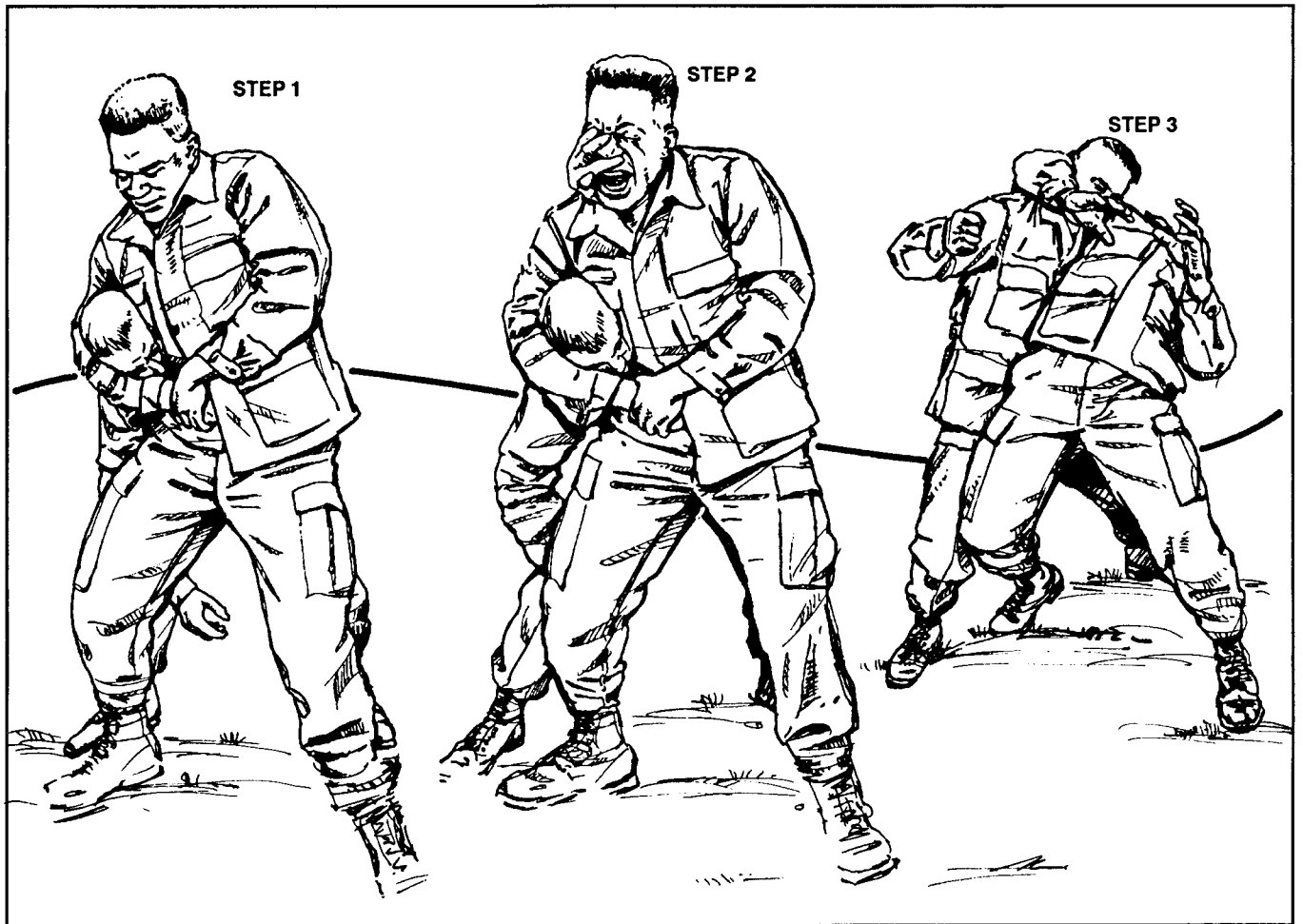


Figure 3-14. Headlock escape.

### 3-5. GRAPPLING

Grappling is when two or more fighters engage in close-range, hand-to-hand combat. They may be armed or unarmed. To win, the fighter must be aware of how to move his body to maintain the upper hand, and he must know the mechanical strengths and weaknesses of the human body. The situation becomes a struggle of strength pitted against strength unless the fighter can remain in control of his opponent by using skilled movements to gain an advantage in leverage and balance. Knowledge of the following basic movement techniques may give the fighter a way to apply and gain the advantage in grappling situations.

a. **Wristlock From a Collar or Lapel Grab.** When an opponent grabs the defender by the collar or by the lapel, the defender reaches up and grabs the opponent's hand (to prevent him from withdrawing it) while stepping back to pull him off balance (Figure 3-15, Step 1).

The defender peels off the opponent's grabbing hand by crushing his thumb and bending it back on itself toward the palm in a straight line (Figure 3-15, Step 2). To keep his grip on the opponent's thumb, the defender keeps his hands close to his body where his control is strongest.

He then turns his body so that he has a wristlock on his opponent. The wristlock is produced by turning his wrist outward at a 45-degree angle and by bending it toward the elbow (Figure 3-15, Step 3). The opponent can be driven to the ground by putting his palm on the ground.

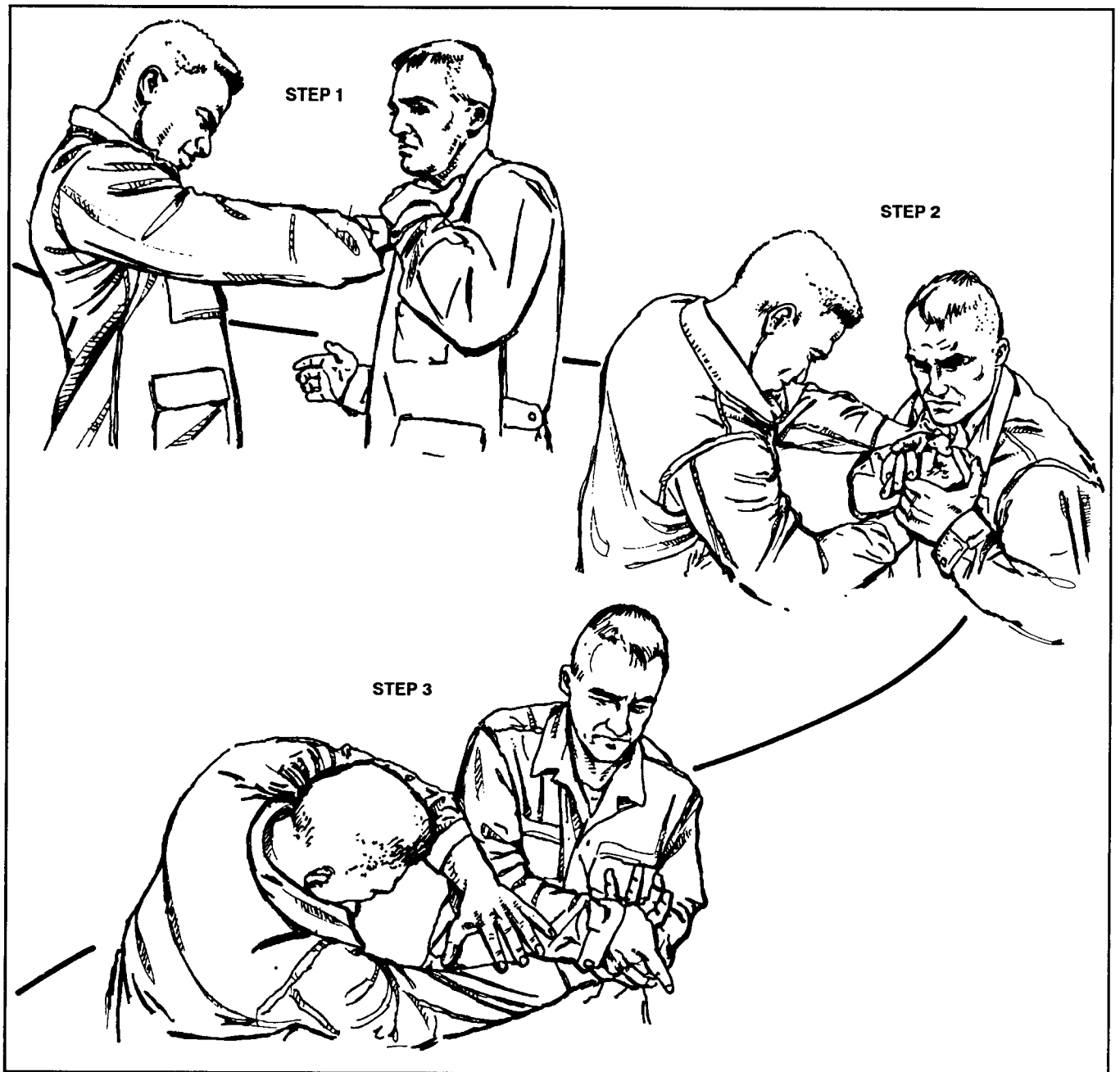


Figure 3-15. Wristlock from a collar or lapel grab.

b. **Wristlock From an Arm Grab.** When an opponent grabs a defender's arm, the defender rotates his arm to grab the opponent's forearm (Figure 3-16, Step 1).

At the same time, he secures his other hand on the gripping hand of the opponent to prevent his escape (Figure 3-16, Step 2).

As the defender steps in toward the opponent and maintains his grip on the hand and forearm, a zee shape is formed by the opponent's arm; this is an effective wristlock (Figure 3-16, Step 3). More pain can be induced by trying to put the opponent's fingers in his own eyes.

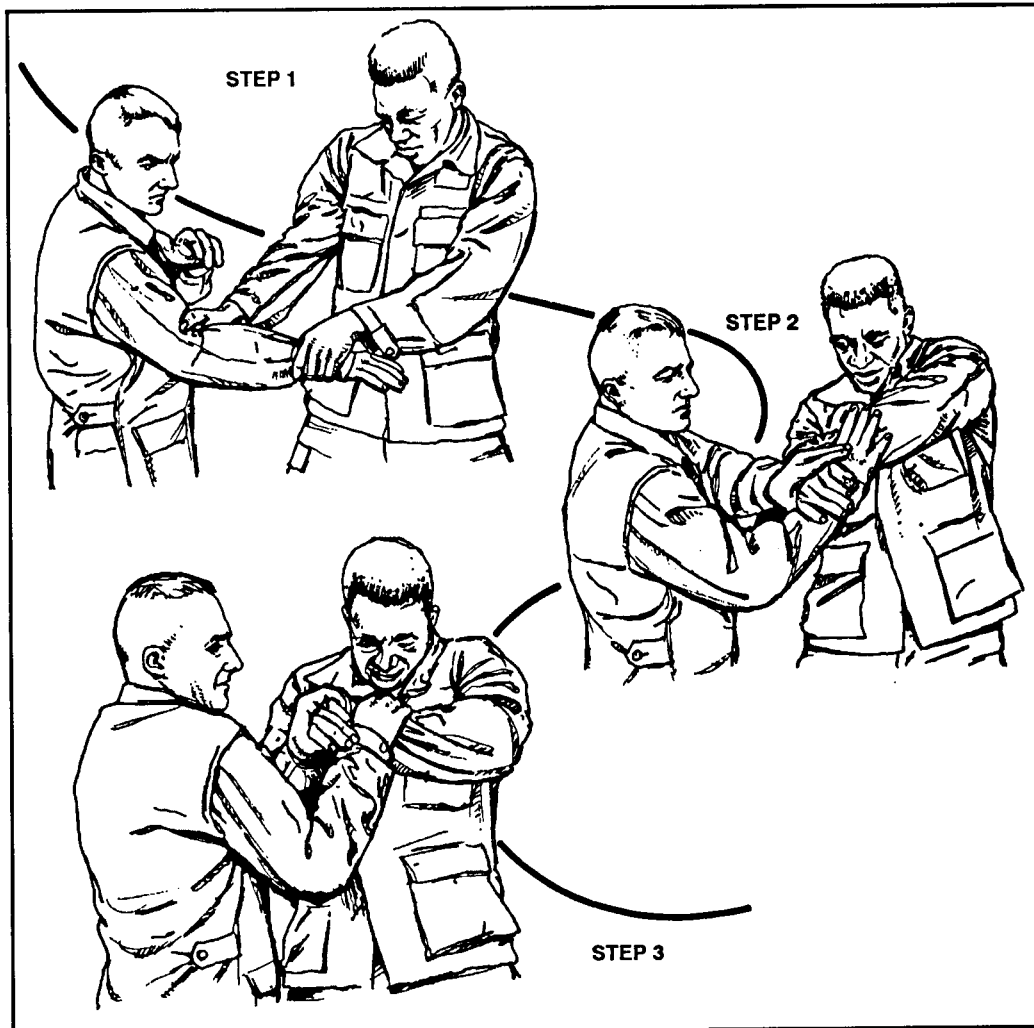


Figure 3-16. Wristlock from an arm grab.

c. **Prisoner Escort.** The escort secures the prisoner's arm with the wrist bent straight back upon itself, palm toward the elbow. The prisoner's elbow can be secured in the crook of the escort's elbow, firmly against the escort's body for the most control (Figure 3-17). This technique is most effective with two escorts, each holding a wrist of the prisoner. Use this technique to secure the opponent only if rope, flex cuffs, or handcuffs are unavailable.



Figure 3-17. Prisoner escort.

d. **Elbow Lock Against the Body.** The opponent's elbow can be locked against the side of the body (Figure 3-18) by the defender. The defender turns his body to force the elbow into a position in which it was not designed to move. He can apply leverage on the opponent's wrist to gain control since the lock causes intense pain. The elbow can easily be broken to make the arm ineffective. This movement must be executed with maximum speed and force.

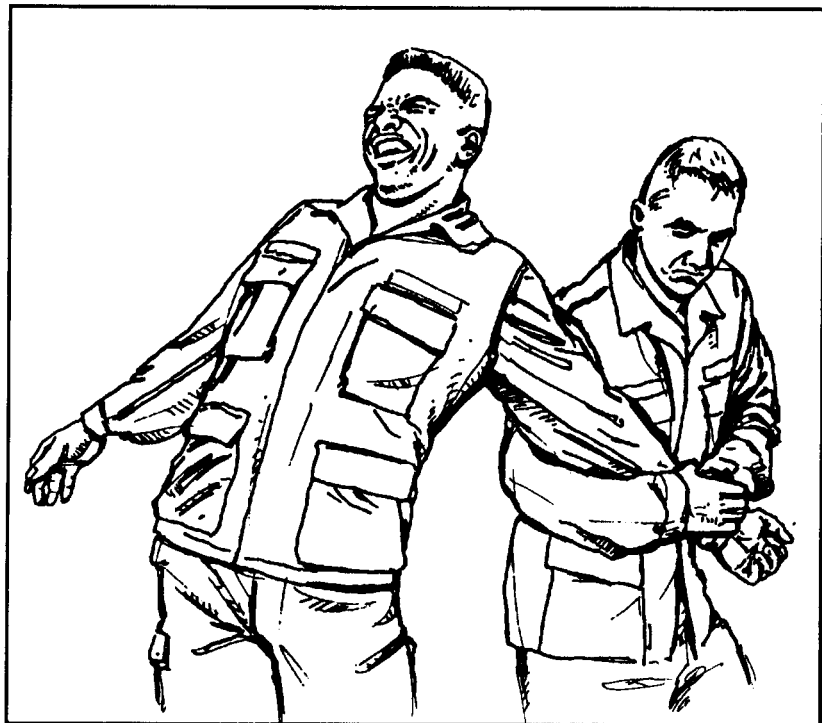


Figure 3-18. Elbow lock against the body.

e. **Elbow Lock Against the Knee.** While grappling on the ground, a defender can gain control of the situation if he can use an elbow lock (Figure 3-19) against the opponent. He uses his knee as a fulcrum for leverage to break his opponent's arm at the elbow. Once the arm breaks, the defender must be prepared with a follow-up technique.



Figure 3-19. Elbow lock against the knee.



f. **Elbow Lock Against the Shoulder.** An elbow lock can be applied by locking the elbow joint against the shoulder (Figure 3-20) and pulling down on the wrist. Leverage is produced by using the shoulder as a fulcrum, by applying force, and by straightening the knees to push upward. This uses the defender's body mass and ensures more positive control. The opponent's arm must be kept straight so he cannot drive his elbow down into the defender's shoulder.



Figure 3-20. Elbow lock against the shoulder.

g. **Shoulder Dislocation.** A defender can maneuver into position to dislocate a shoulder by moving inside when an opponent launches a punch (Figure 3-21, Step 1). The defender holds his hand nearest the punching arm high to protect the head.

The defender continues to move in and places his other arm behind the punching arm (Figure 3-21, Step 2). He strikes downward into the crook of the opponent's elbow to create a bend.

Then he clasps his hands and moves to the opponent's outside until the opponent's upper arm is in alignment with his shoulders and bent 90 degrees at the elbow. As he steps, the defender pulls up on the opponent's elbow and directs the wrist downward. This motion twists the shoulder joint so it is easily dislocated and the opponent loses his balance (Figure 3-21, Step 3).

NOTE: The defender must keep his clasped hands close to the body and properly align the opponent's arm by maneuvering his entire body. This technique will not succeed by using upper-body strength only, the opponent will escape.

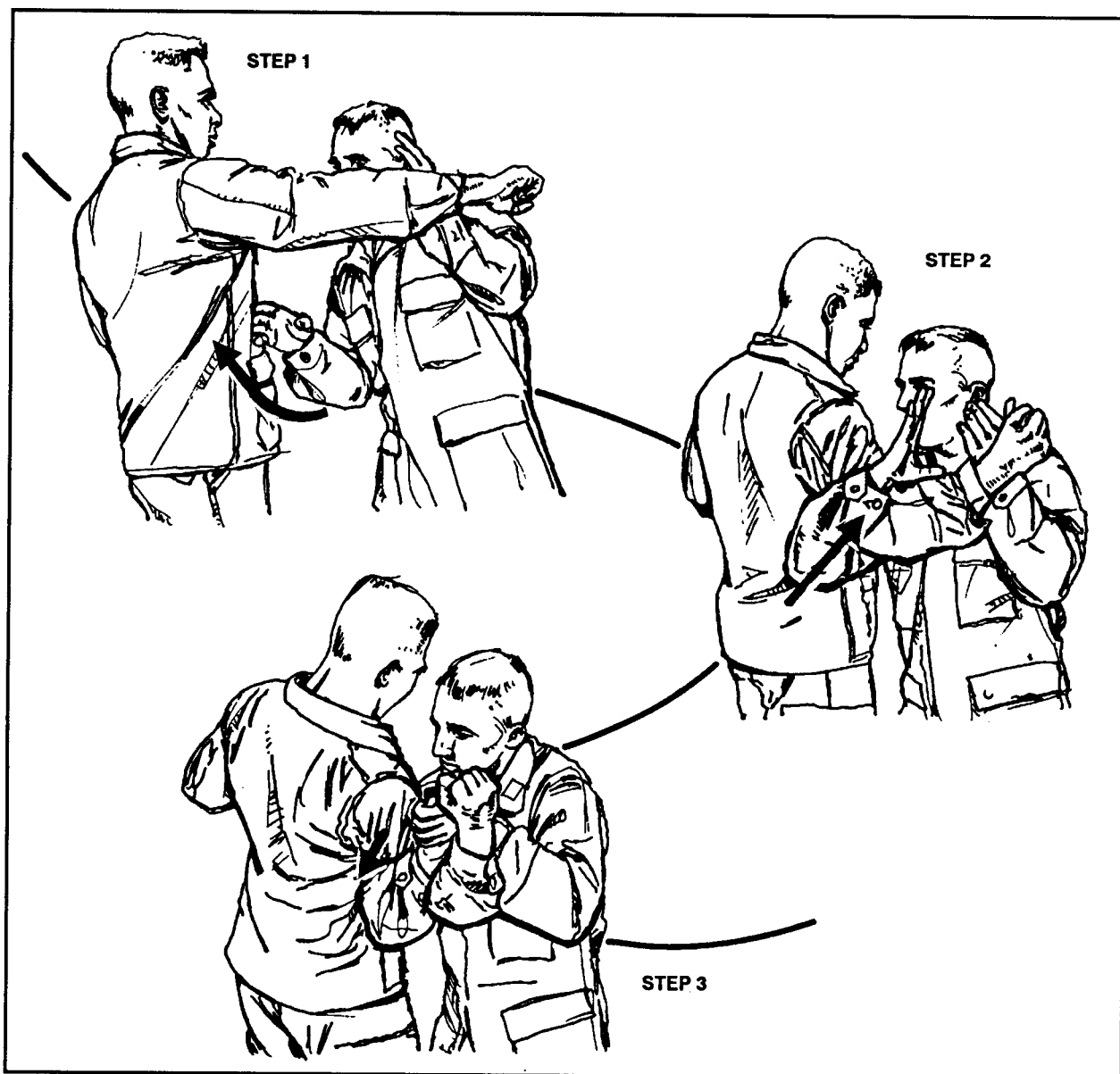


Figure 3-21. Shoulder dislocation.

(1) ***Straight-arm shoulder dislocation.*** The shoulder can also be dislocated (Figure 3-22) by keeping the elbow straight and forcing the opponent's arm backward toward the opposite shoulder at about 45 degrees. The initial movement must take the arm down and alongside the opponent's body. Bending the wrist toward the elbow helps to lock out the elbow. The dislocation also forces the opponent's head downward where a knee strike can be readily made. This dislocation technique should be practiced to get the feel of the correct direction in which to move the joint.



Figure 3-22. Straight-arm shoulder dislocation.

(2) **Shoulder dislocation using the elbow.** While grappling, the defender can snake his hand over the crook in the opponent's elbow and move his body to the outside, trapping one arm of the opponent against his side (Figure 3-23, Step 1).

The defender can then clasp his hands in front of his body and use his body mass in motion to align the opponent's upper arm with the line between the shoulders (Figure 3-23, Step 2).

By dipping his weight and then pulling upward on the opponent's elbow, the shoulder is dislocated, and the opponent loses his balance (Figure 3-23, Step 3). If the opponent's elbow locks rather than bends to allow the shoulder dislocation, the defender can use the elbow lock to keep control.

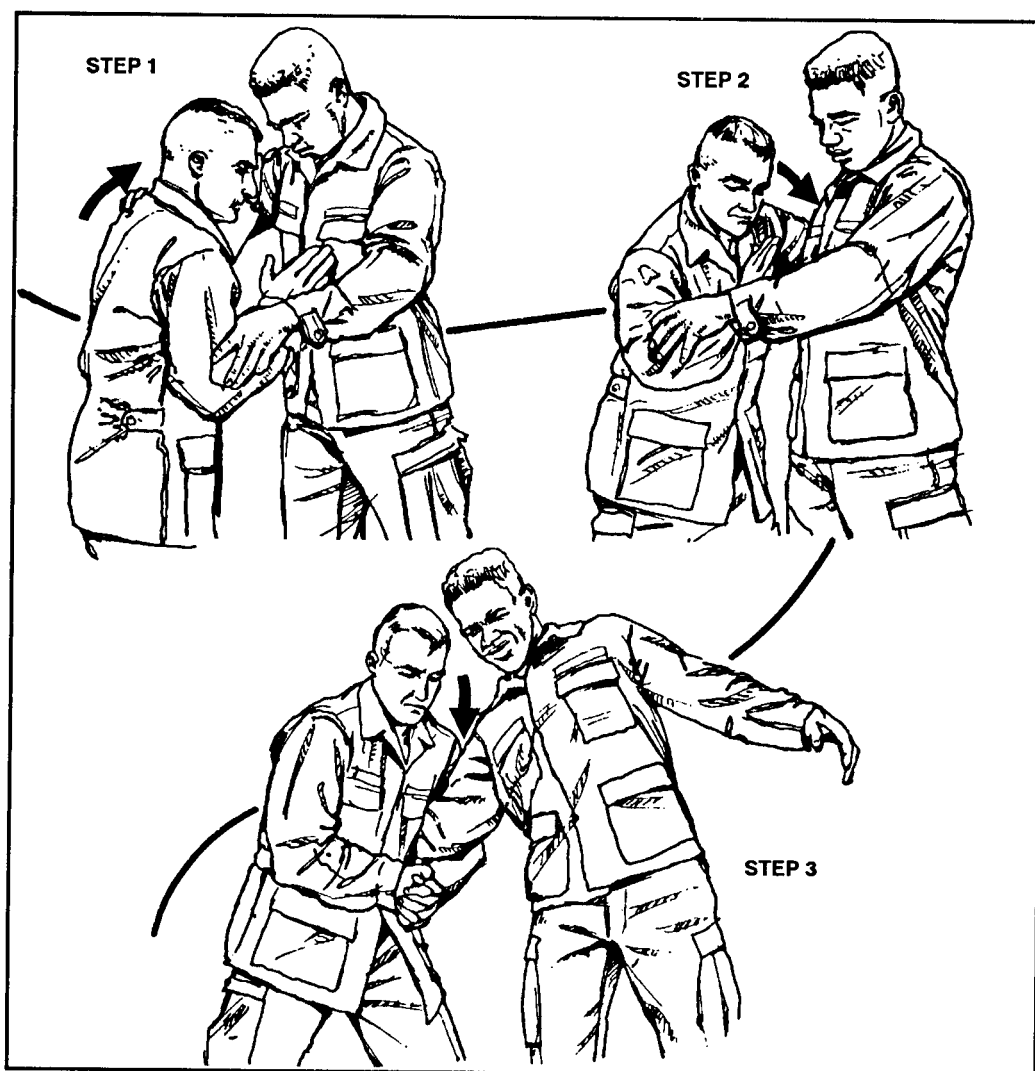


Figure 3-23. Shoulder dislocation using the elbow.

h. **Knee Lock/Break.** The opponent's knee joint can be attacked to produce knee locks or breaks (Figure 3-24) by forcing the knee in a direction opposite to which it was designed to move. The knee can be attacked with the body's mass behind the defender's knee or with his entire body by falling on the opponent's knee, causing it to hyperextend.

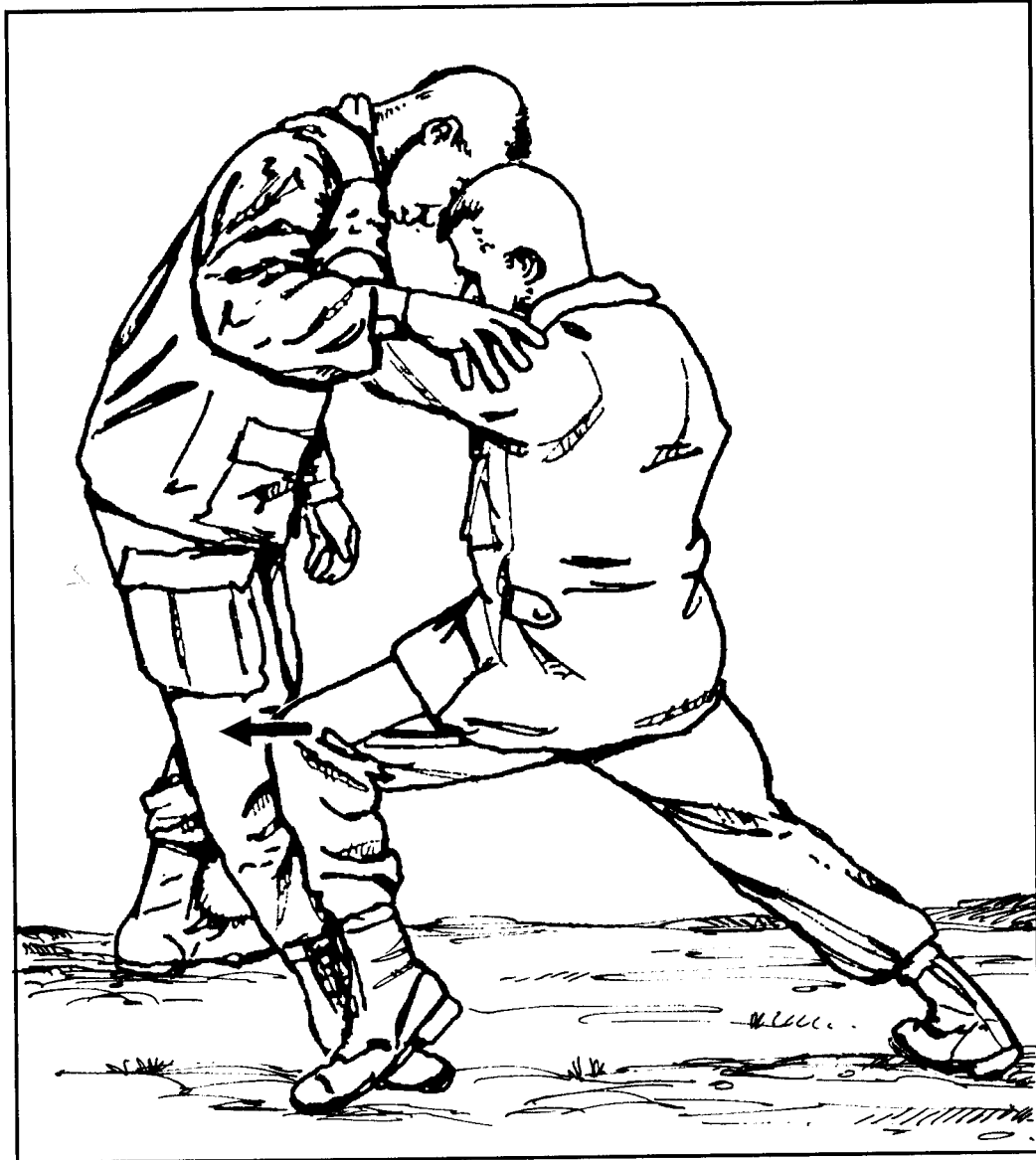


Figure 3-24. Knee lock/break.

## CHAPTER 4

# MEDIUM-RANGE COMBATIVES

*In medium-range combatives, two opponents are already within touching distance. The arsenal of possible body weapons includes short punches and strikes with elbows, knees, and hands. Head butts are also effective; do not forget them during medium-range combat. A soldier uses his peripheral vision to evaluate the targets presented by the opponent and choose his target. He should be aggressive and concentrate his attack on the opponent's vital points to end the fight as soon as possible.*

### 4-1. VITAL TARGETS

The body is divided into three sections: high, middle, and low. Each section contains vital targets (Figure 4-1, pages 4-5 and 4-6). The effects of striking these targets follow:

a. **High Section.** The high section includes the head and neck; it is the most dangerous target area.

(1) **Top of the head.** The skull is weak where the frontal cranial bones join. A forceful strike causes trauma to the cranial cavity, resulting in unconsciousness and hemorrhage. A severe strike can result in death.

(2) **Forehead.** A forceful blow can cause whiplash; a severe blow can cause cerebral hemorrhage and death.

(3) **Temple.** The bones of the skull are weak at the temple, and an artery and large nerve lie close to the skin. A powerful strike can cause unconsciousness and brain concussion. If the artery is severed, the resulting massive hemorrhage compresses the brain, causing coma and or death.

(4) **Eyes.** A slight jab in the eyes causes uncontrollable watering and blurred vision. A forceful jab or poke can cause temporary blindness, or the eyes can be gouged out. Death can result if the fingers penetrate through the thin bone behind the eyes and into the brain.

(5) **Ears.** A strike to the ear with cupped hands can rupture the eardrum and may cause a brain concussion.

(6) **Nose.** Any blow can easily break the thin bones of the nose, causing extreme pain and eye watering.

(7) **Under the nose.** A blow to the nerve center, which is close to the surface under the nose, can cause great pain and watery eyes.

(8) **Jaw.** A blow to the jaw can break or dislocate it. If the facial nerve is pinched against the lower jaw, one side of the face will be paralyzed.

(9) **Chin.** A blow to the chin can cause paralysis, mild concussion, and unconsciousness. The jawbone acts as a lever that can transmit the force of a blow to the back of the brain where the cardiac and respiratory mechanisms are controlled.

(10) **Back of ears and base of skull.** A moderate blow to the back of the ears or the base of the skull can cause unconsciousness by the jarring effect on the back of the brain. However, a powerful blow can cause a concussion or brain hemorrhage and death.

(11) **Throat.** A powerful blow to the front of the throat can cause death by crushing the windpipe. A forceful blow causes extreme pain and gagging or vomiting.

(12) **Side of neck.** A sharp blow to the side of the neck causes unconsciousness by shock to the carotid artery, jugular vein, and vagus nerve. For maximum effect, the blow should be focused below and slightly in front of the ear. A less powerful blow causes involuntary muscle spasms and intense pain. The side of the neck is one of the best targets to use to drop an opponent immediately or to disable him temporarily to finish him later.

(13) **Back of neck.** A powerful blow to the back of one's neck can cause whiplash, concussion, or even a broken neck and death.

**b. Middle Section.** The middle section extends from the shoulders to the area just above the hips. Most blows to vital points in this region are not fatal but can have serious, long-term complications that range from trauma to internal organs to spinal cord injuries.

(1) **Front of shoulder muscle.** A large bundle of nerves passes in front of the shoulder joint. A forceful blow causes extreme pain and can make the whole arm ineffective if the nerves are struck just right.

(2) **Collarbone.** A blow to the collarbone can fracture it, causing intense pain and rendering the arm on the side of the fracture ineffective. The fracture can also sever the brachial nerve or subclavian artery.

(3) **Armpit.** A large nerve lies close to the skin in each armpit. A blow to this nerve causes severe pain and partial paralysis. A knife inserted into the armpit is fatal as it severs a major artery leading from the heart.

(4) **Spine.** A blow to the spinal column can sever the spinal cord, resulting in paralysis or in death.



(5) **Nipples.** A large network of nerves passes near the skin at the nipples. A blow here can cause extreme pain and hemorrhage to the many blood vessels beneath.

(6) **Heart.** A jolting blow to the heart can stun the opponent and allow time for follow-up or finishing techniques.

(7) **Solar plexus.** The solar plexus is a center for nerves that control the cardiorespiratory system. A blow to this location is painful and can take the breath from the opponent. A powerful blow causes unconsciousness by shock to the nerve center. A penetrating blow can also damage internal organs.

(8) **Diaphragm.** A blow to the lower front of the ribs can cause the diaphragm and the other muscles that control breathing to relax. This causes loss of breath and can result in unconsciousness due to respiratory failure.

(9) **Floating ribs.** A blow to the floating ribs can easily fracture them because they are not attached to the rib cage. Fractured ribs on the right side can cause internal injury to the liver; fractured ribs on either side can possibly puncture or collapse a lung.

(10) **Kidneys.** A powerful blow to the kidneys can induce shock and can possibly cause internal injury to these organs. A stab to the kidneys induces instant shock and can cause death from severe internal bleeding.

(11) **Abdomen below navel.** A powerful blow to the area below the navel and above the groin can cause shock, unconsciousness, and internal bleeding.

(12) **Biceps.** A strike to the biceps is most painful and renders the arm ineffective. The biceps is an especially good target when an opponent holds a weapon.

(13) **Forearm muscle.** The radial nerve, which controls much of the movement in the hand, passes over the forearm bone just below the elbow. A strike to the radial nerve renders the hand and arm ineffective. An opponent can be disarmed by a strike to the forearm; if the strike is powerful enough, he can be knocked unconscious.

(14) **Back of hand.** The backs of the hands are sensitive. Since the nerves pass over the bones in the hand, a strike to this area is intensely painful. The small bones on the back of the hand are easily broken and such a strike can also render the hand ineffective.

c. **Low Section.** The low section of the body includes everything from the groin area to the feet. Strikes to these areas are seldom fatal, but they can be incapacitating.

(1) **Groin.** A moderate blow to the groin can incapacitate an opponent and cause intense pain. A powerful blow can result in unconsciousness and shock.

(2) **Outside of thigh.** A large nerve passes near the surface on the outside of the thigh about four finger-widths above the knee. A powerful strike to this region can render the entire leg ineffective, causing an opponent to drop. This target is especially suitable for knee strikes and shin kicks.

(3) **Inside of thigh.** A large nerve passes over the bone about in the middle of the inner thigh. A blow to this area also incapacitates the leg and can cause the opponent to drop. Knee strikes and heel kicks are the weapons of choice for this target.

(4) **Hamstring.** A severe strike to the hamstring can cause muscle spasms and inhibit mobility. If the hamstring is cut, the leg is useless.

(5) **Knee.** Because the knee is a major supporting structure of the body, damage to this joint is especially detrimental to an opponent. The knee is easily dislocated when struck at an opposing angle to the joint's normal range of motion, especially when it is bearing the opponent's weight. The knee can be dislocated or hyperextended by kicks and strikes with the entire body.

(6) **Calf.** A powerful blow to the top of the calf causes painful muscle spasms and also inhibits mobility.

(7) **Shin.** A moderate blow to the shin produces great pain, especially a blow with a hard object. A powerful blow can possibly fracture the bone that supports most of the body weight.

(8) **Achilles tendon.** A powerful strike to the Achilles tendon on the back of the heel can cause ankle sprain and dislocation of the foot. If the tendon is torn, the opponent is incapacitated. The Achilles tendon is a good target to cut with a knife.

(9) **Ankle.** A blow to the ankle causes pain; if a forceful blow is delivered, the ankle can be sprained or broken.

(10) **Instep.** The small bones on the top of the foot are easily broken. A strike here will hinder the opponent's mobility.

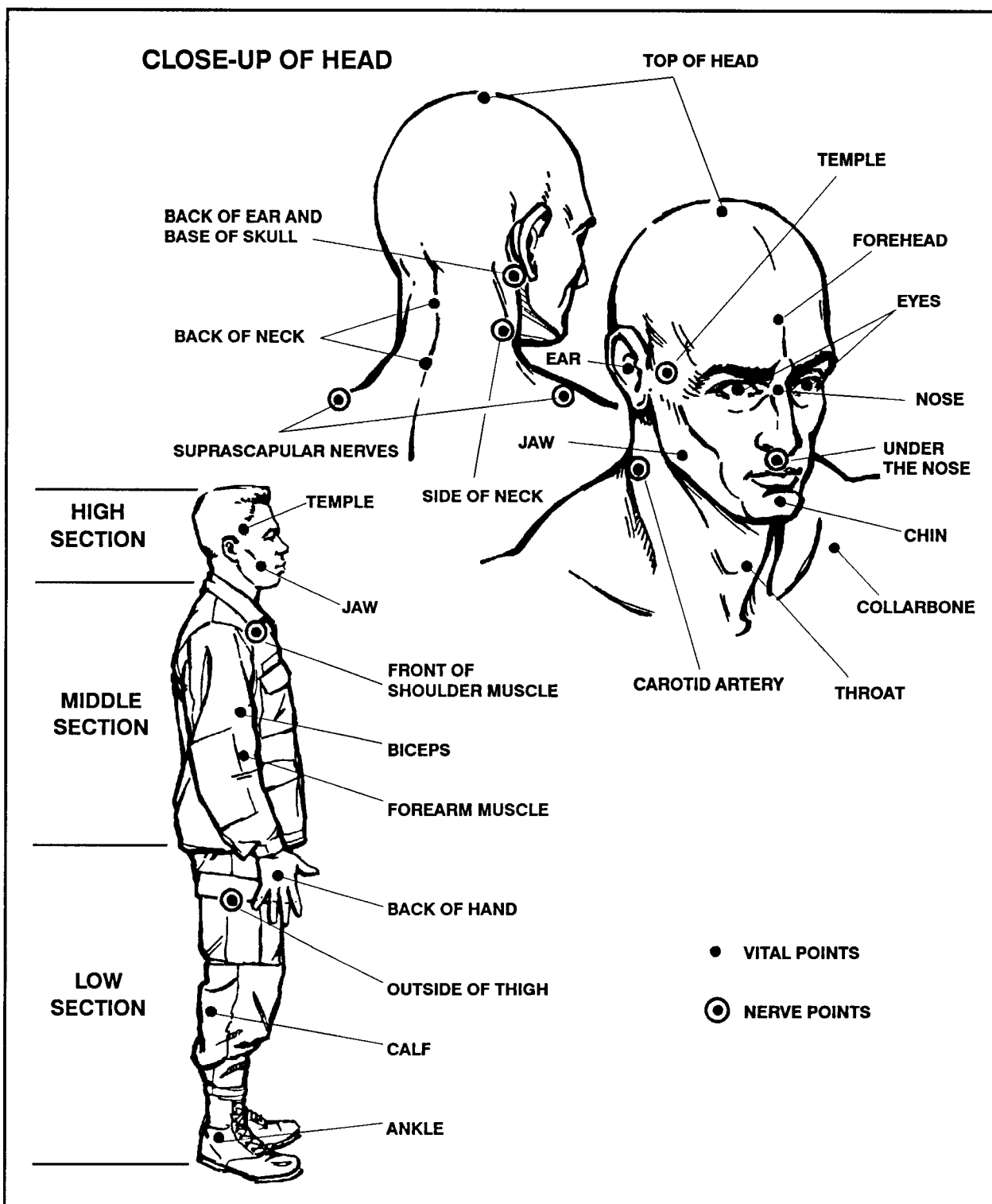


Figure 4-1. Vital targets.

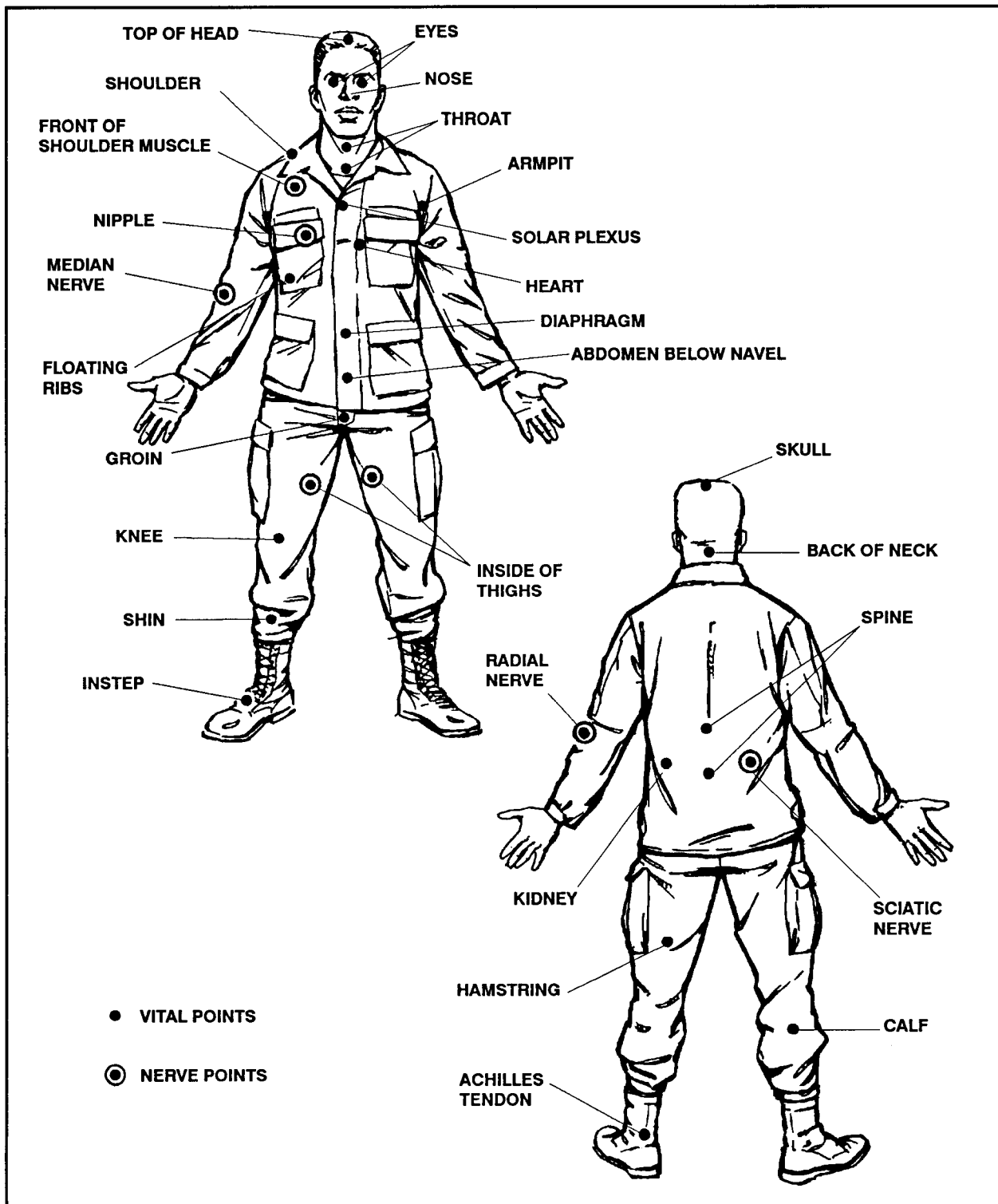


Figure 4-1. Vital targets (continued).

## 4-2. STRIKING PRINCIPLES

Effective striking with the weapons of the body to the opponent's vital points is essential for a victorious outcome in a hand-to-hand struggle. A soldier must be able to employ the principles of effective striking if he is to emerge as the survivor in a fight to the death.

a. **Attitude.** Proper mental attitude is of primary importance in the soldier's ability to strike an opponent. In hand-to-hand combat, the soldier must have the attitude that he will defeat the enemy and complete the mission, no matter what. In a fight to the death, the soldier must have the frame of mind to survive above all else; the prospect of losing cannot enter his mind. He must commit himself to hit the opponent continuously with whatever it takes to drive him to the ground or end his resistance. A memory aid is, "Thump him and dump him!"

b. **Fluid Shock Wave.** A strike should be delivered so that the target is hit and the weapon remains on the impact site for at least a tenth of a second. This imparts all of the kinetic energy of the strike into the target area, producing a fluid shock wave that travels into the affected tissue and causes maximum damage. It is imperative that all strikes to vital points and nerve motor points are delivered with this principle in mind. The memory aid is, "Hit and stick!"

c. **Target Selection.** Strikes should be targeted at the opponent's vital points and nerve motor points. The results of effective strikes to vital points are discussed in paragraph 4-1. Strikes to nerve motor points cause temporary mental stunning and muscle motor dysfunction to the affected areas of the body. Mental stunning results when the brain is momentarily disoriented by overstimulation from too much input—for example, a strike to a major nerve. The stunning completely disables an opponent for three to seven seconds and allows the soldier to finish off the opponent, gain total control of the situation, or make his escape. Sometimes, such a strike causes unconsciousness. A successful strike to a nerve motor center also renders the affected body part immovable by causing muscle spasms and dysfunction due to nerve overload. (Readily available nerve motor points are shown in Figure 4-1, pages 4-5 and 4-6.)

(1) **Jugular notch pressure point.** Located at the base of the neck just above the breastbone; pressure to this notch can distract and take away his balance. Pressure from fingers jabbed into the notch incurs intense pain that causes an the opponent to withdraw from the pressure involuntarily.

(2) **Suprascapular nerve motor point.** This nerve is located where the trapezius muscle joins the side of the neck. A strike to this point causes intense pain, temporary dysfunction of the affected arm and hand, and mental stunning for three to seven seconds. The strike should be a downward knife-hand or hammer-fist strike from behind.

(3) **Brachial plexus origin.** This nerve motor center is on the side of the neck. It is probably the most reliable place to strike someone to stun them. Any part of the hand or arm may be applied—the palm heel, back of the hand, knife hand, ridge hand, hammer fist, thumb tip, or the forearm. A proper strike to the brachial plexus origin causes—

- Intense pain.
- Complete cessation of motor activity.
- Temporary dysfunction of the affected arm.
- Mental stunning for three to seven seconds.
- Possible unconsciousness.

(4) **Brachial plexus clavicle notch pressure point.** This center is behind the collarbone in a hollow about halfway between the breastbone and the shoulder joint. The strike should be delivered with a small-impact weapon or the tip of the thumb to create high-level mental stunning and dysfunction of the affected arm.

(5) **Brachial plexus tie-in motor point.** Located on the front of the shoulder joint, a strike to this point can cause the arm to be ineffective. Multiple strikes may be necessary to ensure total dysfunction of the arm and hand.

(6) **Stellate ganglion.** The ganglion is at the top of the pectoral muscle centered above the nipple. A severe strike to this center can cause high-level stunning, respiratory dysfunction, and possible unconsciousness. A straight punch or hammer fist should be used to cause spasms in the nerves affecting the heart and respiratory systems.

(7) **Cervical vertebrae.** Located at the base of the skull, a strike to this particular vertebrae can cause unconsciousness or possibly death. The harder the strike, the more likely death will occur.

(8) **Radial nerve motor point.** This nerve motor point is on top of the forearm just below the elbow. Strikes to this point can create dysfunction of the affected arm and hand. The radial nerve should be struck with the hammer fist or the forearm bones or with an impact weapon, if available. Striking the radial nerve can be especially useful when disarming an opponent armed with a knife or other weapon.

(9) **Median nerve motor point.** This nerve motor point is on the inside of the forearm at the base of the wrist, just above the heel of the hand. Striking this center produces similar effects to striking the radial nerve, although it is not as accessible as the radial nerve.

(10) **Sciatic nerve.** A sciatic nerve is just above each buttock, but below the belt line. A substantial strike to this nerve can disable both legs and possibly cause respiratory failure. The sciatic nerve is the largest nerve in the

body besides the spinal cord. Striking it can affect the entire body, especially if an impact weapon is used.

(11) **Femoral nerve.** This nerve is in the center of the inside of the thigh; striking the femoral nerve can cause temporary motor dysfunction of the affected leg, high-intensity pain, and mental stunning for three to seven seconds. The knee is best to use to strike the femoral nerve.

(12) **Common peroneal nerve motor point.** The peroneal nerve is on the outside of the thigh about four fingers above the knee. A severe strike to this center can cause collapse of the affected leg and high-intensity pain, as well as mental stunning for three to seven seconds. This highly accessible point is an effective way to drop an opponent quickly. This point should be struck with a knee, shin kick, or impact weapon.

### 4-3. SHORT PUNCHES AND STRIKES

During medium-range combat, punches and strikes are usually short because of the close distance between fighters. Power is generated by using the entire body mass in motion behind all punches and strikes.

a. **Hands as Weapons.** A knowledge of hand-to-hand combat fighting provides the fighter another means to accomplish his mission. Hands can become deadly weapons when used by a skilled fighter.

(1) **Punch to solar plexus.** The defender uses this punch for close-in fighting when the opponent rushes or tries to grab him. The defender puts his full weight and force behind the punch and strikes his opponent in the solar plexus (Figure 4-2), knocking the breath out of his lungs. The defender can then follow-up with a knee to the groin, or he can use other disabling blows to vital areas.

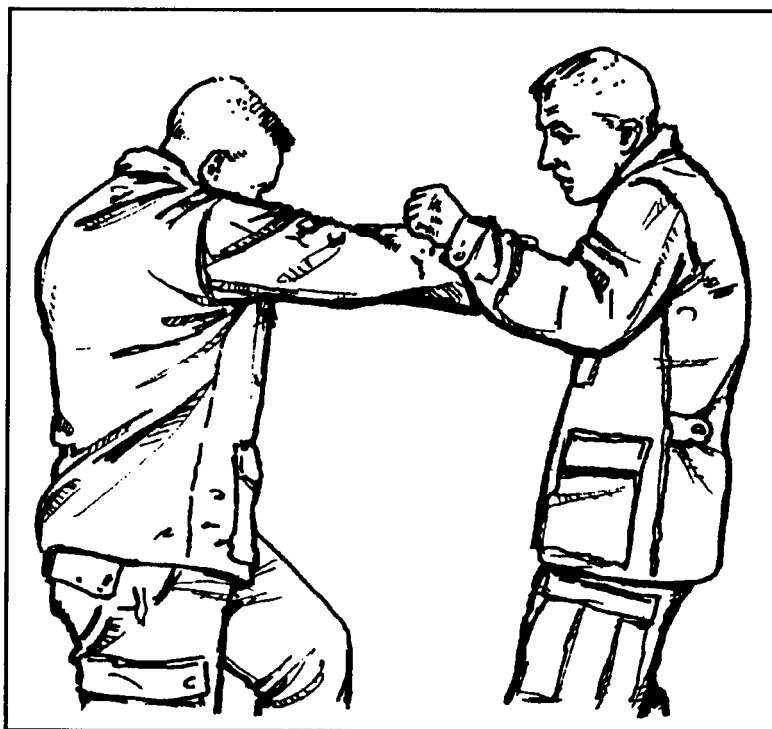


Figure 4-2. Punch to solar plexus.

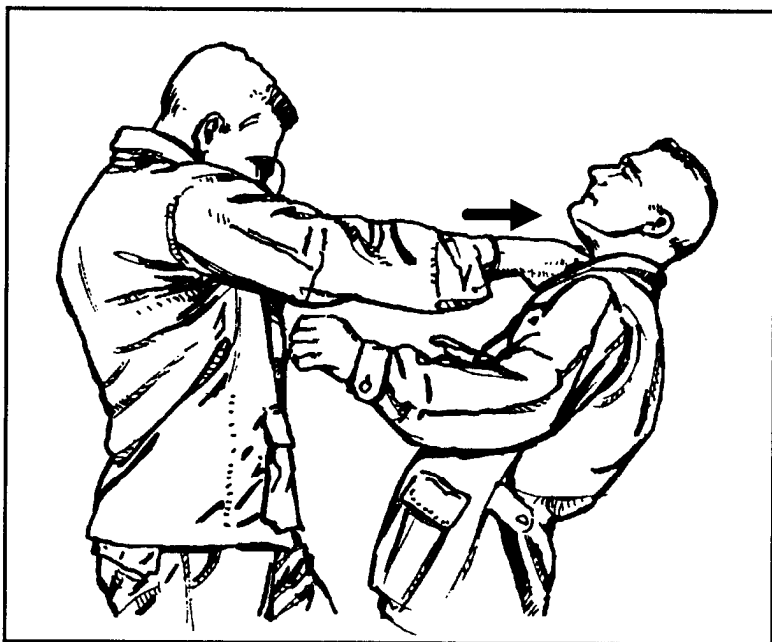


Figure 4-3. Thumb strike to throat.

**(2) Thumb strike to throat.** The defender uses the thumb strike to the throat (Figure 4-3) as an effective technique when an opponent is rushing him or trying to grab him. The defender thrusts his right arm and thumb out and strikes his opponent in the throat-larynx area while holding his left hand high for protection. He can follow up with a disabling blow to his opponent's vital areas.

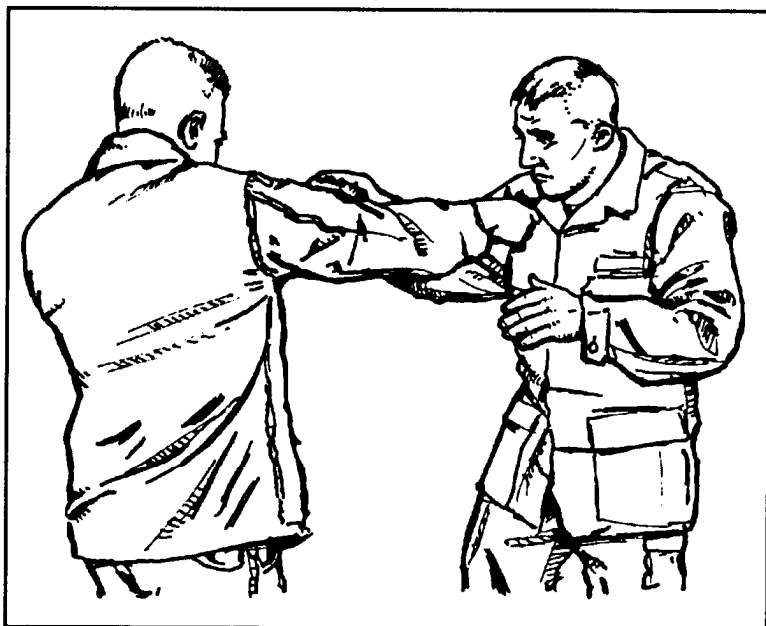


Figure 4-4. Thumb strike to shoulder joint.

**(3) Thumb strike to shoulder joint.** The opponent rushes the defender and tries to grab him. The defender strikes the opponent's shoulder joint or upper pectoral muscle with his fist or thumb (Figure 4-4). This technique is painful and renders the opponent's arm numb. The defender then follows up with a disabling movement.



(4) ***Hammer-fist strike to face.*** The opponent rushes the defender. The defender counters by rotating his body in the direction of his opponent and by striking him in the temple, ear, or face (Figure 4-5). The defender follows up with kicks to the groin or hand strikes to his opponent's other vital areas.

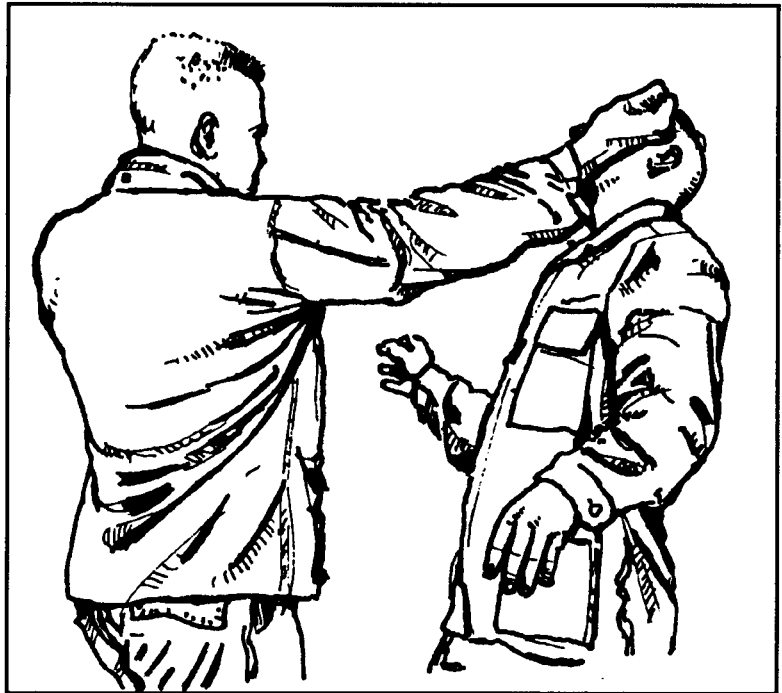


Figure 4-5. Hammer-fist strike to face.

(5) ***Hammer-fist strike to side of neck.*** The defender catches his opponent off guard, rotates at the waist to generate power, and strikes his opponent on the side of the neck (carotid artery) (Figure 4-6) with his hand clenched into a fist. This strike can cause muscle spasms at the least and may knock his opponent unconscious.

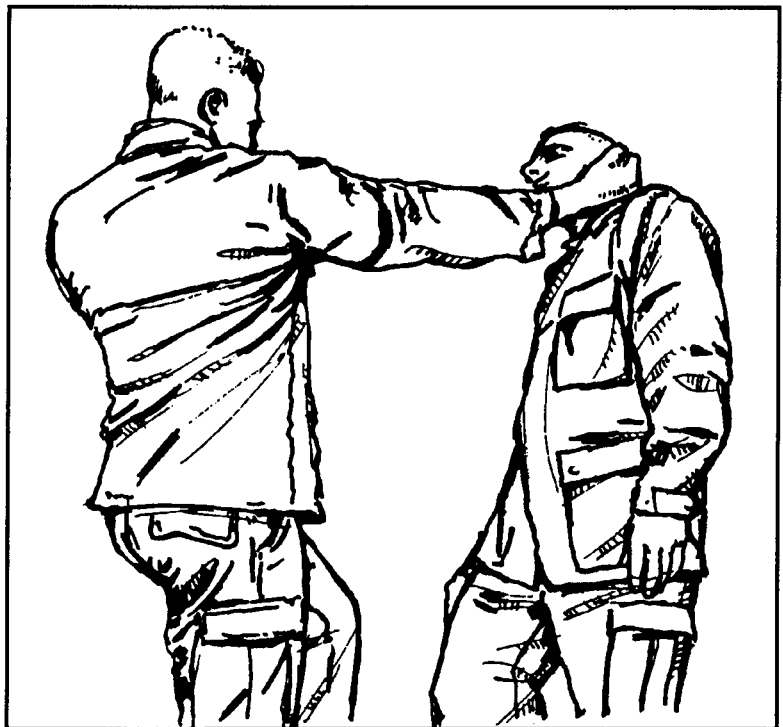


Figure 4-6. Hammer-fist strike to side of neck.



Figure 4-7. Hammer-fist to pectoral muscle.

(6) **Hammer fist to pectoral muscle.** When the opponent tries to grapple with the defender, the defender counters by forcefully striking his opponent in the pectoral muscle (Figure 4-7). This blow stuns the opponent, and the defender immediately follows up with a disabling blow to a vital area of his opponent's body.



Figure 4-8. Hook punch to solar plexus or floating ribs.

(7) **Hook punch to solar plexus or floating ribs.** The opponent tries to wrestle the defender to the ground. The defender counters with a short hook punch to his opponent's solar plexus or floating ribs (Figure 4-8). A sharply delivered blow can puncture or collapse a lung. The defender then follows up with a combination of blows to his opponent's vital areas.

(8) **Uppercut to chin.** The defender steps between his opponent's arms and strikes with an uppercut punch (Figure 4-9) to the chin or jaw. The defender then follows up with blows to his opponent's vital areas.



Figure 4-9. Uppercut to chin.

(9) **Knife-hand strike to side of neck.** The defender executes a knife-hand strike to the side of his opponent's neck (Figure 4-10) the same way as the hammer-fist strike (Figure 4-6, page 4-11) except he uses the edge of his striking hand.



Figure 4-10. Knife-hand strike to side of neck.

(10) ***Knife-hand strike to radial nerve.*** The opponent tries to strike the defender with a punch. The defender counters by striking his opponent on the top of the forearm just below the elbow (radial nerve) (Figure 4-11) and uses a follow-up technique to disable his opponent.

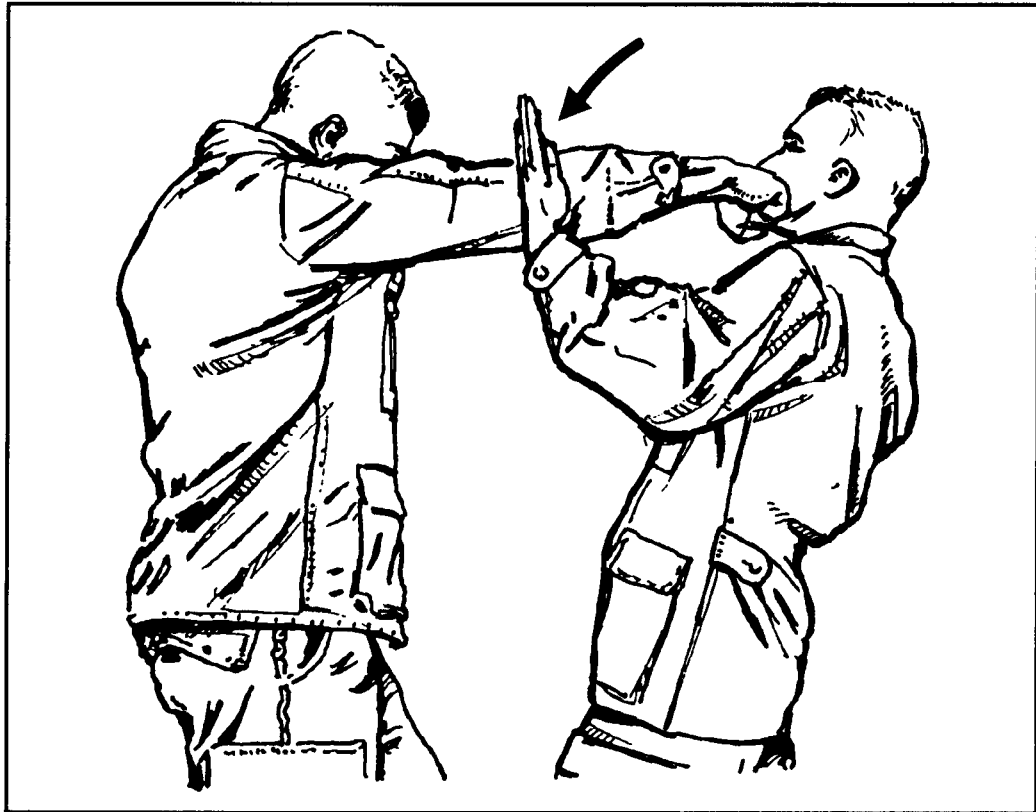


Figure 4-11. Knife-hand strike to radial nerve.

(11) ***Palm-heel strike to chin.*** The opponent tries to surprise the defender by lunging at him. The defender quickly counters by striking his opponent with a palm-heel strike to the chin (Figure 4-12), using maximum force.

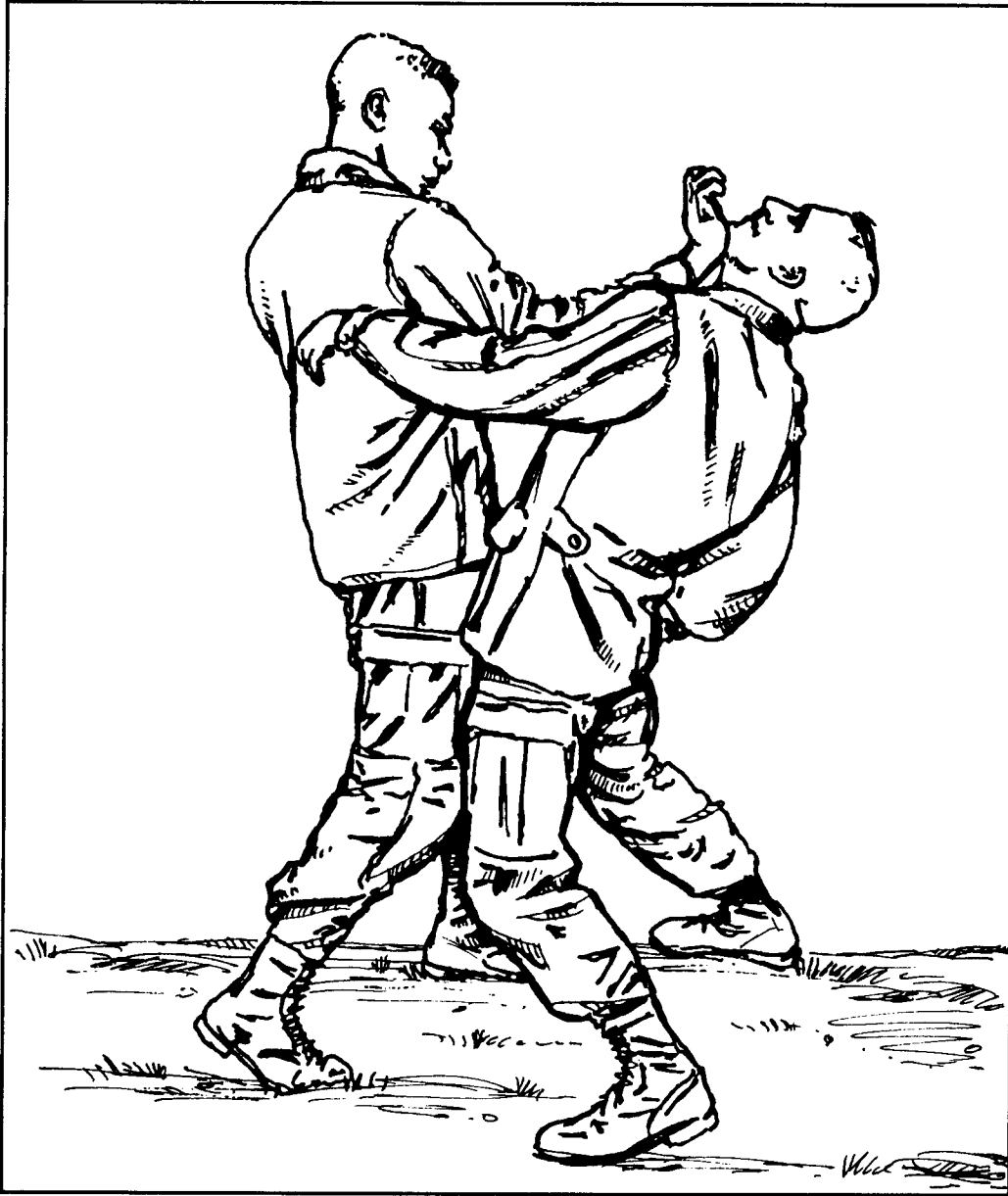


Figure 4-12. Palm-heel strike to chin.

(12) ***Palm-heel strike to solar plexus.*** The defender meets his opponent's rush by striking him with a palm-heel strike to the solar plexus (Figure 4-13). The defender then executes a follow-up technique to his opponent's vital organs.



Figure 4-13. Palm-heel strike to solar plexus.

(13) ***Palm-heel strike to kidneys.*** The defender grasps his opponent from behind by the collar and pulls him off balance. He quickly follows up with a hard palm-heel strike to the opponent's kidney (Figure 4-14). The defender can then take down his opponent with a follow-up technique to the back of his knee.



Figure 4-14. Palm-heel strike to kidneys.

b. **Elbows as Weapons.** The elbows are also formidable weapons; tremendous striking power can be generated from them. The point of the elbow should be the point of impact. The elbows are strongest when kept in front of the body and in alignment with the shoulder joint; that is, never strike with the elbow out to the side of the body.

(1) **Elbow strikes.** When properly executed, elbow strikes (Figures 4-15 through 4-21, pages 4-18 through 4-22) render an opponent ineffective. When using elbow strikes, execute them quickly, powerfully, and repetitively until the opponent is disabled.

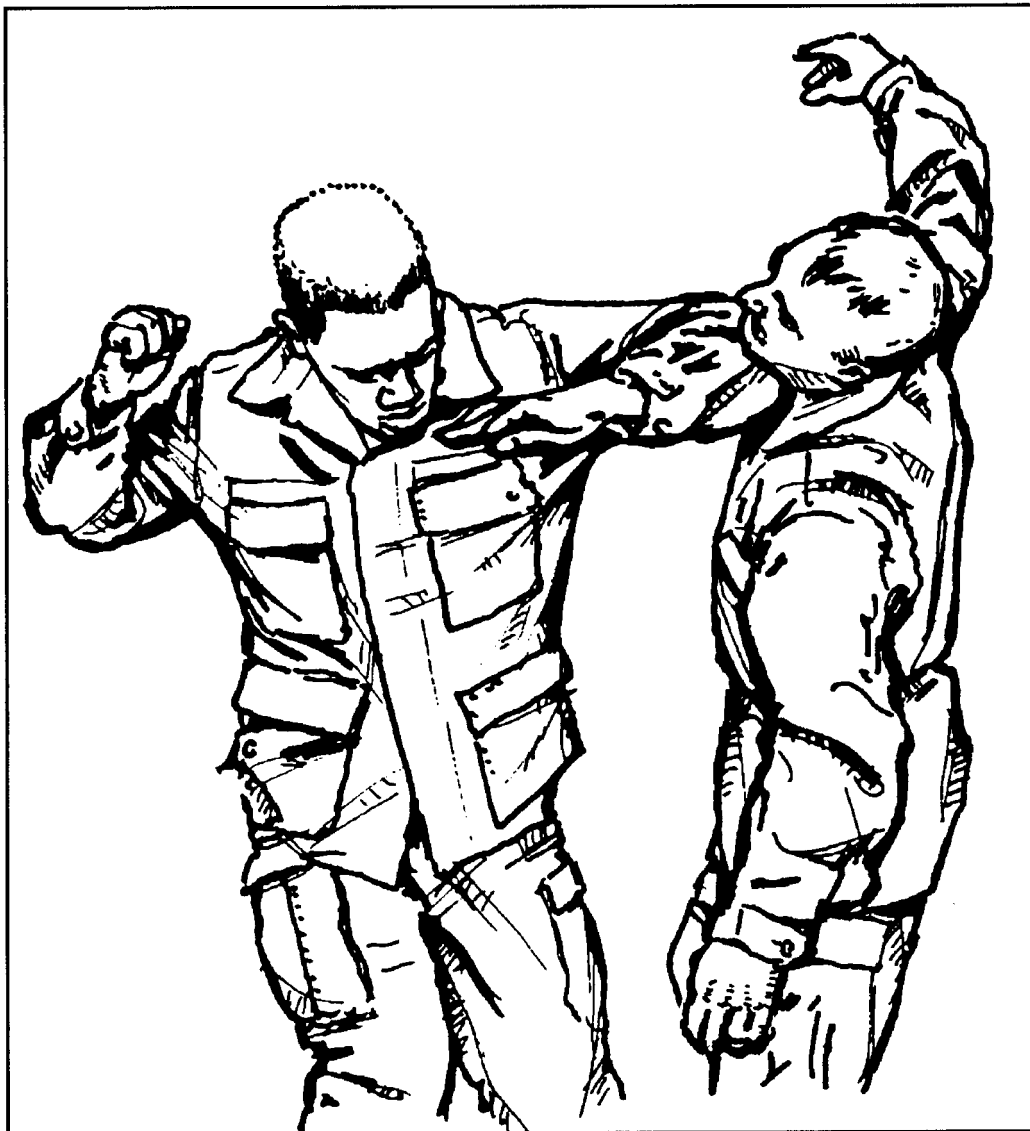


Figure 4-15. Elbow strike to face.





Figure 4-16. Elbow strike to temple.

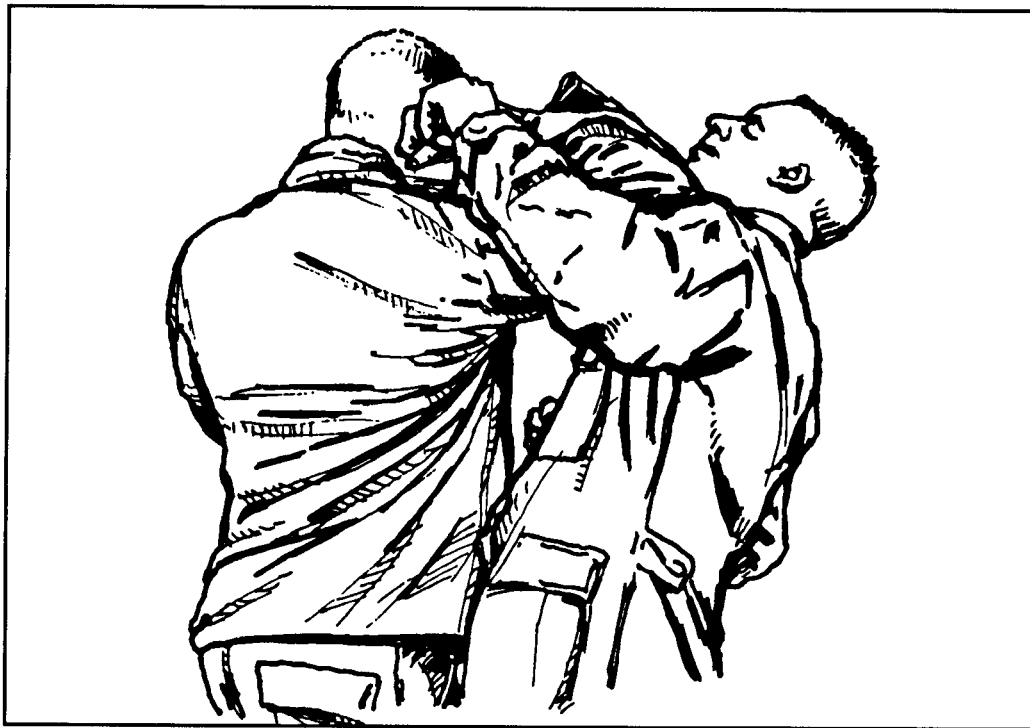


Figure 4-17. Rising elbow strike.

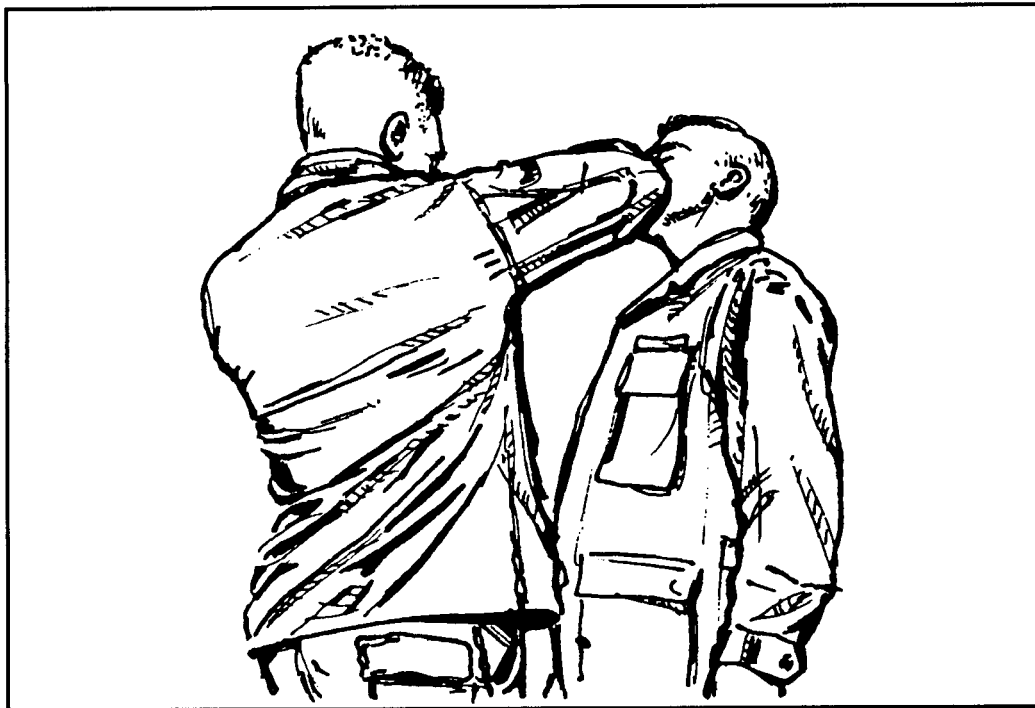


Figure 4-18. Elbow strike to head.

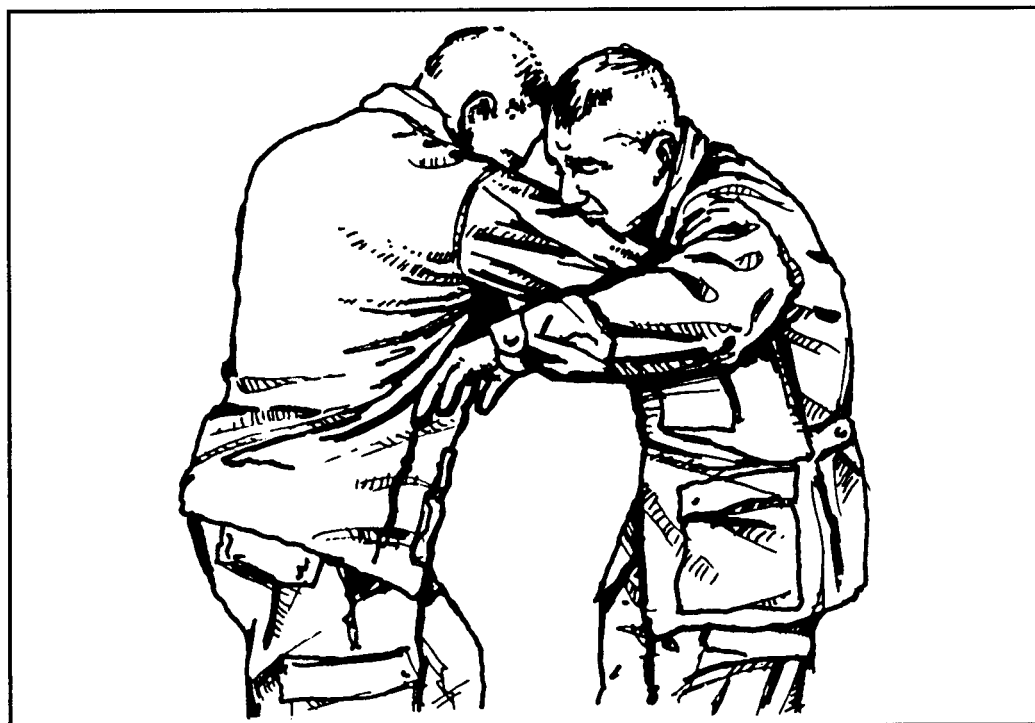


Figure 4-19. Elbow strike to solar plexus.



Figure 4-20. Elbow strike to biceps.

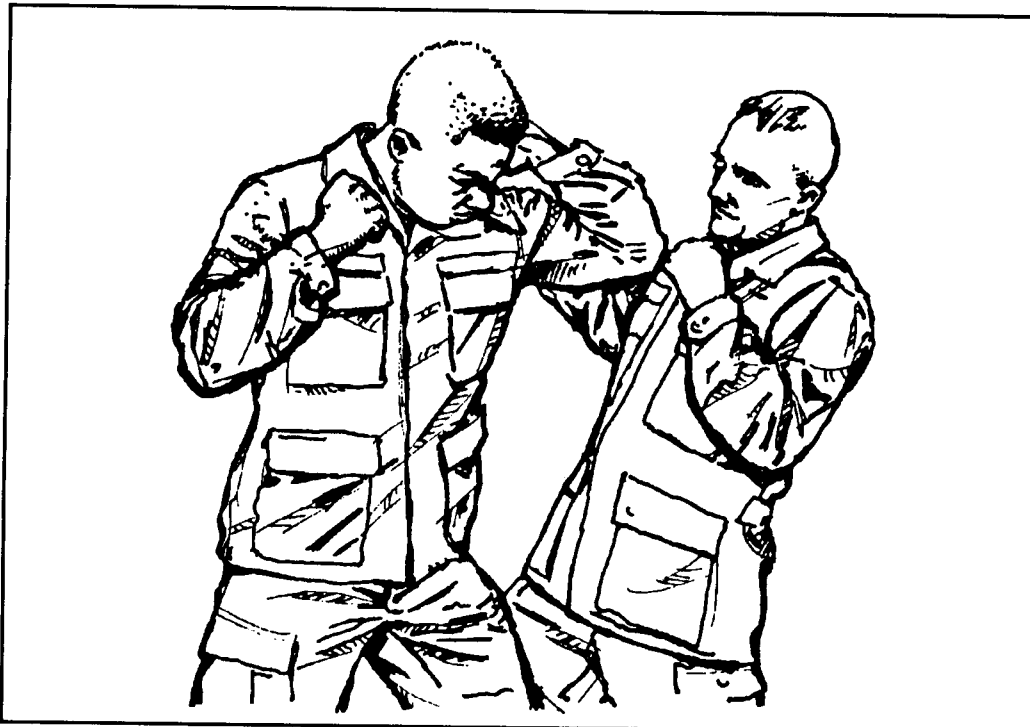


Figure 4-21. Elbow strike to inside of shoulder.

(2) **Repetitive elbow strikes.** The attacker on the right throws a punch (Figure 4-22, Step 1).

The defender counters with an elbow strike to the biceps (Figure 4-22, Step 2). The attacker follows with a punch from his other arm.

The defender again counters with an elbow strike to the shoulder joint (Figure 4-22, Step 3). He next strikes with an elbow from the opposite side to the throat.

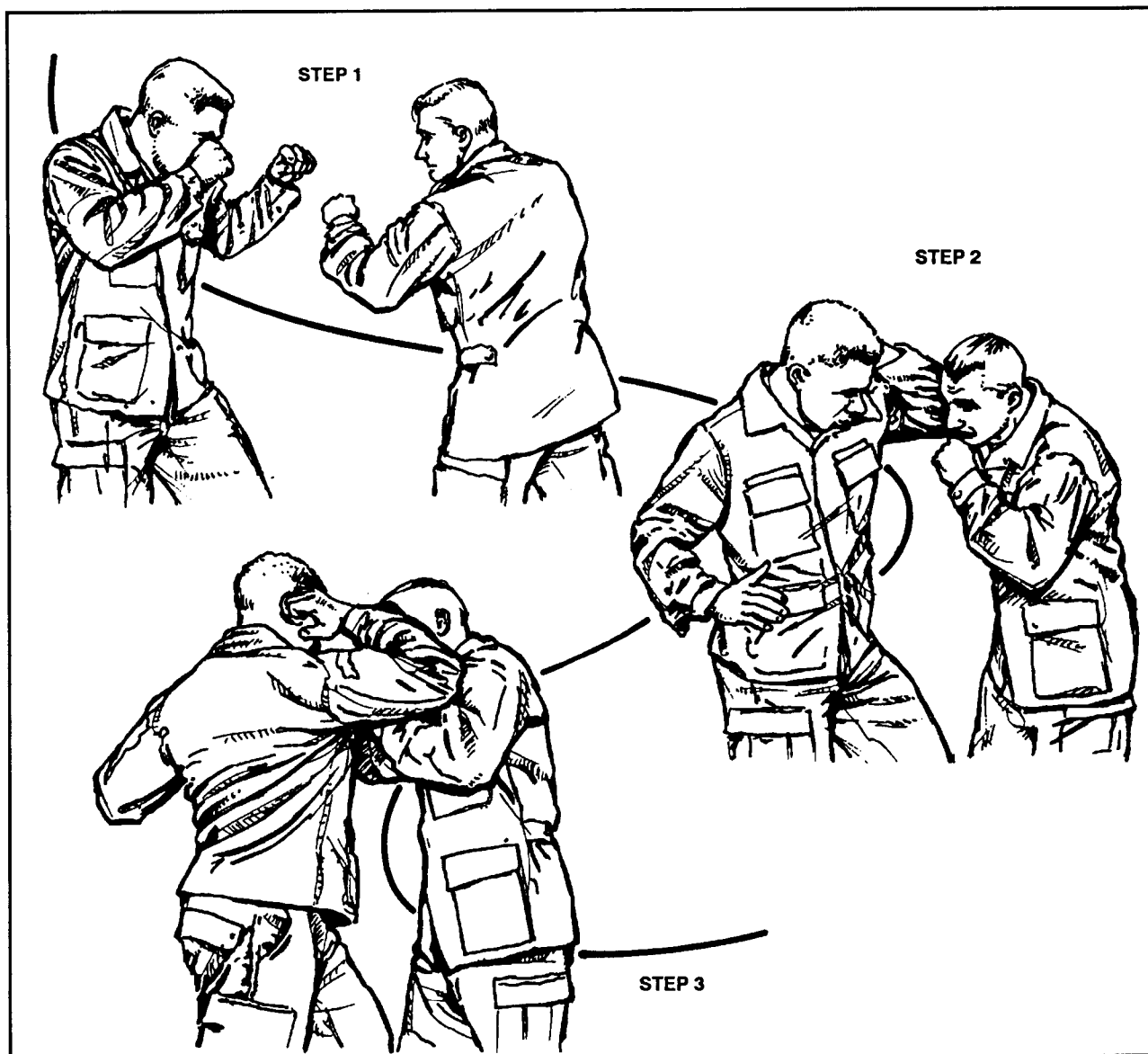


Figure 4-22. Repetitive elbow strikes.

c. **Knees as Weapons.** When the knees are used to strike opponents, they are especially potent weapons and are hard to defend or protect against. Great power is generated by thrusting the hips in with a knee strike; however, use the point of the knee as the impact surface. All knee strikes should be executed repetitively until the opponent is disabled. The following techniques are the most effective way to overpower or disable the opponent.

(1) **Front knee strike.** When an opponent tries to grapple with the defender, the defender strikes his opponent in the stomach or solar plexus with his knee (Figure 4-23). This stuns the opponent and the defender can follow up with another technique.



Figure 4-23. Front knee strike.

(2) ***Knee strike to outside of thigh.*** The defender delivers a knee strike to the outside of his opponent's thigh (common peroneal nerve) (Figure 4-24). This strike causes intense pain and renders the opponent's leg ineffective.

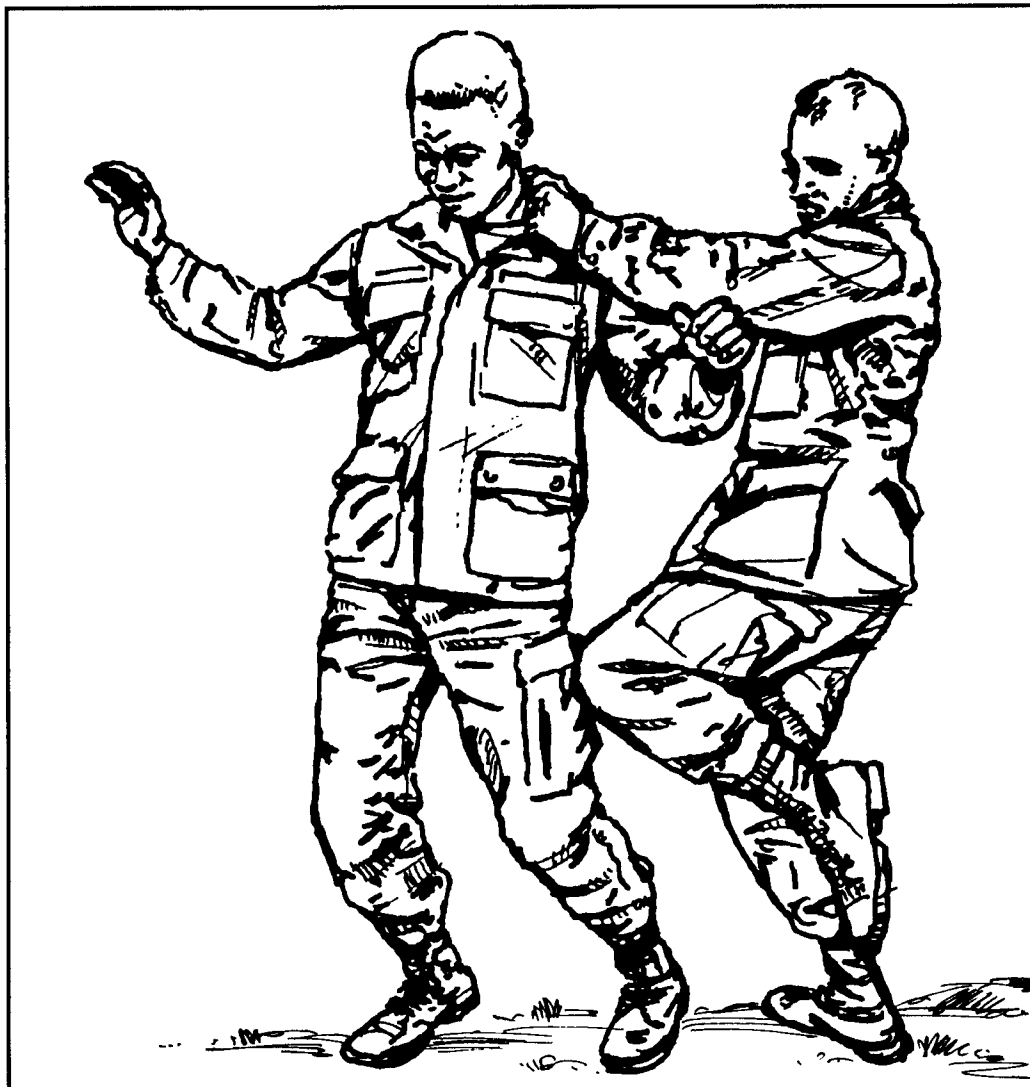


Figure 4-24. Knee to outside of thigh.

(3) *knee strike to inside of thigh.* An effective technique for close-in grappling is when the defender delivers a knee strike to the inside of his opponent's thigh (peroneal nerve) (Figure 4-25). The defender then executes a follow-up technique to a vital point.



Figure 4-25. Knee to inside of thigh.

(4) ***Knee strike to groin.*** The knee strike to the groin is effective during close-in grappling. The defender gains control by grabbing his opponent's head, hair, ears, or shoulders and strikes him in the groin with his knee (Figure 4-26).



Figure 4-26. Knee strike to groin.



(5) *Knee strike to face.* The defender controls his opponent by grabbing behind his head with both hands and forcefully pushing his head down. At the same time, the defender brings his knee up and smashes the opponent in the face (Figure 4-27). When properly executed, the knee strike to the face is a devastating technique that can cause serious injury to the opponent.

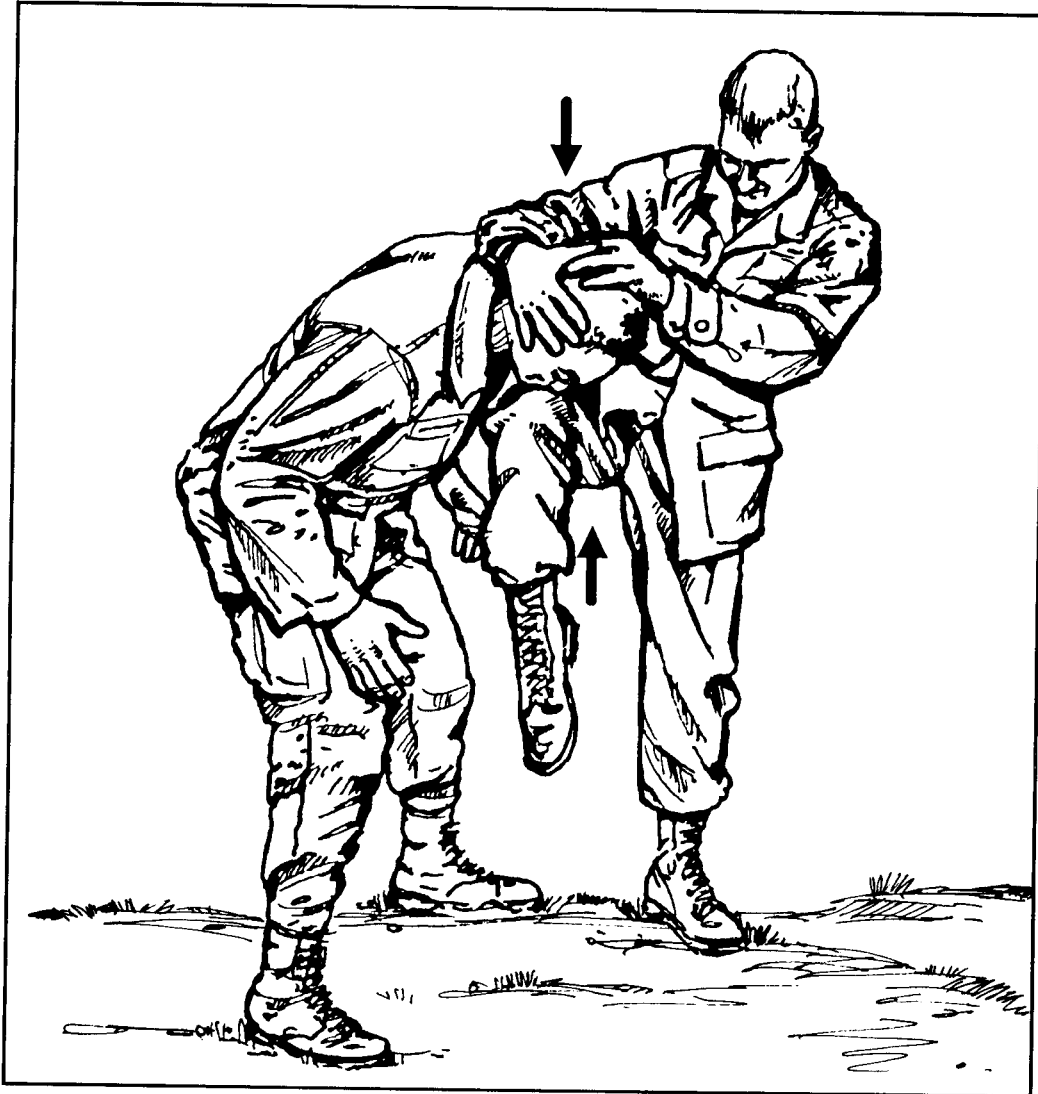


Figure 4-27. Knee strike to face.

## CHAPTER 5

# LONG-RANGE COMBATIVES

*In long-range combatives, the distance between opponents is such that the combatants can engage one another with fully extended punches and kicks or with handheld weapons, such as rifles with fixed bayonets and clubs. As in medium-range combatives, a fighter must continuously monitor his available body weapons and opportunities for attack, as well as possible defense measures. He must know when to increase the distance from an opponent and when to close the gap. The spheres of influence that surround each fighter come into contact in long-range combatives. (See Chapter 6 for interval gaps and spheres of influence.)*

### Section 1 NATURAL WEAPONS

The most dangerous natural weapons a soldier possesses are his hands and feet. This section describes natural weapon techniques of various punches, strikes, and kicks and stresses aggressive tactics with which to subdue an opponent.

#### 5-1. EXTENDED ARM PUNCHES AND STRIKES

Extended arm punches and strikes in long-range combatives, like those in medium-range combatives, should be directed at vital points and nerve motor points. It is essential to put the entire body mass in motion behind long-range strikes. Closing the distance to the target gives the fighter an opportunity to take advantage of this principle.

a. In extended punches, the body weapon is usually the fist, although the fingers may be used—for example, eye gouging. When punching, hold the fist vertically or horizontally. Keep the wrist straight to prevent injury and use the first two knuckles in striking.

b. Another useful variation of the fist is to place the thumb on top of the vertical fist so that the tip protrudes beyond the curled index finger that supports it. The thumb strike is especially effective against soft targets.

Do not fully lock out the arm when punching; keep a slight bend in the elbow to prevent hyperextension if the intended target is missed.

### **5-2. KICKS**

Kicks during hand-to-hand combat are best directed to low targets and should be simple but effective. Combat soldiers are usually burdened with combat boots and LCE. His flexibility level is usually low during combat, and if engaged in hand-to-hand combat, he will be under high stress. He must rely on gross motor skills and kicks that do not require complicated movement or much training and practice to execute.

a. **Side Knee Kick.** When an opponent launches an attack—for example, with a knife (Figure 5-1, Step 1), it is most important for the defender to first move his entire body off the line of attack as the attacker moves in.

As the defender steps off at 45 degrees to the outside and toward the opponent, he strikes with a short punch to the floating ribs (Figure 5-1, Step 2).

Then the defender turns his body by rotating on the leading, outside foot and raises the knee of his kicking leg to his chest. He then drives his kick into the side of the attacker's knee with his foot turned 45 degrees outward (Figure 5-1, Step 3). This angle makes the most of the striking surface and reduces his chances of missing the target.

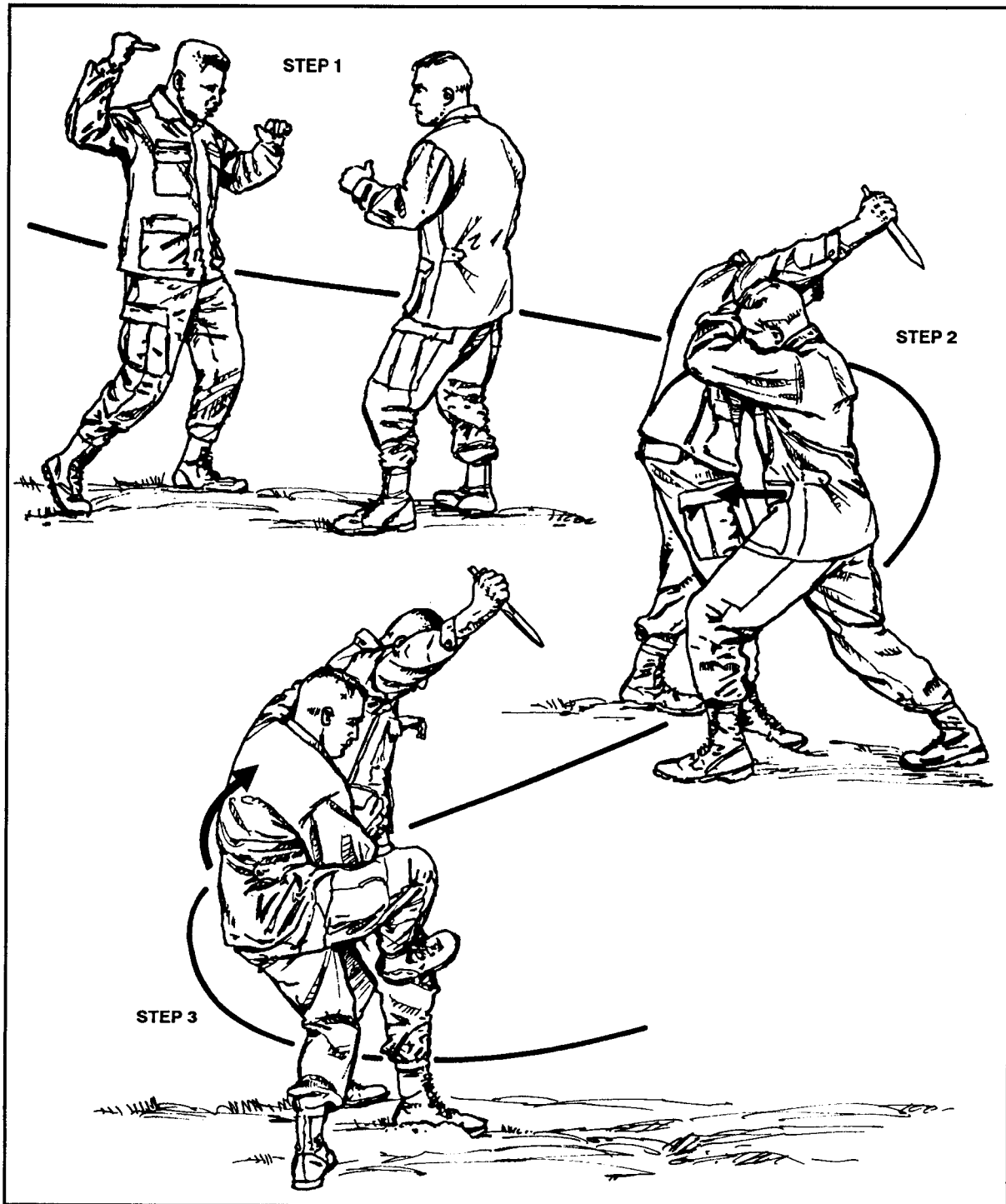


Figure 5-1. Side knee kick.

b. **Front Knee Kick.** As the attacker moves in, the defender immediately shifts off the line of attack and drives his kicking foot straight into the knee of the attacker (Figure 5-2). He turns his foot 45 degrees to make the most of the striking surface and to reduce the chances of missing the target. If the kick is done right, the attacker's advance will stop abruptly, and the knee joint will break.

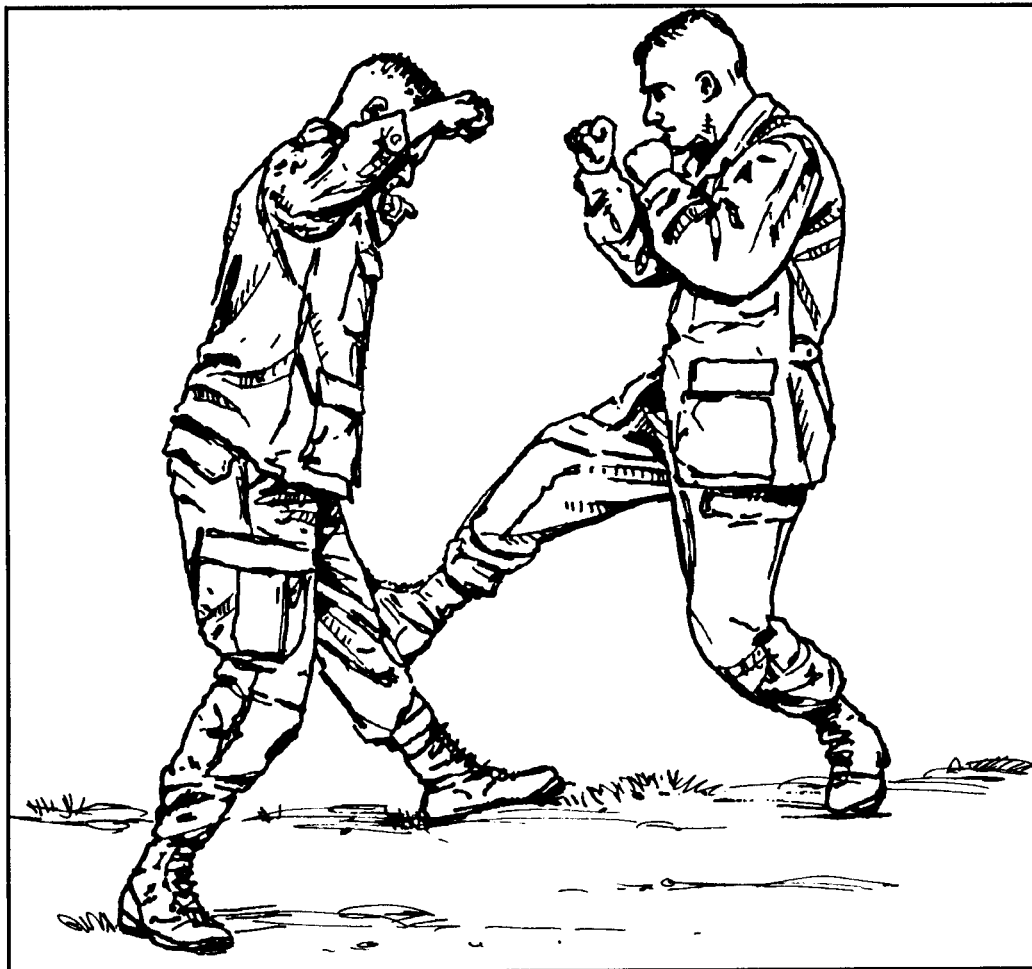


Figure 5-2. Front knee kick.

c. **Heel Kick to Inside of Thigh.** The defender steps 45 degrees outside and toward the attacker to get off the line of attack. He is now in a position where he can drive his heel into the inside of the opponent's thigh (femoral nerve) (Figure 5-3, Steps 1 and 2). Either thigh can be targeted because the kick can still be executed if the defender moves to the inside of the opponent rather than to the outside when getting off the line of attack.

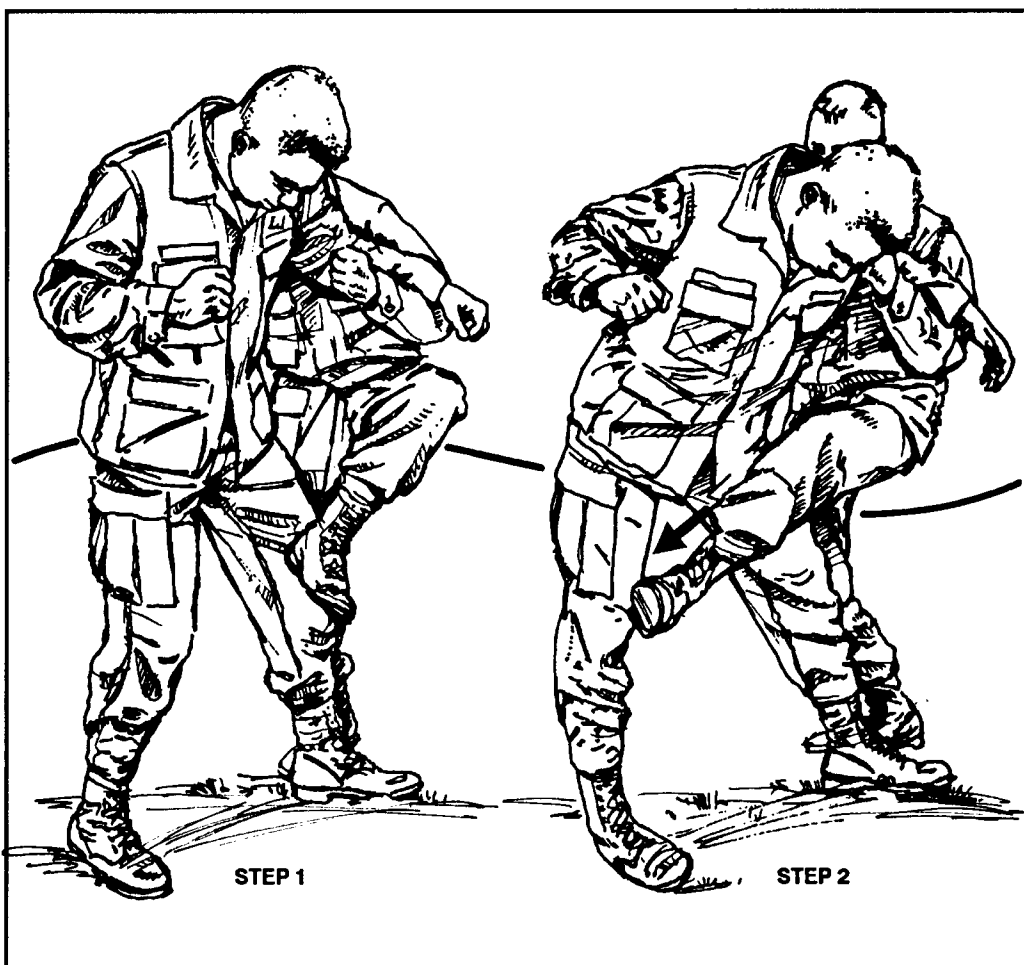


Figure 5-3. Heel kick to inside of thigh.

d. **Heel Kick to Groin.** The defender drives a heel kick into the attacker's groin (Figure 5-4) with his full body mass behind it. Since the groin is a soft target, the toe can also be used when striking it.

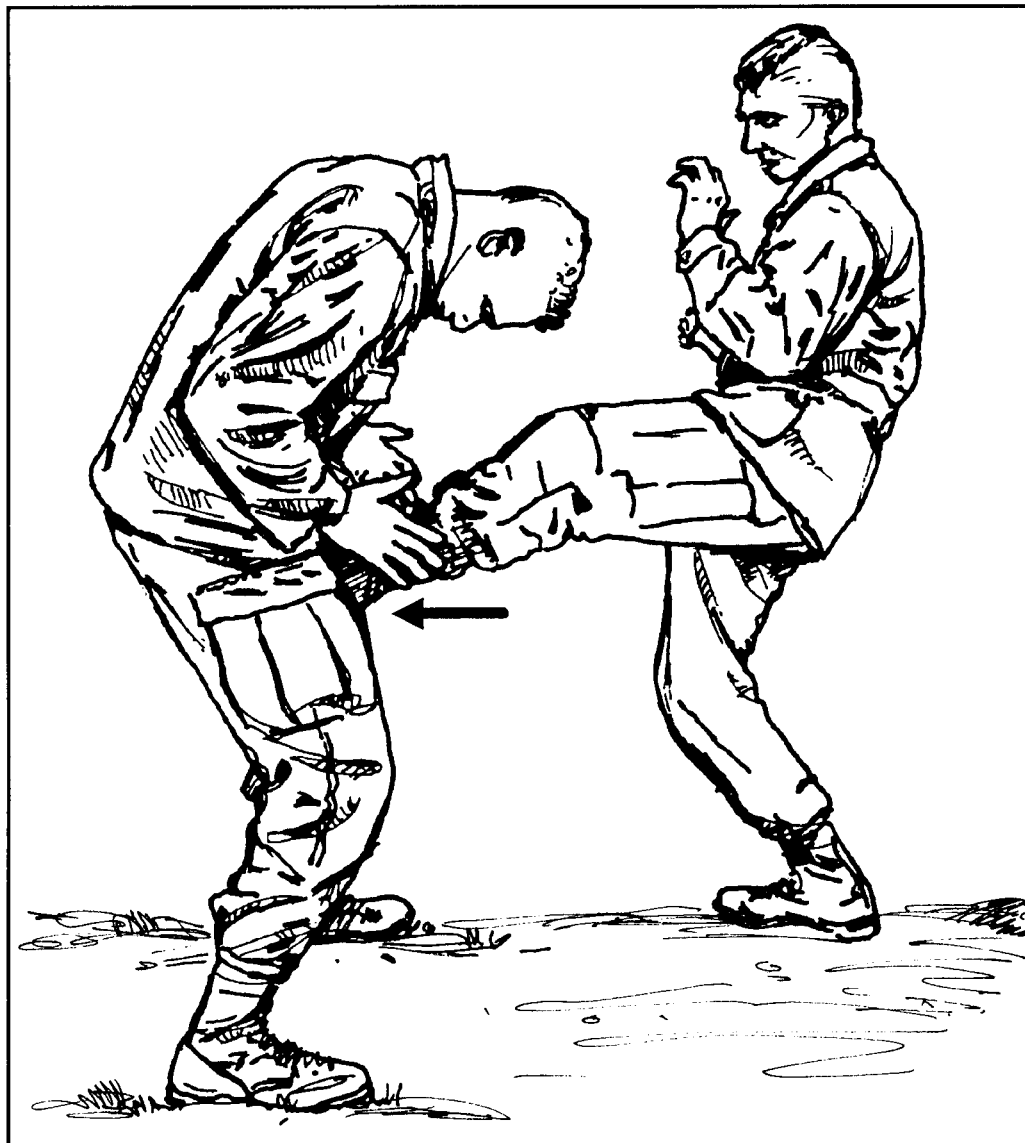


Figure 5-4. Heel kick to groin.

e. **Shin Kick.** The shin kick is a powerful kick, and it is easily performed with little training. When the legs are targeted, the kick is hard to defend against (Figure 5-5), and an opponent can be dropped by it.



Figure 5-5. Shin kick to legs.



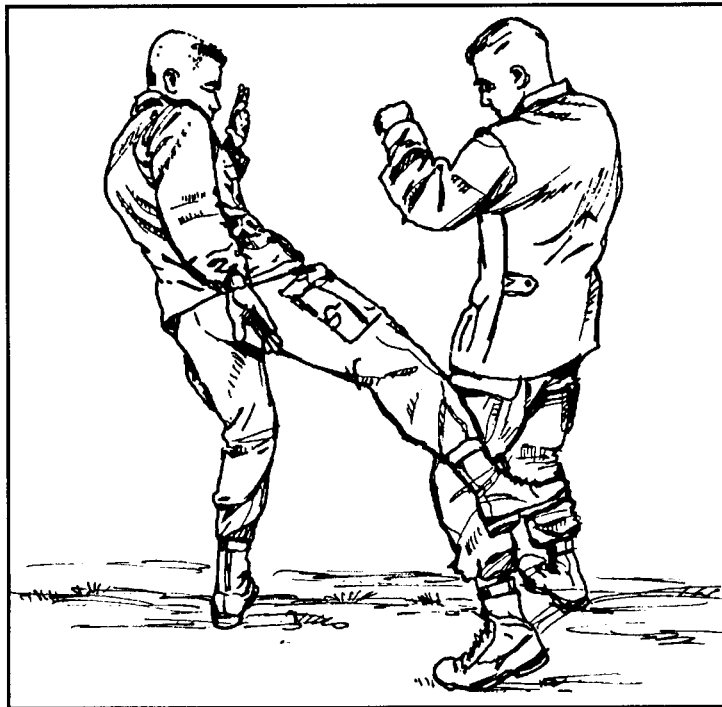


Figure 5-6. Shin kick to common peroneal nerve.

The calves and common peroneal nerve (Figure 5-6) are the best striking points.

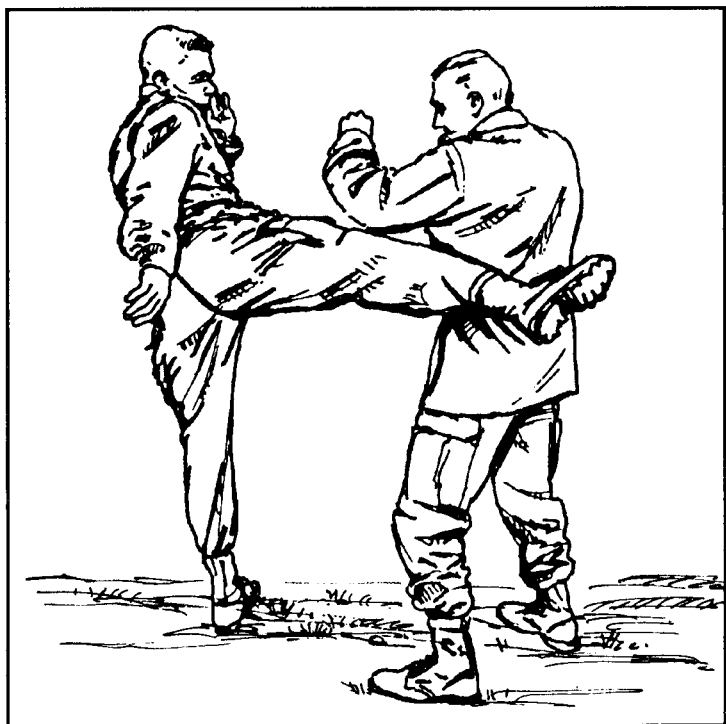


Figure 5-7. Shin kick to floating ribs.

The shin kick can also be used to attack the floating ribs (Figure 5-7).

f. **Stepping Side Kick.** A soldier starts a stepping side kick (Figure 5-8, Step 1) by stepping either behind or in front of his other foot to close the distance between him and his opponent. The movement is like that in a skip. The soldier now brings the knee of his kicking foot up and thrusts out a side kick (Figure 5-8, Step 2). Tremendous power and momentum can be developed in this kick.

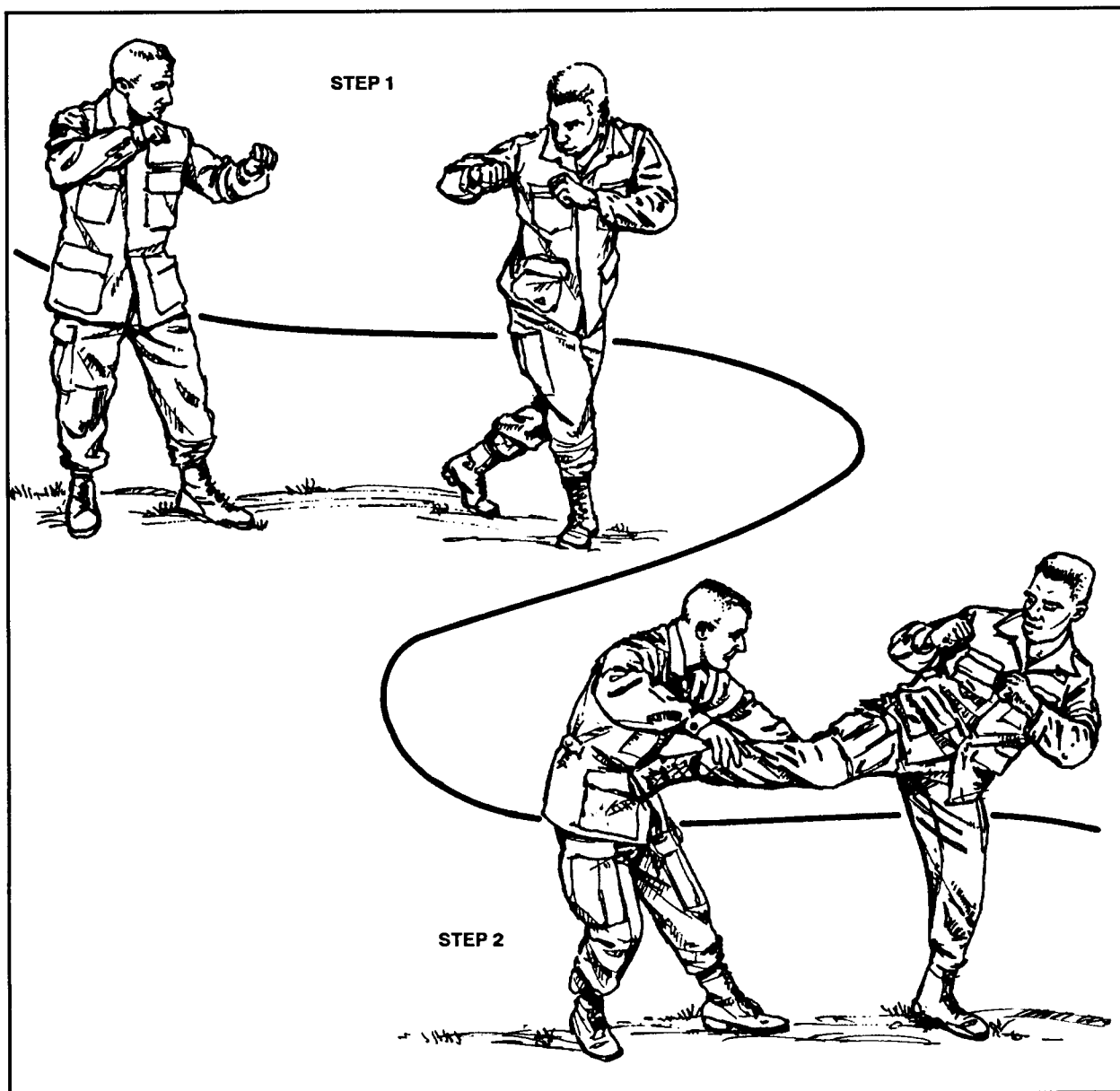


Figure 5-8. Stepping side kick.

g. **Counter to Front Kick.** When the attacker tries a front kick, the defender traps the kicking foot by meeting it with his own (Figure 5-9, Step 1). The defender turns his foot 45 degrees outward to increase the likelihood of striking the opponent's kicking foot. This counter requires good timing by the defender, but not necessarily speed. Do not look at the feet; use your peripheral vision.

When an attacker tries a front kick (Figure 5-9, Step 2), the defender steps off the line of attack of the incoming foot to the outside.

As the attacker's kicking leg begins to drop, the defender kicks upward into the calf of the attacker's leg (Figure 5-9, Step 3). This kick is extremely painful and will probably render the leg ineffective. This technique does not rely on the defender's speed, but on proper timing.

The defender can also kick to an opponent's kicking leg by moving off the line of attack to the inside and by using the heel kick to the inside of the thigh or groin (Figure 5-9, Step 4).



Figure 5-9. Counter to front kick.

**h. Counter to Roundhouse-Type Kick.** When an opponent prepares to attack with a roundhouse-type kick (Figure 5-10, Step 1), the defender moves off the line of attack by stepping to the inside of the knee of the kicking leg.

He then turns his body to receive the momentum of the leg (Figure 5-10, Step 2). By moving to the inside of the knee, the defender lessens the power of the attacker's kicking leg. The harder the attacker kicks, the more likely he is to hyperextend his own knee against the body of the defender, but the defender will not be harmed. However, the defender must get to the inside of the knee, or an experienced opponent can change his roundhouse kick into a knee strike. The defender receives the energy of the kicking leg and continues turning with the momentum of the kick.

The attacker will be taken down by the defender's other leg with no effort (Figure 5-10, Step 3).

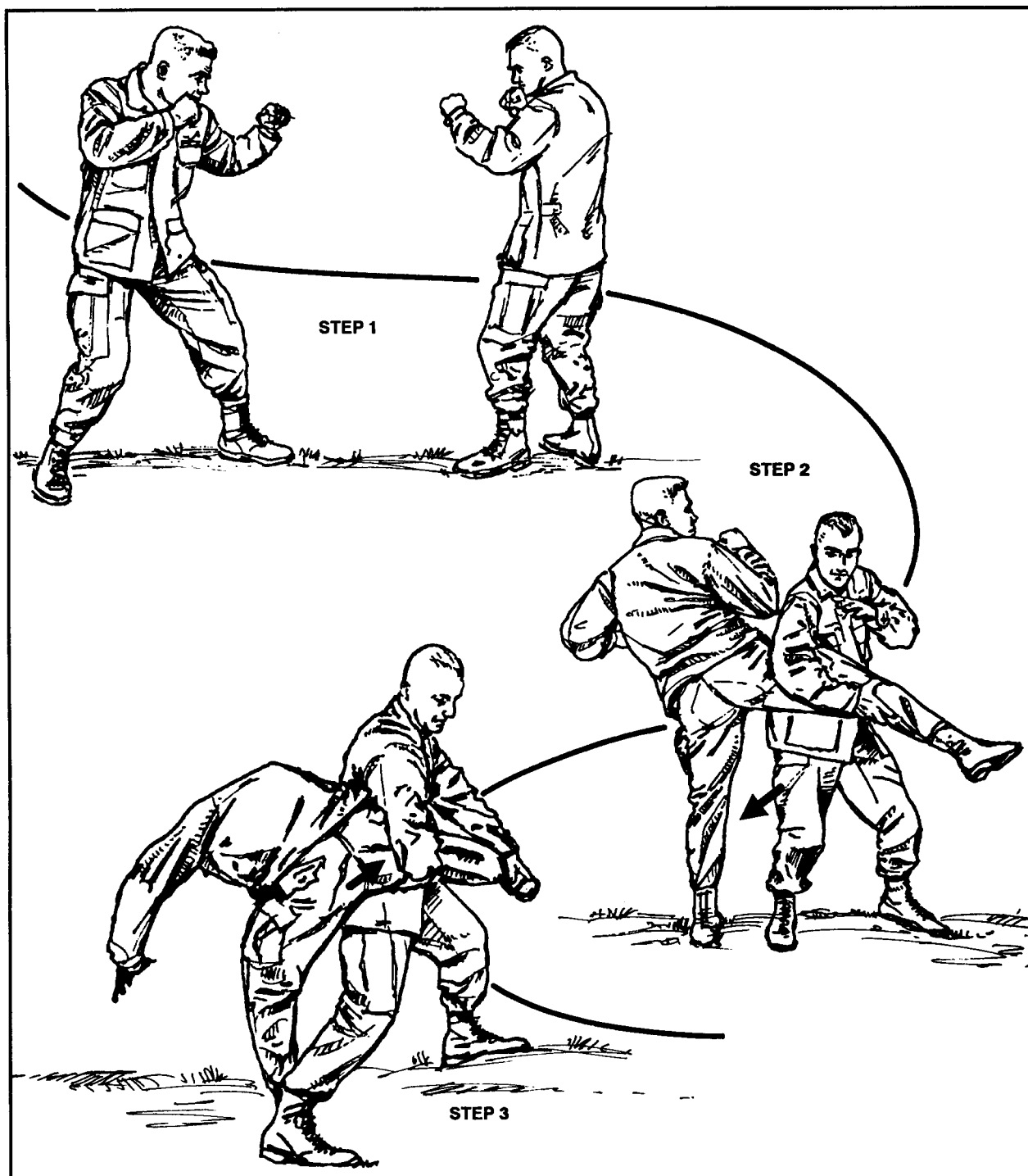


Figure 5-10. Counter to roundhouse kick.

i. **Kick as a Defense Against Punch.** As the opponent on the left throws a punch (Figure 5-11, Step 1), the defender steps off the line of attack to the outside.

He then turns toward the opponent, brings his knee to his chest, and launches a heel kick to the outside of the opponent's thigh (Figure 5-11, Step 2). He keeps his foot turned 45 degrees to ensure striking the target and to maintain balance.

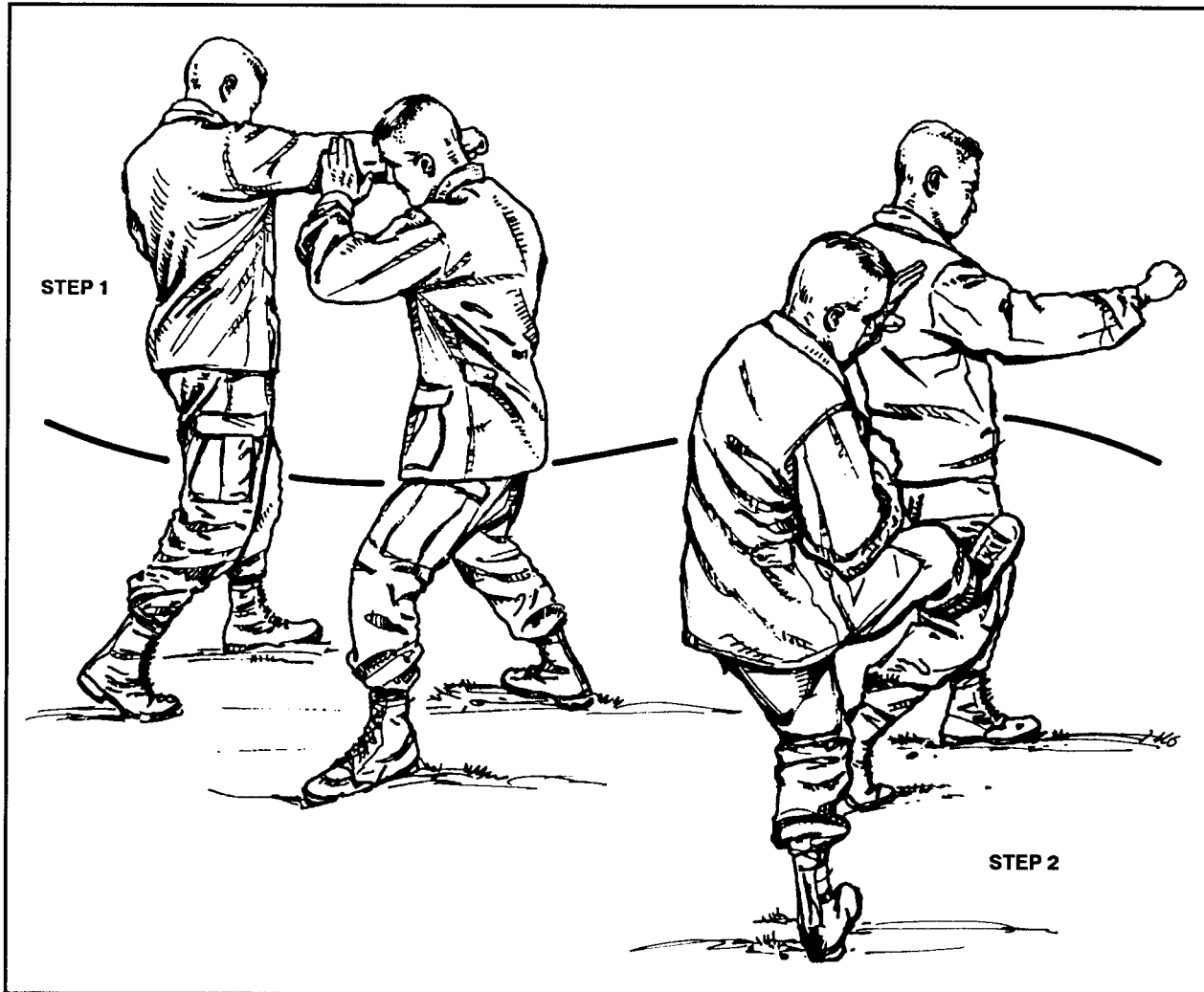


Figure 5-11. Kick as a defense against punch.

## Section II

### DEFENSIVE TECHNIQUES

A knife (or bayonet), properly employed, is a deadly weapon; however, using defensive techniques, such as maintaining separation, will greatly enhance the soldier's ability to fight and win.

#### 5-3. DEFENSE AGAINST AN ARMED OPPONENT

An unarmed defender is always at a distinct disadvantage facing an armed opponent. It is imperative therefore that the unarmed defender understand and use the following principles to survive:

a. **Separation.** Maintain a separation of at least 10 feet plus the length of the weapon from the attacker. This distance gives the defender time to react to any attempt by the attacker to close the gap and be upon the defender. The defender should also try to place stationary objects between himself and the attacker.

b. **Unarmed Defense.** Unarmed defense against an armed opponent should be a last resort. If it is necessary, the defender's course of action includes:

(1) **Move the body out of the line of attack of the weapon.** Step off the line of attack or redirect the attack of the weapon so that it clears the body.

(2) **Control the weapon.** Maintain control of the attacking arm by securing the weapon, hand, wrist, elbow, or arm by using joint locks, if possible.

(3) **Stun the attacker with an effective counterattack.** Counterattack should be swift and devastating. Take the vigor out of the attacker with a low, unexpected kick, or break a locked joint of the attacking arm. Strikes to motor nerve centers are effective stuns, as are skin tearing, eye gouging, and attacking of the throat. The defender can also take away the attacker's balance.

(4) **Ground the attacker.** Take the attacker to the ground where the defender can continue to disarm or further disable him.

(5) **Disarm the attacker.** Break the attacker's locked joints. Use leverage or induce pain to disarm the attacker and finish him or to maintain physical control.

c. **Precaution.** Do not focus full attention on the weapon because the attacker has other body weapons to use. There may even be other attackers that you have not seen.

d. **Expedient Aids.** Anything available can become an expedient aid to defend against an armed attack. The kevlar helmet can be used as a shield; similarly, the LCE and shirt jacket can be used to protect the defender against a weapon. The defender can also throw dirt in the attacker's eyes as a distraction.



### 5-4. ANGLES OF ATTACK

Any attack, regardless of the type weapon, can be directed along one of nine angles (Figure 5-12). The defense must be oriented for each angle of attack.

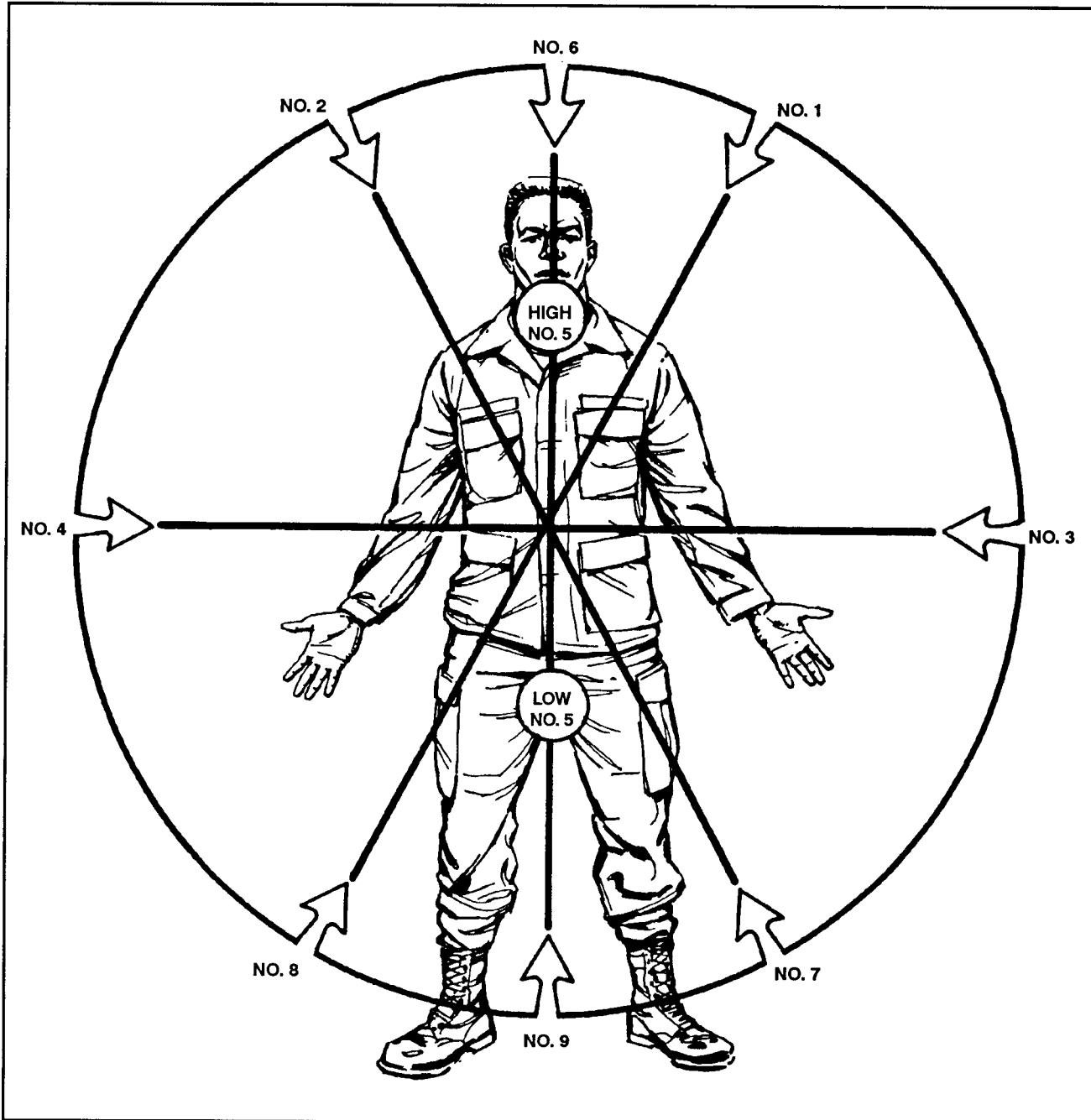


Figure 5-12. Angles of attack.

- a. **No. 1 Angle of Attack.** A downward diagonal slash, stab, or strike toward the left side of the defender's head, neck, or torso.
- b. **No. 2 Angle of Attack.** A downward diagonal slash, stab, or strike toward the right side of the defender's head, neck, or torso.
- c. **No. 3 Angle of Attack** A horizontal attack to the left side of the defender's torso in the ribs, side, or hip region.
- d. **No. 4 Angle of Attack.** The same as No. 3 angle, but to the right side.
- e. **No. 5 Angle of Attack.** A jabbing, lunging, or punching attack directed straight toward the defender's front.
- f. **No. 6 Angle of Attack.** An attack directed straight down upon the defender.
- g. **No. 7 Angle of Attack.** An upward diagonal attack toward the defender's lower-left side.
- h. **No. 8 Angle of Attack.** An upward diagonal attack toward the defender's lower-right side.
- i. **No. 9 Angle of Attack.** An attack directed straight up—for example, to the defender's groin.

#### 5-5. DEFENSE AGAINST A KNIFE

When an unarmed soldier is faced with an enemy armed with a knife, he must be mentally prepared to be cut. The likelihood of being cut severely is less if the fighter is well trained in knife defense and if the principles of weapon defense are followed. A slash wound is not usually lethal or shock inducing; however, a stab wound risks injury to vital organs, arteries, and veins and may also cause instant shock or unconsciousness.

a. **Types of Knife Attacks.** The first line of defense against an opponent armed with a knife is to avoid close contact. The different types of knife attacks follow:

(1) **Thrust.** The thrust is the most common and most dangerous type of knife attack. It is a strike directed straight into the target by jabbing or lunging.

(2) **Slash.** The slash is a sweeping surface cut or circular slash. The wound is usually a long cut, varying from a slight surface cut to a deep gash.

(3) **Flick.** This attack is delivered by flicking the wrist and knife to extended limbs, inflicting numerous cuts. The flick is very distracting to the defender since he is bleeding from several cuts if the attacker is successful.

(4) **Tear.** The tear is a cut made by dragging the tip of the blade across the body to create a ripping-type cut.

(5) **Hack.** The hack is delivered by using the knife to block or chop with.

(6) **Butt.** The butt is a strike with the knife handle.

b. **Knife Defense Drills.** Knife defense drills are used to familiarize soldiers with defense movement techniques for various angles of attack. For training, the soldiers should be paired off; one partner is named as the attacker and one is the defender. It is important that the attacker make his attack realistic in terms of distance and angling during training. His strikes must be accurate in hitting the defender at the intended target if the defender does not defend himself or move off the line of attack. For safety, the attacks are delivered first at one-quarter and one-half speed, and then at three-quarter speed as the defender becomes more skilled. Variations can be added by changing grips, stances, and attacks.

(1) **No. 1 angle of defense—heck and lift.** The attacker delivers a slash along the No. 1 angle of attack. The defender meets and checks the movement with his left forearm bone, striking the inside forearm of the attacker (Figure 5-13, Step 1).

The defender's right hand immediately follows behind the strike to lift, redirect, and take control of the attacker's knife arm (Figure 5-13, Step 2).

The defender brings the attacking arm around to his right side where he can use an arm bar, wrist lock, and so forth, to disarm the attacker (Figure 5-13, Step 3).

He will have better control by keeping the knife hand as close to his body as possible (Figure 5-13, Step 4).

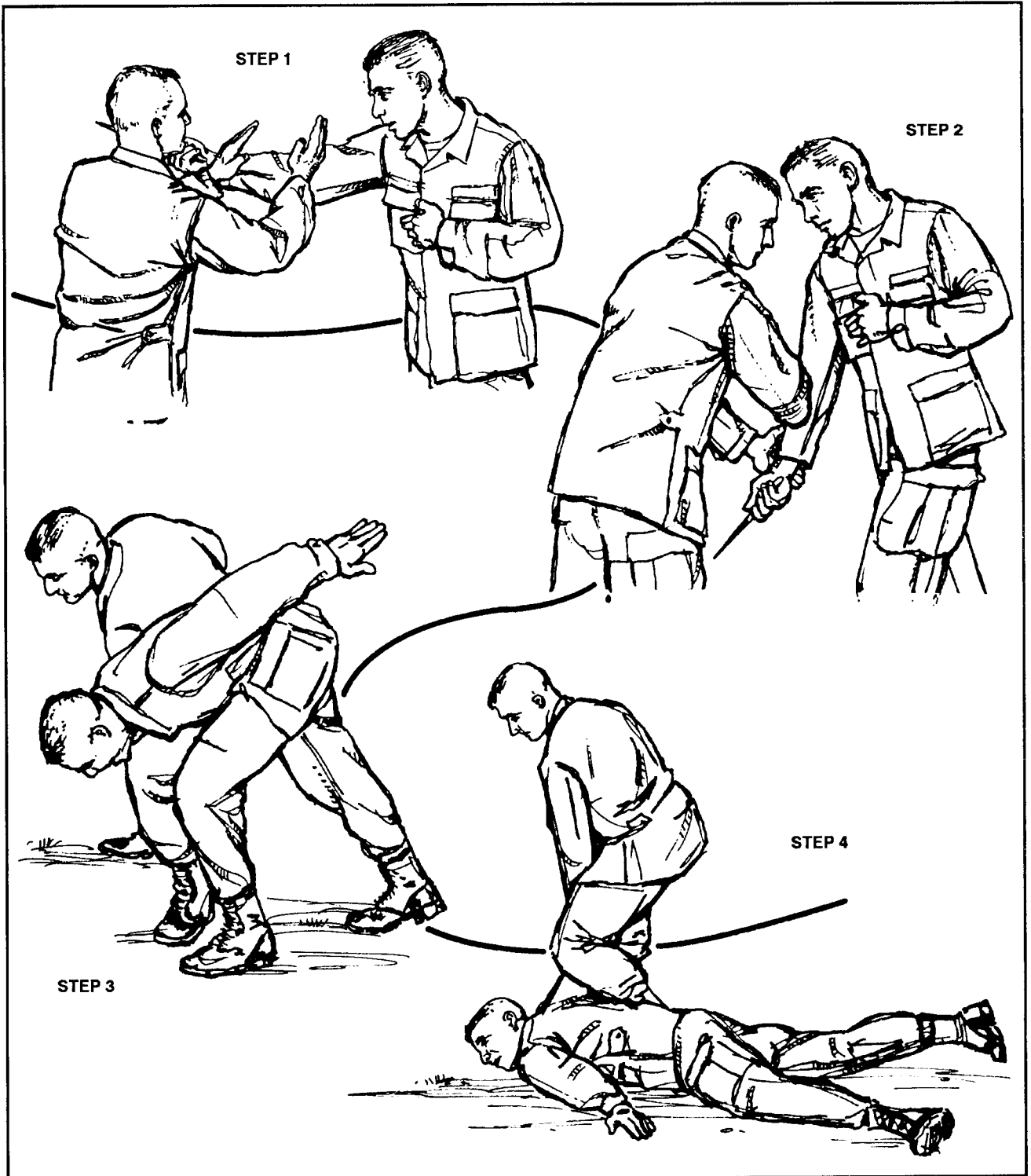


Figure 5-13. No. 1 angle of defense - check and lift.

(2) **No. 2 angle of defense—*check and ride***. The attacker slashes with a No. 2 angle of attack. The defender meets the attacking arm with a strike from both forearms against the outside forearm, his bone against the attacker's muscle tissue (Figure 5-14, Step 1).

The strike checks the forward momentum of the attacking arm. The defender's right hand is then used to ride the attacking arm clear of his body (Figure 5-14, Step 2).

He redirects the attacker's energy with strength starting from the right elbow (Figure 5-14, Step 3).

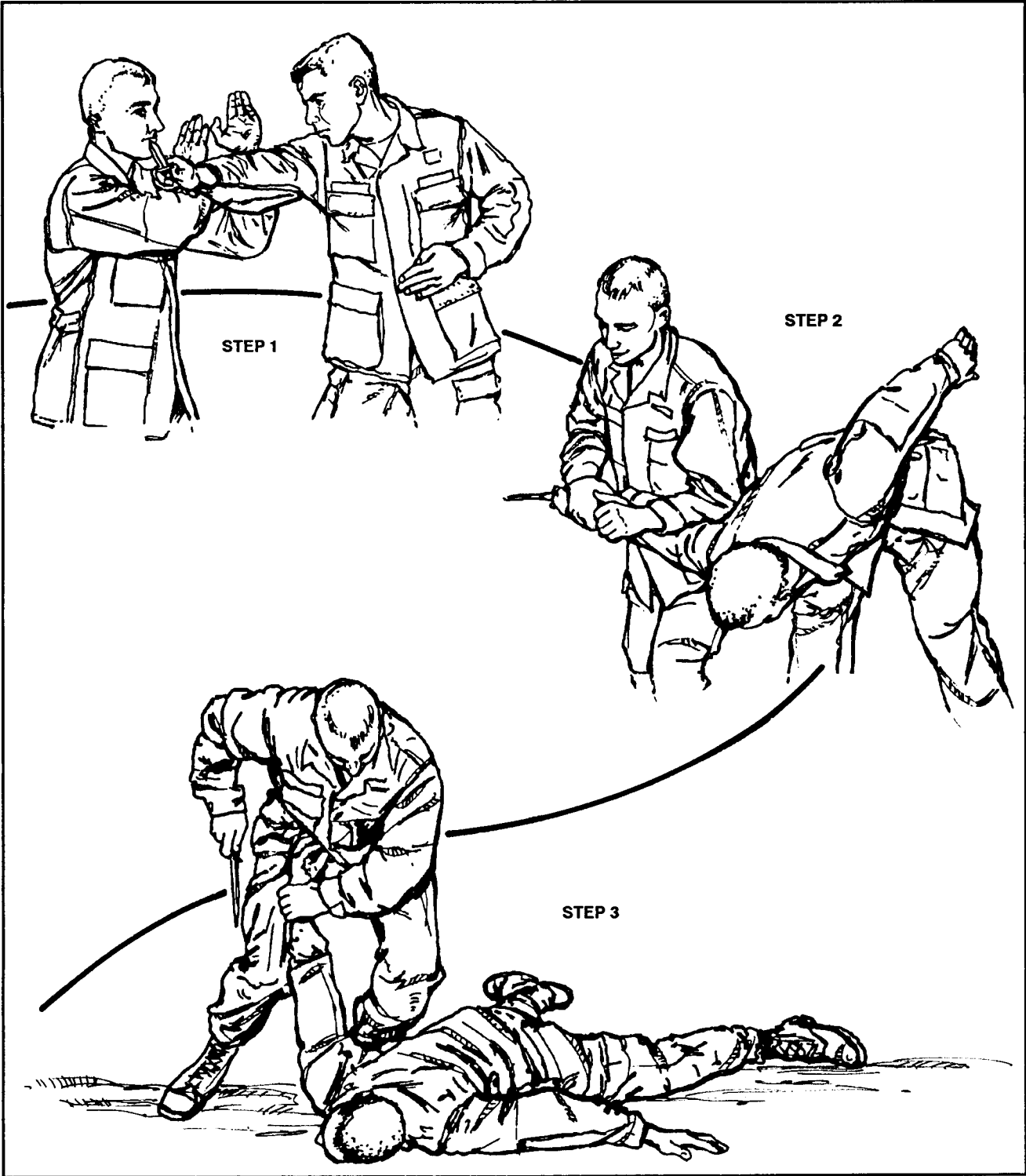


Figure 5-14. No. 2 angle of defense - check and ride.

(3) **No. 3 angle of defense—check and lift.** The attacker delivers a horizontal slash to the defender's ribs, kidneys, or hip on the left side (Figure 5-15, Step 1). The defender meets and checks the attacking arm on the left side of his body with a downward circular motion across the front of his own body.

At the same time, he moves his body off the line of attack. He should meet the attacker's forearm with a strike forceful enough to check its momentum (Figure 5-15, Step 2). The defender then rides the energy of the attacking arm by wiping downward along the outside of his own left forearm with his right hand.

He then redirects the knife hand around to his right side where he can control or disarm the weapon (Figure 5-15, Step 3).



Figure 5-15. No. 3 angle of defense - check and lift.



(4) **No. 4 angle of defense—check.** The attacker slashes the defender with a backhand slashing motion to the right side at the ribs, kidneys, or hips. The defender moves his right arm in a downward circular motion and strikes the attacking arm on the outside of the body (Figure 5-16, Step 1).

At the same time, he moves off the line of attack (Figure 5-16, Step 2). The strike must be forceful enough to check the attack.

The left arm is held in a higher guard position to protect from a redirected attack or to assist in checking (Figure 5-16, Step 3).

The defender moves his body to a position where he can choose a proper disarming maneuver (Figure 5-16, Step 4).



Figure 5-16. No. 4 angle of defense - check.

(5) ***Low No. 5 angle of defense-parry.*** A lunging thrust to the stomach is made by the attacker along the No. 5 angle of attack (Figure 5-17, Step 1).

The defender moves his body off the line of attack and deflects the attacking arm by parrying with his left hand (Figure 5-17, Step 2). He deflects the attacking hand toward his right side by redirecting it with his right hand.

As he does this, the defender can strike downward with the left forearm or the wrist onto the forearm or wrist of the attacker (Figure 5-17, Step 3).

The defender ends up in a position to lock the elbow of the attacking arm across his body if he steps off the line of attack properly (Figure 5-17, Step 4).



Figure 5-17. Low No. 5 angle of defense - parry.

(6) **High No. 5 angle of defense.** The attacker lunges with a thrust to the face, throat, or solar plexus (Figure 5-18, Step 1).

The defender moves his body off the line of attack while parrying with either hand. He redirects the attacking arm so that the knife clears his body (Figure 5-18, Step 2).

He maintains control of the weapon hand or arm and gouges the eyes of the attacker, driving him backward and off balance (Figure 5-18, Step 3). If the attacker is much taller than the defender, it may be a more natural movement for the defender to raise his left hand to strike and deflect the attacking arm. He can then gouge his thumb or fingers into the jugular notch of the attacker and force him to the ground.

Still another possibility for a high No. 5 angle of attack is for the defender to move his body off the line of attack while parrying. He can then turn his body, rotate his shoulder under the elbow joint of the attacker, and lock it out (Figure 5-18, Step 4).

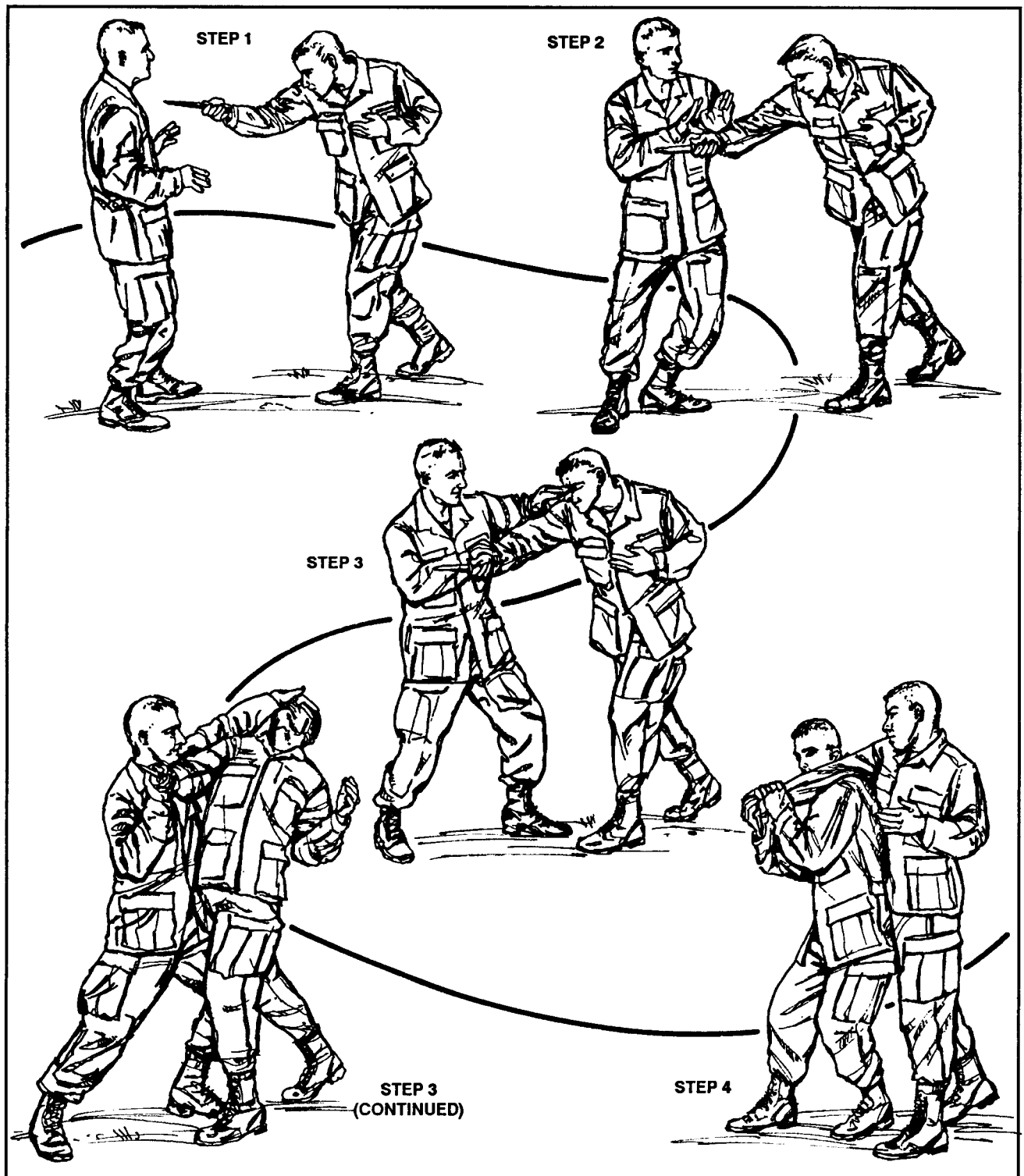


Figure 5-18. High No. 5 angle of defense.

(7) **No. 6 angle of defense.** The attacker strikes straight downward onto the defender with a stab (Figure 5-19, Step 1).

The defender reacts by moving his body out of the weapon's path and by parrying or checking and redirecting the attacking arm, as the movement in the high No. 5 angle of defense (Figure 5-19, Step 2). The reactions may vary as to what is natural for the defender.

The defender then takes control of the weapon and disarms the attacker (Figure 5-19, Step 3).

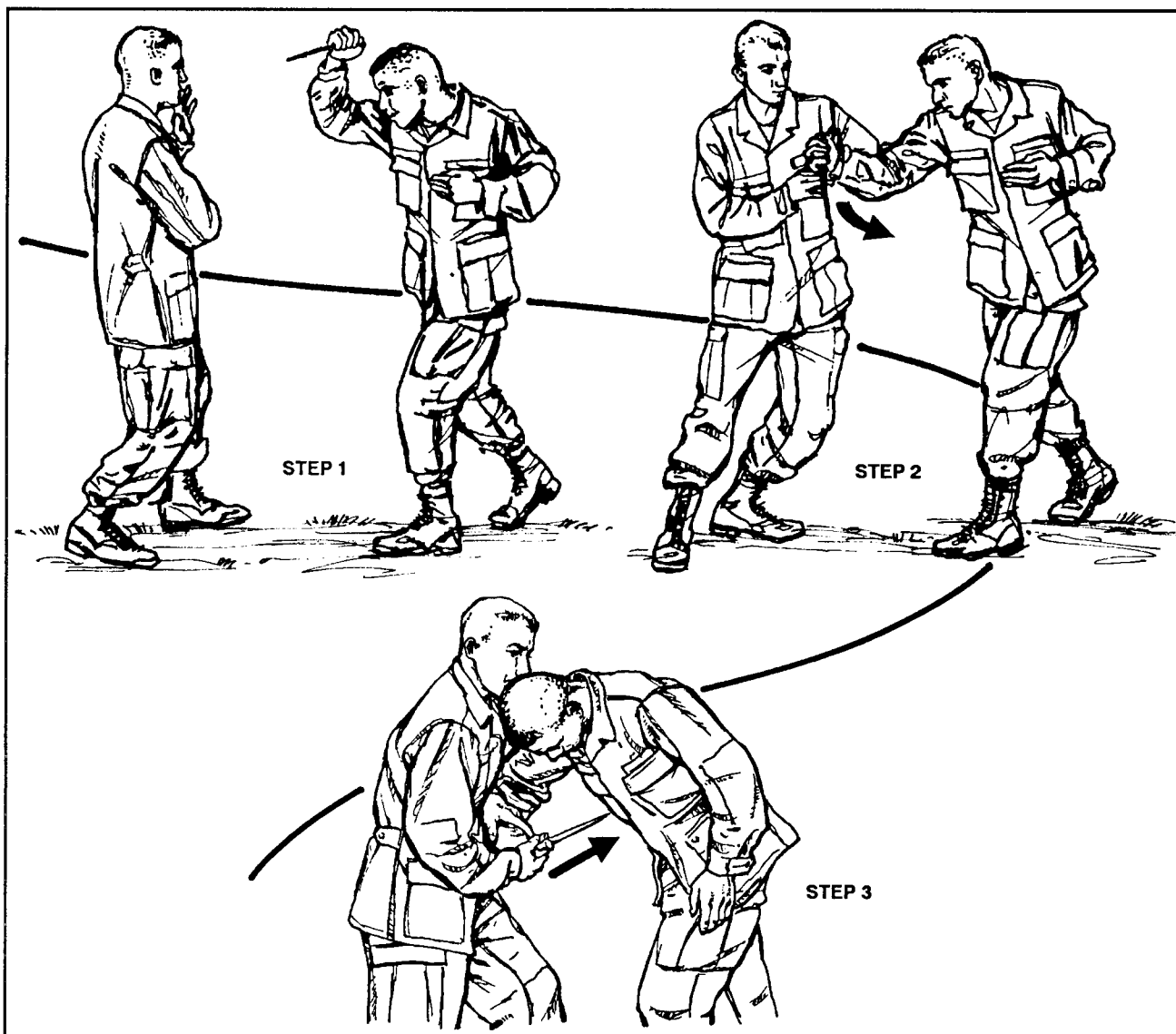


Figure 5-19. No. 6 angle of defense.

c. **Follow-Up Techniques.** Once the instructor believes the soldiers are skilled in these basic reactions to attack, follow-up techniques may be introduced and practiced. These drills make up the defense possibilities against the various angles of attack. They also enable the soldier to apply the principles of defense against weapons and allow him to feel the movements. Through repetition, the reactions become natural, and the soldier instinctively reacts to a knife attack with the proper defense. It is important not to associate specific movements or techniques with certain types of attack. The knife fighter must rely on his knowledge of principles and his training experience in reacting to a knife attack. No two attacks or reactions will be the same; thus, memorizing techniques will not ensure a soldier's survival.

(1) **Defend and clear.** When the defender has performed a defensive maneuver and avoided an attack, he can push the attacker away and move out of the attacker's reach.

(2) **Defend and stun.** After the defender performs his first defensive maneuver to a safer position, he can deliver a stunning blow as an immediate counterattack. Strikes to motor nerve points or attacker's limbs, low kicks, and elbow strikes are especially effective stunning techniques.

(3) **Defend and disarm.** The defender also follows up his first defensive maneuver by maintaining control of the attacker's weapon arm, executing a stunning technique, and disarming the attacker. The stun distracts the attacker and also gives the defender some time to gain possession of the weapon and to execute his disarming technique.

## 5-6. UNARMED DEFENSE AGAINST A RIFLE WITH FIXED BAYONET

Defense against a rifle with a fixed bayonet involves the same principles as knife defense. The soldier considers the same angles of attack and the proper response for any attack along each angle.

a. Regardless of the type weapon used by the enemy, his attack will always be along one of the nine angles of attack at any one time. The soldier must get his entire body off the line of attack by moving to a safe position. A rifle with a fixed bayonet has two weapons: a knife at one end and a butt stock at the other end. The soldier will be safe as long as he is not in a position where he can be struck by either end during the attack.

b. Usually, he is in a more advantageous position if he moves inside the length of the weapon. He can then counterattack to gain control of the situation as soon as possible. The following counterattacks can be used as defenses against a rifle with a fixed bayonet; they also provide a good basis for training.



(1) ***Unarmed defense against No. 1 angle of attack.*** The attacker prepares to slash along the No. 1 angle of attack (Figure 5-20, Step 1).

The defender waits until the last possible moment before moving so he is certain of the angle along which the attack is directed (Figure 5-20, Step 2). This way, the attacker cannot change his attack in response to movement by the defender.

When the defender is certain that the attack is committed along a specific angle (No. 1, in this case), he moves to the inside of the attacker and gouges his eyes (Figure 5-20, Step 2) while the other hand redirects and controls the weapon. He maintains control of the weapon and lunges his entire body weight into the eye gouge to drive the attacker backward and off balance. The defender now ends up with the weapon, and the attacker is in a poor recovery position (Figure 5-20, Step 3).

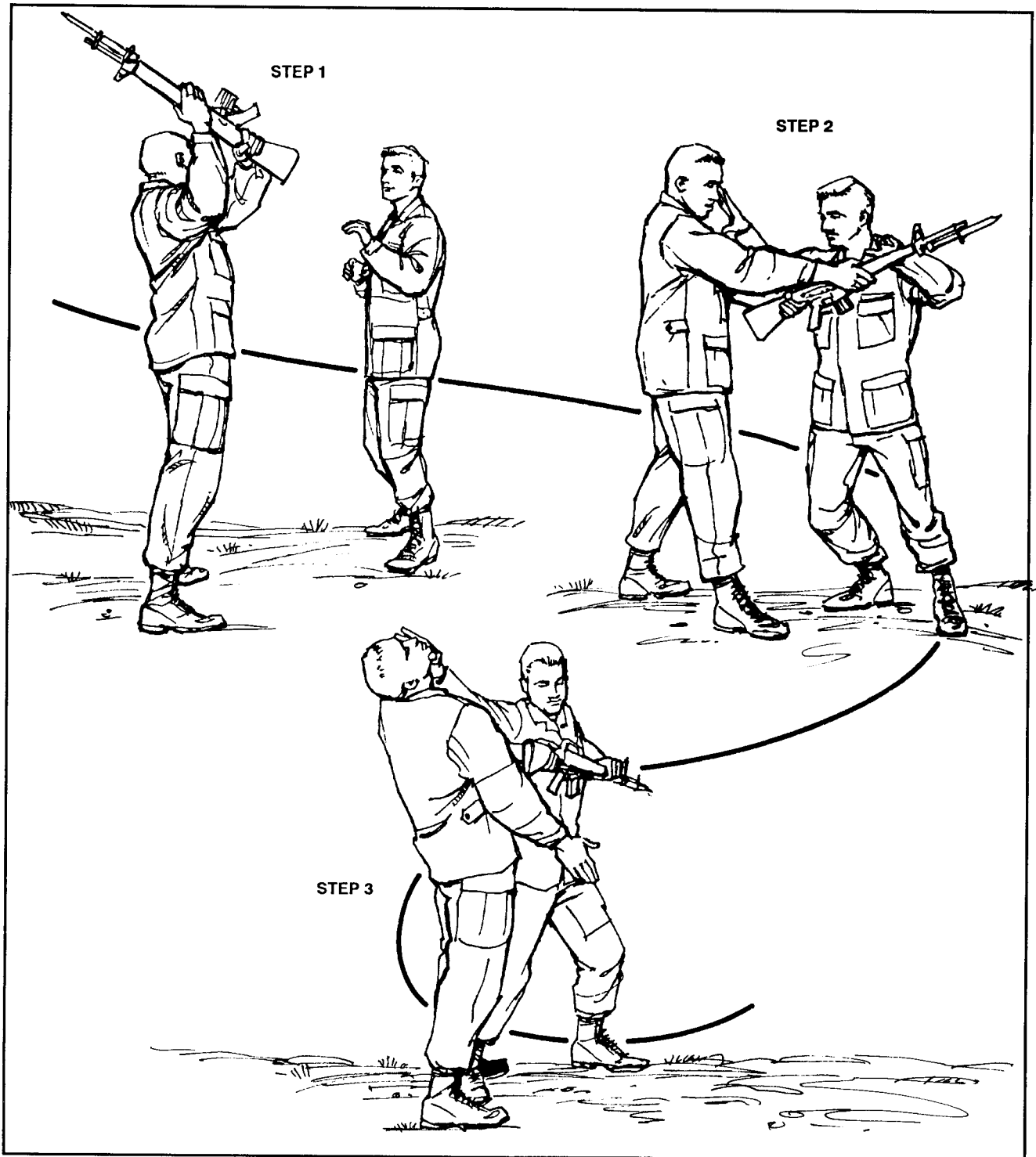


Figure 5-20. Unarmed defense against No. 1 angle of attack.

(2) ***Unarmed defense against No. 2 angle of attack.*** The attacker makes a diagonal slash along the No. 2 angle of attack (Figure 5-21, Step 1). Again, the defender waits until he is sure of the attack before moving.

The defender then moves to the outside of the attacker and counterattacks with a thumb jab into the right armpit (Figure 5-21, Step 2). He receives the momentum of the attacking weapon and controls it with his free hand.

He uses the attacker's momentum against him by pulling the weapon in the direction it is going with one hand and pushing with his thumb of the other hand (Figure 5-21, Step 3). The attacker is completely off balance, and the defender can gain control of the weapon.

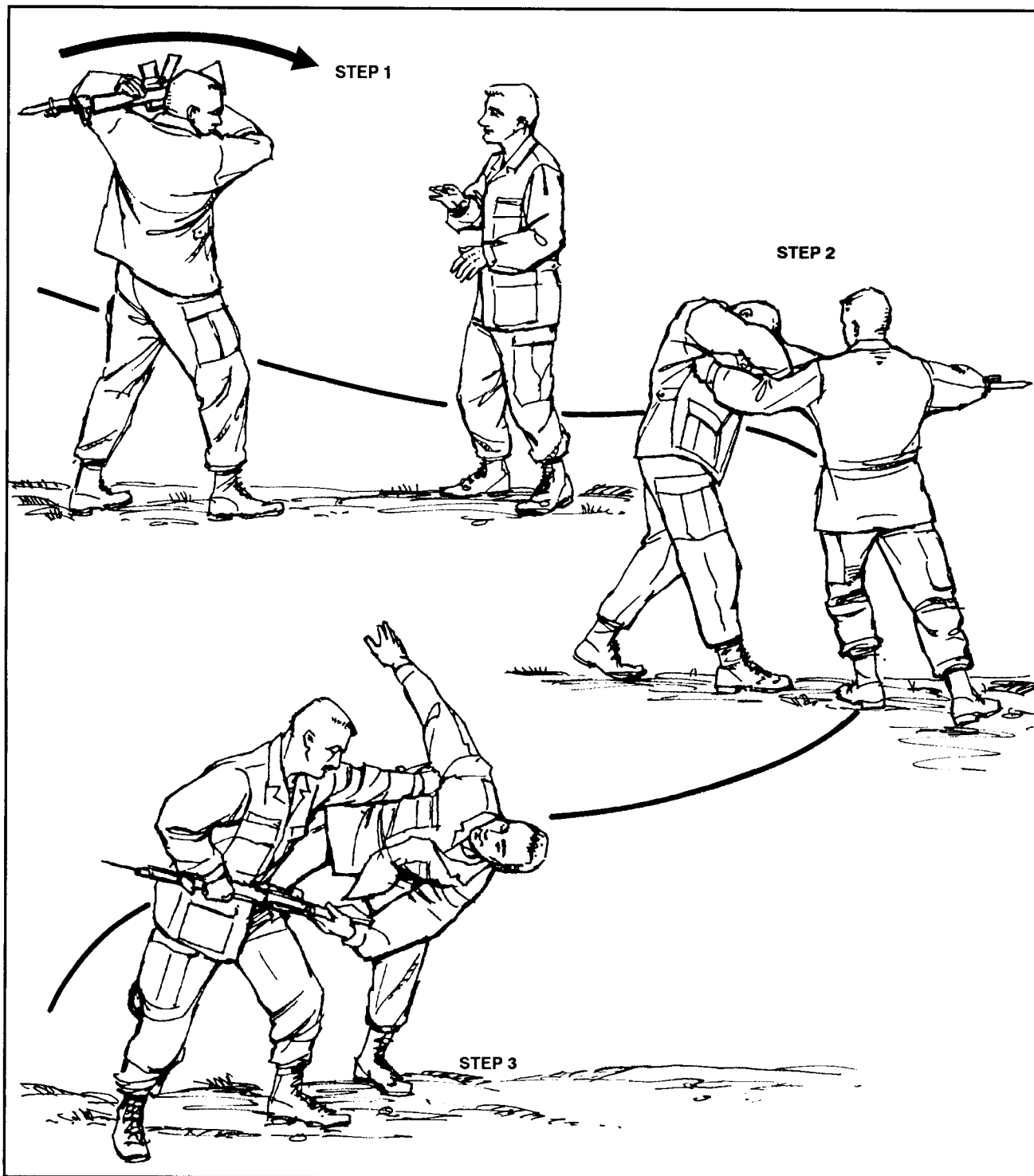


Figure 5-21. Unarmed defense against No. 2 angle of attack.

(3) **Unarmed defense against No. 3 angle of attack.** The attacker directs a horizontal slash along the No. 3 angle of attack (Figure 5-22, Step 1).

The defender turns and moves to the inside of the attacker; he then strikes with his thumb into the jugular notch (Figure 5-22, Step 2).

His entire body mass is behind the thumb strike and, coupled with the incoming momentum of the attacker, the strike drives the attacker's head backward and takes his balance (Figure 5-22, Step 3).

The defender turns his body with the momentum of the weapon's attack to strip the weapon from the attacker's grip (Figure 5-22, Step 4).

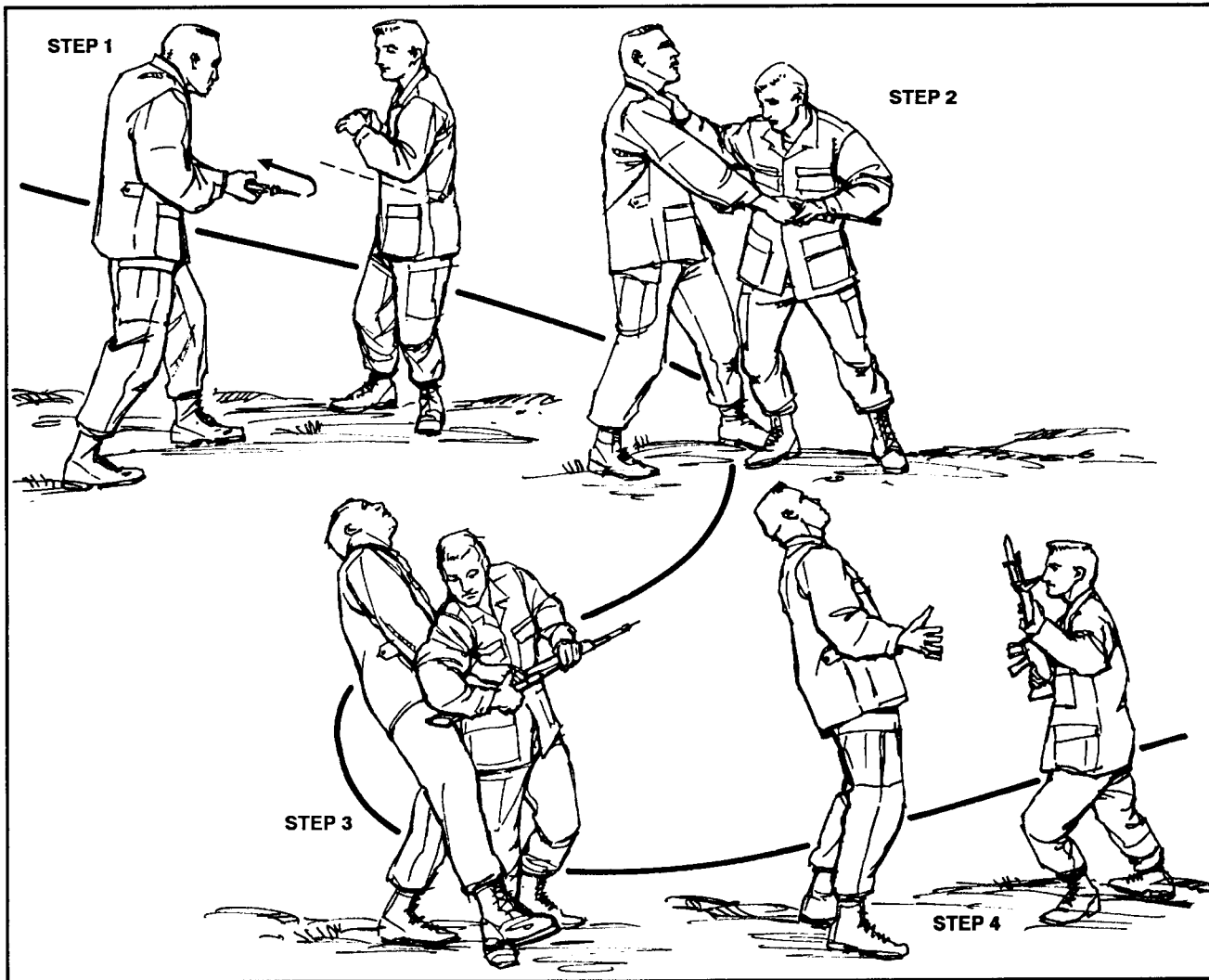


Figure 5-22. Unarmed defense against No. 3 angle of attack.

(4) **Unarmed defense against No. 4 angle of attack.** The attack is a horizontal slash along the No. 4 angle of attack (Figure 5-23, Step 1).

The defender moves into the outside of the attacker (Figure 5-23, Step 2).

He then turns with the attack, delivering an elbow strike to the throat (Figure 5-23, Step 3). At the same time, the defender's free hand controls the weapon and pulls it from the attacker as he is knocked off balance from the elbow strike.

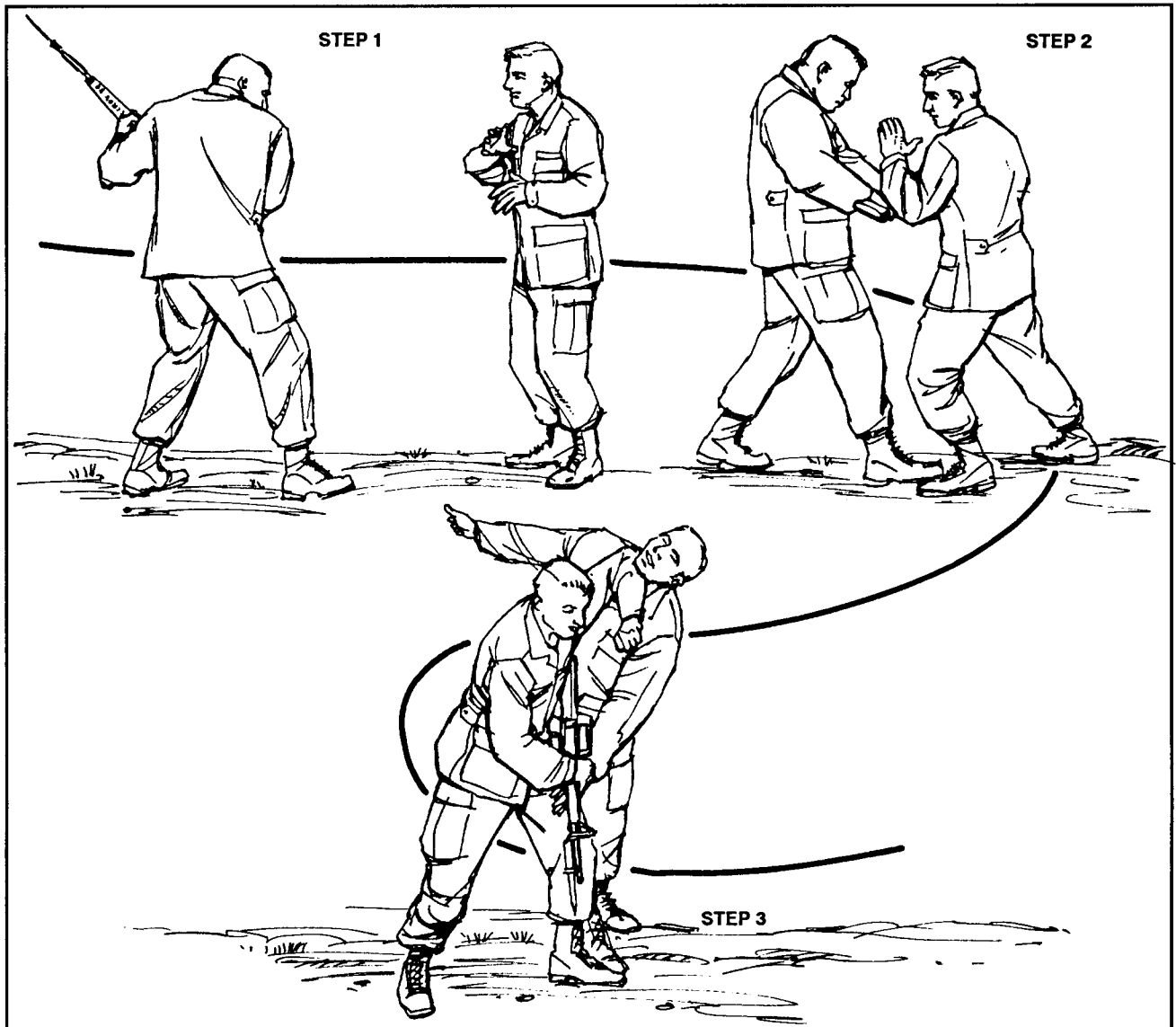


Figure 5-23. Unarmed defense against No. 4 angle of attack.

(5) **Unarmed defense against low No. 5 angle of attack.** The attacker thrusts the bayonet at the stomach of the defender (Figure 5-24, Step 1).

The defender shifts his body to the side to avoid the attack and to gouge the eyes of the attacker (Figure 5-24, Step 2).

The defender's free hand maintains control of and strips the weapon from the attacker as he is driven backward with the eye gouge (Figure 5-24, Step 3).

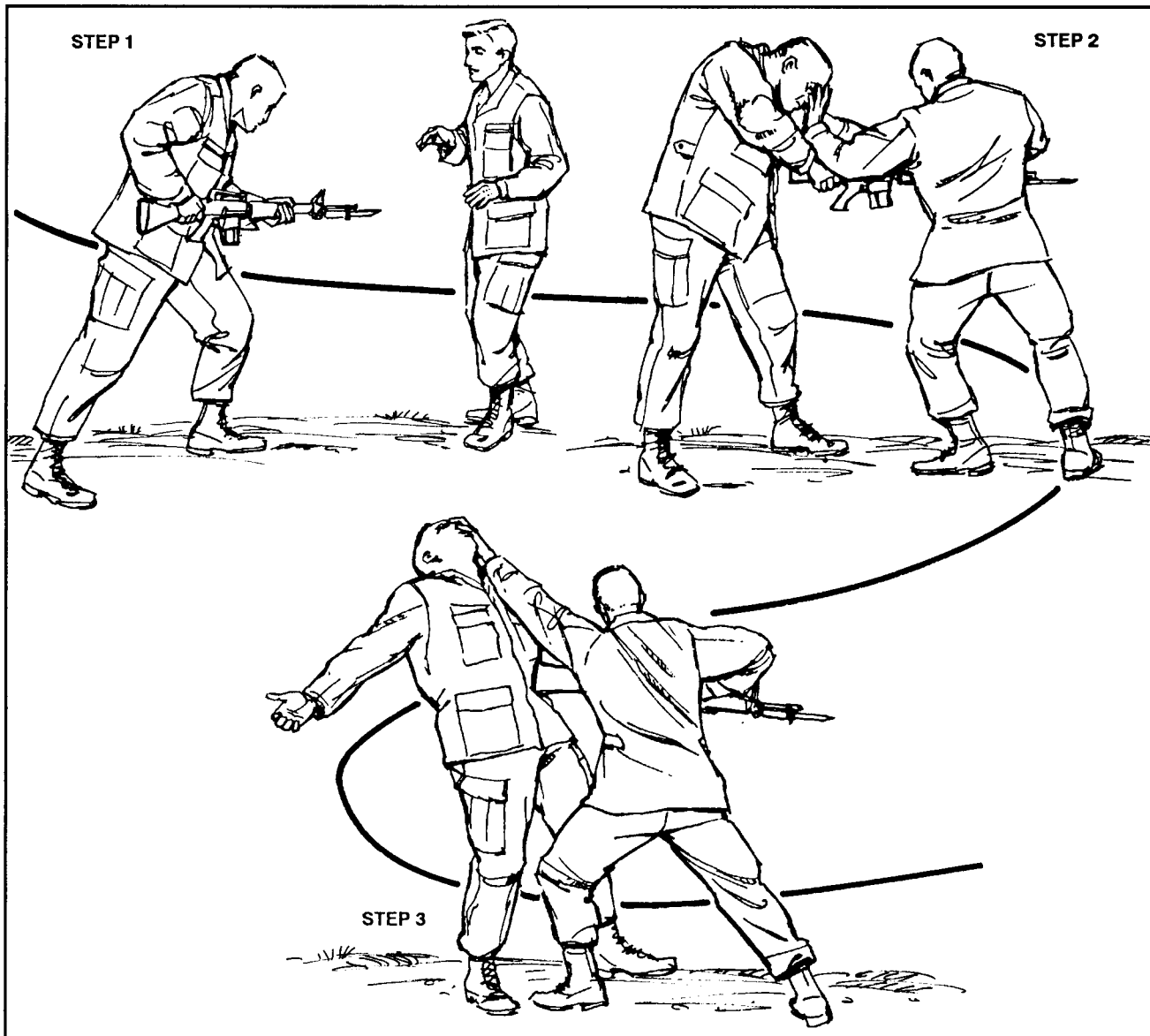


Figure 5-24. Unarmed defense against low No. 5 angle of attack.

(6) **Unarmed defense against high No. 5 angle of attack.** The attacker delivers a thrust to the throat of the defender (Figure 5-25, Step 1).

The defender then shifts to the side to avoid the attack, parries the thrust, and controls the weapon with his trail hand (Figure 5-25, Step 2).

He then shifts his entire body mass forward over the lead foot, slamming a forearm strike into the attacker's throat (Figure 5-25, Step 3).

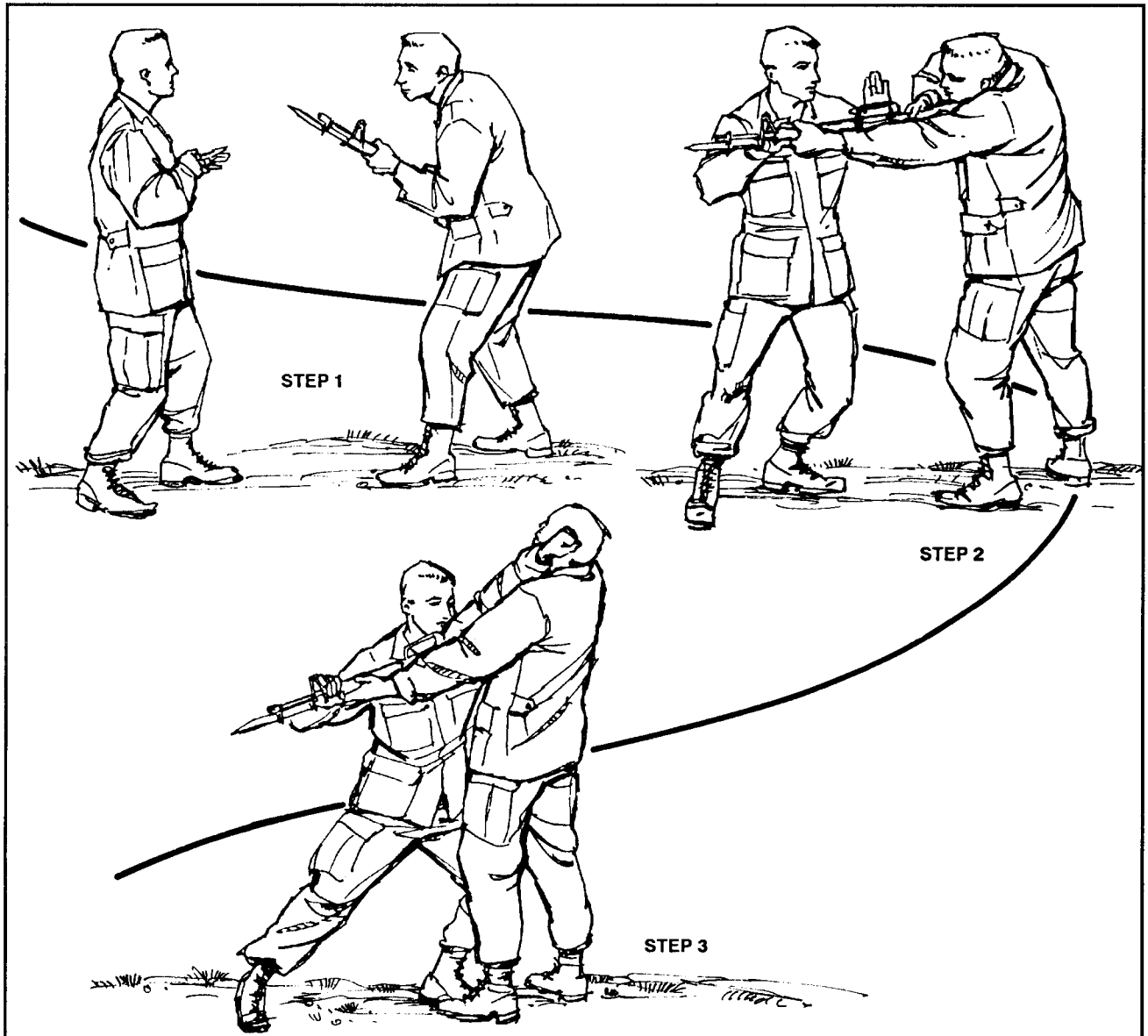


Figure 5-25. Unarmed defense against high No. 5 angle of attack.



(7) **Unarmed defense against No. 6 angle of attack.** The attacker delivers a downward stroke along the No. 6 angle of attack (Figure 5-26, Step 1).

The defender shifts to the outside to get off the line of attack and he grabs the weapon. Then, he pulls the attacker off balance by causing him to overextend himself (Figure 2-26, Step 2).

The defender shifts his weight backward and causes the attacker to fall, as he strips the weapon from him (Figure 5-26, Step 3).

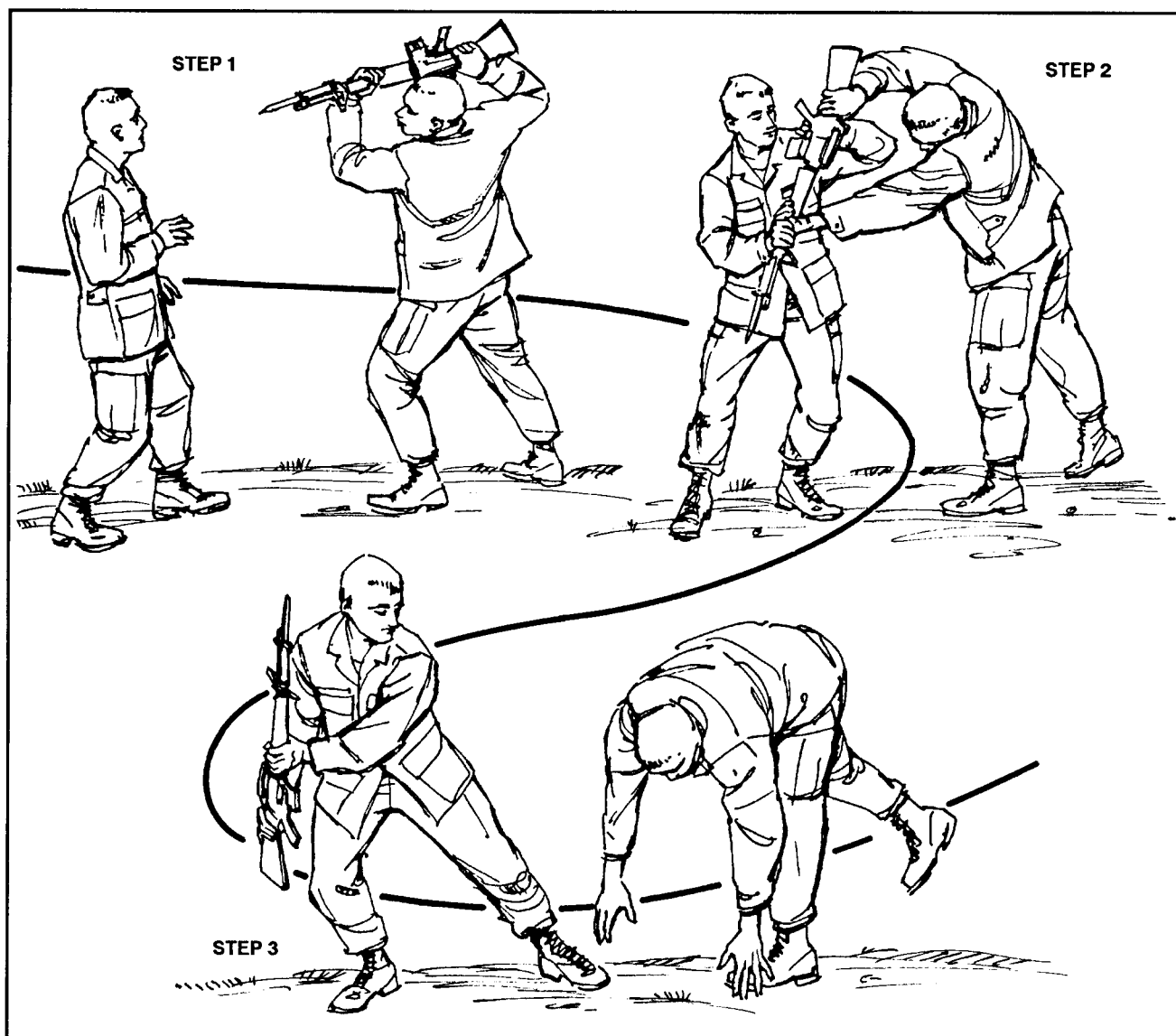


Figure 5-26. Unarmed defense against No. 6 angle of attack.

## 5-7. ADVANCED WEAPONS TECHNIQUES AND TRAINING

For advanced training in weapons techniques, training partners should have the same skill level. Attackers can execute attacks along multiple angles of attack in combinations. The attacker must attack with a speed that offers the defender a challenge, but does not overwhelm him. It should not be a contest to see who can win, but a training exercise for both individuals.

a. Continued training in weapons techniques will lead to the partners' ability to engage in free-response fighting or sparring—that is, the individuals become adept enough to understand the principles of weapons attacks, defense, and movements so they can respond freely when attacking or defending from any angle.

b. Instructors must closely monitor training partners to ensure that the speed and control of the individuals does not become dangerous during advanced training practice. Proper eye protection and padding should be used, when applicable. The instructor should stress the golden rule in free-response fighting—Do unto others as you would have them do unto you.

### Section III OFFENSIVE TECHNIQUES

At ranges of 10 meters or more in most combat situations, small arms and grenades are the weapons of choice. However, in some scenarios, today's combat soldier must engage the enemy in confined areas, such as trench clearing or room clearing where noncombatants are present or when silence is necessary. In these instances, the bayonet or knife may be the ideal weapon to dispatch the enemy. Other than the side arm, the knife is the most lethal weapon in close-quarter combat.

## 5-8. BAYONET/KNIFE

As the bayonet is an integral part of the combat soldier's equipment, it is readily available for use as a multipurpose weapon. The bayonet produces a terrifying mental effect on the enemy when in the hands of a well-trained and confident soldier. The soldier skilled in the use of the knife also increases his ability to defend against larger opponents and multiple attackers. Both these skills increase his chances of surviving and accomplishing the mission. (Although the following paragraphs say "knife," the information also applies to bayonets.)

a. **Grips.** The best way to hold the knife is either with the straight grip or the reverse grip.

(1) ***Straight Grip.*** Grip the knife in the strong hand by forming a vee and by allowing the knife to fit naturally, as in gripping for a handshake.

The handle should lay diagonally across the palm. Point the blade toward the enemy, usually with the cutting edge down. The cutting edge can also be held vertically or horizontally to the ground. Use the straight grip when thrusting and slashing.

(2) **Reverse Grip.** Grip the knife with the blade held parallel with the forearm, cutting edge facing outward. This grip conceals the knife from the enemy's view. The reverse grip also affords the most power for lethal insertion. Use this grip for slashing, stabbing, and tearing.

b. **Stances.** The primary stances are the knife fighter's stance and the modified stance.

(1) **Knife fighter's stance.** In this stance, the fighter stands with his feet about shoulder-width apart, dominant foot toward the rear. About 70 percent of his weight is on the front foot and 30 percent on the rear foot. He stands on the balls of both feet and holds the knife with the straight grip. The other hand is held close to his body where it is ready to use, but protected (Figure 5-27).



Figure 5-27. Stance.



Figure 5-28. Modified stance.

(2) **Modified stance.** The difference in the modified stance is the knife is held close to the body with the other hand held close over the knife hand to help conceal it (Figure 5-28).

c. **Range.** The two primary ranges in knife fighting are long range and medium range. In long-range knife fighting, attacks consist of figure-eight slashes along the No. 1, No. 2, No. 7, and No. 8 angles of attack; horizontal slashes along the No. 3 and No. 4 angles of attack; and lunging thrusts to vital areas on the No. 5 angle of attack. Usually, the straight grip is used. In medium-range knife fighting, the reverse grip provides greater power. It is used to thrust, slash, and tear along all angles of attack.

**5-9. KNIFE-AGAINST-KNIFE SEQUENCE**

The knife fighter must learn to use all available weapons of his body and not limit himself to the knife. The free hand can be used to trap the enemy's hands to create openings in his defense. The enemy's attention will be focused on the weapon; therefore, low kicks and knee strikes will seemingly come from nowhere. The knife fighter's priority of targets are the eyes, throat, abdominal region, and extended limbs. Some knife attack sequences that can be used in training to help develop soldiers' knowledge of movements, principles, and techniques in knife fighting follow.

a. **Nos. 1 and 4 Angles.** Two opponents assume the knife fighter's stance (Figure 5-29, Step 1).

The attacker starts with a diagonal slash along the No. 1 angle of attack to the throat (Figure 5-29, Step 2).

He then follows through with a slash and continues with a horizontal slash back across the abdomen along the No. 4 angle of attack (Figure 5-29, Step 3).

He finishes the attack by using his entire body mass behind a lunging stab into the opponent's solar plexus (Figure 5-29, Step 4).

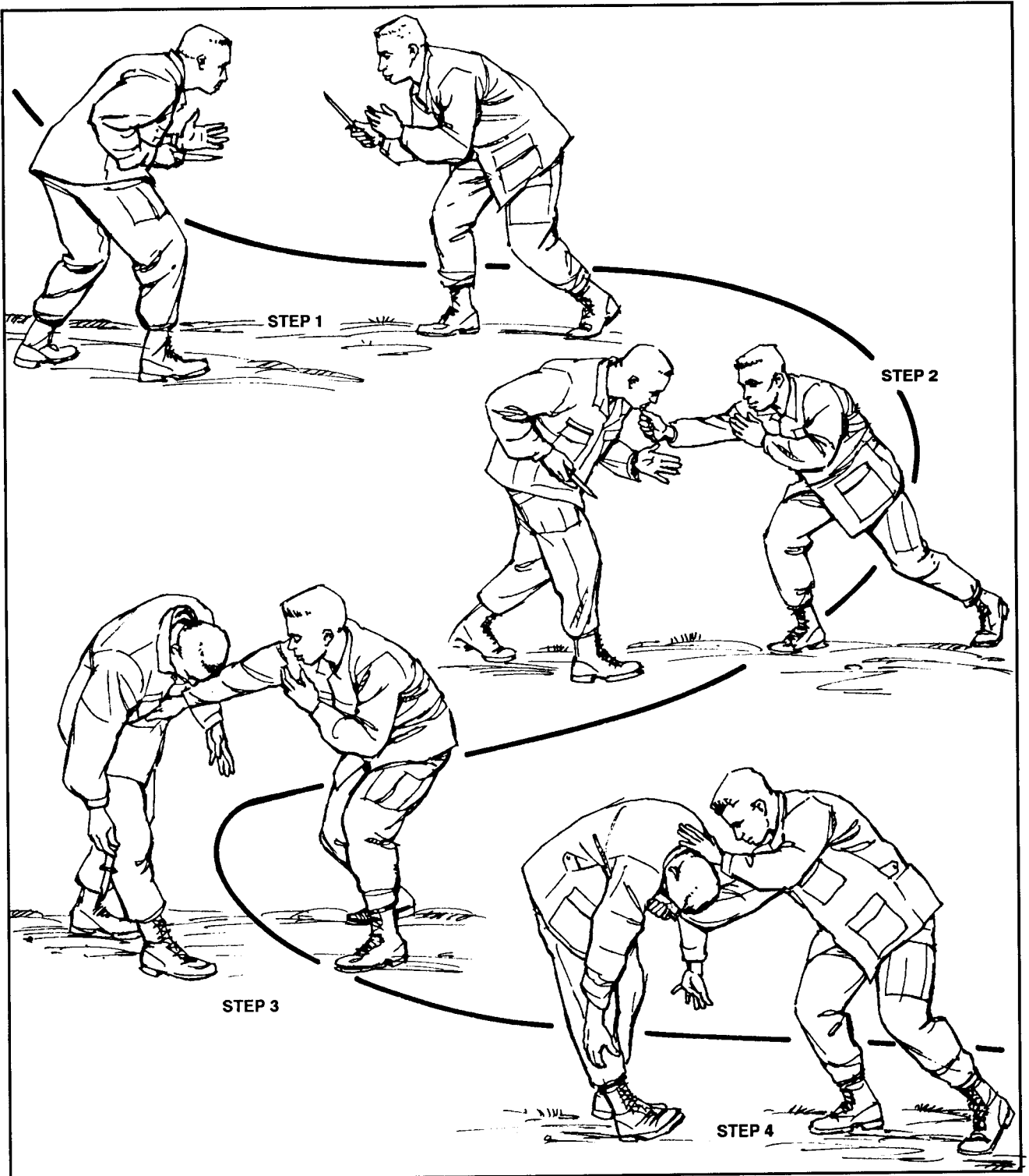


Figure 5-29. Nos. 1 and 4 angles.

b. **Nos. 5, 3, and 2 Angles.** In this sequence, one opponent (attacker) starts an attack with a lunge along the No. 5 angle of attack. At the same time, the other opponent (defender) on the left moves his body off the line of attack, parries the attacking arm, and slices the biceps of his opponent (Figure 5-30, Step 1).

The defender slashes back across the groin along the No. 3 angle of attack (Figure 5-30, Step 2).

He finishes the attacker by continuing with an upward stroke into the armpit or throat along the No. 2 angle of attack (Figure 5-30, Step 3). Throughout this sequence, the attacker's weapon hand is controlled with the defender's left hand as he attacks with his own knife hand.

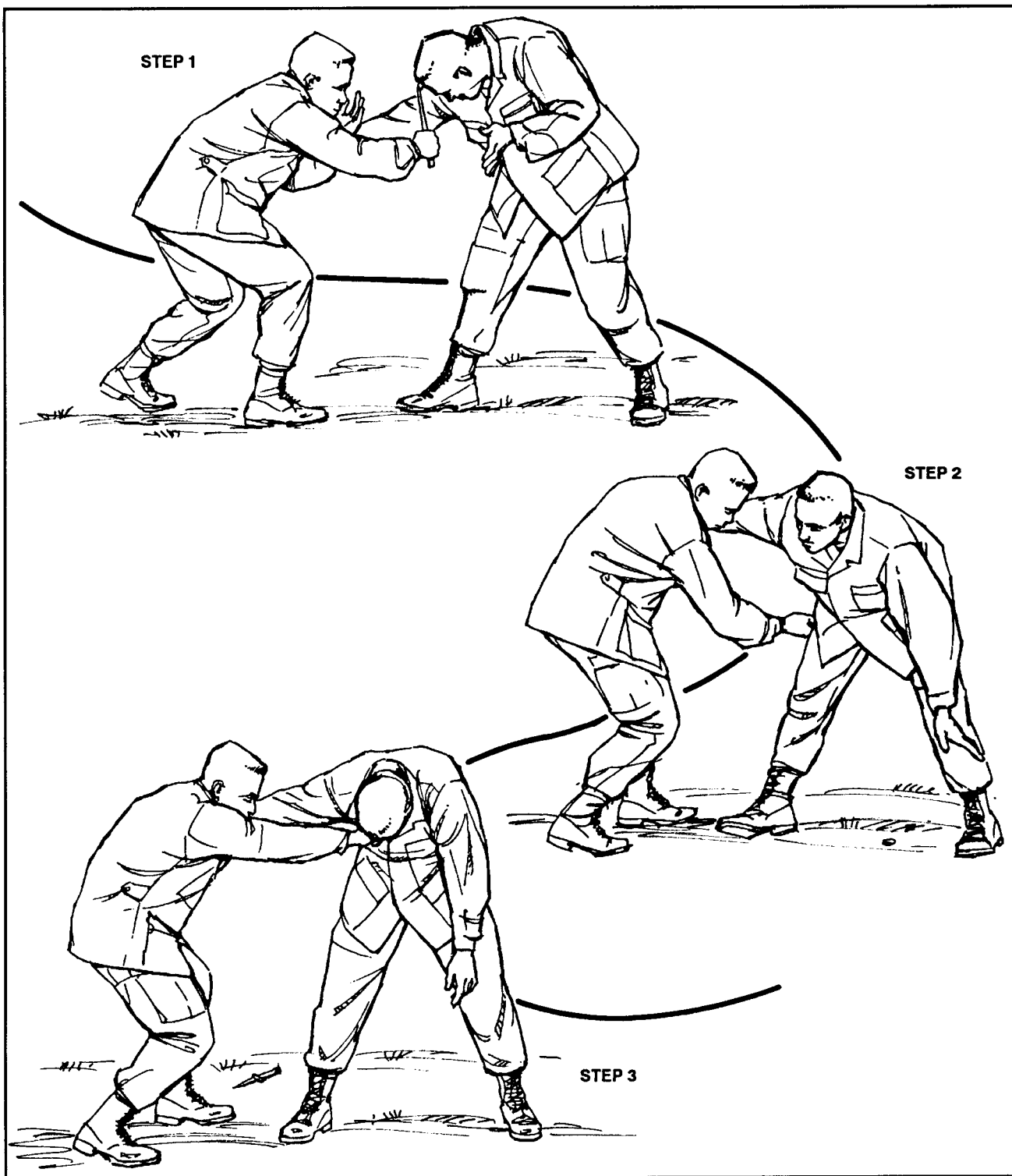


Figure 5-30. Nos. 5, 3, and 2 angles.



c. **Low No. 5 Angle.** In the next sequence, the attacker on the right lunges to the stomach along a low No. 5 angle of attack.

The defender on the left moves his body off the line of attack while parrying and slashing the wrist of the attacking knife hand as he redirects the arm (Figure 5-31, Step 1).

After he slashes the wrist of his attacker, the defender continues to move around the outside and stabs the attacker's armpit (Figure 5-31, Step 2).

He retracts his knife from the armpit, continues his movement around the attacker, and slices his hamstring (Figure 5-31, Step 3).

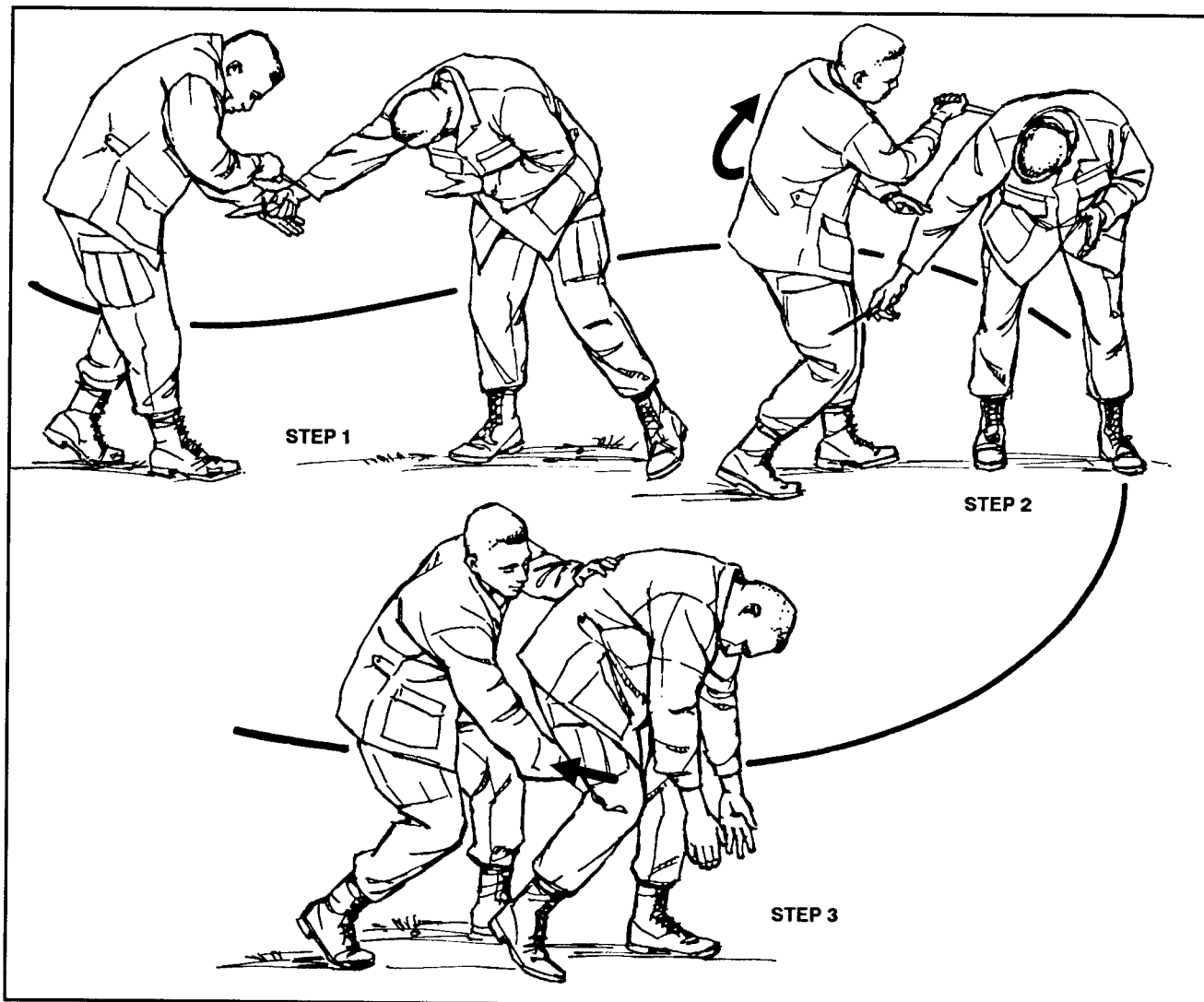


Figure 5-31. Low No. 5 angle.

d. **Optional Low No. 5 Angle.** The attacker on the right lunges to the stomach of his opponent (the defender) along the low No. 5 angle of attack. The defender moves his body off the line of attack of the knife. Then he turns and, at the same time, delivers a slash to the attacker's throat along the No. 1 angle of attack (Figure 5-32, Step 1).

The defender immediately follows with another slash to the opposite side of the attacker's throat along the No. 2 angle of attack (Figure 5-32, Step 2).

The attacker is finished as the opponent on the left (defender) continues to slice across the abdomen with a stroke along the No. 3 angle (Figure 5-32, Step 3).

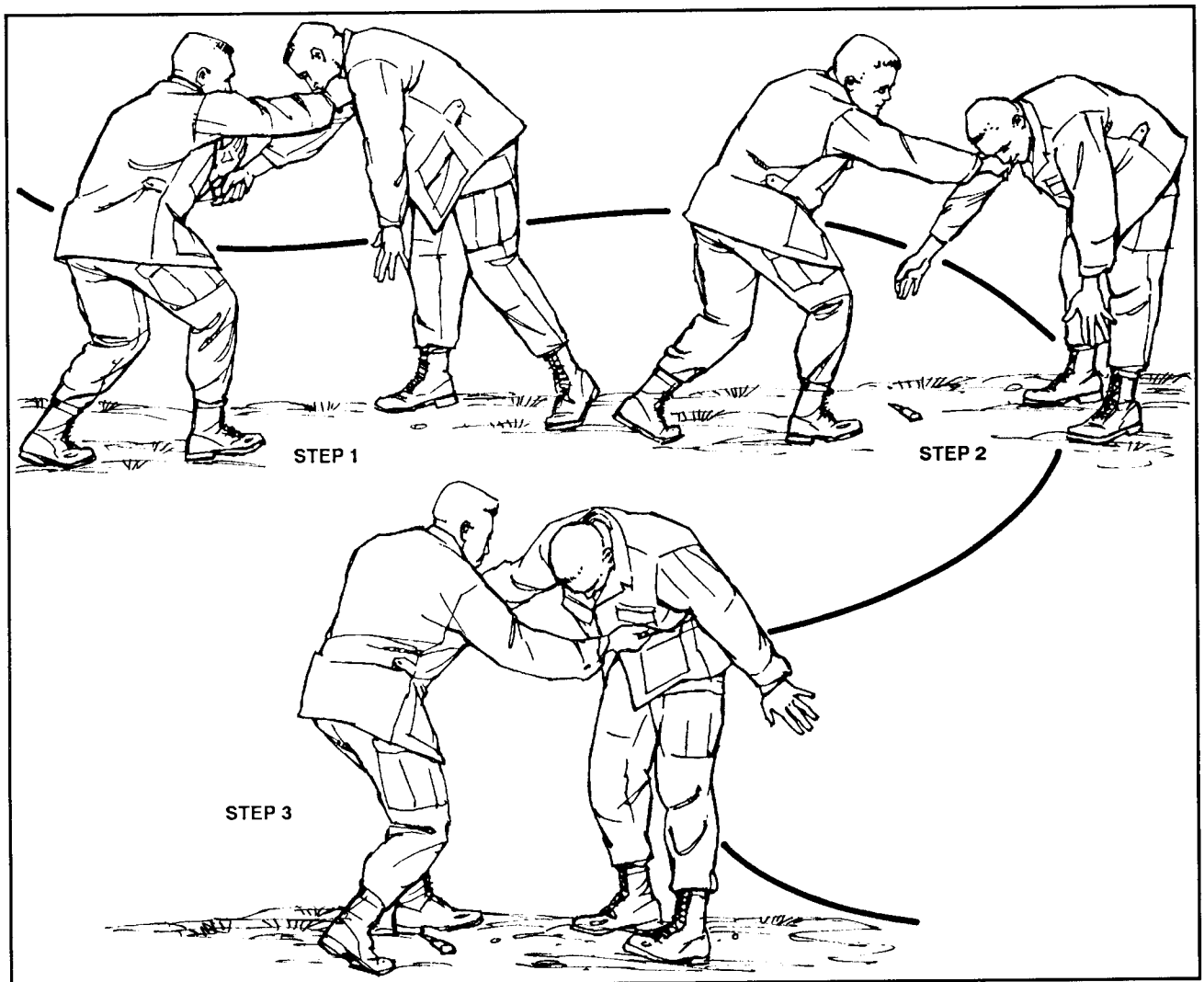


Figure 5-32. Optional low No. 5 angle.

### 5-10. RIFLE WITH FIXED BAYONET

The principles used in fighting with the rifle and fixed bayonet are the same as when knife fighting. Use the same angles of attack and similar body movements. The principles of timing and distance remain paramount; the main difference is the extended distance provided by the length of the weapon. It is imperative that the soldier fighting with rifle and fixed bayonet use the movement of his entire body behind all of his fighting techniques—not just upper-body strength. Unit trainers should be especially conscious of stressing full body mass in motion for power and correcting all deficiencies during training. Whether the enemy is armed or unarmed, a soldier fighting with rifle and fixed bayonet must develop the mental attitude that he will survive the fight. He must continuously evaluate each moment in a fight to determine his advantages or options, as well as the enemy's. He should base his defenses on keeping his body moving and off the line of any attacks from his opponent. The soldier seeks openings in the enemy's defenses and starts his own attacks, using all available bodyweapons and angles of attack. The angles of attack with rifle and fixed bayonet are shown in Figures 5-33 through 5-39.

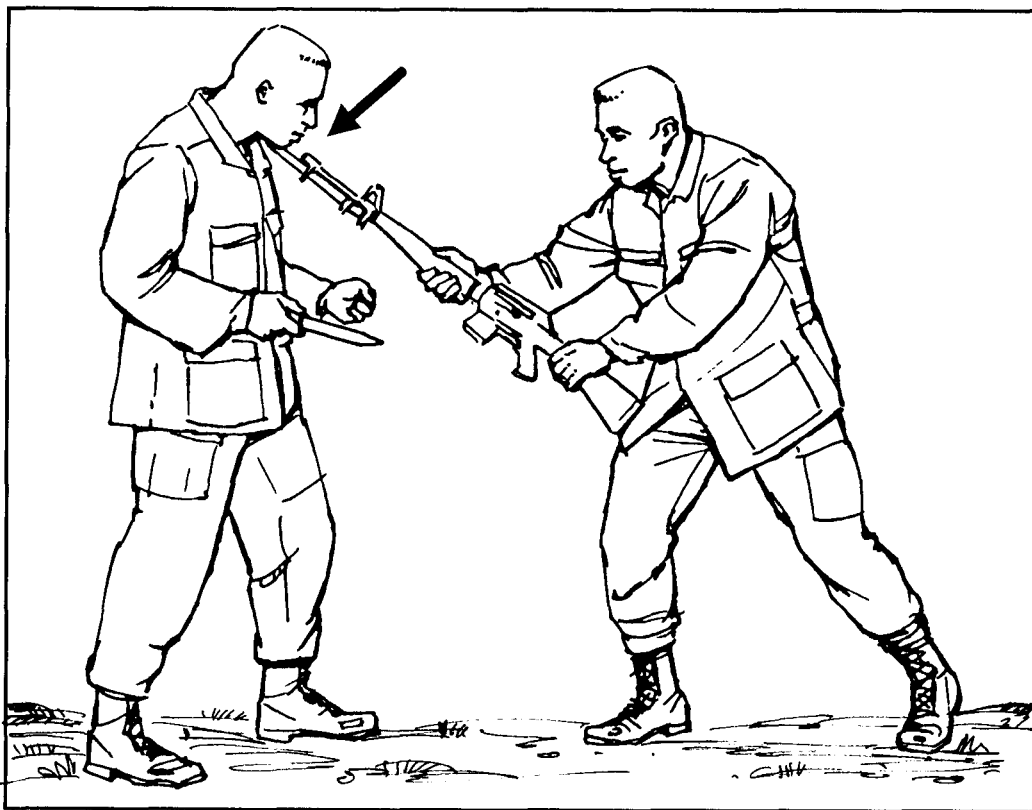


Figure 5-33. No. 1. angle of attack with rifle and fixed bayonet.

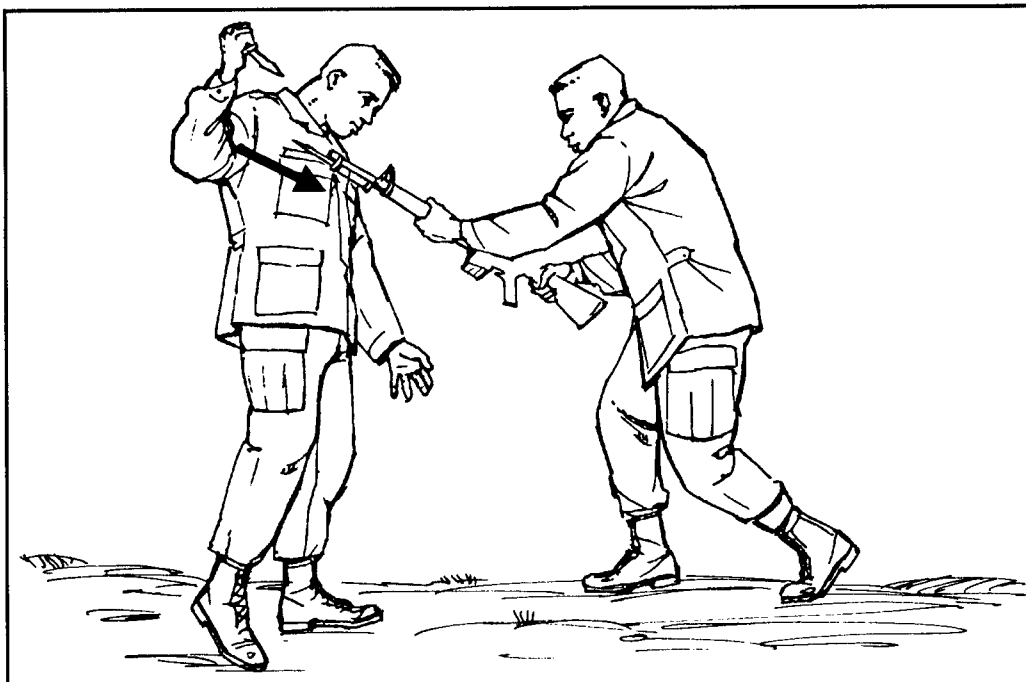


Figure 5-34. No. 2 angle of attack with rifle and fixed bayonet.

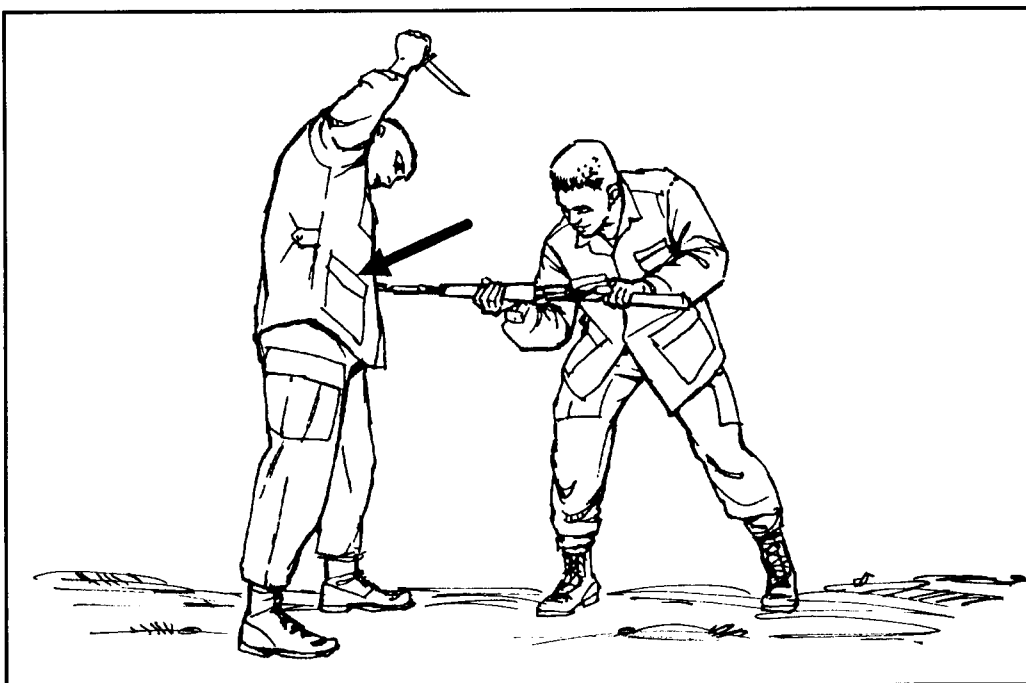


Figure 5-35. No. 3 angle of attack with rifle and fixed bayonet.

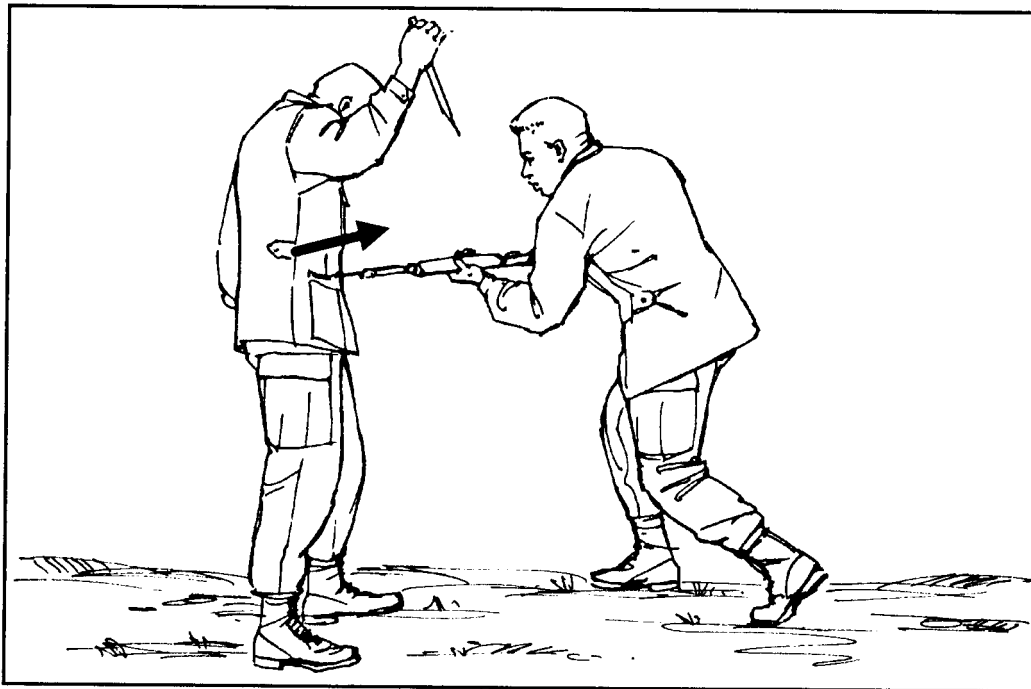


Figure 5-36. No. 4 angle of attack with rifle and fixed bayonet.

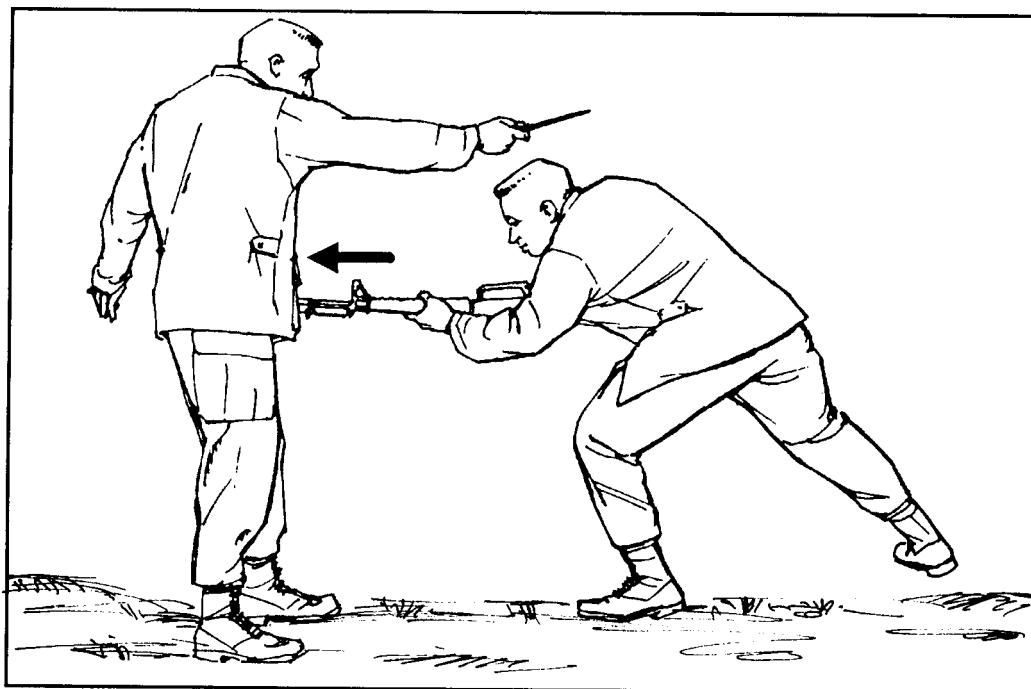


Figure 5-37. Low No. 5 angle of attack with rifle and fixed bayonet.

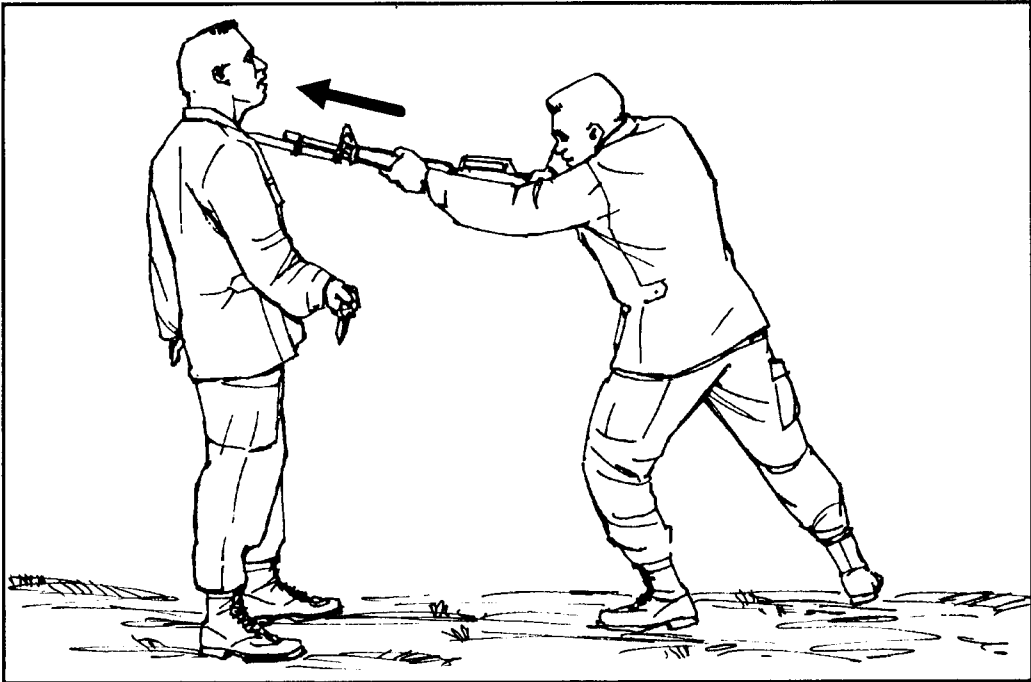


Figure 5-38. High No. 5 angle of attack with rifle and fixed bayonet.

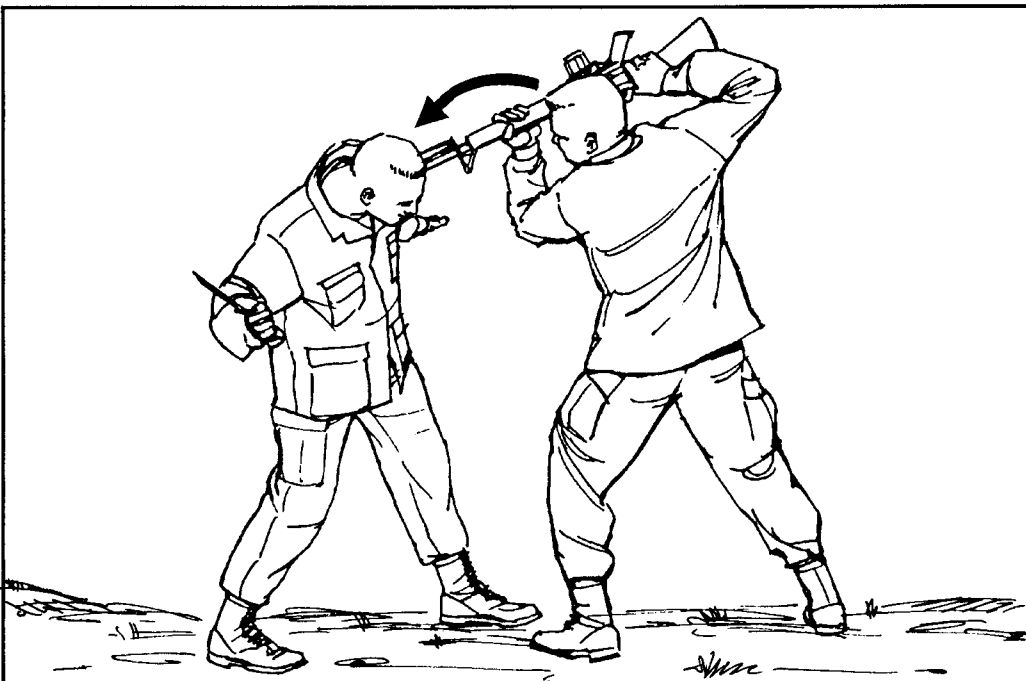


Figure 5-39. No. 6 angle of attack with rifle and fixed bayonet.

a. **Fighting Techniques.** New weapons, improved equipment, and new tactics are always being introduced; however, firepower alone will not always drive a determined enemy from his position. He will often remain in defensive emplacements until driven out by close combat. The role of the soldier, particularly in the final phase of the assault, remains relatively unchanged: His mission is to close with and disable or capture the enemy. This mission remains the ultimate goal of all individual training. The rifle with fixed bayonet is one of the final means of defeating an opponent in an assault.

(1) During infiltration missions at night or when secrecy must be maintained, the bayonet is an excellent silent weapon.

(2) When close-in fighting determines the use of small-arms fire or grenades to be impractical, or when the situation does not permit the loading or reloading of the rifle, the bayonet is still the weapon available to the soldier.

(3) The bayonet serves as a secondary weapon should the rifle develop a stoppage.

(4) In hand-to-hand encounters, the detached bayonet may be used as a handheld weapon.

(5) The bayonet has many nonfighting uses, such as to probe for mines, to cut vegetation, and to use for other tasks where a pointed or cutting tool is needed.

b. **Development.** To become a successful rifle-bayonet fighter, a soldier must be physically fit and mentally alert. A well-rounded physical training program will increase his chances of survival in a bayonet encounter. Mental alertness entails being able to quickly detect and meet an opponent's attack from any direction. Aggressiveness, accuracy, balance, and speed are essential in training as well as in combat situations. These traits lead to confidence, coordination, strength, and endurance, which characterize the rifle-bayonet fighter. Differences in individual body physique may require slight changes from the described rifle-bayonet techniques. These variations will be allowed if the individual's attack is effective.

c. **Principles.** The bayonet is an effective weapon to be used aggressively; hesitation may mean sudden death. The soldier must attack in a relentless assault until his opponent is disabled or captured. He should be alert to take advantage of any opening. If the opponent fails to present an opening, the bayonet fighter must make one by parrying his opponent's weapon and driving his blade or rifle butt into the opponent with force.

(1) The attack should be made to a vulnerable part of the body: face, throat, chest, abdomen, or groin.

(2) In both training and combat, the rifle-bayonet fighter displays spirit by sounding off with a low and aggressive growl. This instills a feeling of confidence in his ability to close with and disable or capture the enemy.

(3) The instinctive rifle-bayonet fighting system is designed to capitalize on the natural agility and combatives movements of the soldier. It must be emphasized that precise learned movements will NOT be stressed during training.

d. **Positions.** The soldier holds the rifle firmly but not rigidly. He relaxes all muscles not used in a specific position; tense muscles cause fatigue and may slow him down. After proper training and thorough practice, the soldier instinctively assumes the basic positions. All positions and movements described in this manual are for right-handed men. A left-handed man, or a man who desires to learn left-handed techniques, must use the opposite hand and foot for each phase of the movement described. All positions and movements can be executed with or without the magazine and with or without the sling attached.

(1) **Attack position.** This is the basic starting position (A and B, Figure 5-40) from which all attack movements originate. It generally parallels a boxer's stance. The soldier assumes this position when running or hurdling obstacles. The instructor explains and demonstrates each move.

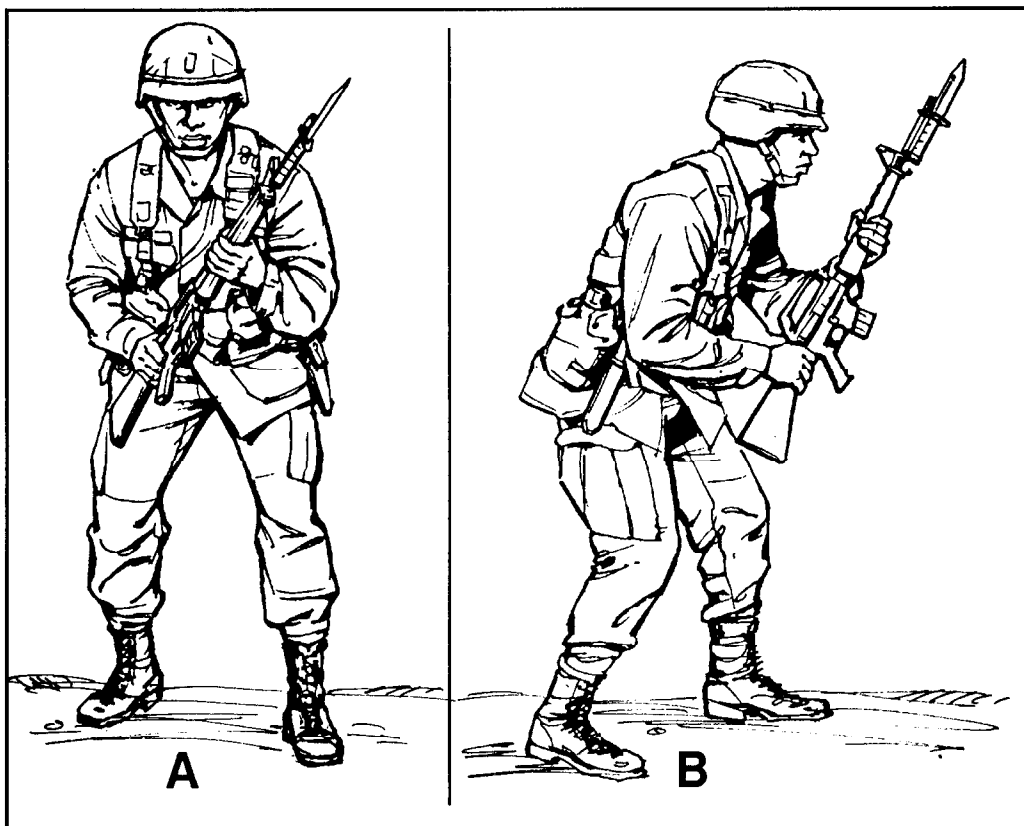


Figure 5-40. Attack position.



(a) Take a step forward and to the side with your left foot so that your feet are a comfortable distance apart.

(b) Hold your body erect or bend slightly forward at the waist. Flex your knees and balance your body weight on the balls of your feet. Your right forearm is roughly parallel to the ground. Hold the left arm high, generally in front of the left shoulder. Maintain eye-to-eye contact with your opponent, watching his weapon and body through peripheral vision.

(c) Hold your rifle diagonally across your body at a sufficient distance from the body to add balance and protect you from enemy blows. Grasp the weapon in your left hand just below the upper sling swivel, and place the right hand at the small of the stock. Keep the sling facing outward and the cutting edge of the bayonet toward your opponent. The command is, **ATTACK POSITION, MOVE**. The instructor gives the command, and the soldiers perform the movement.

(2) **Relaxed position.** The relaxed position (Figure 5-41) gives the soldier a chance to rest during training. It also allows him to direct his attention toward the instructor as he discusses and demonstrates the positions and movements. To assume the relaxed position from the attack position, straighten the waist and knees and lower the rifle across the front of your body by extending the arms downward. The command is, **RELAX**. The instructor gives the command, and the soldiers perform the movement.

e. **Movements.** The soldier will instinctively strike at openings and become aggressive in his attack once he has learned to relax and has developed instinctive reflexes. His movements do not have to be executed in any prescribed order. He will achieve balance



Figure 5-41. Relaxed position.

in his movements, be ready to strike in any direction, and keep striking until he has disabled his opponent. There are two basic movements used throughout bayonet instruction: the whirl and the crossover. These movements develop instant reaction to commands and afford the instructor maximum control of the training formation while on the training field.

(1) **Whirl movement.** The whirl (Figure 5-42, Steps 1, 2, and 3), properly executed, allows the rifle-bayonet fighter to meet a challenge from an opponent attacking him from the rear. At the completion of a whirl, the rifle remains in the attack position. The instructor explains and demonstrates how to spin your body around by pivoting on the ball of the leading foot in the direction of the leading foot, thus facing completely about. The command is, WHIRL. The instructor gives the command, and the soldiers perform the movement.

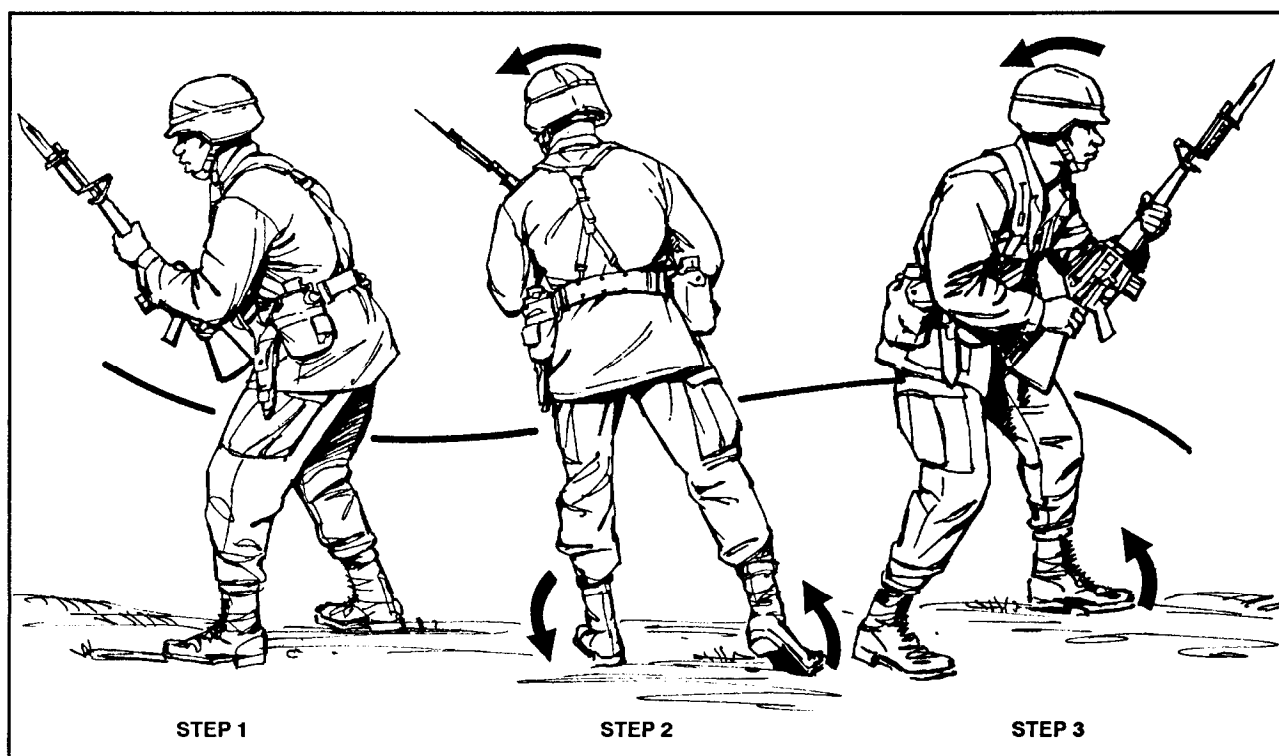


Figure 5-42. Whirl movement.

(2) **Crossover movement.** While performing certain movements in rifle-bayonet training, two ranks will be moving toward each other. When the soldiers in ranks come too close to each other to safely execute additional movements, the crossover is used to separate the ranks a safe distance apart. The instructor explains and demonstrates how to move straight forward and

pass your opponent so that your right shoulder passes his right shoulder, continue moving forward about six steps, halt, and without command, execute the whirl. Remain in the attack position and wait for further commands. The command is, CROSSOVER. The instructor gives the command, and the soldiers perform the movement.

NOTE: Left-handed personnel cross left shoulder to left shoulder.

(3) **Attack movements.** There are four attack movements designed to disable or capture the opponent: thrust, butt stroke, slash, and smash. Each of these movements may be used for the initial attack or as a follow-up should the initial movement fail to find its mark. The soldiers learn these movements separately. They will learn to execute these movements in a swift and continuous series during subsequent training. During all training, the emphasis will be on conducting natural, balanced movements to effectively damage the target. Precise, learned movements will not be stressed.

(a) **Thrust.** The objective is to disable or capture an opponent by thrusting the bayonet blade into a vulnerable part of his body. The thrust is especially effective in areas where movement is restricted—for example, trenches, wooded areas, or built-up areas. It is also effective when an opponent is lying on the ground or in a fighting position. The instructor explains and demonstrates how to lunge forward on your leading foot without losing your balance (Figure 5-43, Step 1) and, at the same time, drive the bayonet with great force into any unguarded part of your opponent's body.

To accomplish this, grasp the rifle firmly with both hands and pull the stock in close to the right hip; partially extend the left arm, guiding the point of the bayonet in the general direction of the opponent's body (Figure 5-43, Step 2).

Quickly complete the extension of the arms and body as the leading foot strikes the ground so that the bayonet penetrates the target (Figure 5-43, Step 3).

To withdraw the bayonet, keep your feet in place, shift your body weight to the rear, and pull rearward along the same line of penetration (Figure 5-43, Step 4).

Next, assume the attack position in preparation to continue the assault (Figure 5-43, Step 5).

This movement is taught by the numbers in three phases:

1. THRUST AND HOLD, MOVE.
2. WITHDRAW AND HOLD, MOVE.
3. ATTACK POSITION, MOVE.

At combat speed, the command is, THRUST SERIES, MOVE. Training emphasis will be placed on movement at combat speed. The instructor gives the commands, and the soldiers perform the movements.

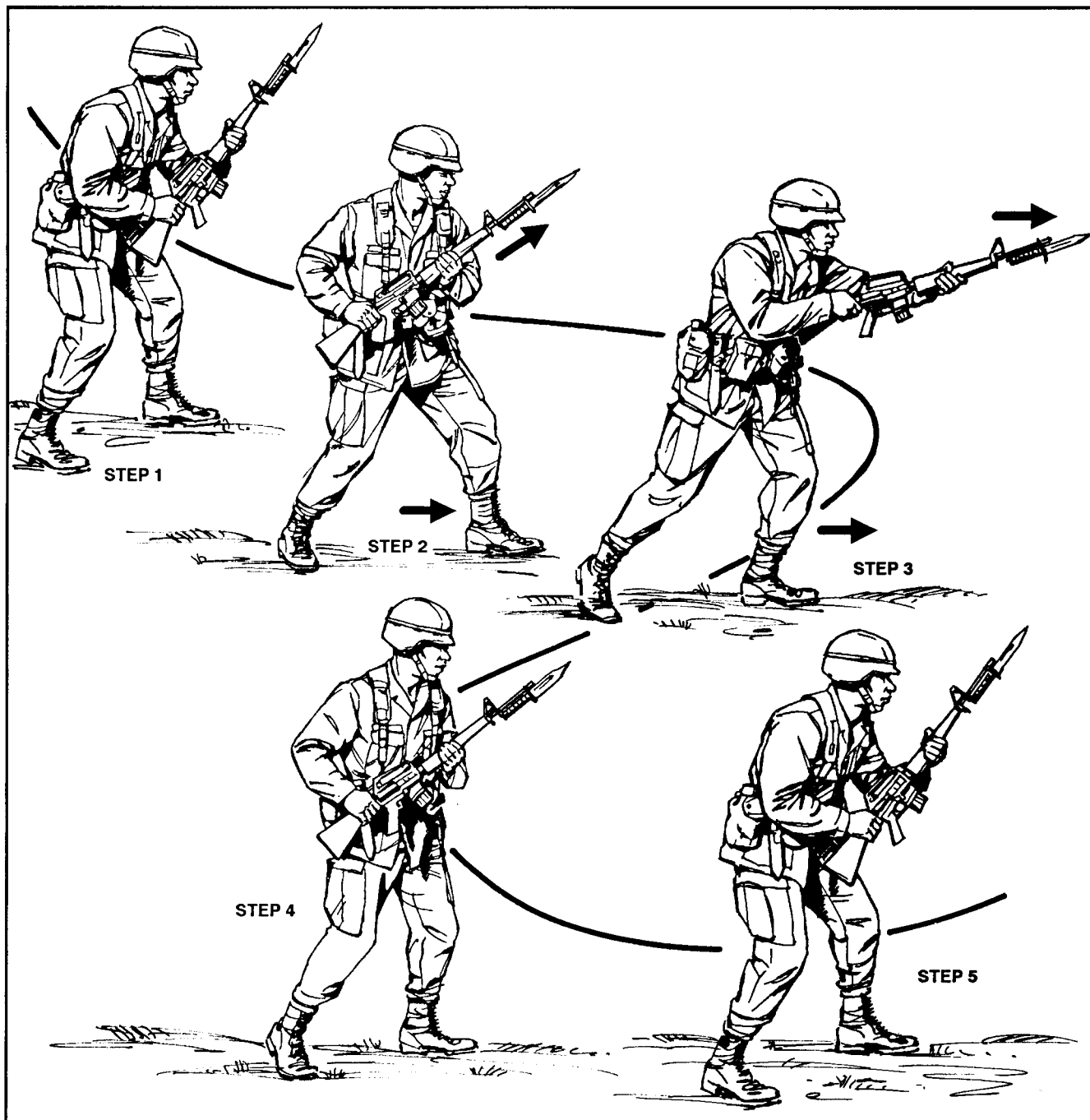


Figure 5-43. Thrust movement.

(b) *Butt stroke*. The objective is to disable or capture an opponent by delivering a forceful blow to his body with the rifle butt (Figure 5-44, Steps 1, 2,3, and 4, and Figure 5-45, Steps 1,2,3, and 4). The aim of the butt stroke may be the opponent's weapon or a vulnerable portion of his body. The butt stroke may be vertical, horizontal, or somewhere between the two planes. The instructor explains and demonstrates how to step forward with your trailing foot and, at the same time using your left hand as a pivot, swing the rifle in an arc and drive the rifle butt into your opponent. To recover, bring your trailing foot forward and assume the attack position. The movement is taught by the numbers in two phases:

1. BUTT STROKE TO THE (head, groin, kidney) AND HOLD, MOVE.
2. ATTACK POSITION, MOVE.

At combat speed, the command is, BUTT STROKE TO THE (head, groin, kidney) SERIES, MOVE. Training emphasis will be placed on movement at combat speed. The instructor gives the commands, and the soldiers perform the movement.

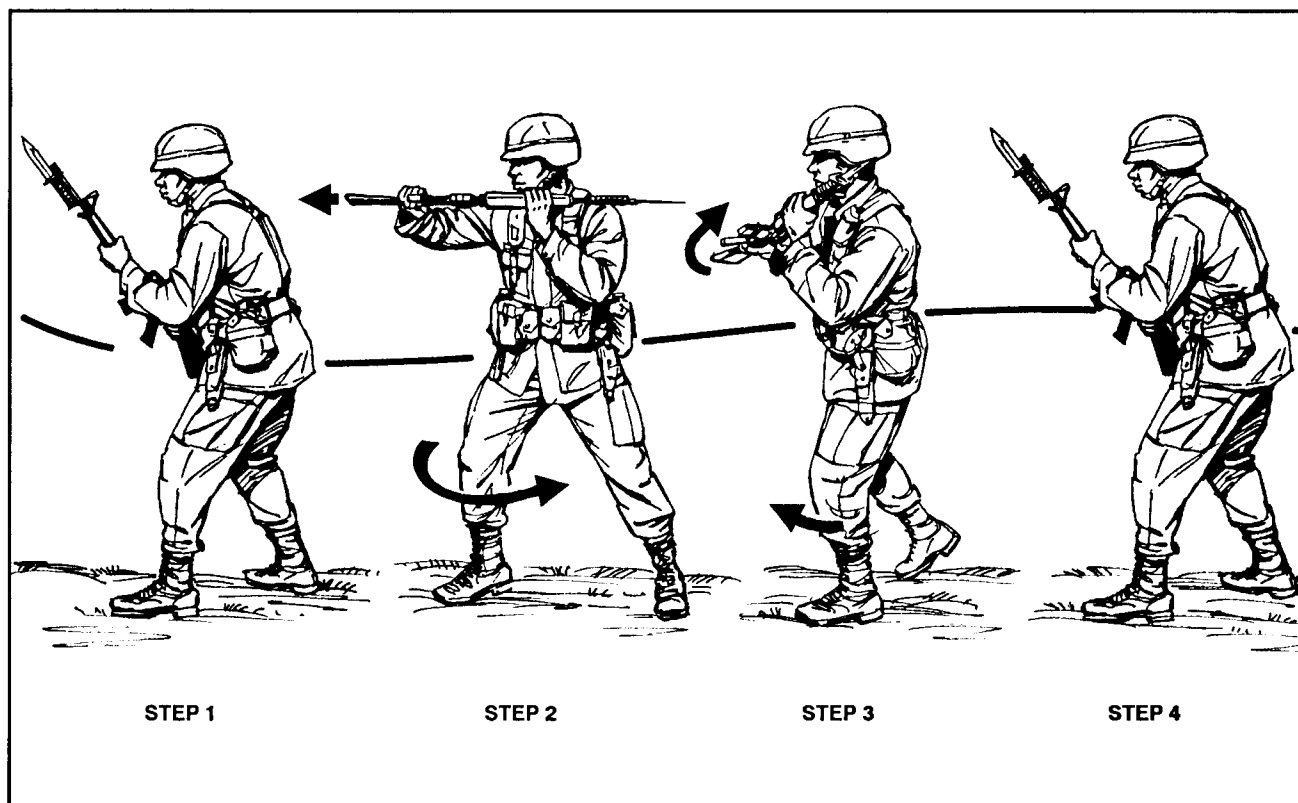


Figure 5-44. Butt stroke to the head.

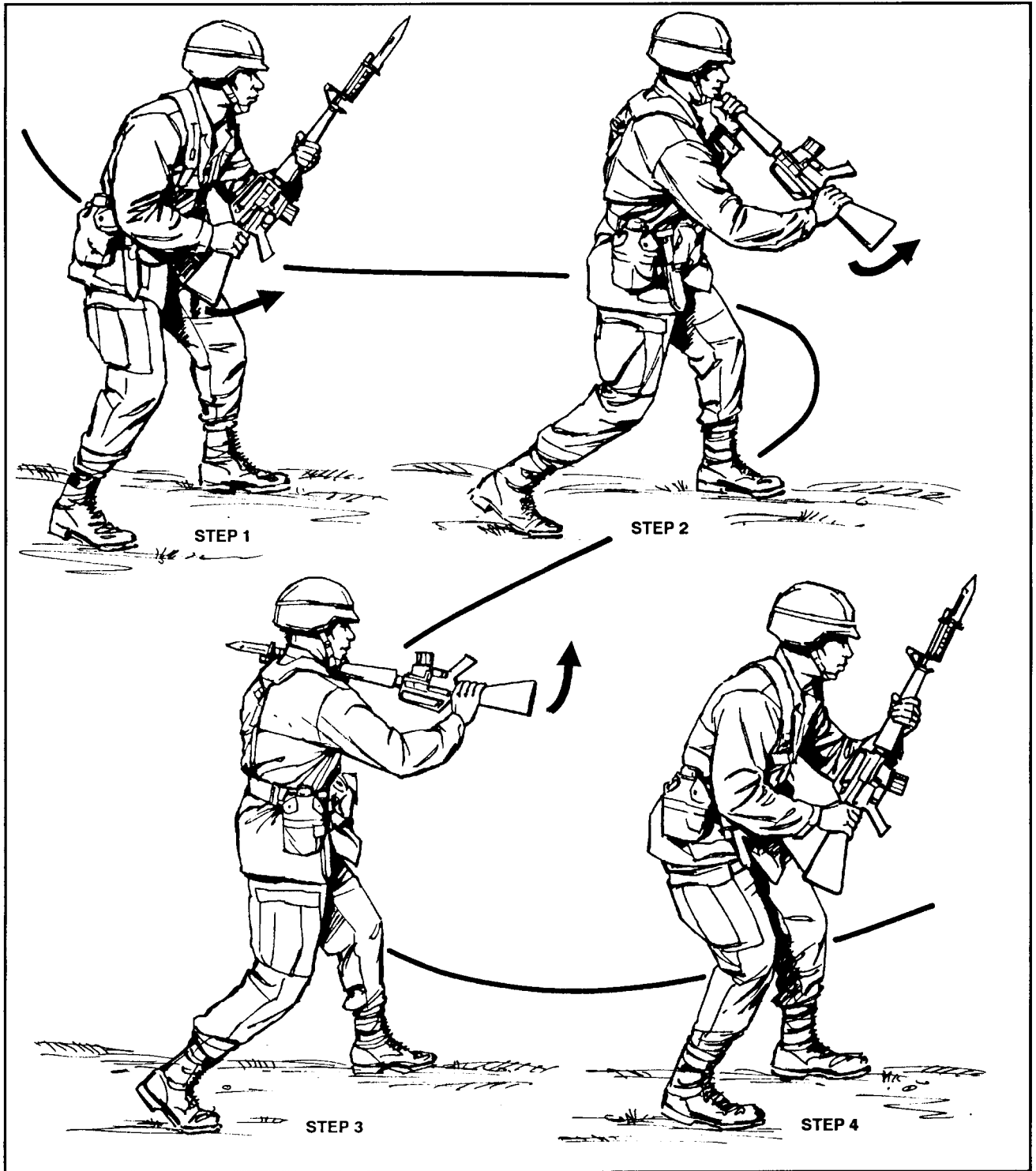


Figure 5-45. Butt stroke to the groin.

(c) *Slash*. The objective is to disable or capture the opponent by cutting him with the blade of the bayonet. The instructor explains and demonstrates how to step forward with your lead foot (Figure 5-46, Step 1).

At the same time, extend your left arm and swing the knife edge of your bayonet forward and down in a slashing arc (Figure 5-46, Steps 2 and 3).

To recover, bring your trailing foot forward and assume the attack position (Figure 5-46, Step 4).

This movement is taught by the number in two phases:

1. SLASH AND HOLD, MOVE.
2. ATTACK POSITION, MOVE.

At combat speed, the command is, SLASH SERIES, MOVE. Training emphasis will be placed on movement at combat speed. The instructor gives the commands, and the soldiers perform the movements.

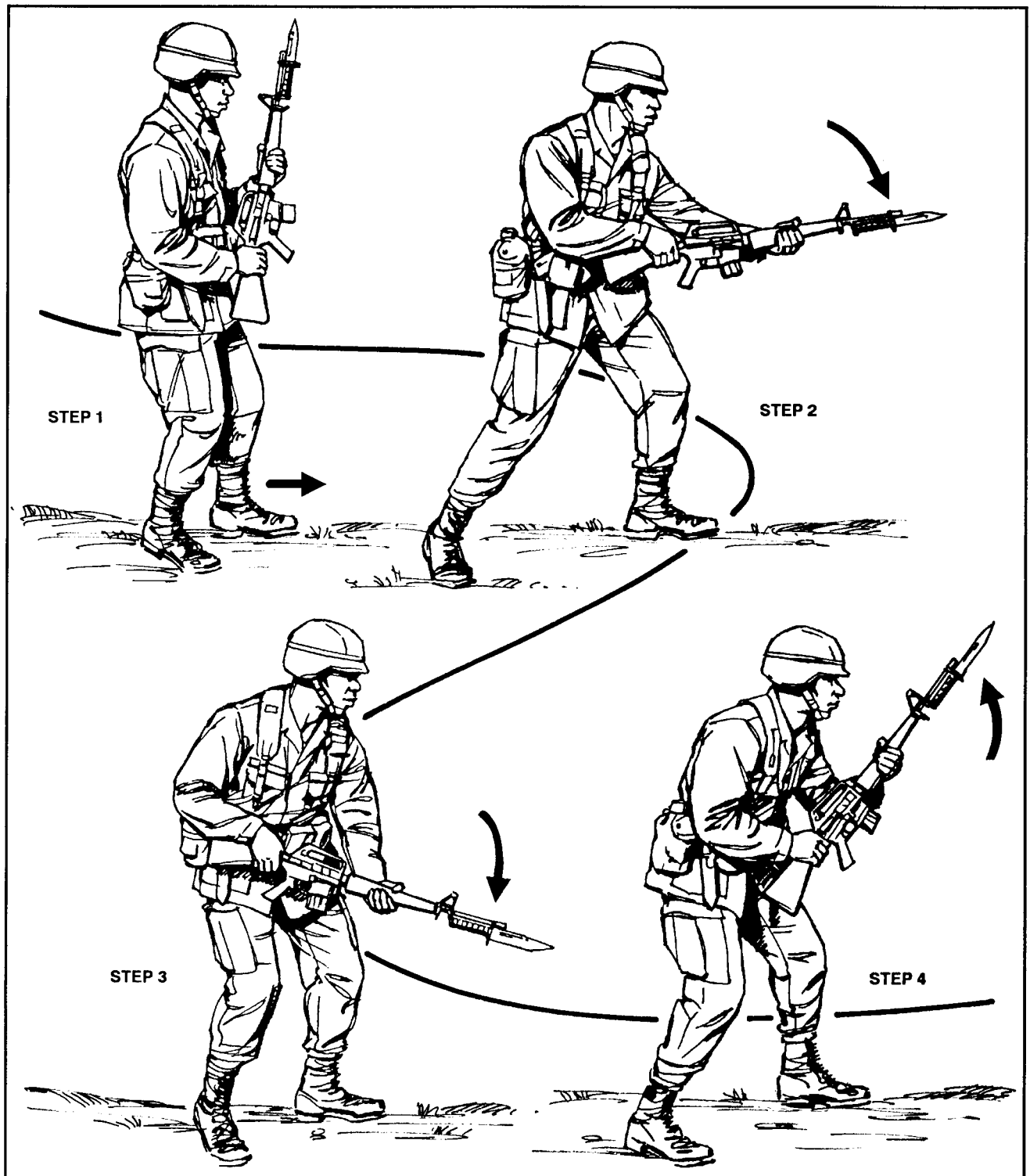


Figure 5-46. Slash movement.



(d) *Smash*. The objective is to disable or capture an opponent by smashing the rifle butt into a vulnerable part of his body. The smash is often used as a follow-up to a butt stroke and is also effective in wooded areas and trenches when movement is restricted. The instructor explains and demonstrates how to push the butt of the rifle upward until horizontal (Figure 5-47, Step 1) and above the left shoulder with the bayonet pointing to the rear, sling up (Figure 5-47, Step 2). The weapon is almost horizontal to the ground at this time.

Step forward with the trailing foot, as in the butt stroke, and forcefully extend both arms, slamming the rifle butt into the opponent (Figure 5-47, Step 3).

To recover, bring your trailing foot forward (Figure 5-47, Step 4) and assume the attack position (Figure 5-47, Step 5).

This movement is taught by the numbers in two phases:

1. SMASH AND HOLD, MOVE.
2. ATTACK POSITION, MOVE.

At combat speed, the command is, SMASH SERIES, MOVE. Training emphasis will be placed on movement at combat speed. The instructor gives the commands, and the soldiers perform the movements.

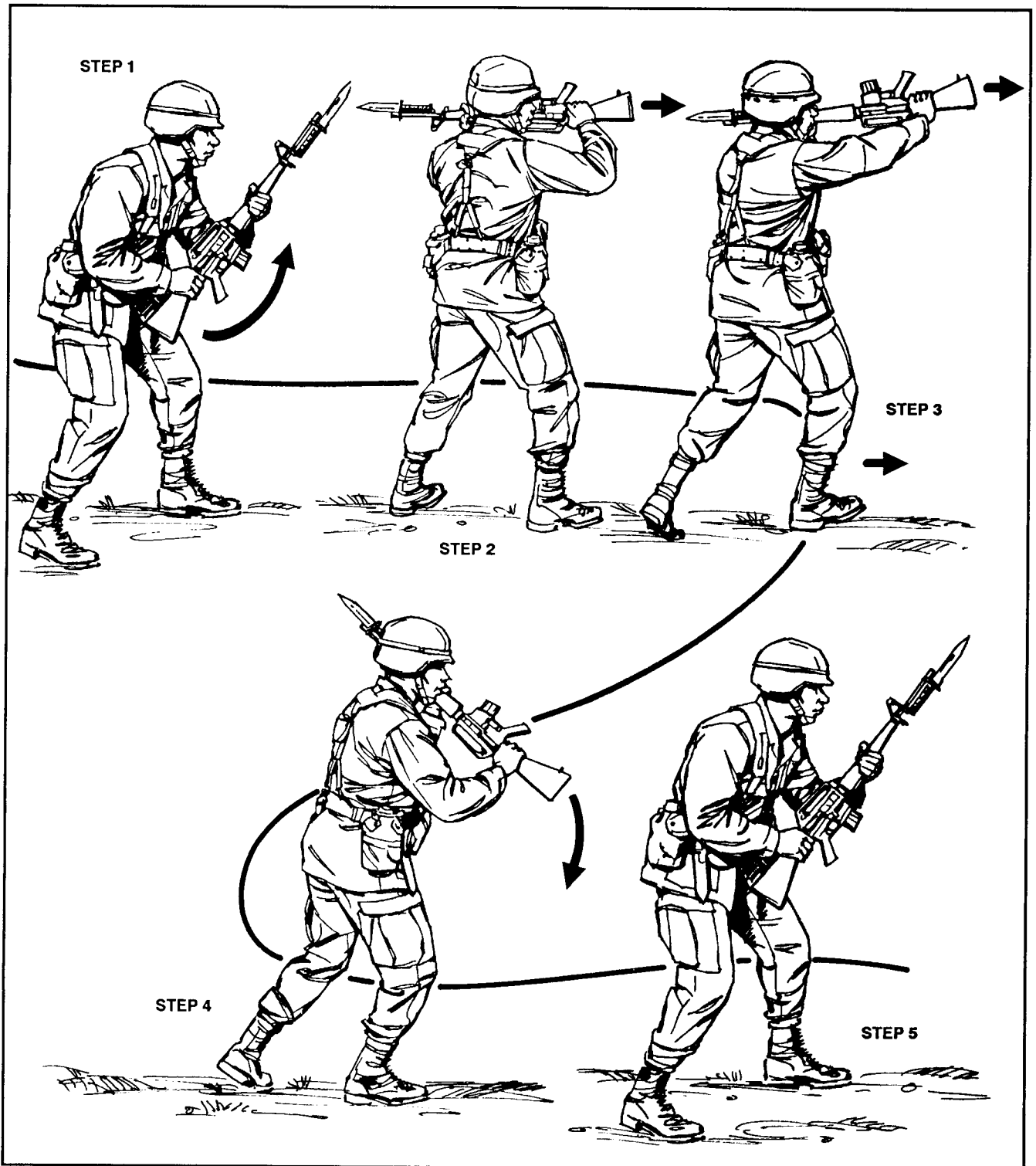


Figure 5-47. Smash movement.

(4) ***Defensive movements.*** At times, the soldier may lose the initiative and be forced to defend himself. He may also meet an opponent who does not present a vulnerable area to attack. Therefore, he must make an opening by initiating a parry or block movement, then follow up with a vicious attack. The follow-up attack is immediate and violent.

**CAUTION**

**TO MINIMIZE WEAPON DAMAGE WHILE USING BLOCKS AND PARRIES, LIMIT WEAPON-TO-WEAPON CONTACT TO HALF SPEED DURING TRAINING.**

(a) ***Parry movement.*** The objective is to counter a thrust, throw the opponent off balance, and hit a vulnerable area of his body. Timing, speed, and judgment are essential factors in these movements. The instructor explains and demonstrates how to—

- **Parry right.** If your opponent carries his weapon on his left hip (left-handed), you will parry it to your right. In execution, step forward with your leading foot (Figure 5-48, Step 1), strike the opponent's rifle (Figure 5-48, Step 2), deflecting it to your right (Figure 5-48, Step 3), and follow up with a thrust, slash, or butt stroke.

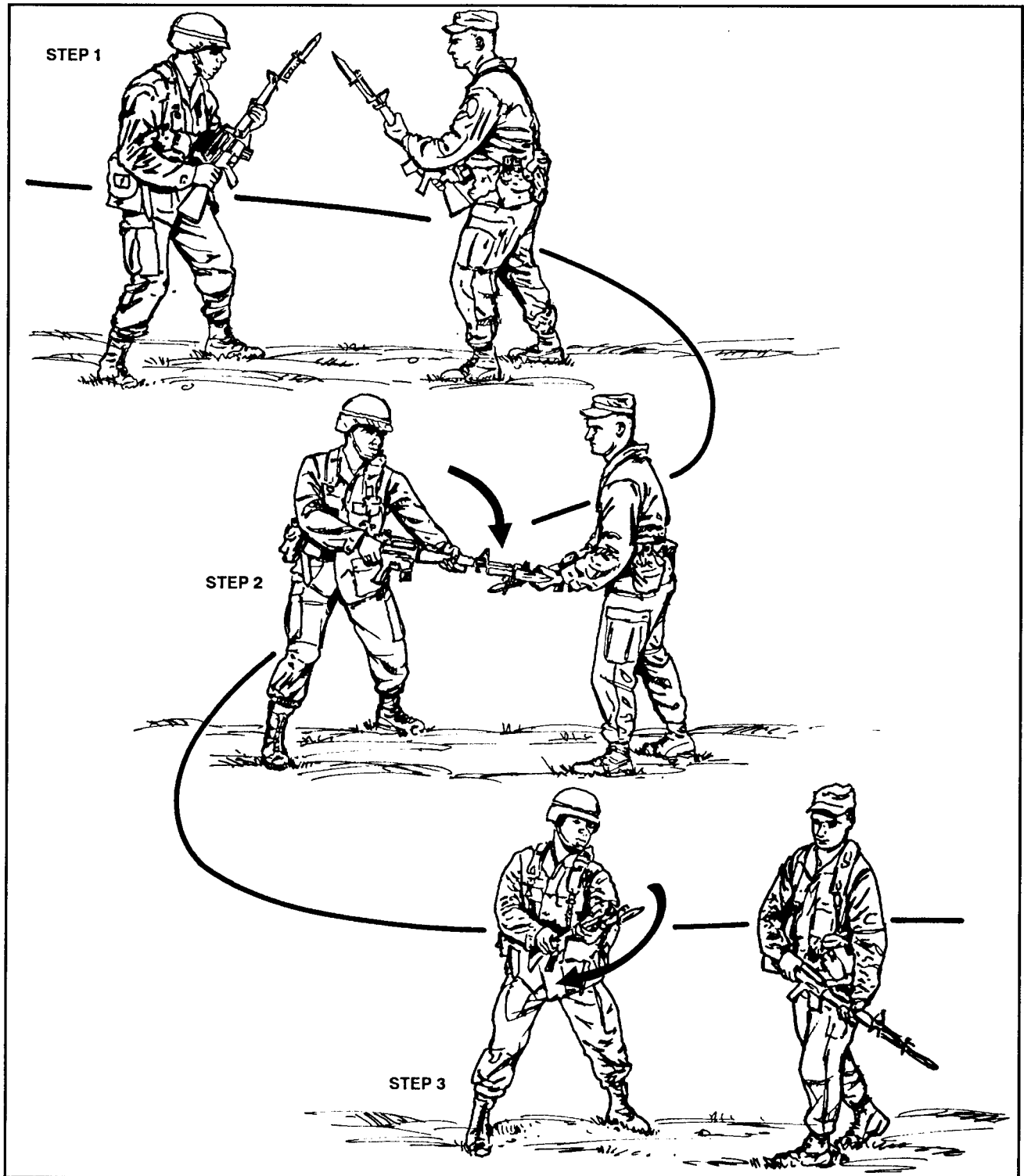


Figure 5-48. Parry right.

- **Parry left.** If your opponent carries his weapon on his right hip (right-handed), you will parry it to your left. In execution, step forward with your leading foot (Figure 5-49, Step 1), strike the opponent's rifle (Figure 5-49, Step 2), deflecting it to your left (Figure 5-49, Step 3), and follow up with a thrust, slash, or butt stroke.

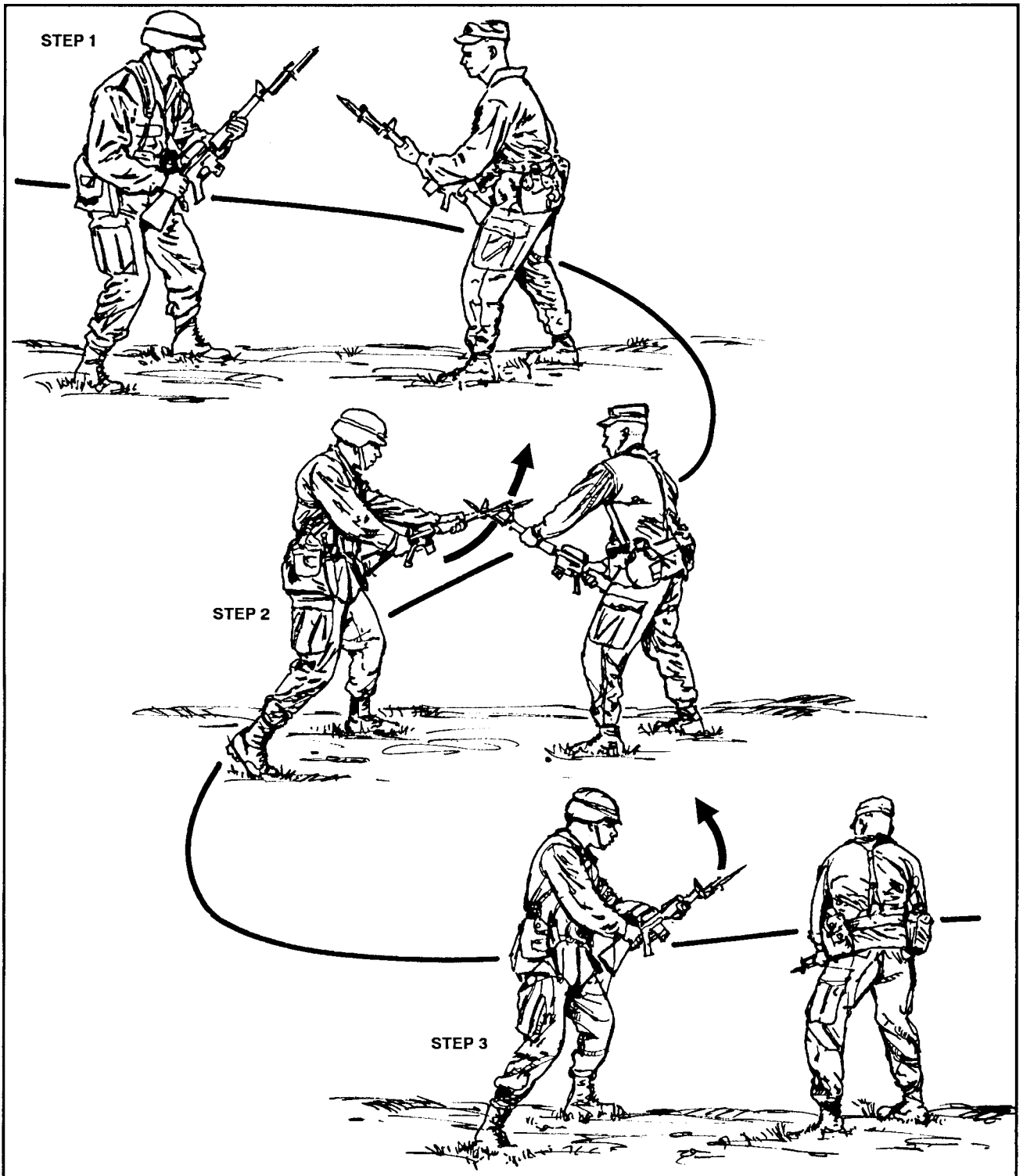


Figure 5-49. Parry left.

A supplementary parry left is the follow-up attack (Figure 5-50, Steps 1,2,3, 4, and 5).

- Recovery. Immediately return to the attack position after completing each parry and follow-up attack.

The movement is taught by the numbers in three phases:

1. PARRY RIGHT (OR LEFT), MOVE.
2. THRUST MOVE.
3. ATTACK POSITION, MOVE.

At combat speed, the command is, PARRY RIGHT (LEFT) or PARRY (RIGHT OR LEFT) WITH FOLLOW-UP ATTACK. The instructor gives the commands, and the soldiers perform the movements.

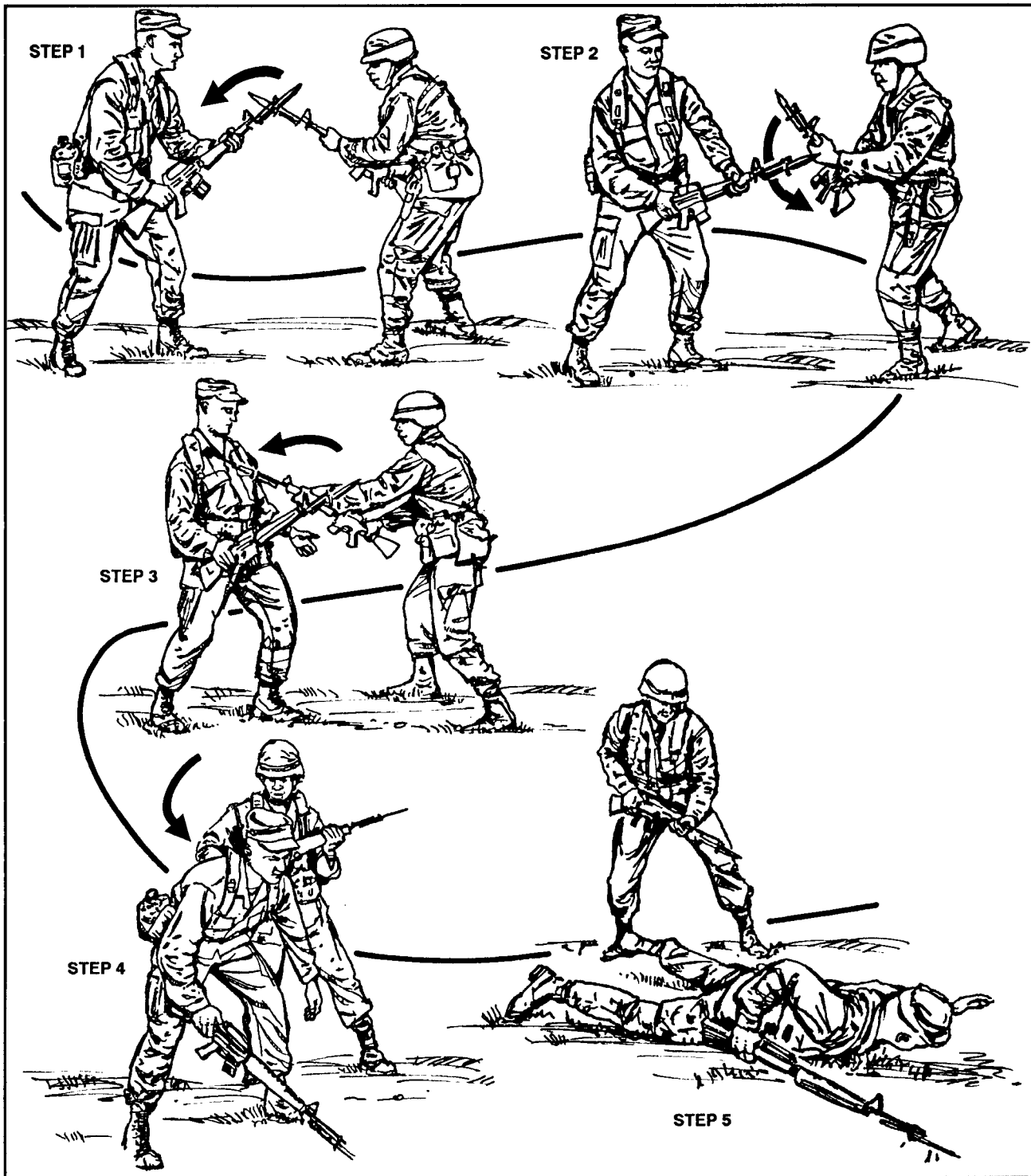


Figure 5-50. Parry left, slash, with follow-up butt stroke to kidney region.



(b) *Block*. When surprised by an opponent, the block is used to cut off the path of his attack by making weapon-to-weapon contact. A block must always be followed immediately with a vicious attack. The instructor explains and demonstrates how to extend your arms using the center part of your rifle as the strike area, and cut off the opponent's attack by making weapon-to-weapon contact. Strike the opponent's weapon with enough power to throw him off balance.

- High block (Figure 5-51, Steps 1,2, and 3). Extend your arms upward and forward at a 45-degree angle. This action deflects an opponent's slash movement by causing his bayonet or upper part of his rifle to strike against the center part of your rifle.

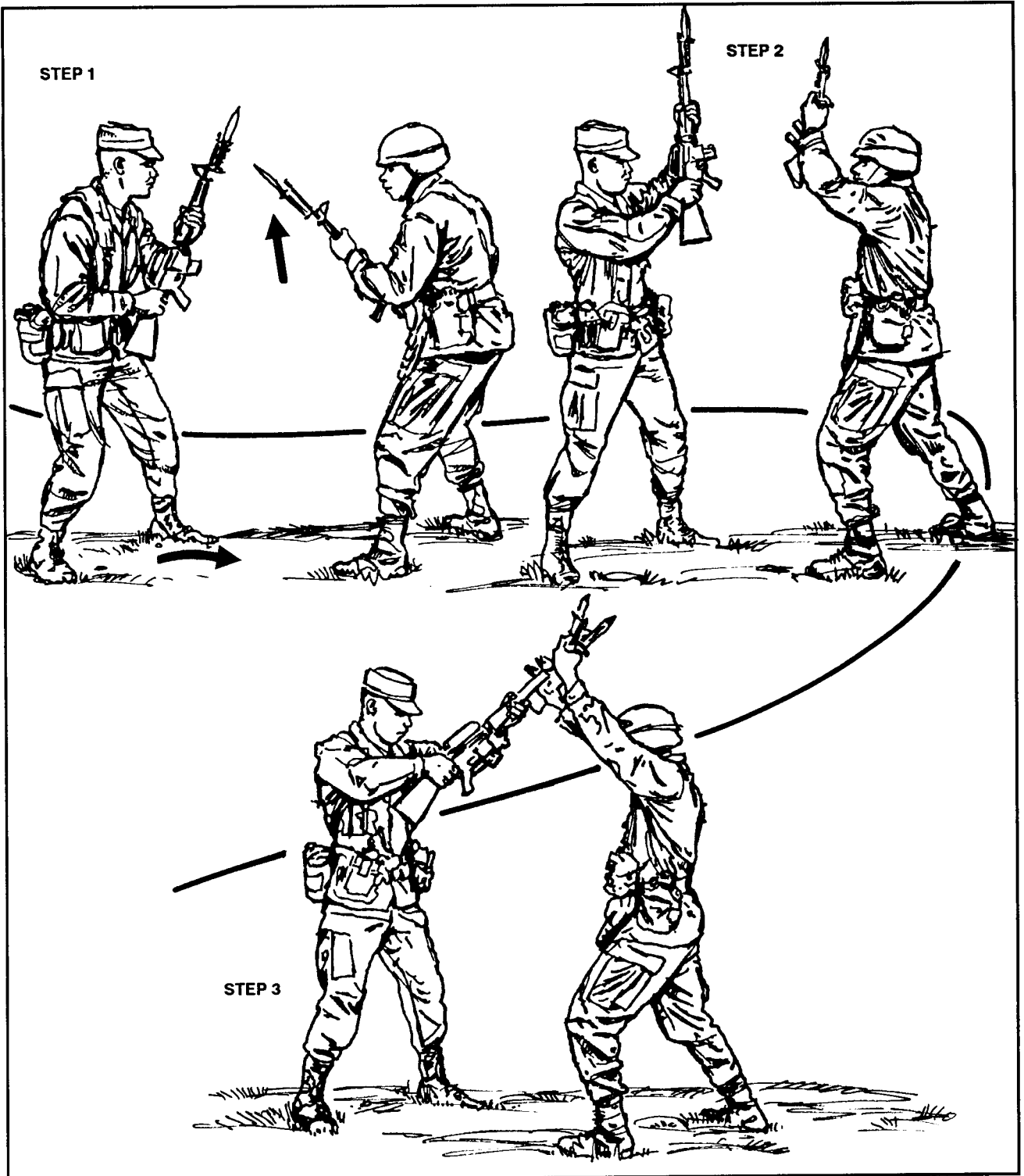


Figure 5-51. High block against slash.

- Low block (Figure 5-52, Steps 1,2, and 3). Extend your arms downward and forward about 15 degrees from your body. This action deflects an opponent's butt stroke aimed at the groin by causing the lower part of his rifle stock to strike against the center part of your rifle.



Figure 5-52. Low block against butt stroke to groin.

- Side block (Figure 5-53, Steps 1 and 2). Extend your arms with the left hand high and right hand low, thus holding the rifle vertical. This block is designed to stop a butt stroke aimed at your upper body or head. Push the rifle to your left to cause the butt of the opponent's rifle to strike the center portion of your rifle.
- Recovery. Counterattack each block with a thrust, butt stroke, smash, or slash.

Blocks are taught by the numbers in two phases:

1. HIGH (LOW) or (SIDE) BLOCK.
2. ATTACK POSITION, MOVE.

At combat speed, the command is the same. The instructor gives the commands, and the soldiers perform the movement.

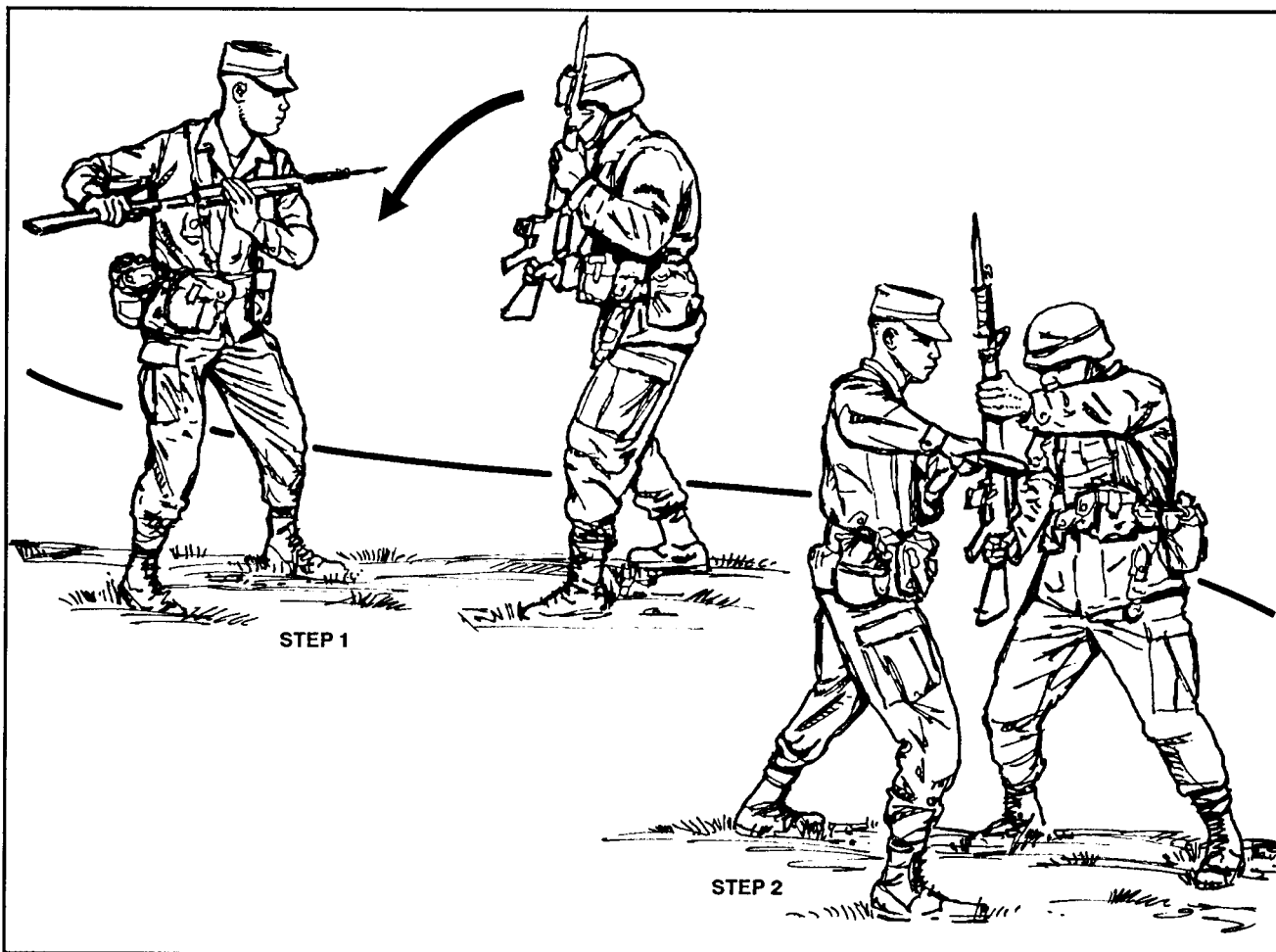


Figure 5-53. Side block against butt stroke.

(5) **Modified movements.** Two attack movements have been modified to allow the rifle-bayonet fighter to slash or thrust an opponent without removing his hand from the pistol grip of the M16 rifle should the situation dictate.

(a) The modified thrust (Figure 5-54, Steps 1 and 2) is identical to the thrust (as described in paragraph (3)(a)) with the exception of the right hand grasping the pistol grip.

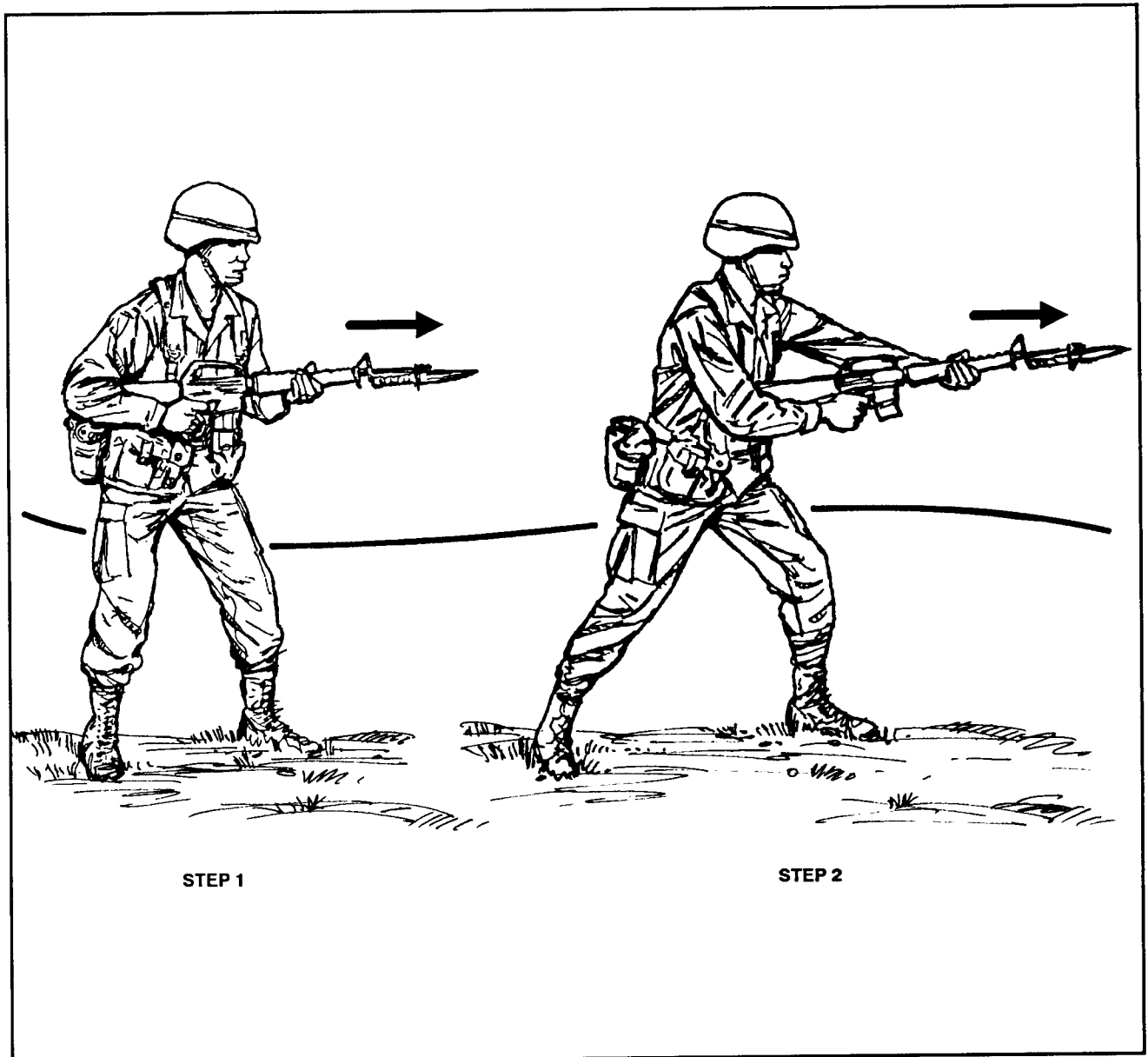


Figure 5-54. Modified thrust.

(b) The modified slash (Figure 5-55, Steps 1,2,3, and 4) is identical to the slash (as described in paragraph (3)(c)) with the exception of the right hand grasping the pistol grip.

(6) **Follow-up movements.** Follow-up movements are attack movements that naturally follow from the completed position of the previous movement. If the initial thrust, butt stroke, smash, or slash fails to make contact with the opponent's body, the soldier should instinctively follow up with additional movements until he has disabled or captured the opponent. It is important to follow-up the initial attack with another aggressive action so the initiative is not lost. The instructor explains and demonstrates how instinct should govern your selection of a specific follow-up movement. For example—

- PARRY LEFT, BUTT STROKE TO THE HEAD, SMASH, SLASH, ATTACK POSITION.
- PARRY LEFT, SLASH, BUTT STROKE TO THE KIDNEY, ATTACK POSITION.
- PARRY RIGHT THRUST, BUTT STROKE TO THE GROIN, SLASH, ATTACK POSITION.

Two examples of commands using follow-up movements are—

- PARRY LEFT (soldier executes), THRUST (soldier executes), BUTT STROKE TO THE HEAD (soldier executes), SMASH (soldier executes), SLASH (soldier executes), ATTACK POSITION (soldier assumes the attack position).
- THRUST (soldier executes), THRUST (soldier executes), THRUST (soldier executes), BUTT STROKE TO THE GROIN (soldier executes), SLASH (soldier executes), ATTACK POSITION (soldier assumes the attack position).

All training will stress damage to the target and violent action, using natural movements as opposed to precise, stereotyped movements. Instinctive, aggressive action and balance are the keys to offense with the rifle and bayonet.

NOTE: For training purposes, the instructor may and should mix up the series of movements.

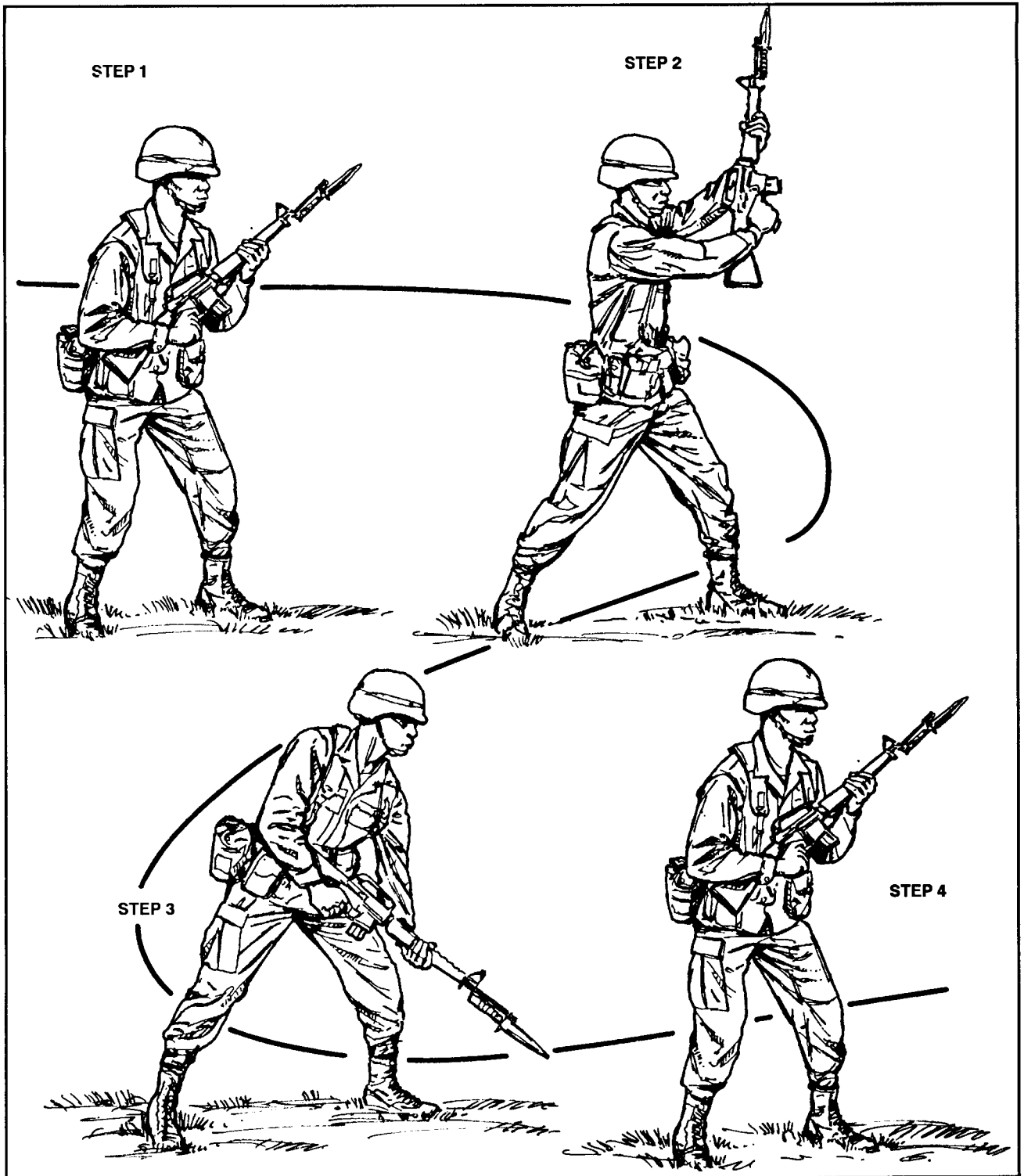


Figure 5-55. Modified slash.



## Section IV FIELD-EXPEDIENT WEAPONS

To survive, the soldier in combat must be able to deal with any situation that develops. His ability to adapt any nearby object for use as a weapon in a win-or-die situation is limited only by his ingenuity and resourcefulness. Possible weapons, although not discussed herein, include ink pens or pencils; canteens tied to string to be swung; snap links at the end of sections of rope; kevlar helmets; sand, rocks, or liquids thrown into the enemy's eyes; or radio antennas. The following techniques demonstrate a few expedient weapons that are readily available to most soldiers for defense and counterattack against the bayonet and rifle with fixed bayonet.

### 5-11. ENTRENCHING TOOL

Almost all soldiers carry the entrenching tool. It is a versatile and formidable weapon when used by a soldier with some training. It can be used in its straight position—locked out and fully extended—or with its blade bent in a 90-degree configuration.

a. To use the entrenching tool against a rifle with fixed bayonet, the attacker lunges with a thrust to the stomach of the defender along a low No. 5 angle of attack (Figure 5-56, Step 1).

The defender moves just outside to avoid the lunge and meets the attacker's arm with the blade of the fully extended entrenching tool (Figure 5-56, Step 2).

The defender gashes all the way up the attacker's arm with the force of both body masses coming together. The hand gripping the entrenching tool is given natural protection from the shape of the handle. The defender continues pushing the blade of the entrenching tool up and into the throat of the attacker, driving him backward and downward (Figure 5-56, Step 3).



Figure 5-56. Entrenching tool against rifle with fixed bayonet.

b. An optional use of entrenching tool against a rifle with fixed bayonet is for the attacker to lunge to the stomach of the defender (Figure 5-57, Step 1).

The defender steps to the outside of the line of attack at 45 degrees to avoid the weapon. He then turns his body and strikes downward onto the attacking arm (on the radial nerve) with the blade of the entrenching tool (Figure 5-57, Step 2).

He drops his full body weight down with the strike, and the force causes the attacker to collapse forward. The defender then strikes the point of the entrenching tool into the jugular notch, driving it deeply into the attacker (Figure 5-57, Step 3).

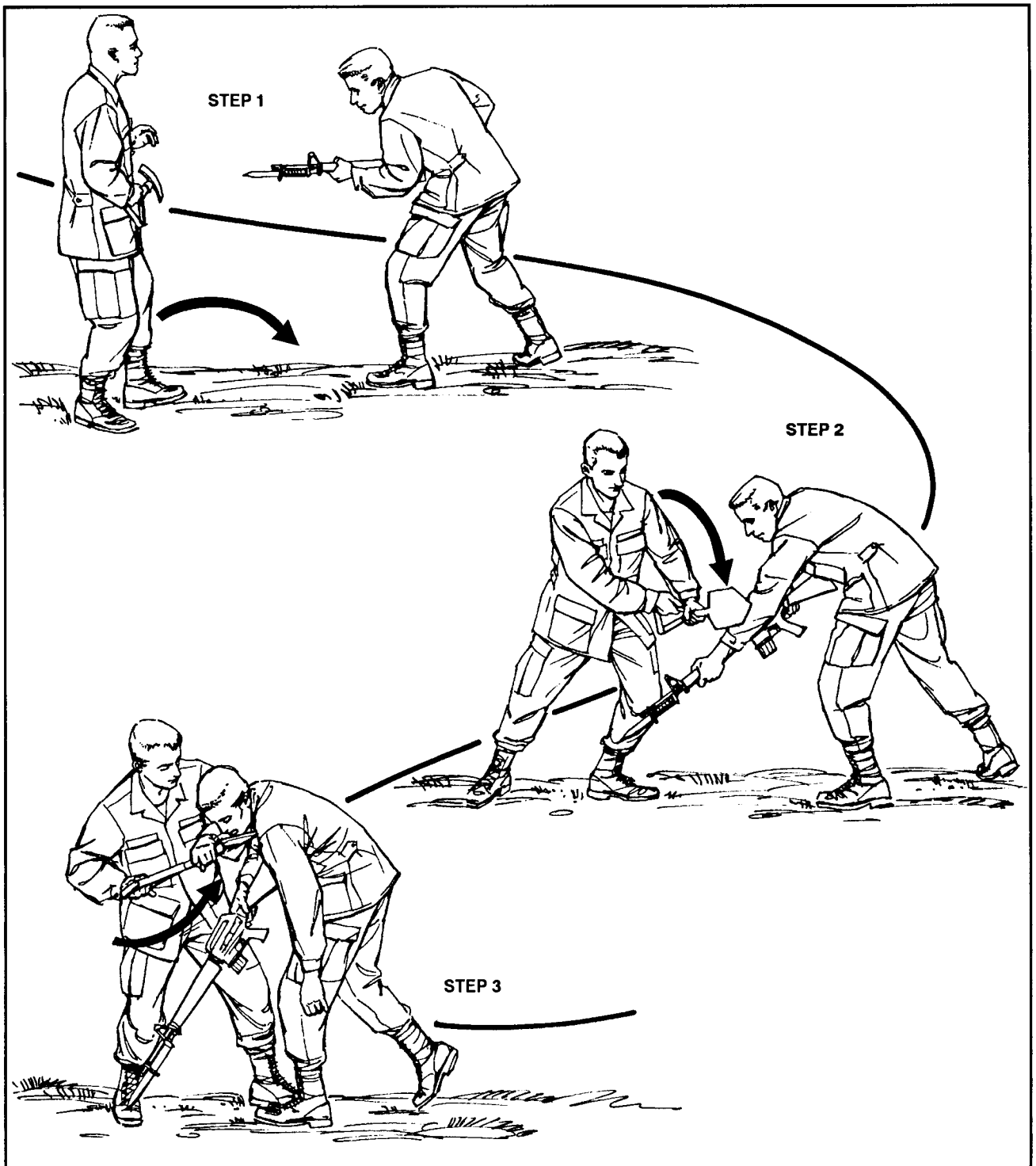


Figure 5-57. Optional use of entrenching tool against rifle with fixed bayonet.

c. In the next two sequences, the entrenching tool is used in the bent configuration—that is, the blade is bent 90 degrees to the handle and locked into place.

(1) The attacker tries to stick the bayonet into the chest of the defender (Figure 5-58, Step 1).

When the attack comes, the defender moves his body off the line of attack by stepping to the outside. He allows his weight to shift forward and uses the blade of the entrenching tool to drag along the length of the weapon, scraping the attacker's arm and hand (Figure 5-58, Step 2). The defender's hand is protected by the handle's natural design.

He continues to move forward into the attacker, strikes the point of the blade into the jugular notch, and drives it downward (Figure 5-58, Step 3).

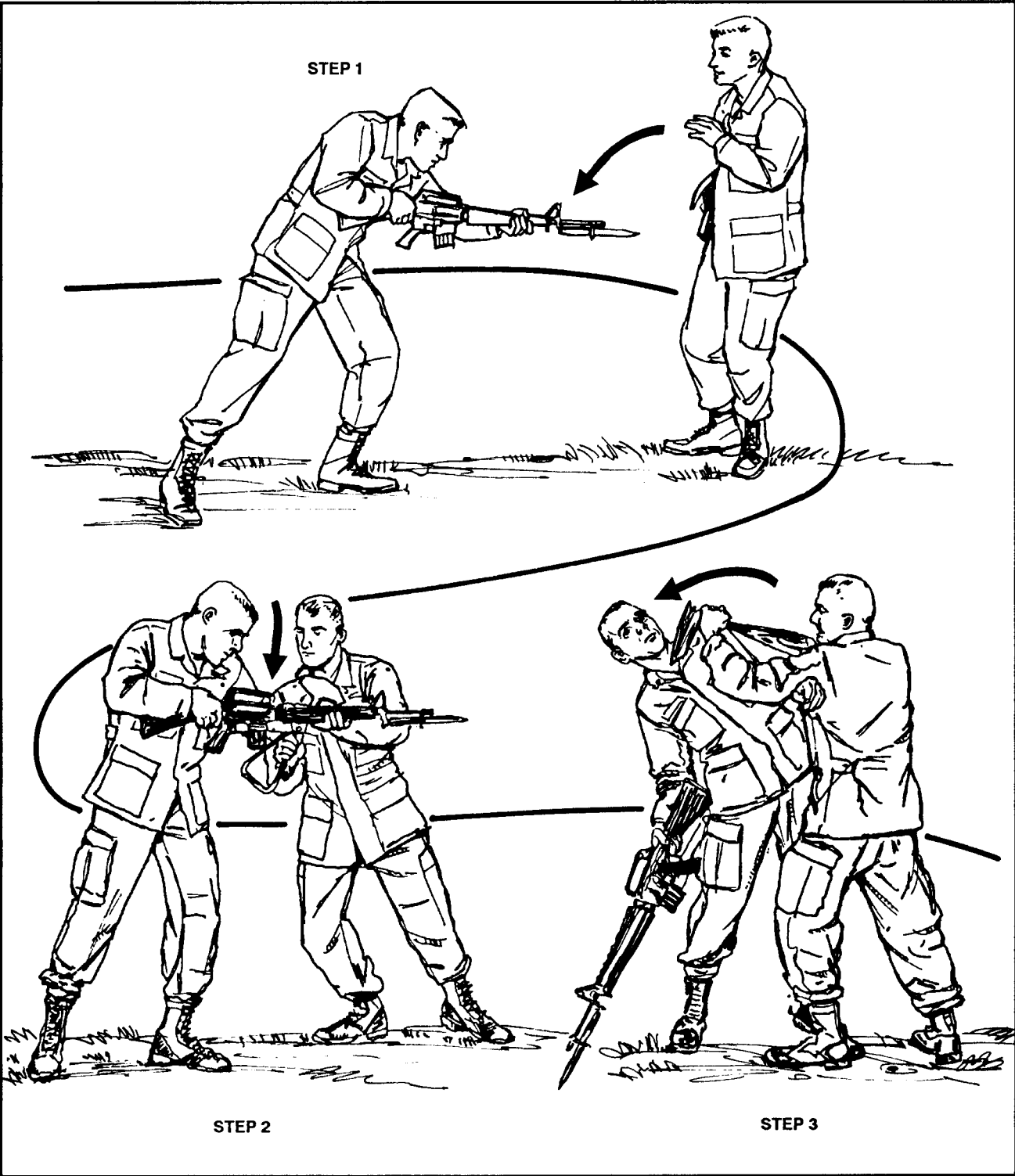


Figure 5-58. Entrenching tool in bent configuration.

(2) The attacker lunges with a fixed bayonet along the No. 5 angle of attack (Figure 5-59, Step 1).

The defender then steps to the outside to move off the line of attack and turns; he strikes the point of the blade of the entrenching tool into the side of the attacker's throat (Figure 5-59, Step 2).

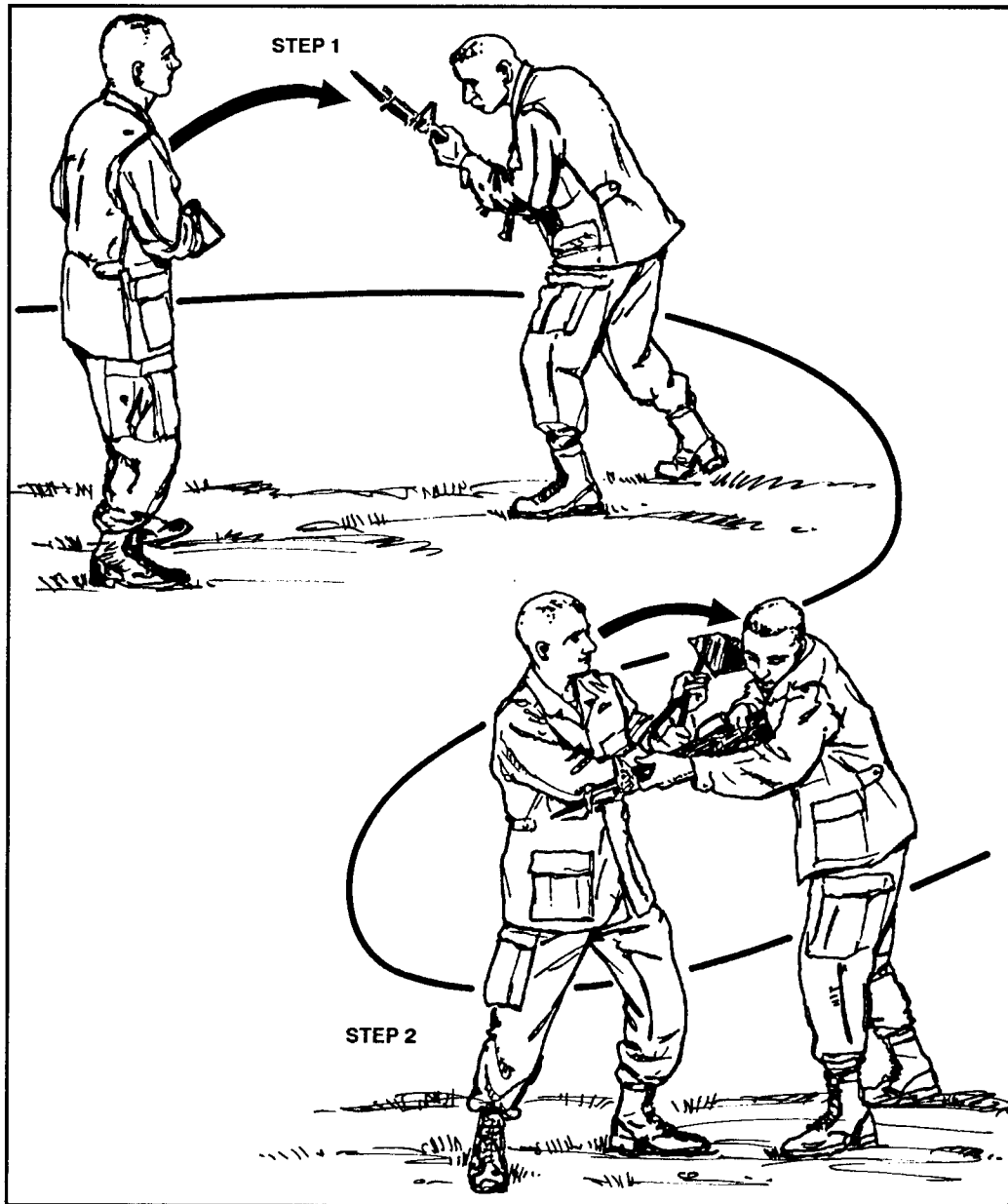


Figure 5-59. Optional use of entrenching tool  
in bent configuration.

## 5-12. THREE-FOOT STICK

Since a stick can be found almost anywhere, a soldier should know its uses as a field-expedient weapon. The stick is a versatile weapon; its capability ranges from simple prisoner control to lethal combat.

a. Use a stick about 3 feet long and grip it by placing it in the vee formed between the thumb and index finger, as in a handshake. It may also be grasped by two hands and used in an unlimited number of techniques. The stick is not held at the end, but at a comfortable distance from the butt end.

b. When striking with the stick, achieve maximum power by using the entire body weight behind each blow. The desired point of contact of the weapon is the last 2 inches at the tip of the stick. The primary targets for striking with the stick are the vital body points in Chapter 4. Effective striking points are usually the wrist, hand, knees, and other bony protuberances. Soft targets include the side of the neck, jugular notch, solar plexus, and various nerve motor points. Attack soft targets by striking or thrusting the tip of the stick into the area. Three basic methods of striking are—

(1) **Thrusting.** Grip the stick with both hands and thrust straight into a target with the full body mass behind it.

(2) **Whipping.** Hold the stick in one hand and whip it in a circular motion; use the whole body mass in motion to generate power.

(3) **Snapping.** Snap the stick in short, shocking blows, again with the body mass behind each strike.



c. When the attacker thrusts with a knife to the stomach of the defender with a low No. 5 angle of attack, the defender moves off the line of attack to the outside and strikes vigorously downward onto the attacking wrist, hand, or arm (Figure 5-60, Step 1).

The defender then moves forward, thrusts the tip of the stick into the jugular notch of the attacker (Figure 5-60, Step 2), and drives him to the ground with his body weight—not his upper body strength (Figure 5-60, Step 3).

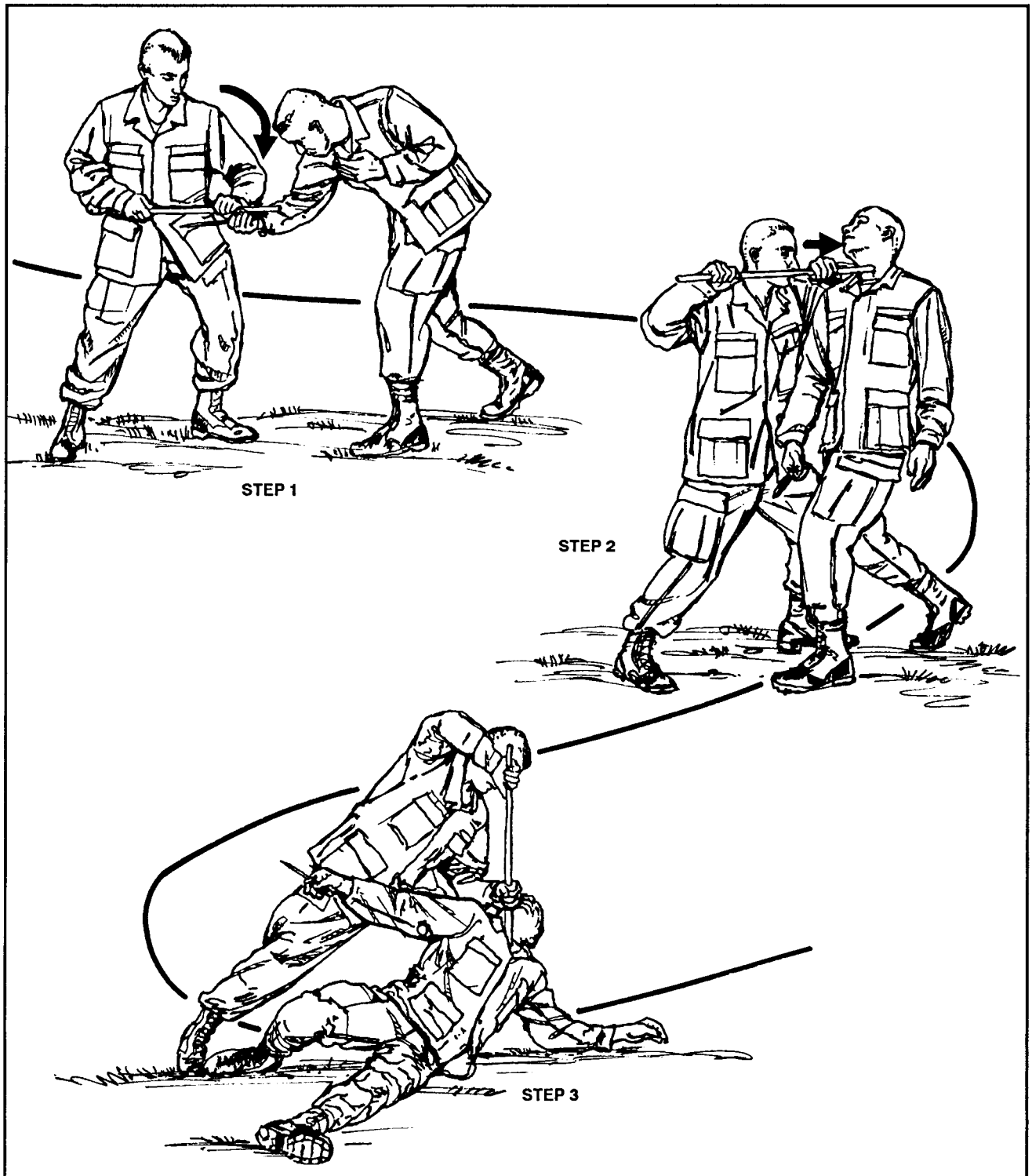


Figure 5-60. Three-foot stick against knife.

d. When using a three-foot stick against a rifle with fixed bayonet, the defender grasps the stick with two hands, one at each end, as the attacker thrusts forward to the chest (Figure 5-61, Step 1).

He steps off the line of attack to the outside and redirects the weapon with the stick (Figure 5-61, Step 2).

He then strikes forward with the forearm into the attacker's throat (Figure 5-61, Step 3). The force of the two body weights coming together is devastating. The attacker's neck is trapped in the notch formed by the stick and the defender's forearm.

Using the free end of the stick as a lever, the defender steps back and uses his body weight to drive the attacker to the ground. The leverage provided by the stick against the neck creates a tremendous choke with the forearm, and the attacker loses control completely (Figure 5-61, Step 4).

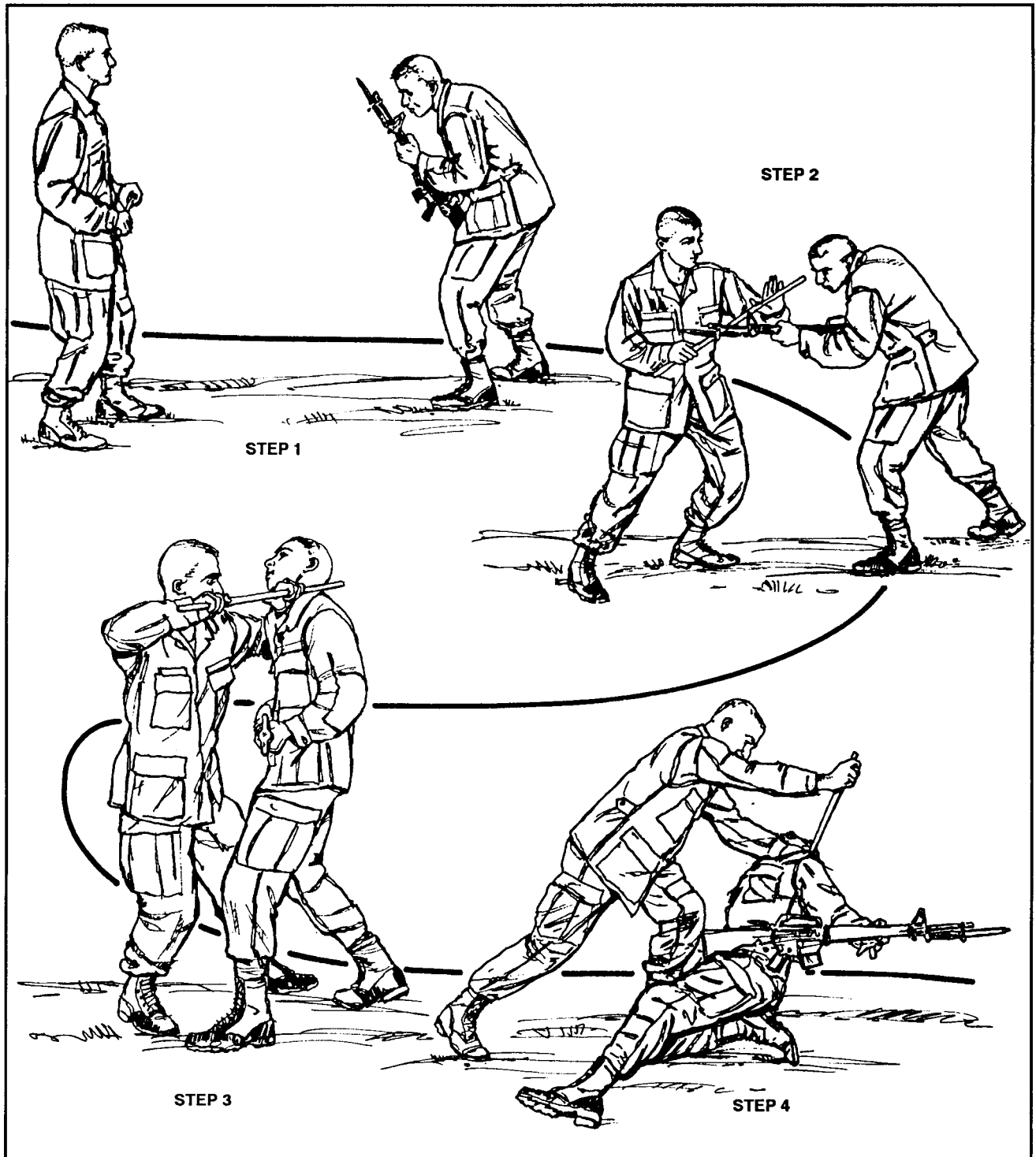


Figure 5-61. Three-foot stick against rifle with fixed bayonet.

**5-13. THREE-FOOT ROPE**

A section of rope about 3 feet long can provide a useful means of self-defense for the unarmed combat soldier in a hand-to-hand fight. Examples of field-expedient ropes are a web belt, boot laces, a portion of a 120-foot nylon rope or sling rope, or a cravat rolled up to form a rope. Hold the rope at the ends so the middle section is rigid enough to almost serve as a stick-like weapon, or the rope can be held with the middle section relaxed, and then snapped by vigorously pulling the hands apart to strike parts of the enemy's body, such as the head or elbow joint, to cause serious damage. It can also be used to entangle limbs or weapons held by the opponent, or to strangle him.

a. When the attacker lunges with a knife to the stomach (Figure 5-62, Step 1), the defender moves off the line of attack 45 degrees to the outside.

He snaps the rope downward onto the attacking wrist, redirecting the knife (Figure 5-62, Step 2).

Then, he steps forward, allowing the rope to encircle the attacker's neck (Figure 5-62, Step 3).

He continues to turn his body and sinks his weight to drop the attacker over his hip (Figure 5-62, Step 4).



Figure 5-62. Three-foot rope against knife.

b. When the attacker thrusts with a fixed bayonet (Figure 5-63, Step 1), the defender moves off the line of attack and uses the rope to redirect the weapon (Figure 5-63, Step 2).

Then, he moves forward and encircles the attacker's throat with the rope (Figure 5-63, Step 3).

He continues moving to unbalance the attacker and strangles him with the rope (Figure 5-63, Step 4).

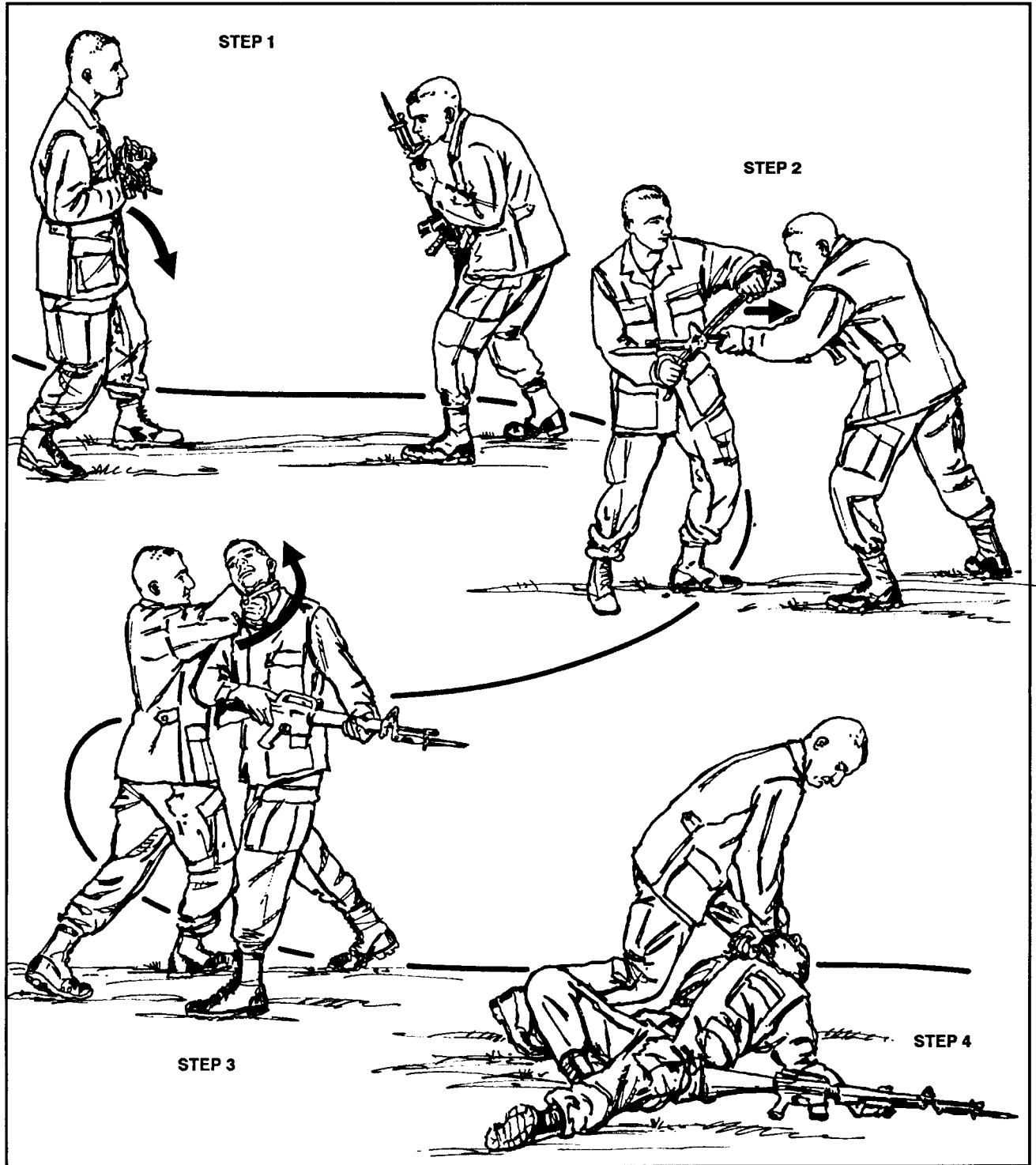


Figure 5-63. Three-foot rope against rifle with fixed bayonet.



c. The 3-foot rope can also be a useful tool against an unarmed opponent. The defender on the left prepares for an attack by gripping the rope between his hands (Figure 5-64, Step 1).

When the opponent on the right attacks, the defender steps completely off the line of attack and raises the rope to strike the attacker's face (Figure 5-64, Step 2).

He then snaps the rope to strike the attacker either across the forehead, just under the nose, or under the chin by jerking his hands forcefully apart. The incoming momentum of the attacker against the rope will snap his head backward, will probably break his neck, or will at least knock him off his feet (Figure 5-64, Step 3).

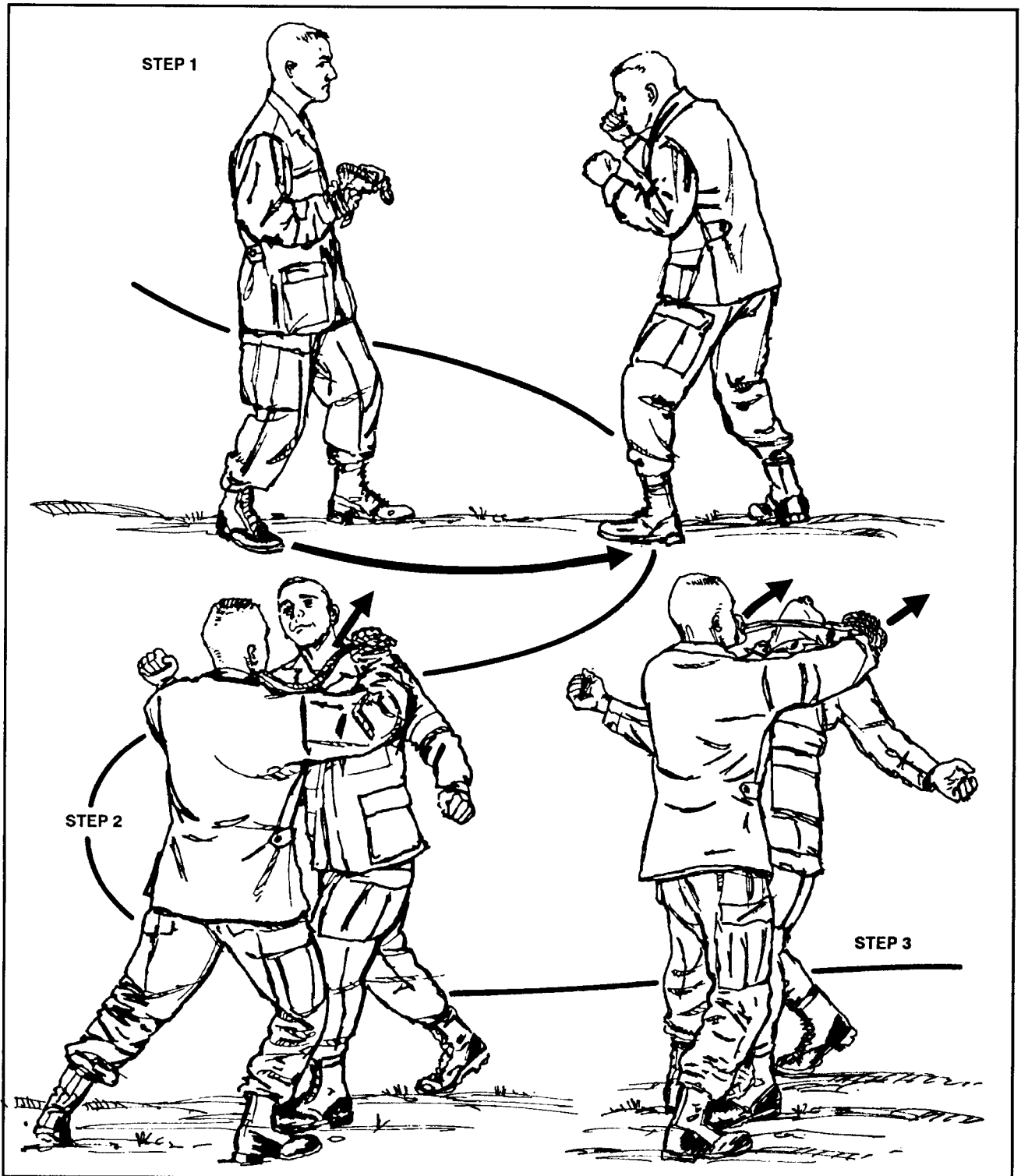


Figure 5-64. Three-foot rope against unarmed opponent.

**5-14. SIX-FOOT POLE**

Another field-expedient weapon that can mean the difference between life and death for a soldier in an unarmed conflict is a pole about 6 feet long. Examples of poles suitable for use are mop handles, pry bars, track tools, tent poles, and small trees or limbs cut to form a pole. A soldier skilled in the use of a pole as a weapon is a formidable opponent. The size and weight of the pole requires him to move his whole body to use it effectively. Its length gives the soldier an advantage of distance in most unarmed situations. There are two methods usually used in striking with a pole:

a. **Swinging.** Becoming effective in swinging the pole requires skilled body movement and practice. The greatest power is developed by striking with the last 2 inches of the pole.

b. **Thrusting.** The pole is thrust straight along its axis with the user's body mass firmly behind it.

(1) An attacker tries to thrust forward with a fixed bayonet (Figure 5-65, Step 1).

The defender moves his body off the line of attack; he holds the tip of the pole so that the attacker runs into it from his own momentum. He then aims for the jugular notch and anchors his body firmly in place so that the full force of the attack is felt at the attacker's throat (Figure 5-65, Step 2).

(2) The defender then shifts his entire body weight forward over his lead foot and drives the attacker off his feet (Figure 5-65, Step 3).

**NOTE:** During high stress, small targets, such as the throat, may be difficult to hit. Good, large targets include the solar plexus and hip/thigh joint.

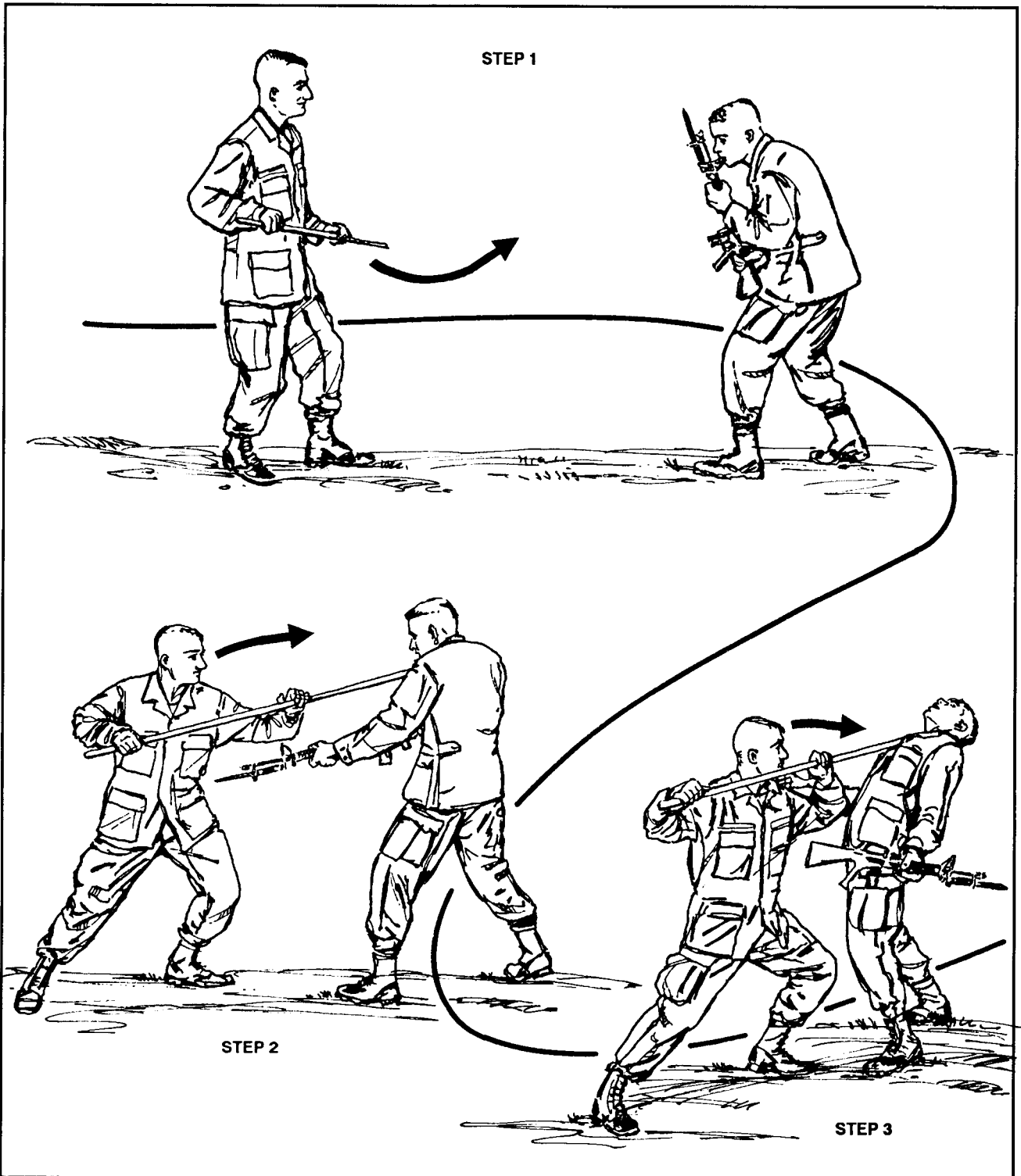


Figure 5-65. Thrusting with 6-foot pole.

## CHAPTER 6

# TRANSITION TECHNIQUES

*In battle, when a combat soldier closes with the enemy to within small-arms and grenade range, and he has exhausted his ammunition or his weapon fails to fire, the fluidity of the battle may dictate that he will become engaged in hand-to-hand combat.*

### 6-1. COMBAT SCENARIOS

In some combat scenarios, innocent noncombatants may be present. Firing of small arms, grenades, and so on, would needlessly endanger them. Therefore, the soldier may need to engage the enemy in hand-to-hand combat in such situations. In other scenarios, the enemy may make a surprise attack at close quarters or confront the soldier in an area where firearms are either out of reach or impractical to use.

### 6-2. BRIDGING THE GAP BETWEEN RANGES

An imaginary sphere of defense extends all-round a soldier and spans the length of his arms. In hand-to-hand combat, the space and distance between opponents, known as the *interval gap*, is the primary factor in the soldier's ability to interpret and react to the enemy's movement. Within the interval gap is a zone of safety, *the reactionary gap*, which allows time for the soldier's reaction to the enemy's movement.

a. The average reactionary gap to an unarmed attacker is 6 feet—that is, the zone of safety that allows him time to observe and to react to an attack from an unarmed opponent. The average reactionary gap to an attacker armed with a weapon is 10 feet, plus the length of the weapon.

b. A soldier must be able to maintain constant control of his sphere of defense by interpreting the timing and rhythm of the enemy's movements and the interval gap during the attack. Having control gives him an opportunity to bridge the gap and enter the enemy's sphere of defense at will. *Timing* and *distance* are the keys to controlling the situation.

c. In hand-to-hand combat, an attacking enemy has only one intent—to kill his opponent. To survive, the combat soldier must not allow the enemy to penetrate his sphere of defense. He must stay mentally alert and be aware of an all-round perimeter of defense. He must visualize the nine basic angles of attack. His best reaction to the enemy is to strike first or counterattack before the enemy has a chance to develop his offensive. Surprise increases the chances of success. The soldier must be physically mobile, react to the enemy's movement with the proper response, and counterattack according to the enemy's rhythm, timing, and distance. He must also control the tempo of the fight with consecutive and successful attacks, seizing the momentum and winning. A memory aid is, "Win or Die!"

d. When the enemy bridges the soldier's interval gap, the soldier must defend his personal perimeter. He has six options.

(1) **Avoid the attack.** This option calls for the soldier to disengage by increasing the separation and by staying out of range.

(a) He can retreat to influence the enemy to pursue, then counterattack when his position is more favorable.

(b) He can move his body out of the line of attack of the enemy or his weapon. A simple, economical, and effective reaction to a straight-line attack is to sidestep off the angle of attack at a 45-degree angle. Then, the soldier can penetrate the enemy's sphere of defense at an offset angle. He is now in a position where he is both safe and strong, but the enemy's vital targets are exposed and his balance is weakened.

(2) **Lead the force of the attack.** This option involves receiving the enemy's attack and making him extend or travel farther than he intended. To take control of the attack, the soldier uses his own weight and body mass and the enemy's onrushing weight to cause the enemy to lose his balance.

(3) **Redirect the force.** The soldier changes the enemy's direction of attack by directing it off its original line or angle. This causes openings in the enemy's defense so the soldier can counterattack.

(4) **Absorb the force.** In this option, the soldier receives the enemy attack, but he absorbs the impact so that the effect is harmless. The enemy is deceived into thinking his attack is successful, and his momentary lapse in defense allows the soldier to react with the right counterattack.

(5) **Meet force with force.** The soldier can meet the incoming attack and burst through the enemy's defense by sheer brute force. When using this option, an effective reaction is to step off the line of attack just enough to avoid being struck and meet the enemy with a suitable body weapon (or other weapon if available). The two forces meet with combined body masses in motion, but the enemy is damaged. A superior mental attitude (the will to survive) is essential for the soldier to accomplish this option.

(6) ***Use the momentum of the force against the attacker.*** With this option, the hand-to-hand fighter uses the attacker's momentum against him to gain control of his balance or to expose weaknesses in his defense. The soldier can add his own force to that of the attacker to increase the power and damage effect.

e. A soldier must develop the intuitive ability to change counterattack techniques according to his range from the enemy—that is, long, medium, or close range. He is then more likely to sense weaknesses in the defensive sphere of his opponent and to respond instinctively with the most effective body movement and weapon for the range—moment by moment. The soldier using any of these six options, or combinations of them, to react to an attack with proper timing and distance, as well as swift counterattack will emerge victorious in a hand-to-hand confrontation.

## CHAPTER 7

# SENTRY REMOVAL

*Careful planning rehearsal, and execution are vital to the success of a mission that requires the removal of a sentry. This task may be necessary to gain access to an enemy location or to escape confinement.*

### 7-1. PLANNING CONSIDERATIONS

A detailed schematic of the layout of the area guarded by sentries must be available. Mark known and suspected locations of all sentries. It will be necessary—

- a. To learn the schedule for the changing of the guards and the checking of the posts.
- b. To learn the guard's meal times. It may be best to attack a sentry soon after he has eaten when his guard is lowered. Another good time to attack the sentry is when he is going to the latrine.
- c. To post continuous security.
- d. To develop a contingency plan.
- e. To plan infiltration and exfiltration routes.
- f. To carefully select personnel to accomplish the task.
- g. To carry the least equipment necessary to accomplish the mission because silence, stealth, and ease of movement are essential.
- h. To conceal or dispose of killed sentries.

### 7-2. REHEARSALS

Reproduce and rehearse the scenario of the mission as closely as possible to the execution phase. Conduct the rehearsal on similar terrain, using sentries, the time schedule, and the contingency plan. Use all possible infiltration and exfiltration routes to determine which may be the best.

### 7-3. EXECUTION

When removing a sentry, the soldier uses his stalking skills to approach the enemy undetected. He must use all available concealment and keep his silhouette as low as possible.



a. When stepping, the soldier places the ball of his lead foot down first and checks for stability and silence of the surface to be crossed. He then lightly touches the heel of his lead foot. Next, he transfers his body weight to his lead foot by shifting his body forward in a relaxed manner. With the weight on the lead foot, he can bring his rear foot forward in a similar manner.

b. When approaching the sentry, the soldier synchronizes his steps and movement with the enemy's, masking any sounds. He also uses background noises to mask his sounds. He can even follow the sentry through locked doors this way. He is always ready to strike immediately if he is discovered. He focuses his attention on the sentry's head since that is where the sentry generates all of his movement and attention. However, it is important not to stare at the enemy because he may sense the stalker's presence through a sixth sense. He focuses on the sentry's movements with his peripheral vision. He gets to within 3 or 4 feet and at the proper moment makes the kill as quickly and silently as possible.

c. The attacker's primary focus is to summon all of his mental and physical power to suddenly explode onto the target. He maintains an attitude of complete confidence throughout the execution. He must control fear and hesitation because one instant of hesitation could cause his defeat and compromise the entire mission.

#### **7-4. PSYCHOLOGICAL ASPECTS**

Killing a sentry is completely different than killing an enemy soldier while engaged in a firefight. It is a cold and calculated attack on a specific target. After observing a sentry for hours, watching him eat or look at his wife's photo, an attachment is made between the stalker and the sentry. Nonetheless, the stalker must accomplish his task efficiently and brutally. At such close quarters, the soldier literally feels the sentry fight for his life. The sights, sounds, and smells of this act are imprinted in the soldier's mind; it is an intensely personal experience. A soldier who has removed a sentry should be observed for signs of unusual behavior for four to seven days after the act.

#### **7-5. TECHNIQUES**

The following techniques are proven and effective ways to remove sentries. A soldier with moderate training can execute the proper technique for his situation, when he needs to.

a. **Brachial Stun, Throat Cut.** This technique relies on complete mental stunning to enable the soldier to cut the sentry's throat, severing the trachea and carotid arteries. Death results within 5 to 20 seconds. Some sounds are emitted from the exposed trachea, but the throat can be cut before the sentry can recover from the effect of the stunning strike and cry out. The soldier

silently approaches to within striking range of the sentry (Figure 7-1, Step 1). The soldier strikes the side of the sentry's neck with the knife butt or a hammer fist strike (Figure 7-1, Step 2), which completely stuns the sentry for three to seven seconds. He then uses his body weight to direct the sentry's body to sink in one direction and uses his other hand to twist the sentry's head to the side, deeply cutting the throat across the front in the opposite direction (Figure 7-1, Step 3). He executes the entire length of the blade in a slicing motion. The sentry's sinking body provides most of the force—not the soldier's upper-arm strength (Figure 7-1, Step 4).

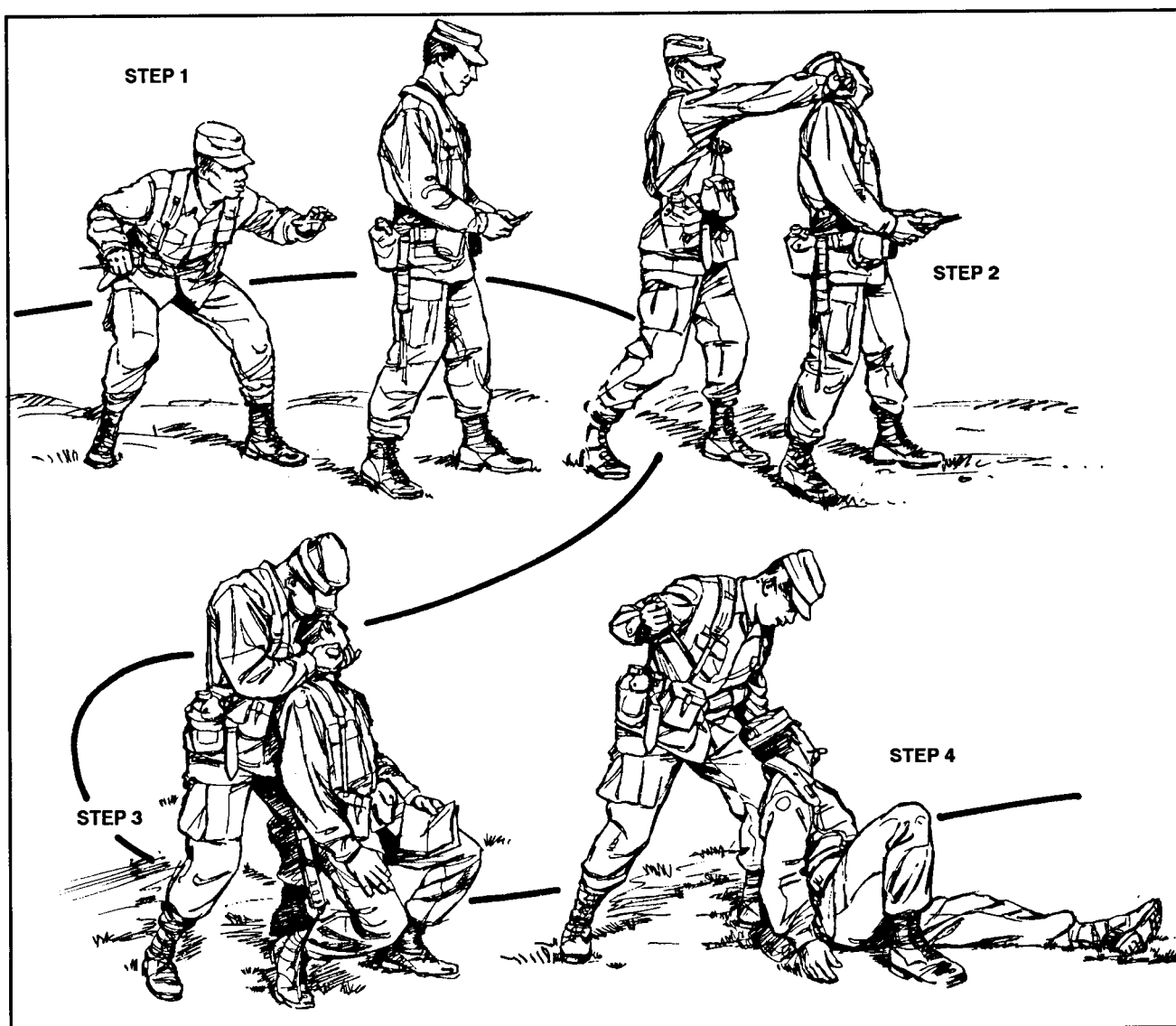


Figure 7-1. Brachial stun, throat cut.

b. **Kidney Stab, Throat Cut.** This technique relies on a stab to the kidney (Figure 7-2, Step 1) to induce immediate shock. The kidney is relatively accessible and by inducing shock with such a stab, the soldier has the time to cut the sentry's throat. The soldier completes his stalk and stabs the kidney by pulling the sentry's balance backward and downward and inserts the knife upward against his weight. The sentry will possibly gasp at this point, but shock immediately follows. By using the sentry's body weight that is falling downward and turning, the soldier executes a cut across the front of the throat (Figure 7-2, Step 2). This completely severs the trachea and carotid arteries.

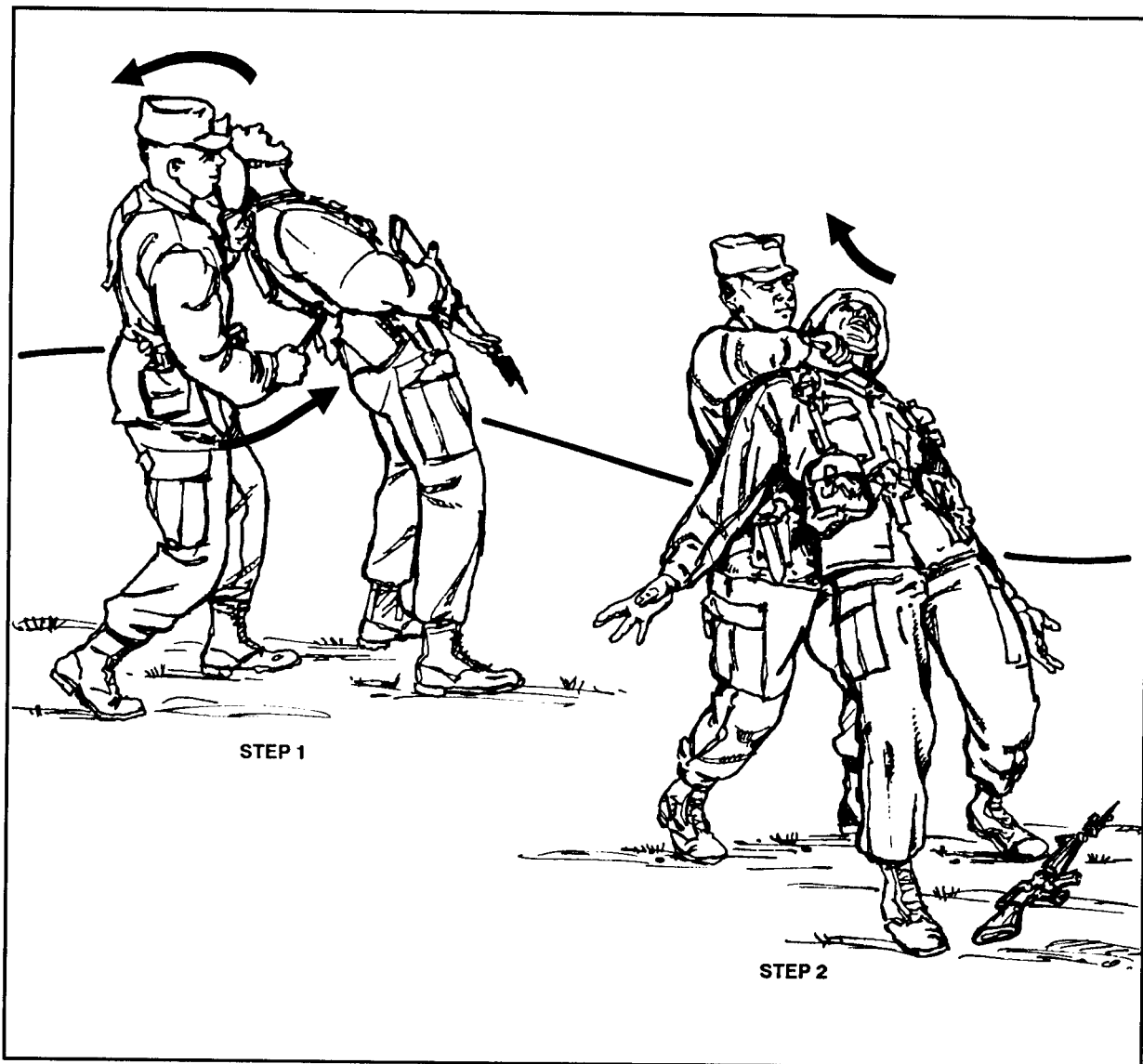


Figure 7-2. Kidney stab, throat cut.

c. **Pectoral Muscle Strike, Throat Cut.** The stun in this technique is produced by a vigorous strike to the stellate ganglia nerve center at the top of the pectoral muscle (Figure 7-3, Step 1). The strike is delivered downward with the attacker's body weight. Use the handle of the knife for impact. Care should be taken to avoid any equipment worn by the sentry that could obstruct the strike. Do not try this technique if the sentry is wearing a ballistic vest or bulky LCE. The sentry is unable to make a sound or move if the stun is properly delivered. The throat is then cut with a vertical stab downward into the subclavian artery at the junction of the neck and clavicle (Figure 7-3, Step 2). Death comes within 3 to 10 seconds, and the sentry is lowered to the ground.

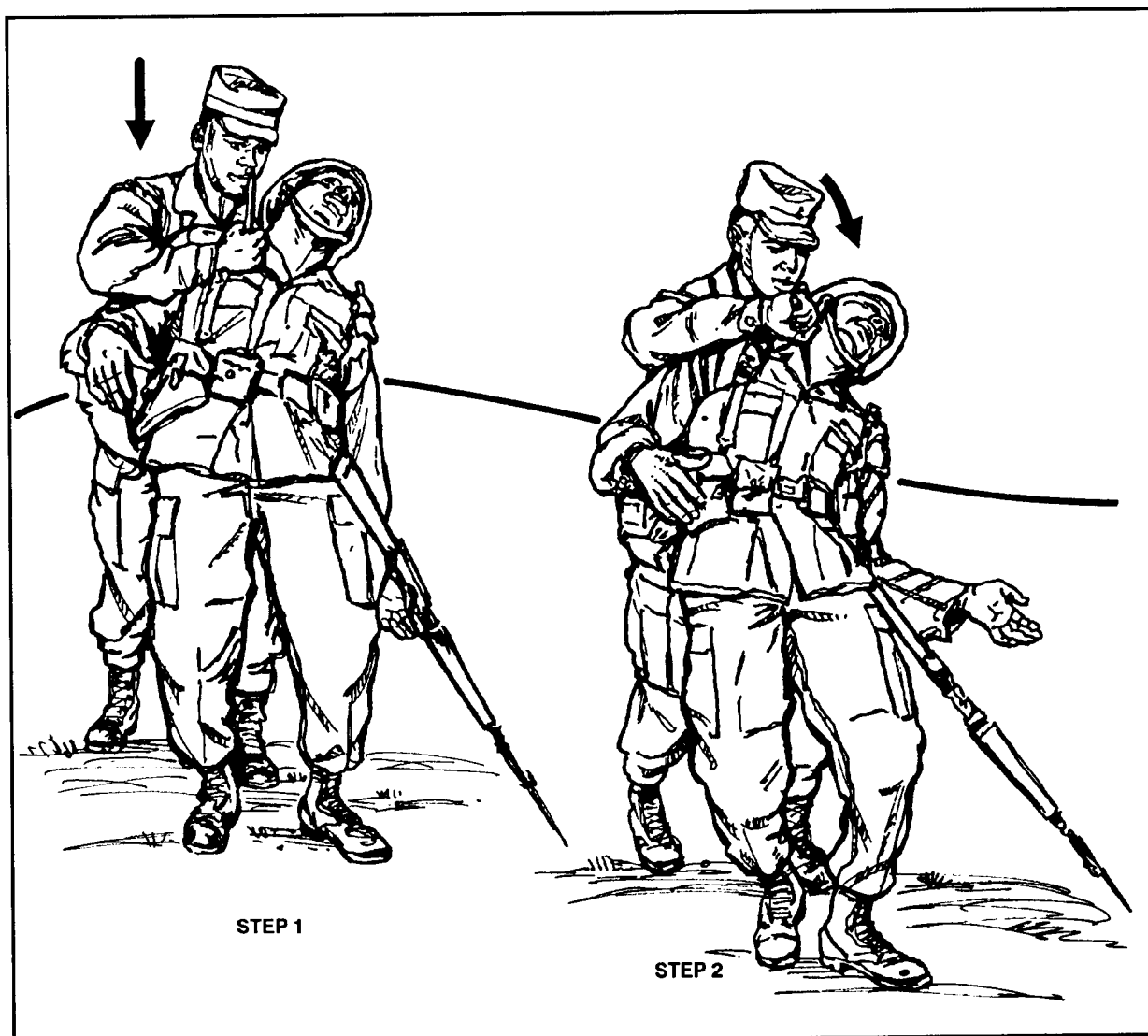


Figure 7-3. Pectoral muscle strike, throat cut.

**d. Nose Pinch, Mouth Grab, Throat Cut.** In this technique, completely pinch off the sentry's mouth and nose to prevent any outcry. Then cut his throat or stab his subclavian artery (Figure 7-4). The danger with this technique is that the sentry can resist until he is killed, although he cannot make a sound.

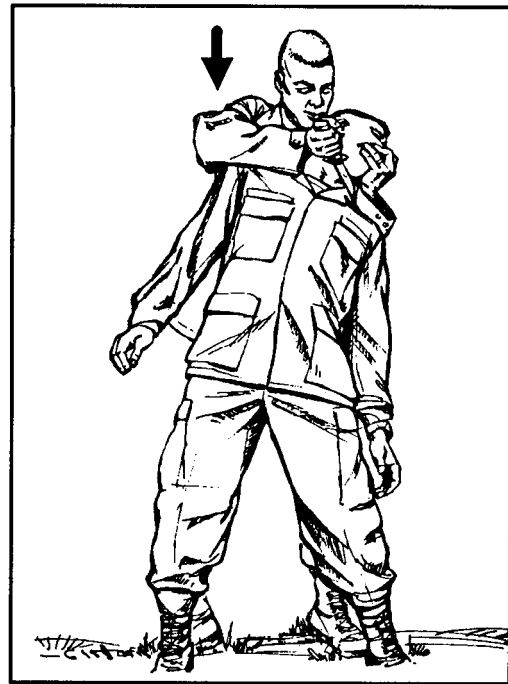


Figure 7-4. Nose pinch, mouth grab, throat cut.

**e. Crush Larynx, Subclavian Artery Stab.** Crush the sentry's larynx by inserting the thumb and two or three fingers behind his larynx, then twisting and crushing it. The subclavian artery can be stabbed at the same time with the other hand (Figure 7-5).



Figure 7-5. Crush larynx, subclavian artery stab.

f. **Belgian Takedown.** In the Belgian take down technique, the unsuspecting sentry is knocked to the ground and kicked in the groin, inducing shock. The soldier can then kill the sentry by any proper means. Since surprise is the essential element of this technique, the soldier must use effective stalking techniques (Figure 7-6, Step 1). To initiate his attack, he grabs both of the sentry's ankles (Figure 7-6, Step 2). Then he heaves his body weight into the hips of the sentry while pulling up on the ankles. This technique slams the sentry to the ground on his face. Then, the soldier follows with a kick to the groin (Figure 7-6, Step 3).

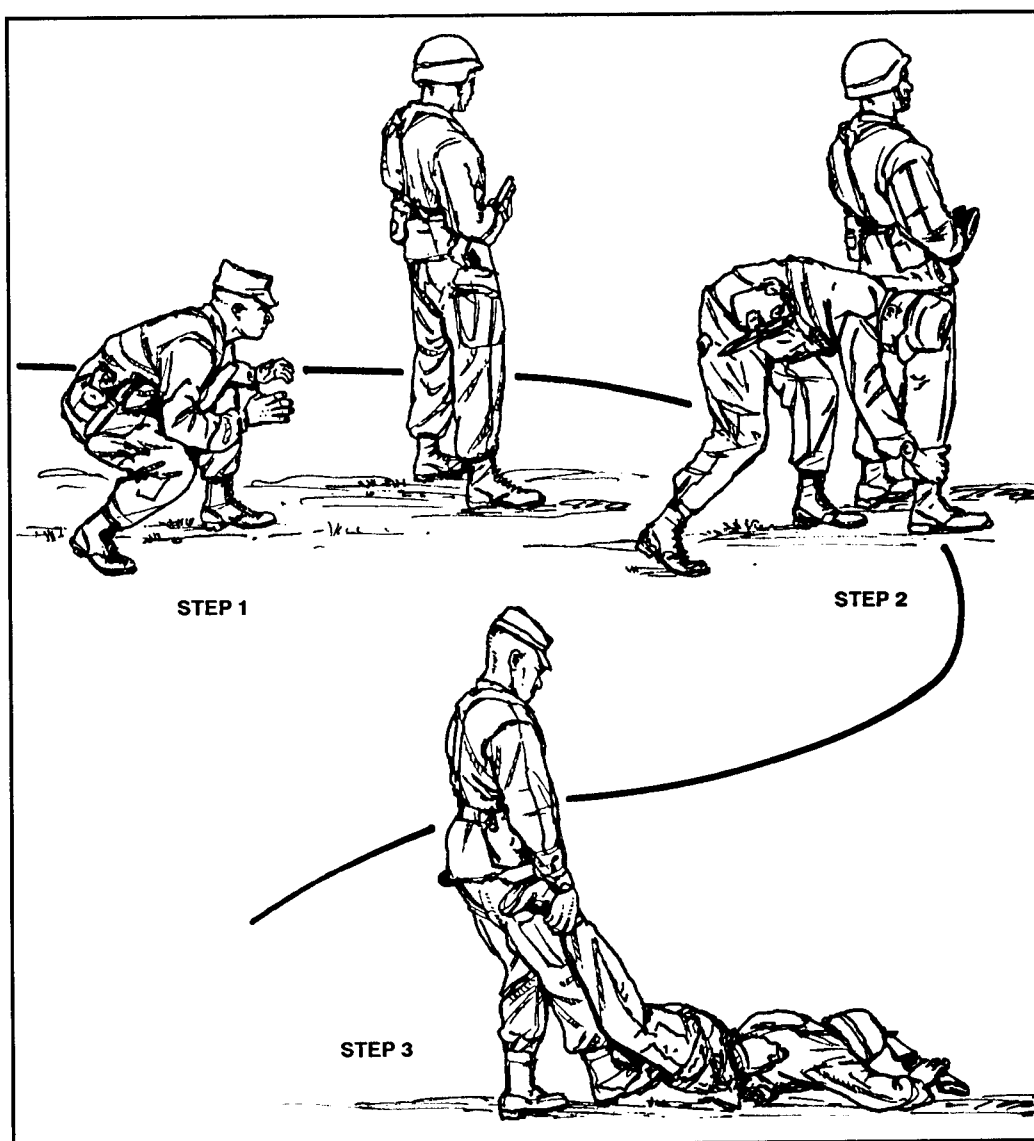


Figure 7-6. Belgian takedown.

g. **Neck Break With Sentry Helmet.** The soldier can break the sentry's neck by vigorously snatching back and down on the sentry's helmet (Figure 7-7, Step 1) while forcing the sentry's body weight forward with a knee strike (Figure 7-7, Step 2). The chin strap of the helmet must be fastened for this technique to work.

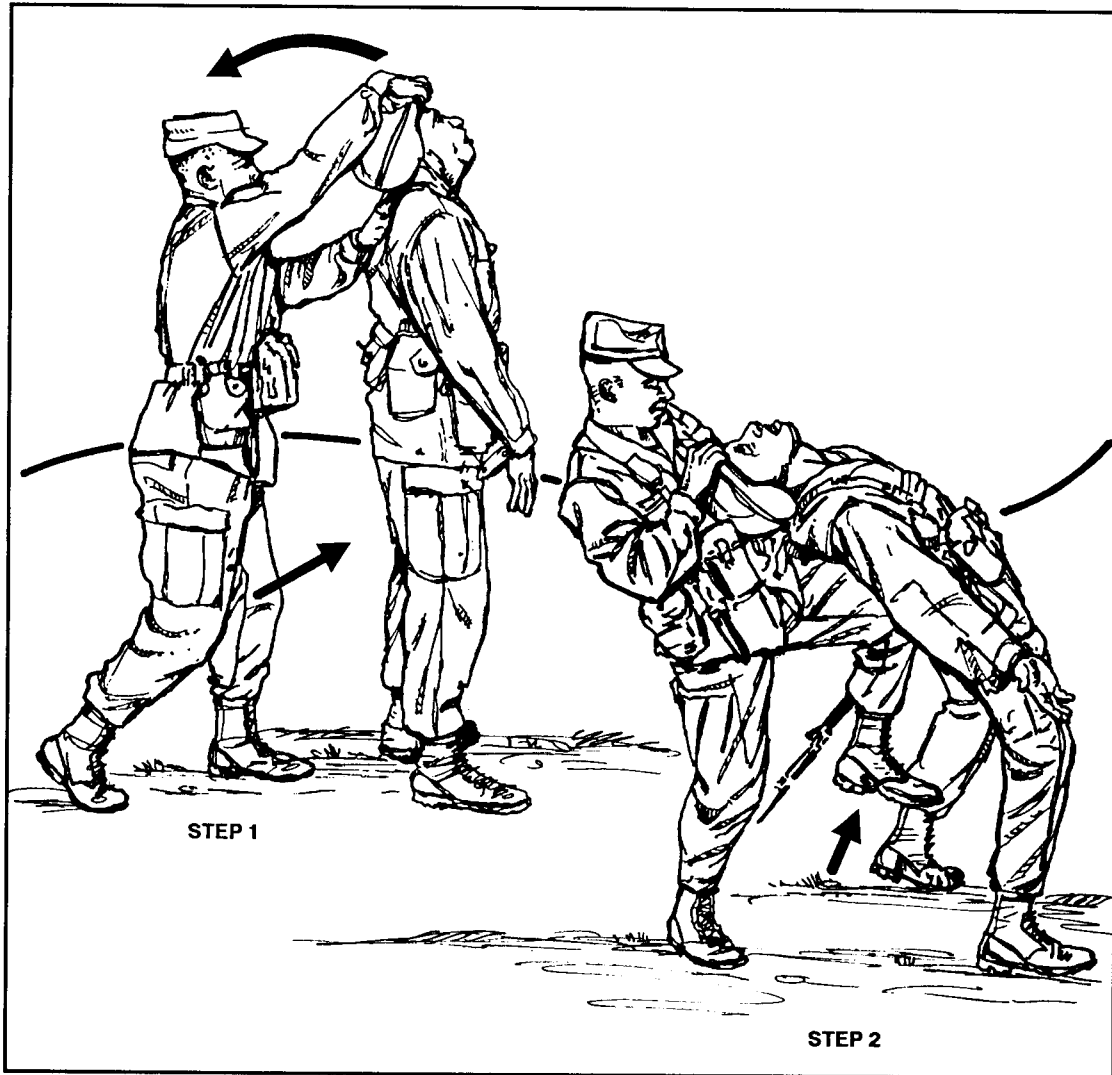


Figure 7-7. Neck break with sentry helmet.

h. **Knockout With Helmet.** The sentry's helmet is stripped from his head and used by the soldier to knock him out (Figure 7-8, Step 1). The soldier uses his free hand to stabilize the sentry during the attack. This technique can only be used when the sentry's chin strap is loose. The preferred target area for striking with the helmet is at the base of the skull or on the temple (Figure 7-8, Step 2).

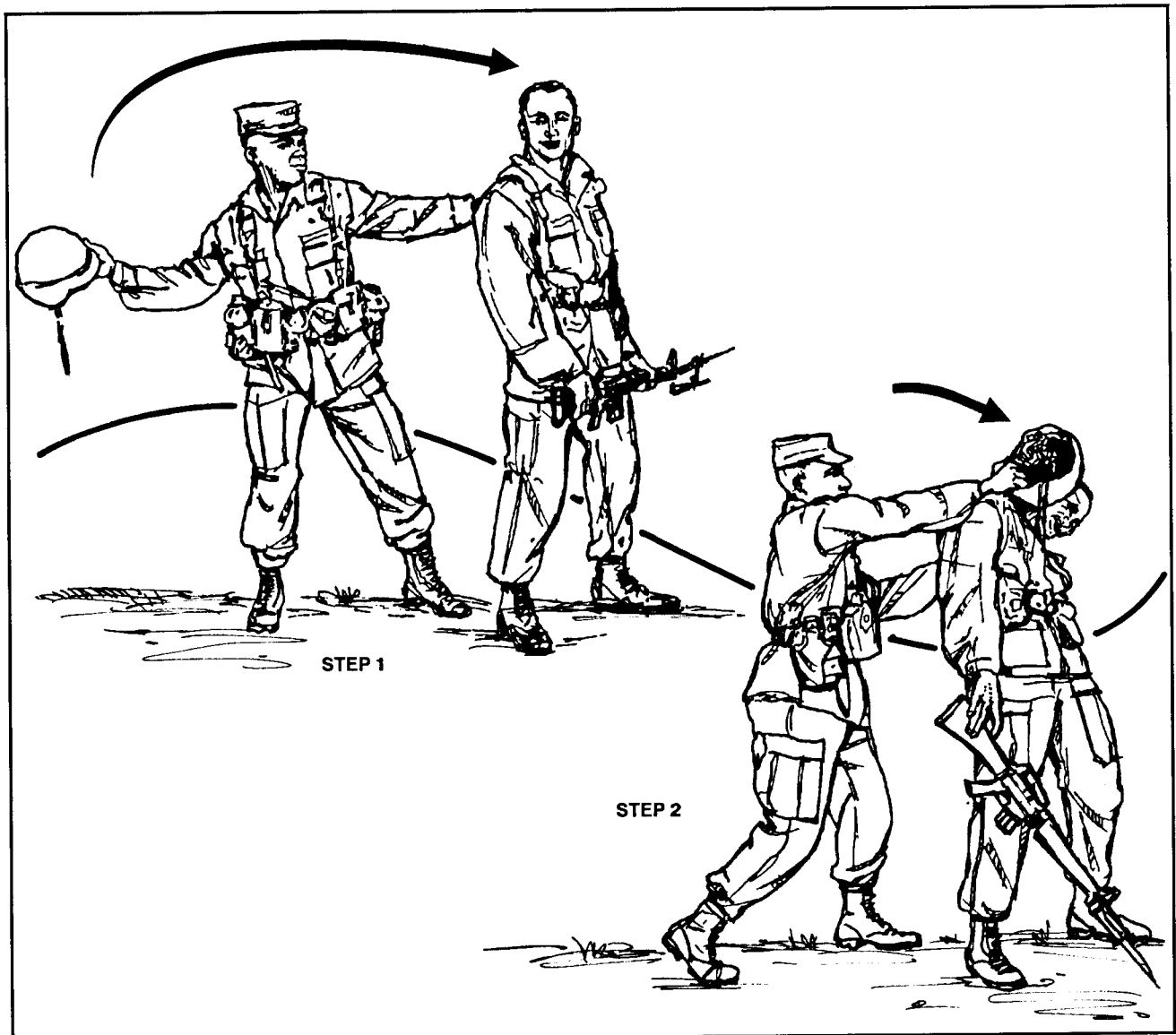


Figure 7-8. Knockout with helmet.



i. **The Garrote.** In this technique, use a length of wire, cord, rope, or webbed belt to takeout a sentry. Silence is not guaranteed, but the technique is effective if the soldier is unarmed and must escape from a guarded area. The soldier carefully stalks the sentry from behind with his garrote ready (Figure 7-9, Step 1). He loops the garrote over the sentry's head across the throat (Figure 7-9, Step 2) and forcefully pulls him backward as he turns his own body to place his hips in low against the hips of the sentry. The sentry's balance is already taken at this point, and the garrote becomes crossed around the sentry's throat when the turn is made. The sentry is thrown over the soldier's shoulder and killed by strangling or breaking his neck (Figure 7-9, Step 3).

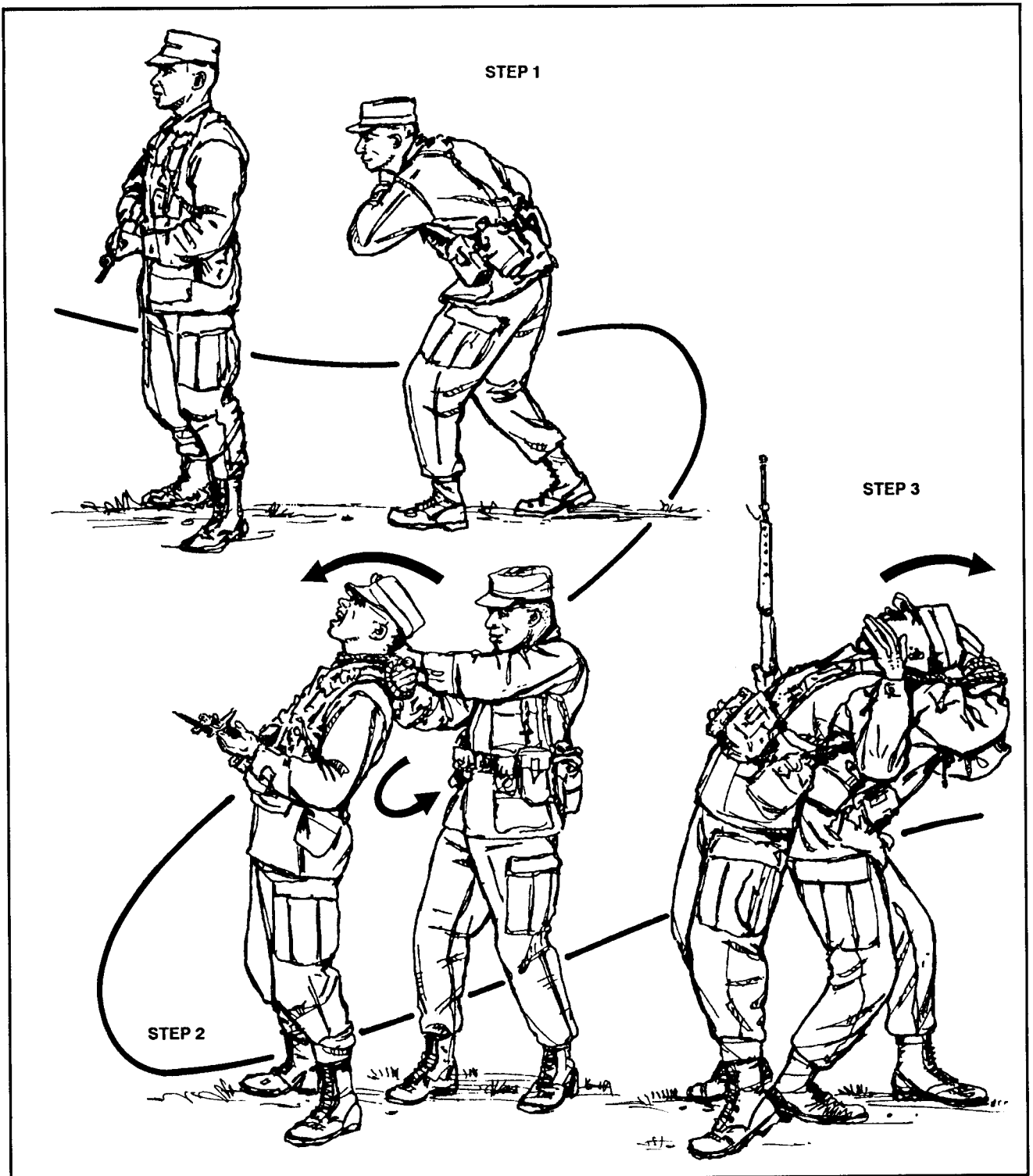


Figure 7-9. The garrote.

## APPENDIX A

### PUGIL TRAINING

*Training in pugil techniques prepares the soldier to confidently and aggressively use the rifle-bayonet. It furnishes the rifle-bayonet fighter with an opponent who can think, move, evade, fight back, and (most important) make corrections. It provides realism.*

#### Section I EQUIPMENT

Pugil equipment consists of the pugil stick and protective gear that is especially designed to protect the soldier during training. It allows the soldier to participate in pugil training without incurring or fearing injury. Participation with no fear of injury helps the soldier to develop an individual style of fighting and improve his ability to fight with the rifle and bayonet. Pugil equipment (Figure A-1) is designed to prevent injuries to the head and face, chest, groin, and hands.

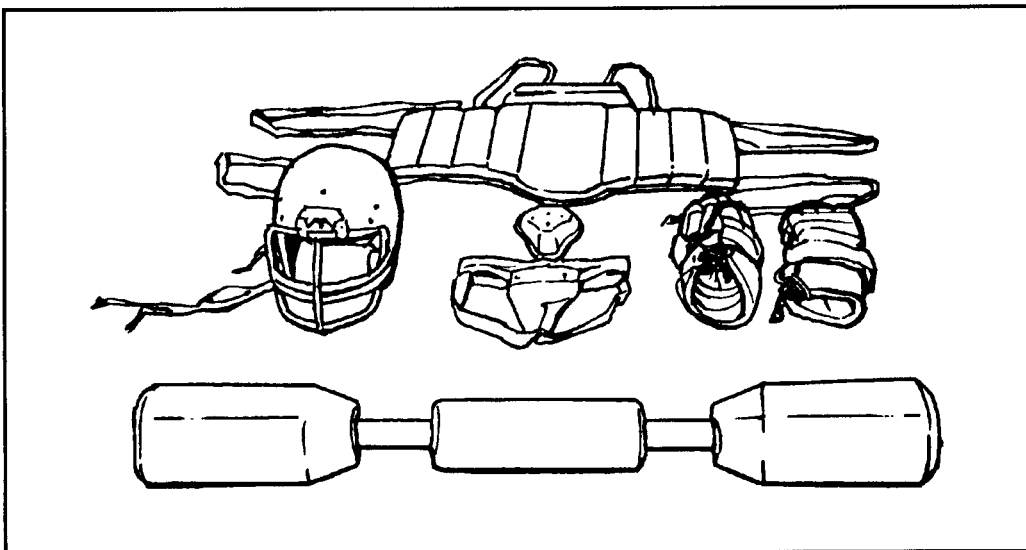


Figure A-1. Pugil equipment.

### A-1. SECURING EQUIPMENT

Units can construct pugil sticks or obtain them from the Training Support Center. The helmets with attached face masks, gloves, chest protectors, and boxers' protective cups are nonstock-type commercial items. Locally used nonstandard stock numbers identify these commercial items, which are obtained through TSC or local purchase.

### A-2. HEADGEAR

Headgear consists of a regulation football helmet with a face mask attached (Figure A-2). When purchasing these helmets, you should consider the varying head sizes of individuals. For each 100 helmets purchased, it is recommended that 10 percent be 6 1/2 to 6 3/4 in size, 80 percent be 6 7/8 to 7 1/8 in size, and 10 percent be 7 1/4 to 7 1/2 in size. Adjust helmets that are too large for an individual by adding foam rubber to the inside of the helmet. To secure the helmet to the head, use a chin strap made of vinyl plastic and foam rubber.

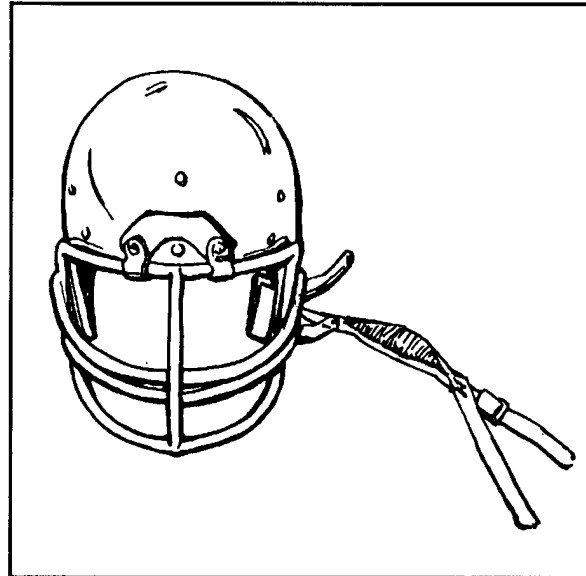


Figure A-2. Pugil headgear.

### A-3. GROIN EQUIPMENT

A boxer's protective cup of the variety used in athletic competition protects the groin (Figure A-3).

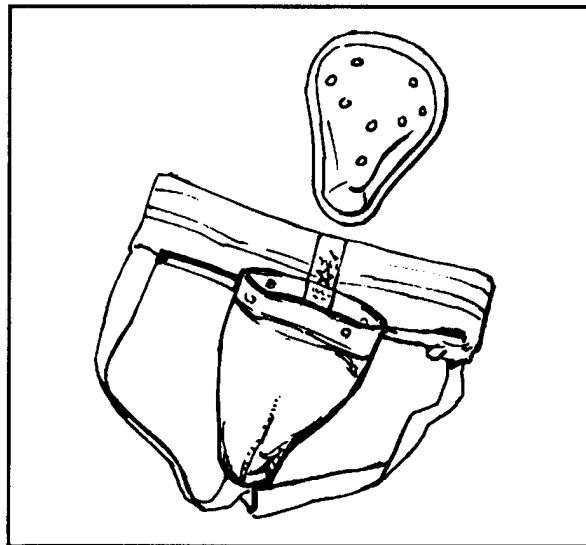


Figure A-3. Boxer's protective cup.

**CAUTION**

GLOVES AND CHEST PROTECTORS MUST BE WORN DURING TRAINING.

**A-4. HAND EQUIPMENT**

Gloves are required in pugil training. Hockey gloves (Figure A-4) provide maximum protection for the fingers and joints of the hands and wrist and aid in controlling the stick.

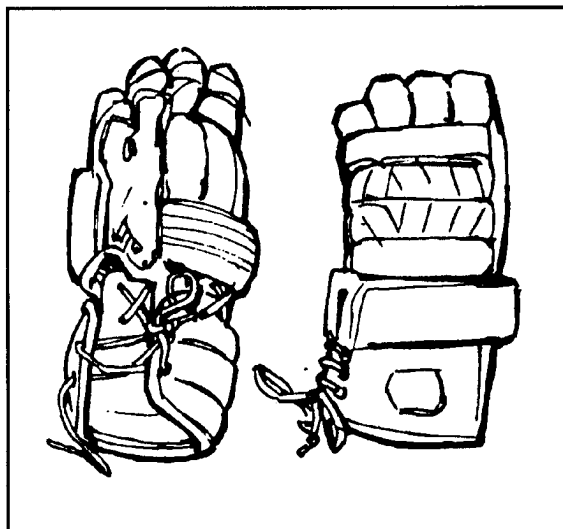


Figure A-4. Hockey gloves.

**A-5. CHEST PROTECTORS**

Soldiers must use chest protectors (Figure A-5) during pugil training to prevent injuries. Baseball catchers' chest protectors or martial arts protectors are recommended. If chest protectors are unavailable, substitute flak vests.

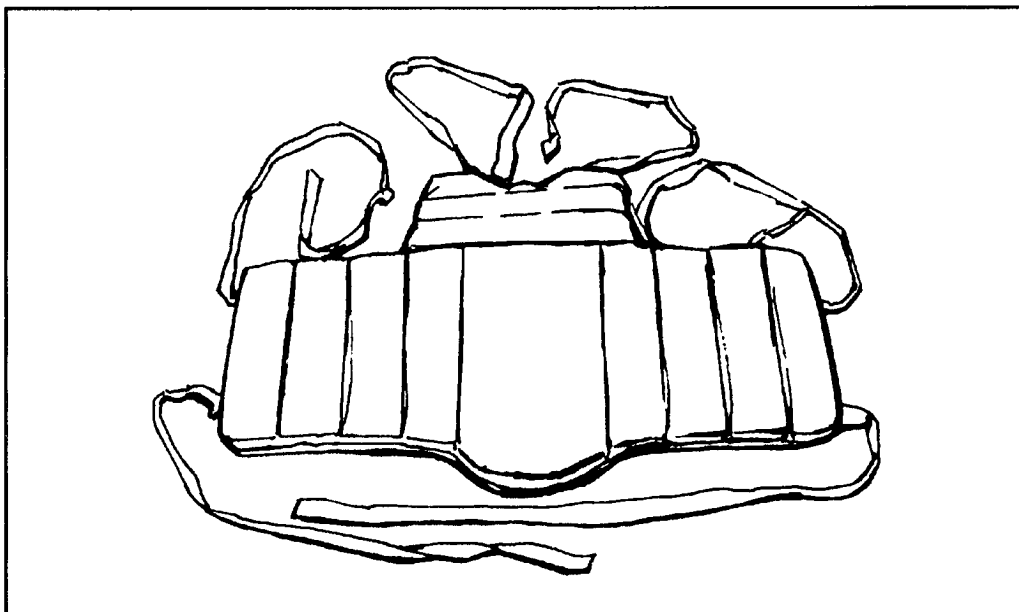


Figure A-5. Chest protector.

**A-6. PUGIL STICK**

Pugil sticks (Figure A-6) may be obtained from the local TSC or call Devices Section, TSC, Ft Benning, GA, DSN 835-1407.

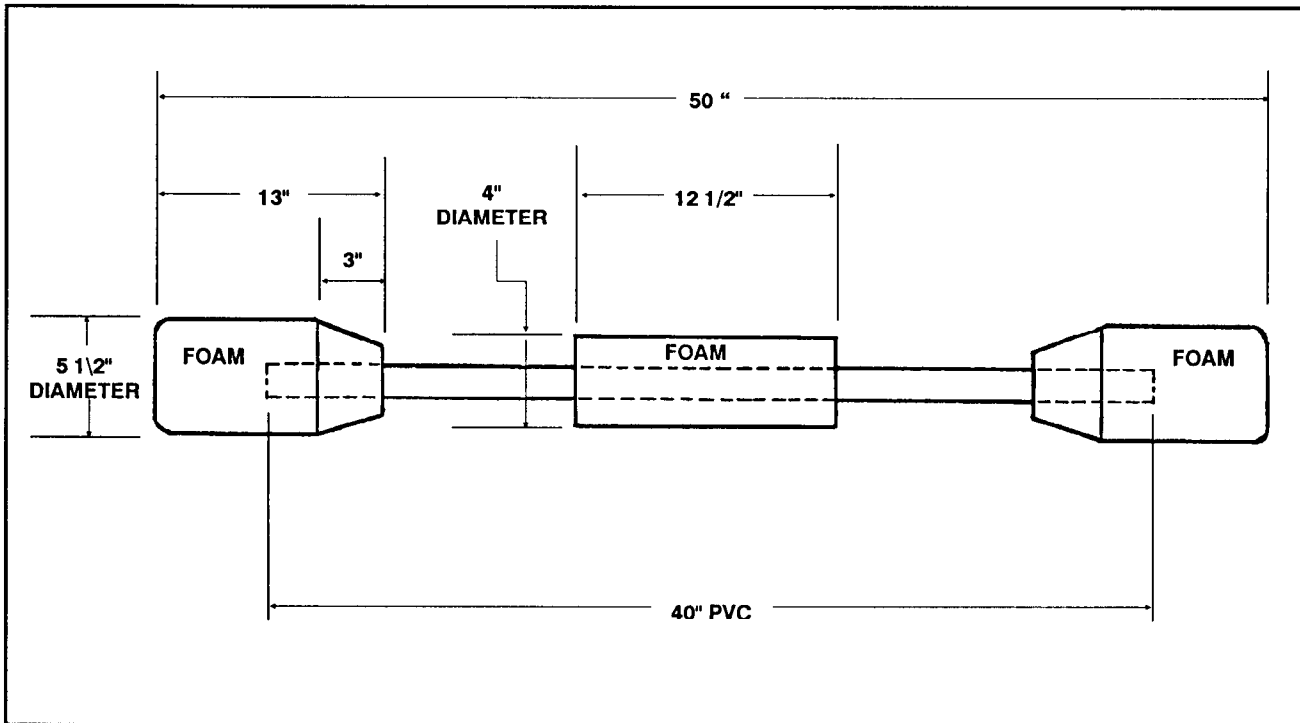


Figure A-6. Materials in pugil stick construction.

**Section II  
TECHNIQUES**

Pugil training is a way to teach the soldier to use the rifle-bayonet with confidence and aggression. After the soldier becomes skilled in the basic positions and movements with the rifle-bayonet, he should be introduced to pugil training techniques.

**A-7. VALUE OF PUGIL TRAINING**

Since pugil fighting is a rugged contact activity, the soldiers must remain alert. They act and react from instinct, thus affording an opportunity to develop their individual rifle-bayonet fighting skills. Little effort is required by the instructor to motivate the soldiers—the pugil stick is the motivating force. Soldiers derive much physical benefit from pugil training, and they develop an aggressive mental spirit that is so essential if the rifle-bayonet fighter is to be successful in combat (Figure A-7).

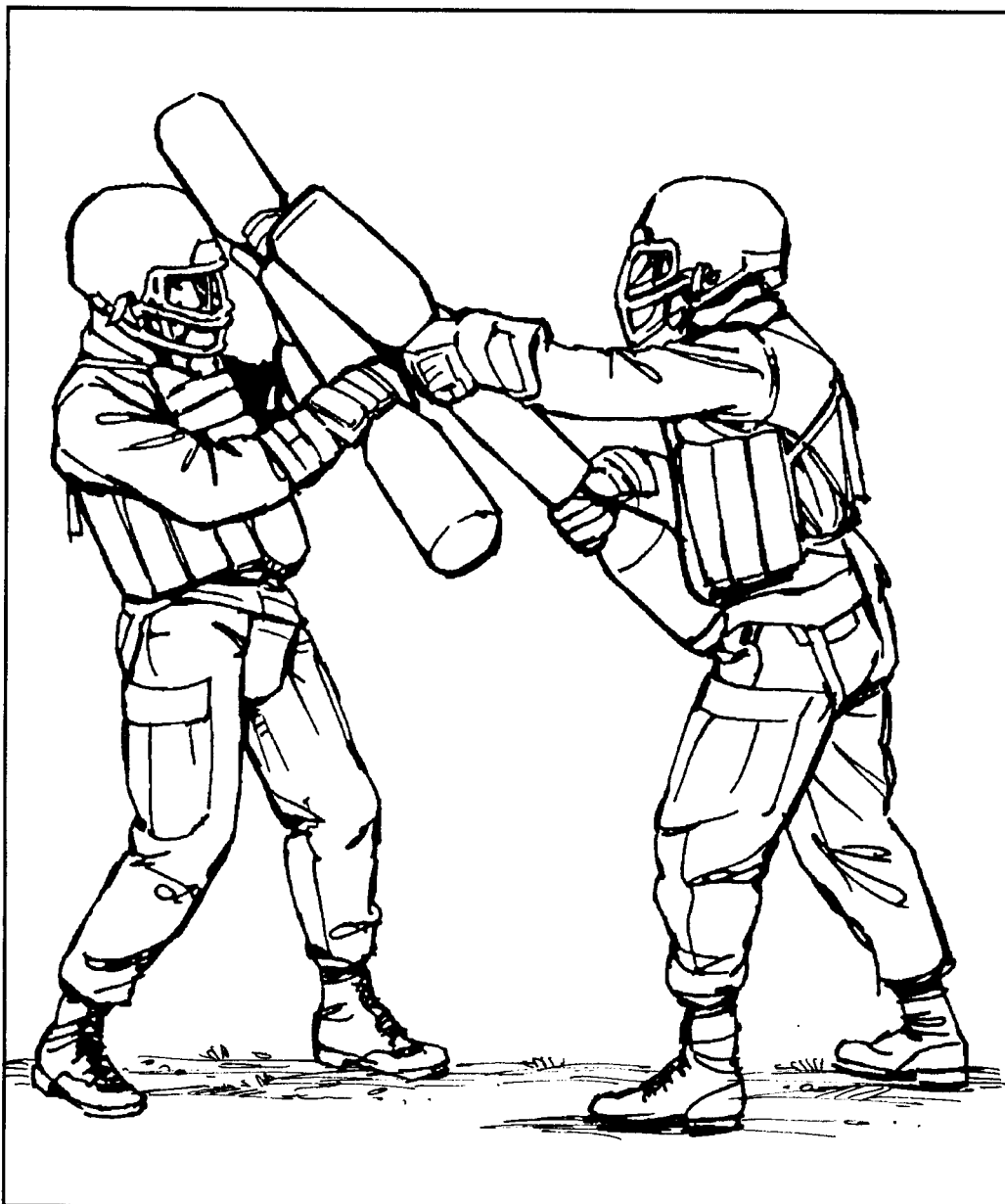


Figure A-7. Man-to-man contact.

a. The instructor must consider several factors to gain maximum effectiveness from pugil training. These include training, control, supervision, safety, and protective equipment.

b. The instructor should teach the rifle-bayonet fighter the basic positions and movements, as well as the series of follow-up movements, with the rifle-bayonet before beginning pugil training.

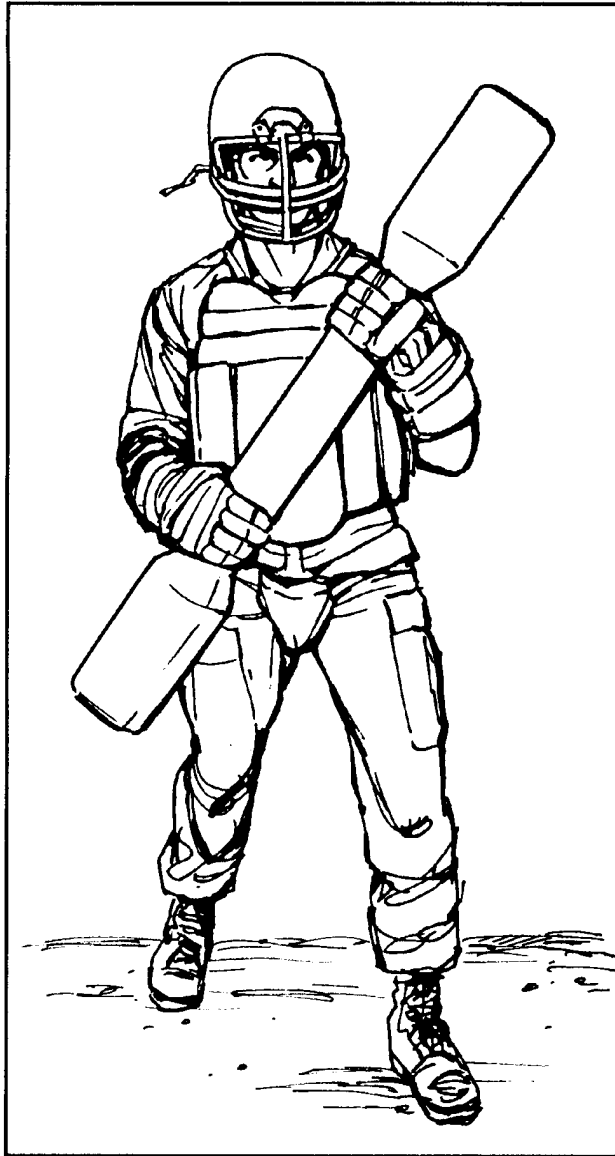
c. The pugil stick should approximate the length and weight of the M16 rifle with bayonet attached for maximum training benefit. Substitution of the pugil stick for the rifle provides an opportunity to improve skill and test each soldier's ability to perform against a realistic, evasive target. All the positions and movements with the pugil stick are the same as with the rifle and bayonet (Figure A-8).

#### **A-8. CONTROL, SUPERVISION, AND SAFETY**

Instructors supervising pugil training must understand its values and limitations. The instructor maintains control of the bout at all times; his best method of control is by blowing a whistle to start and stop action. He is alert to prevent wild swinging of the pugil sticks, and he ensures that the soldiers keep their eyes on each other. For safety reasons, he should pair soldiers who are about the same height and weight.

a. Soldiers use only the positions and movements that they have been taught in rifle-bayonet training. They must hold the stick and deliver blows as if using the rifle-bayonet.

b. One instructor is necessary for each bout; however, he needs assistance to supervise the fitting and exchanging of equipment. The instructor makes sure the equipment fits properly and watches constantly for any loose or broken equipment. As soon as he sees any insecure equipment, he stops the



**Figure A-8. Substitution of the pugil stick for the rifle.**



bout to prevent possible injuries. After deficiencies have been corrected, the round is resumed.

c. The instructor insists that the soldiers growl during the bouts; this adds to their aggressiveness and tends to reduce tension.

d. Soldiers with medical problems, such as hernias, frequent headaches, previous brain concussions, recent tooth extractions, or lacerations with stitches, must be excluded from pugil training for safety reasons. Therefore, before conducting pugil training, it is necessary to determine if anyone should be eliminated from participation. Finally, instructors should always be alert for the unexpected and, if in doubt, stop the bout immediately to prevent injury.

### **A-9. WARM-UP ROUND**

In the early stages of pugil training, maximum benefit is gained by working with platoon-size groups (or smaller) in a circular formation. Two soldiers engage in a pugil bout in the center of the circle. An instructor critiques them so all soldiers can learn from observed mistakes. The soldiers assume the attack position 12 steps from each other. In the first round, the instructor allows them freedom of movement to prove to soldiers that the equipment provides ample protection from a hard blow. Everyone should take part in as many bouts as necessary to gain skill before going on to more advanced training. Immediately after the warm-up round, the soldiers engage in graded bouts.

### **A-10. GRADED BOUTS**

During graded bouts (Figure A-9, page A-8), the opponents face each other, 12 steps apart. The instructor should be in a position where he can best control the bout. Each bout consists of three rounds. To score a point or win a round, a soldier must score a solid blow with either end of the pugil stick to a vulnerable point—the head, throat, chest, stomach, or groin region.

a. To start a bout or a round, the instructor blows the whistle, and the soldiers move toward each other in the attack. The instructor awards one point to the soldier striking the first disabling blow. A disabling blow is any blow that is delivered to a vulnerable part of the opponent's body. When a soldier strikes such a blow, the instructor uses a whistle to stop the round. At the end of the round, soldiers move back to their respective lines, assume the attack position, and wait for the signal to start the next round. The soldier who wins two out of three rounds wins the bout.

b. The instructor should encourage soldiers to move in aggressively and to attack violently, using any of the attack movements learned during rifle-bayonet training. If the soldier misses or his opponent sidesteps, he should immediately follow up until he has landed a blow to a vulnerable spot.

c. The soldier who hesitates to strike his opponent realizes that defeat can be quick; therefore, he tries to be aggressive and overcome his opponent in the shortest possible time.

d. Because training is done in two-man bouts, a squad, platoon, and finally a company champion may be selected. The instructor should encourage competition throughout the pugil training program.

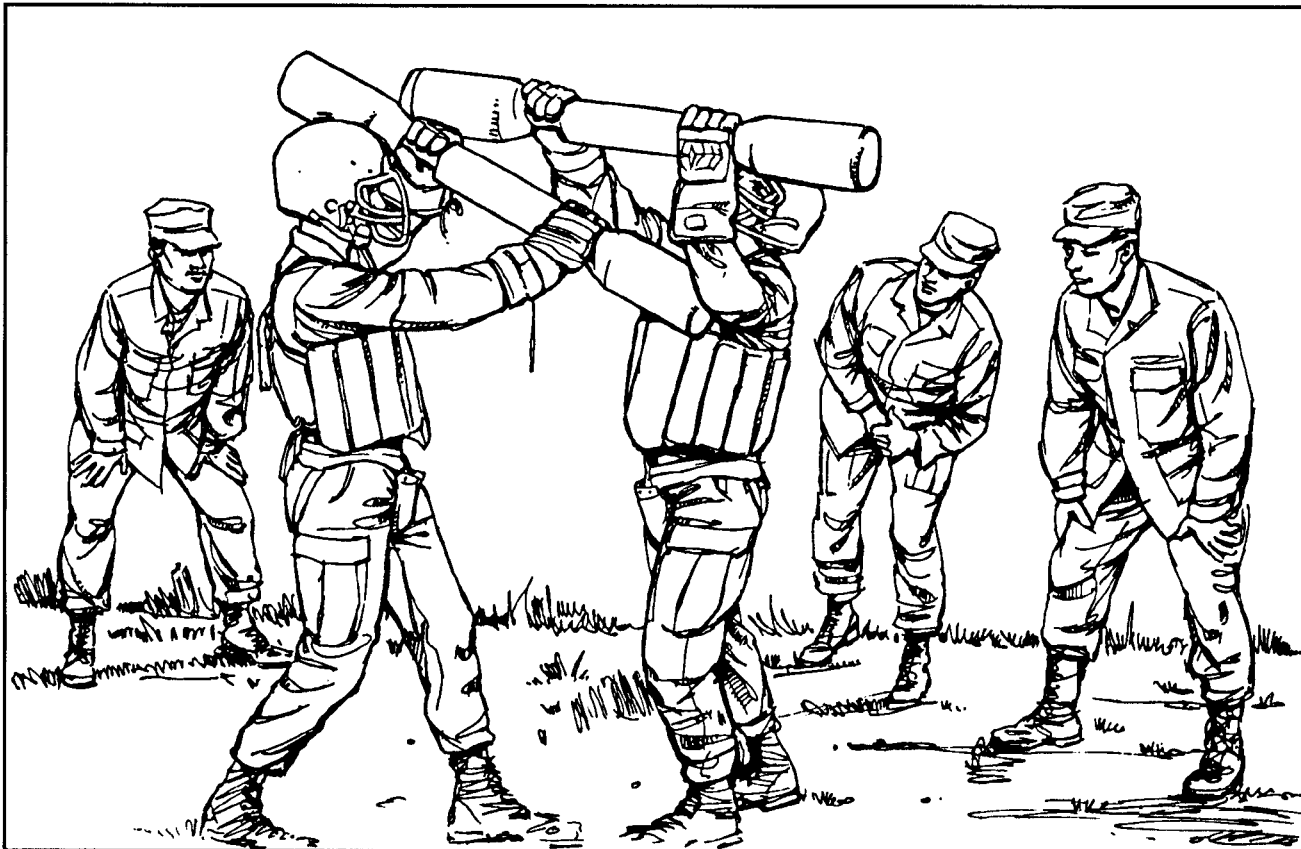


Figure A-9. Pugil bout.

### A-11. PUGIL COURSES

After several two-man bouts, the rifle-bayonet fighter is ready for the human thrusting target course and the human thrusting assault course.

a. **Human Thrusting Target Course.** Eight to ten soldiers are lined up in file formation, 12 steps apart. The instructor selects each soldier to act as a specific-type target. The rifle-bayonet fighter, also in pugil gear, walks to each human target, moving with the pugil stick at the attack position. As the rifle-bayonet fighter approaches an opponent, the opponent shouts the movement that the rifle-bayonet fighter is to execute—for example, thrust,

slash, butt stroke. After executing the movement, the rifle-bayonet fighter pauses long enough for the instructor to make corrections, then he moves to the next target. The number of walk-throughs depends on each soldier's ability to execute the movements correctly. Next, he runs through the course at full speed, growling and executing the called movements with maximum force against his opponents. The duties are rotated so that all soldiers get to act as fighters and as human targets.

b. **Human Thrusting Assault Course.** A qualification-type course can be conducted to measure each soldier's skill. This course should approximate an obstacle course in length, obstacles, and terrain. The course layout should take advantage of natural obstacles, such as streams, ditches, hills, and thickly wooded areas. Soldiers in pugil equipment can be placed among the obstacles to act as human targets. The rest of the unit, in pugil equipment, can negotiate all obstacles and human targets, using instinctive rifle-bayonet fighting movements.

## GLOSSARY

Achilles tendon—the strong tendon joining the calf muscles to the heel bone.

API—assistant primary instructor.

AR—Army regulation.

brachial plexus—a network of nerves in the armpits, supplying nerves to the chest, shoulders, and arms.

Cardiorespiratory—pertains to the heart and lung system.

carotid artery—the pair of main arteries that supply blood to the brain via the neck.

cervical vertebrae—neck and upper spine bones.

clavicle—collarbone.

common peroneal—having two or more branches and located between the knee and ankle.

cranial—the skull.

DA—Department of the Army.

DSN—defense switched network.

dysfunction—impaired or abnormal function.

femoral nerve—the chief artery in the front part of the inner thigh.

FM—field manual.

FSN—federal stock number.

garrote—strangulation with a rope or wire.

IAW—in accordance with.

LCE—load-carrying equipment.

METL—mission-essential task list.

No—number.

NSN—national stock number.

OIC—officer in charge.

OSUT—one-station unit training.

pectoral muscle—muscles that connect the ventral walls of the chest with the bones of the upper arms and shoulders.

peroneal nerve—a nerve located near the fibula.

PI—primaty instructor.

POI—program(s) of instruction.

PT—physical training.

PVC—polyvinyl chloride

S3—perations and training officer.

sanguineous strangulation—a violent, bloodthirsty strangulation.

sciatic nerves—a pair of large nerves that pass out of the pelvis and down the back of the thigh.

solar plexus—the pit of the stomach.

stellate ganglion—a star-shaped mass of nerve tissue external to the brain or spinal cord.

subclavian artery—part of the main artery of the arm or forelimb.

suprascapular nerve—a nerve on top of the shoulder.

TC—training circular.

trachea—the main trunk of the system of tubes by which air passes to and from the lungs.

trapezius—a large, flat, triangular muscle on each side of the back.

TSC—Ttaining Support Center.

US—United States.

vagus nerve—cranial nerves that supply the heart and lungs with sensory and motor fibers.