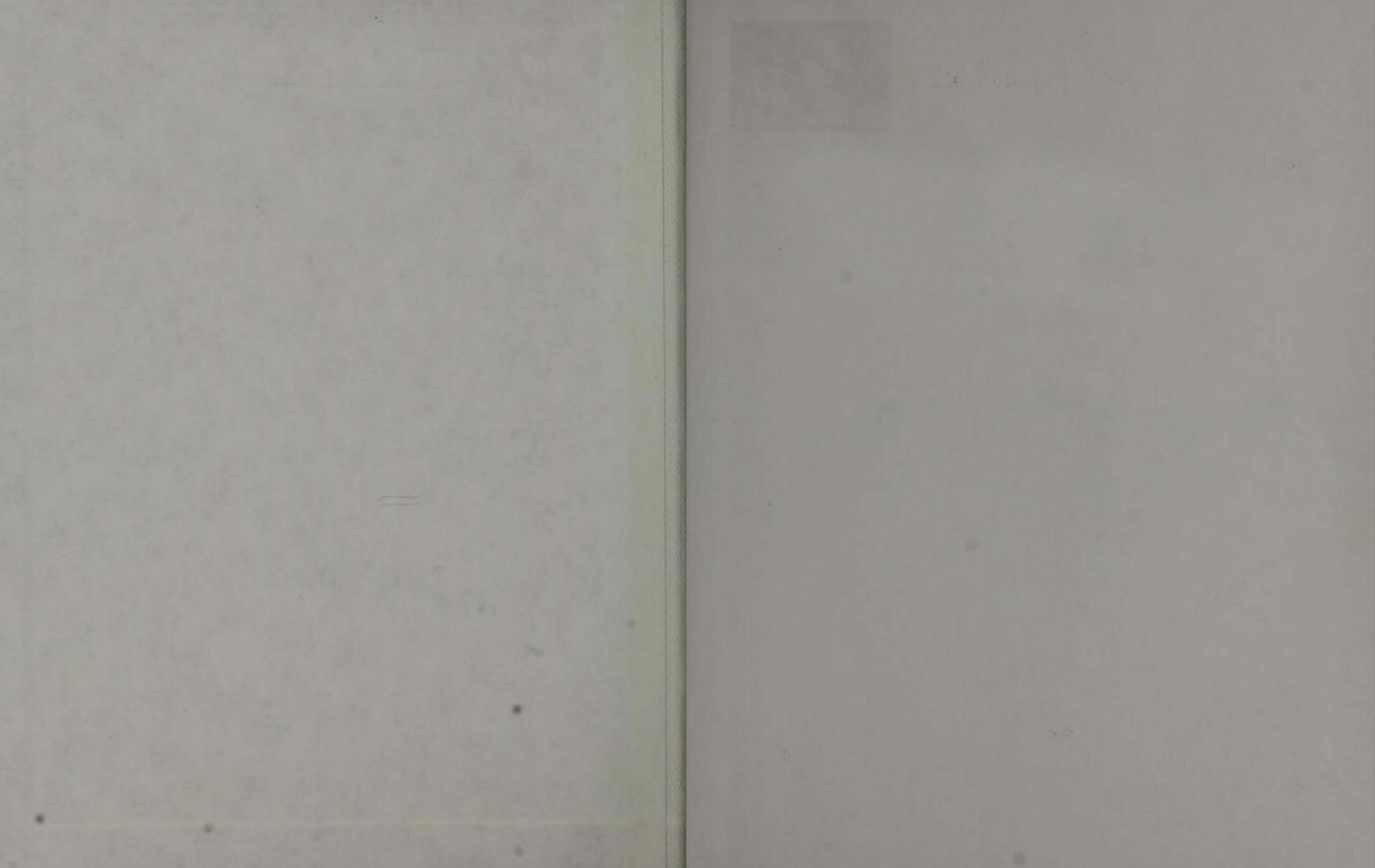


THE WAY  
PEOPLE  
LIVE

Life of a **Roman**  
**Soldier**

by Don Nardo



THE WAY  
PEOPLE  
LIVE

Life of a **Roman**  
**Soldier**

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Life of a Roman Soldier

THE WAY  
PEOPLE  
LIVE

# Life of a Roman Soldier

by Don Nardo

Lucent Books, P.O. Box 289011, San Diego, CA 92198-9011

On Cover: Roman garrison detachment on the Nile; Roman pavement mosaic, Prenestino Museum, Rome, Italy

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# Discovering the Humanity in Us All

Books in The Way People Live series focus on groups of people in a wide variety of circumstances, settings, and time periods. Some books focus on different cultural groups, others, on people in a particular historical time period, while others cover people involved in a specific event. Each book emphasizes the daily routines, personal and historical struggles, and achievements of people from all walks of life.

To really understand any culture, it is necessary to strip the mind of the common notions we hold about groups of people. These stereotypes are the archenemies of learning. It does not even matter whether the stereotypes are positive or negative; they are confining and tight. Removing them is a challenge that's not easily met, as anyone who has ever tried it will admit. Ideas that do not fit into the templates we create are unwelcome visitors—ones we would prefer remain quietly in a corner or forgotten room.

The cowboy of the Old West is a good example of such confining roles. The cowboy was courageous, yet soft-spoken. His time (it is always a he, in our template) was spent alternatively saving a rancher's daughter from certain death on a runaway stagecoach, or shooting it out with rustlers. At times, of course, he was likely to get a little crazy in town after a trail drive, but for the most part, he was the epitome of inner strength. It is disconcerting to find out that the cowboy is human, even a bit childish. Can it really be true that cowboys would line up to help the

cook on the trail drive grind coffee, just hoping he would give them a little stick of peppermint candy that came with the coffee shipment? The idea of tough cowboys vying with one another to help "Coosie" (as they called their cooks) for a bit of candy seems silly and out of place.

So is the vision of Eskimos playing video games and watching MTV, living in prefab housing in the Arctic. It just does not fit with what "Eskimo" means. We are far more comfortable with snow igloos and whale blubber, harpoons and kayaks.

Although the cultures dealt with in Lucent's The Way People Live series are often historically and socially well known, the emphasis is on the personal aspects of life. Groups of people, while unquestionably affected by their politics and their governmental structures, are more than those institutions. How do people in a particular time and place educate their children? What do they eat? And how do they build their houses? What kinds of work do they do? What kinds of games do they enjoy? The answers to these questions bring these cultures to life. People's lives are revealed in the particulars and only by knowing the particulars can we understand these cultures' will to survive and their moments of weakness and greatness.

This is not to say that understanding politics does not help to understand a culture. There is no question that the Warsaw ghetto, for example, was a culture that was brought about by the politics and social ideas of Adolf

Hitler and the Third Reich. But the Jews who were crowded together in the ghetto cannot be understood by the Reich's politics. Their life was a day-to-day battle for existence, and the creativity and methods they used to prolong their lives is a vital story of human perseverance that would be denied by focusing only on the institutions of Hitler's Germany. Knowing that children as young as five or six outwitted Nazi guards on a daily basis, that Jewish policemen helped the Germans control the ghetto, that children attended secret schools in the ghetto and even earned diplomas—these are the things that reveal the fabric of life, that can inspire, intrigue, and amaze.

Books in The Way People Live series allow both the casual reader and the student to see humans as victims, heroes, and onlookers. And although humans act in ways that can fill us with feelings of sorrow and revulsion, it is important to remember that "hero," "predator," and "victim" are dangerous terms. Heaping undue pity or praise on people reduces them to objects, and strips them of their humanity.

Seeing the Jews of Warsaw only as victims is to deny their humanity. Seeing them only as they appear in surviving photos, staring at the

camera with infinite sadness, is limiting, both to them and to those who want to understand them. To an object of pity, the only appropriate response becomes "Those poor creatures!" and that reduces both the quality of their struggle and the depth of their despair. No one is served by such two-dimensional views of people and their cultures.

With this in mind, The Way People Live series strives to flesh out the traditional, two-dimensional views of people in various cultures and historical circumstances. Using a wide variety of primary quotations—the words not only of the politicians and government leaders, but of the real people whose lives are being examined—each book in the series attempts to show an honest and complete picture of a culture removed from our own by time or space.

By examining cultures in this way, the reader will notice not only the glaring differences from his or her own culture, but also will be struck by the similarities. For indeed, people share common needs—warmth, good company, stability, and affirmation from others. Ultimately, seeing how people really live, or have lived, can only enrich our understanding of ourselves.

# The World's First Truly Professional Warrior

The ancient Roman soldier constituted the basic, integral unit of one of history's most extraordinary and successful military systems. Between about 400 B.C. and A.D. 100, the legendary Roman army conquered the entire Mediterranean world, bringing Rome the mightiest empire the world had yet seen. For centuries afterward, Rome administered that world, spreading Roman culture and ideas far and wide; and after its empire collapsed in the fifth century, numerous elements of that culture remained ingrained, profoundly shaping the development of medieval and modern Europe. These far-reaching developments could not have occurred without the exceptional discipline, skill, courage, daring, and often sheer tenacity displayed by many generations of Roman military men.

The discipline, courage, and training of Roman troops is attested not only by their many successes on the battlefield but also by the surviving accounts of eyewitnesses. For example, the first-century-A.D. Jewish historian Josephus, whom the Romans defeated and captured and who came to greatly respect the Roman military machine, writes in his *Jewish War*:

Anyone who will take a look at the organization of their army . . . will recognize that they hold their wide-flung empire as the prize of valor, not the gift of fortune. . . . No lack of discipline dislodges them from their regular formation, no panic incapacitates them, no toil wears them out;



*Disciplined and courageous, Roman soldiers were part of one of history's most successful armies.*

so victory over men not so trained follows as a matter of course. It would not be far from truth to call their drills bloodless battles, and their battles bloody drills.<sup>1</sup>

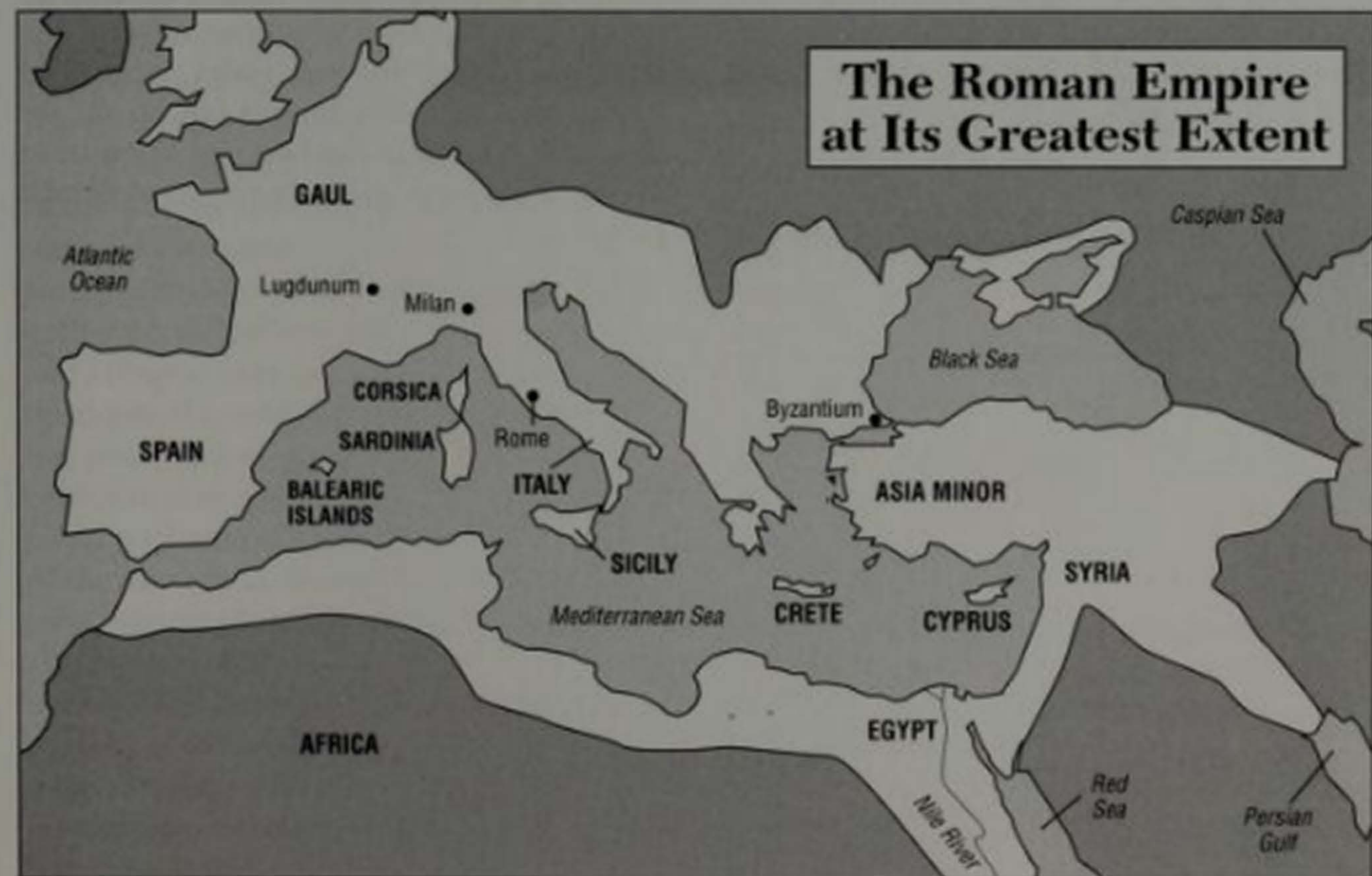
Often matching the Roman soldier's discipline and courage were his hardiness, stubbornness, and determination, traits that in general long characterized the Romans as a people. Time after time during their long his-

tory, they suffered horrendous and crippling hardships and seemed on the brink of total ruin, yet they refused to admit defeat and soon bounced back stronger than ever. In the Second Punic War (218–202 B.C.), for instance, pitted against the powerful maritime empire of Carthage, Rome suffered its worst battlefield defeat ever, losing more than fifty thousand men. Yet in the span of little more than a decade, the Roman ranks replenished, rallied, and decisively defeated Carthage. The Roman military displayed the same gritty determination and resourcefulness in almost everything it did. In their first war with Carthage (264–241 B.C.), having no warships or naval tradition of their own, the Romans managed the phenomenal accomplishment of building some 120 fully equipped warships in only sixty days. This feat, the second-century-B.C. Greek historian Polybius exclaims,

illustrates better than any other the extraordinary spirit and audacity of the Romans. . . . It was not a question of having adequate resources for the enterprise, for they had in fact none whatsoever, nor had they ever given a thought to the sea before this. But once they had conceived the idea, they embarked on it so boldly that without waiting to gain any experience in naval warfare they immediately engaged [joined battle with] the Carthaginians, who had for generations enjoyed an unchallenged supremacy at sea.<sup>2</sup>

Moreover, Roman soldiers and their battlefield formations were highly flexible, with the ability to adapt quickly to changing situations. In Polybius's words,

Every Roman soldier, once he is armed and goes into action, can adapt himself



equally well to any place or time and meet an attack from any quarter. He is likewise equally well-prepared and needs to make no change whether he has to fight with the main body [of the army] or with a detachment . . . or singly. Accordingly, since the effective use of the parts of the Roman army is so much superior, their plans are much more likely to achieve success than those of others.<sup>3</sup>

The discipline, courage, determination, and flexibility of the Roman soldier, coupled with his excellent training and the superior strategy and tactics of his commanders, made him the world's first truly professional warrior. As such, he was often a highly efficient killing machine. Roman troops were far from merely brutish, ruthless destroyers, however. In their conquests, they often carried with them a powerful civilizing influence in the form of Roman administration, law and order, architecture, literature, and other cultural aspects. According to Michael Simkins, a noted expert on the Roman military,

The Roman soldier was . . . the primary agent for the propagation of Roman

ideas and the establishment of a settled way of life. . . . Though the initial shock of conquest and the often unjust treatment of the subjugated nation must seem unacceptable behavior to many people today, it is all too easy to overlook the fact that a good proportion of those brought so roughly within the Roman pale [sphere], settled down . . . and flourished. Some became Roman citizens themselves, by military service in . . . Rome's forces; others by services rendered to the Empire in a variety of ways. . . . Citizenship was hereditary and carried with it substantial benefits under the Roman system.<sup>4</sup>

Therefore, it was with the "one-two punch," so to speak, of military aggression and the spread of culture that Rome first conquered and then absorbed and/or successfully ruled so many diverse peoples. And in century after century, the Roman soldier stood at the forefront of that process. Today, more than fifteen centuries after Rome's fall, he and his army still symbolize the best and worst traits of one of history's greatest and most pivotal peoples.

## CHAPTER 1

# The Evolution of Rome and Its Military System

For more than twelve centuries, from its legendary founding in 753 B.C. to its renowned fall in A.D. 476, ancient Rome existed as an independent state. During this long interval, the Roman people and their government, society, and culture steadily evolved, changing in response to an ever-changing world, as well as to a constant influx of new ideas and customs borrowed from other peoples. All the while, the Roman realm relentlessly expanded and contracted. At first consisting of a tiny city-state in west-central Italy, Rome grew into a vast empire encompassing the whole Mediterranean world; eventually, this process reversed itself and that empire shrank back into a small Italian state of marginal power and influence.

Simultaneously, responding to the needs of the Roman state, the Roman army underwent an evolution of its own. It began as a small, militia-like force of farmers called together periodically to defend their local fields and villages; over several centuries it developed into the world's most formidable standing professional army; and over still more centuries it mutated and deteriorated until it could no longer effectively defend the realm. At the same time, the army's structure, strategies, battlefield tactics, armor, and weaponry all changed with the times, in some cases markedly. Therefore, to speak of "the Roman soldier" is misleading. In reality, there were many distinctly different Roman soldiers, depending on the age in which they lived. The following brief summary of the evolution of

the Roman realm and its renowned armed forces makes this clear.

## The Early Roman Army

Well before 1000 B.C., tribal peoples calling themselves Latins had come to inhabit the area around the fertile plain of Latium, located in west-central Italy between the Mediterranean Sea and the rugged Apennine Mountains. Some of these agrarian folk established villages on seven low hills near the Tiber River; and in time, these villages came together into the city of Rome. (Archaeological evidence suggests that this occurred within a century or so of 753 B.C., the traditional founding date calculated by later Roman scholars.) At first, Rome, a small city-state only a few square miles in extent, was a monarchy ruled by kings. Their word was law, although they increasingly came to take the advice and respond to the demands of a small group of well-to-do landowners—the patricians.

The exact nature and makeup of the army that defended this small monarchy is unknown. However, writings by later ancient historians suggest that it was a militia, a group of nonprofessionals called into service during an emergency or when otherwise needed and disbanded after a short campaign. The army was under the direct command of the king, but as it grew larger, the king needed officers to help him control it. The first such unit commanders were three tribunes (from the Latin



word *tribunus*, meaning "tribal officer"). Each tribune appropriately commanded one thousand men, all landowners, from one of Rome's three traditional native tribes. The total force of three thousand soldiers was called a legion (from the word *legio*, meaning "the levying"). The various subdivisions of each tribe each supplied one hundred men, a basic unit that became known as a century. The legion was supported by about three hundred cavalry (horse soldiers), which were drawn from the ranks of a well-to-do social class known as the *equites*, or "knights," among the few who could afford to keep horses.

The way these early part-time soldiers fought is uncertain. But apparently by the early sixth century B.C., they had adopted the hoplite phalanx developed by the Greeks about a century or so before. Hoplites were heavily armored infantry soldiers who stood in ranks (lines), one behind the other, creating a formidable battlefield formation—the phalanx. When the phalanx, with its wall of upright shields and forward-pointing spears, marched forward, it was extremely difficult to stop or defend against. (The Romans learned about Greek fighting methods from the Greek cities that had grown up in southern Italy in the eighth and seventh centuries B.C. and also from the Etruscans, the people who inhabited Etruria, the region directly north of Rome, who had themselves adopted Greek military methods. Part of the Romans' practical genius was their talent for imitating others, their ability to borrow the best attributes of foreign cultures and to adapt these to their own special needs.)

## Early Republican Expansion

Eventually, the Romans grew tired of being ruled by kings. In about 509 B.C., the patricians dismantled the Monarchy and in its



The hoplite phalanx (made up of soldiers like the one seen here) was a battle formation borrowed from the Greeks.

place installed the Republic, a government based on the democratic idea of rule by representatives of the people. However, Roman leaders at first defined "the people" rather narrowly. Only free adult males who owned weapons (and were therefore eligible for military service), a group that made up a minority of the population, could vote or hold public office. Some of these citizens met periodically in a body called the Assembly, which proposed and voted on new laws and also annually elected two consuls, or administrator-generals, to run the state and lead the army. The other legislative body, the Senate, was composed exclusively of well-to-do patricians, who held their positions for life. The senators usually dictated the policies of the consuls and, through the use of wealth and high position, indirectly influenced the way the members of the Assembly voted. Thus, the Senate held the real power in Rome, making the Republic an

oligarchy (a government headed by an elite few) rather than a true democracy.

In the Republic's first century, Rome began the physical expansion that would eventually lead it to Mediterranean mastery. And its land army, now commanded by the two consuls (and below them the traditional tribunes), was the principal instrument of that expansion. (Still strictly a land power, Rome had no navy at this time.) At first, the Romans' enemies—other Italian tribal peoples—were situated nearby. As military historian Lawrence Keppie points out, in these years

the wars between Rome and her neighbors were little more than scuffles be-

tween armed raiding bands of a few hundred men at most. . . . Fidenae, against which the Romans were fighting in 499 [B.C.], now lies within the motorway circuit round modern Rome, and is all but swallowed up in its northern suburbs.<sup>5</sup>

Over time, however, the Roman army pushed the borders of Rome's territory and influence ever outward. After absorbing the villages and farmlands of the Latium plain, Rome fought a ten-year-long war against the Etruscans, capturing the important Etruscan city of Veii in 396 B.C.

By this time, the army had expanded to a legion/phalanx of six thousand men, supported

*Macedonian soldiers line up in a phalanx.*



by some eighteen hundred cavalry. Because the soldiers, called legionaries, had to spend more and more time away from home, the state began to pay them. Also, the army had come to represent a wider cross-section of society; some of the soldiers were now drawn from social classes that could afford to supply only limited armor and weapons (although they were by law still property owners). Some had shields, thrusting spears, and swords but no cuirasses (chest armor), for instance, while others had no armor at all and armed themselves with throwing spears (javelins) or slings.

### Camillus's Reforms

This early Roman army met its greatest test yet in 390 B.C. A large force of Gauls, tribesmen from the wilds of central Europe who had earlier crossed the Alps into northern Italy, descended through Etruria and marched on Rome. The Roman phalanx assembled near the Allia River, a few miles north of Rome, expecting easily to repulse the invaders. Even though the Gallic army lacked organization and discipline, its fearsome-looking warriors—naked, long haired, and wearing war paint—staged a wild, screaming charge that completely terrified the unprepared Roman soldiers. The phalanx fell apart, the Romans were defeated, and the Gauls proceeded to sack Rome.<sup>6</sup>

To avoid any other such disasters, the Romans decided to institute radical military reforms. Under a strong leader named Marcus Furius Camillus, who went on to defeat the Gauls, they abandoned the rigid, sometimes inflexible, phalanx. In the coming years, Camillus and other reformers created an army in which a legion broke down into several smaller units on the battlefield. These units, called maniples (*manipuli*, meaning “handfuls”), were capable of independent action and

could be combined into various configurations, making the whole army much more flexible. Moreover, the Romans discarded the circular hoplite shield and adopted the more protective oval (later rectangular) *scutum* (of Italian origin), and they largely replaced the thrusting spear with a throwing spear, the *pilum*. “The new flexibility of battle-order and equipment,” says Keppie,

were cardinal factors in the Romans’ eventual conquest of the Mediterranean world. The hoplites had worked in close order at short range, but the new legionaries were mostly equipped to engage with the *pilum* at long range, then to charge forward into already disorganized enemy ranks, before setting to with sword and shield.<sup>7</sup>

By the 360s B.C. this new army consisted of two full legions, each with about forty-two hundred to five thousand men. And by 311, there were four legions, which thereafter became the standard minimum. Each consul usually commanded two legions. In addition, when campaigning, a consul’s two legions, in which the legionaries were Roman citizens, were accompanied by two more legions drawn from Rome’s allies (Italian peoples it had conquered and signed treaties with). These noncitizen soldiers were collectively referred to as the *alae sociorum* (“wings of allies”).

### All of Italy and Far Beyond

This newly refurbished army soon won Rome control of all of Italy. By 290 B.C. the Romans had conquered the Samnites and other hill tribes of central Italy; and by 265 the Greek cities scattered across the peninsula’s south-

ern sector had been absorbed into the Roman sphere. Next, Rome cast its gaze beyond the shores of Italy and onto neighboring Mediterranean coasts. Carthage, a powerful trading city and empire centered at the northern tip of Tunisia, on the African coast, fell to Roman steel after the three devastating Punic Wars, fought between 264 and 146 B.C.<sup>8</sup> In 216, during the Second Punic War, the largest and bloodiest conflict fought on earth up till that time, the Romans suffered a horrendous defeat at the hands of the brilliant Carthaginian general Hannibal at Cannae, in southeastern Italy. But under their own equally talented general, Publius Cornelius Scipio, they went on to defeat Hannibal in 202 at Zama, in north Africa, and win the war. As prizes in these conflicts, Rome gained the large and fertile island of Sicily, at the foot of the Italian boot; other western Mediterranean islands; Spain; and much of north Africa.

During these years, the Roman army continued to expand in size and became increasingly better organized. Campaigns often lasted many months or more and newly won territories required garrisons (groups of soldiers

manning forts) to hold and protect them, so the army developed a hard core of professional soldiers who signed up for hitches lasting several years. Also, out of necessity during the Punic conflicts, Rome built a powerful navy.

Soon after obliterating Carthage, Rome unleashed its formidable combined land and naval forces on the Greek kingdoms clustered in the Mediterranean’s eastern sphere, including Macedonia, Seleucia, and Egypt. The watershed battle took place at Cynoscephalae, in Greece, in 197 B.C. There, the flexible Roman maniples met and demolished the more rigid Greek phalanx commanded by Macedonia’s King Philip V, signaling the beginning of the end of Greek autonomy in the Mediterranean. Indeed, by the end of the second century B.C., that sea had become in effect a Roman lake. Thereafter, the Romans rather arrogantly referred to it as *mare nostrum*, “our sea.”

### “Marius’s Mules”

But Rome’s phenomenal success had come at a price. By the dawn of the first century B.C.,



Here, Hannibal’s army is defeated at Zama.

## Omens of Military Defeat

As was the case in other ancient conflicts, the battles of the Punic Wars were typically accompanied by superstitious tales of omens, supernatural warnings of impending good or bad fortune. In his famous history of Rome, the first-century-B.C. Roman historian Livy includes this list of evil omens that supposedly preceded one of Rome's debilitating defeats at the hands of the Carthaginian general Hannibal.

"In Rome or near it many prodigies [strange or marvelous events] occurred that winter, or—as often happens when men's thoughts are once turned upon religion—many were reported and too easily credited [believed]. Some of these portents [omens] were: that a

free-born infant of six months had cried "Triumph!" in the marketplace; that in the cattle market an ox had climbed, of its own accord, to the third story of a house, and then . . . had thrown itself down; that phantom ships had been seen gleaming in the sky . . . that in Lanuvium a slain victim had stirred, and a raven had flown into [the goddess] Juno's temple and landed on her very couch; that in the district of Amiternum, in many places apparitions [ghostlike images] of men in shining raiment [outfits] had appeared in the distance, but had not drawn near to anyone; that in the Picentian region there had been a shower of pebbles . . . that in Gaul a wolf had snatched a sentry's sword from its scabbard and run off with it."

ominous cracks had appeared in the Republic's structure. To begin with, in their creation of a Mediterranean empire, the Romans had found it increasingly difficult to administer so many diverse lands and peoples with a governmental system that had been designed to rule a single people inhabiting a small city-state. In addition, the state had developed a policy by which it failed to reward its soldiers with substantial pensions and land when they retired. Meeting this need, the wealthiest and most powerful generals began using their influence to secure such benefits for their men. Consequently, the troops began to show more allegiance to their generals than to the state.

A formidable general named Gaius Marius was the first of a new breed of military strongmen to amass such a personal army. He also instituted a new round of far-reaching military reforms. First, he dropped all property qualifications and accepted volunteers

from all classes. This not only greatly increased the number of potential recruits, but also initiated profound changes in the army's character. In the past, the majority of soldiers, especially the well-to-do, looked on serving as a necessary but unpleasant duty. Their goal was to discharge that duty as quickly as possible and resume their civilian careers. For the volunteers of Marius's more permanent, professional force, by contrast, serving in the army *was* their career, to which many brought enthusiasm and a sense of purpose and pride.

Among Marius's other reforms was supplying all of the troops with standard weapons. Especially important in this regard was his introduction of an improved version of the *pilum*, this one equipped with a wooden rivet that broke on impact, preventing an enemy soldier from throwing it back. He also reorganized the army into cohorts, groups of about 480 men, each further divided into six centuries of 80

(rather than 100) men, so a typical legion now had 4,800 men (although apparently it could have fewer or more men under certain conditions). In addition, Marius standardized and improved the quality of training and taught the soldiers to carry their own supplies rather than to rely on cumbersome baggage trains of mules that slowed down an army on the march. The first-century-A.D. Greek biographer Plutarch wrote,

*Gaius Marius, shown here, instituted massive military reforms.*



There was practice in running and in long marches; and every man was compelled to carry his own baggage and to prepare his own meals. This was the origin of the expression "one of Marius's mules," applied later to any soldier who was a glutton for work and obeyed orders cheerfully and without grumbling.<sup>9</sup>

Finally, the nature of the auxiliary troops who supported the legions changed shortly after Marius instituted his reforms. This was because the Roman government granted citizenship to all the residents of Italy in the 80s B.C. Since Rome's former noncitizen allies (*socii*) were now citizens, the *alae sociorum* ceased to exist. Thereafter, in their place, the army recruited its auxiliaries—including archers, slingers, and other light-armed troops, as well as some cavalry units—from Spain, north Africa, Germany, and other more distant lands.

## The Early Imperial Army

A number of other Roman generals followed Marius's example of amassing a personal army, including his famous nephew Julius Caesar. It was during Caesar's colorful but brutal conquest of Gaul, the then wild lands of what are now France and Belgium, that he gathered and polished a crack force loyal only to him. The dangerous rivalries that developed among him and other ambitious leaders soon afterward led to a series of devastating civil wars that rocked the Republic to its foundations and eventually brought it down. The climactic battle of these conflicts took place in the waters near Actium, in western Greece, in 31 B.C. Caesar's protégé, Mark Antony, and Antony's lover/ally, Cleopatra VII, the Greek queen of Egypt, went down to defeat and



Here, at Actium in 31 B.C., Octavian (Augustus Caesar) defeats the forces of Antony and Cleopatra.

soon afterward committed suicide. Four years later, the now virtually powerless Roman Senate bestowed on the victor of Actium—Caesar's adopted son, Octavian—the title of Augustus, "the exalted one." Though he never personally used the title of emperor, Augustus was in fact the first in the long line of dictators who ruled the political entity that became known as the Roman Empire.

Augustus rightly viewed the imperial army as one of the main pillars supporting his vast autocratic power. Under his reforms, the military had twenty-eight legions, each with about 5,500 men (including cavalry), for a total of more than 150,000 men. By the end of his reign, each legion was commanded by an officer called a legionary legate (*legatus legionis*), who was appointed by the emperor; under the legate were the traditional six tribunes; and under them were the centurions (each in charge of a single century), whose position, like that of the tribunes, dated from the fourth century B.C. Augustus also sought to eliminate

the problem that had brought the Republic to its knees—troops swearing loyalty to individual generals rather than to the state. He banned conscription (the military draft), except in the case of a national emergency, and opted instead for a professional standing army of volunteers, correctly reasoning that career men who enlisted by choice were more likely to support the establishment than a renegade general.

Among Augustus's other military reforms was the requirement that once each year soldiers swear an oath to him as their supreme commander. He also granted them hefty bonuses and created a system of land grants as part of their pensions, making it almost impossible for a general to buy their allegiance. In addition, he created some special military garrisons for the capital city. One was a force of about forty-five hundred elite, highly paid troops called the Praetorian Guard (a force that later emperors considerably expanded). Its membership was restricted to men of Ital-

ian birth, and its primary tasks were to guard Augustus and to see that his orders and policies were enforced. The other city units included three "urban cohorts" (*cohortes urbanae*), consisting of about fifteen hundred policemen to keep order in Rome (and later in other cities), and a brigade of about thirty-five hundred *vigiles*, firefighters who sometimes also patrolled the dark and dangerous night streets.

## The Century of Crisis

During its first two centuries, the Roman Empire enjoyed a period of relative peace and prosperity that came to be called the *Pax Romana*, or "Roman Peace" (ca. 30 B.C. to A.D. 180). This was because Augustus and most of his immediate successors were thoughtful, effective rulers. The five emperors who ruled from 96 to 180—Nerva, Trajan, Hadrian, Antoninus Pius, and Marcus Aurelius—were especially capable and enlightened leaders.<sup>10</sup> They brought Roman civilization to its political, economic, and cultural zenith. Under Trajan, an able, thoughtful, and generous ruler, the Empire was larger than it ever had been or ever would be. It stretched from the Atlantic Ocean in the west to the Persian Gulf in the east, and from north Africa in the south to central Britain in the north. This huge realm covered some 3.5 million square miles and supported more than 100 million inhabitants.

Unfortunately for those inhabitants, however, Marcus Aurelius's death in 180 marked the end of the largely safe and happy *Pax Romana*. Thereafter, the Empire's political and economic problems rapidly increased, leading to a century of severe crisis in which the Roman realm approached the brink of total collapse. The crisis had several dimensions and causes, among them poor leadership, for one

ambitious, brutal, and/or incompetent individual after another occupied the throne, and serious economic problems, including a shortage of precious metals, rising inflation, and declining agriculture.

Worst of all, the Empire faced grave military threats; large seminomadic Germanic tribes assaulted its northern borders. At the same time, by the early third century the Roman army, though larger than ever, had grown less disciplined and reliable than it had been in the past, so it was often unable to stop enemy incursions into Roman territory. Making matters worse, army units in various parts of the realm swore allegiance to their generals, much as in late republican times, and these leaders frequently and foolishly tried to fight one another while defending against the invaders. During the ensuing roughly fifty-year period of near-anarchy, more than fifty rulers claimed the throne, though only about half the claims had any legal basis. All but one of these men died by assassination or other violent means.

Although chaos, disunity, and so-called barbarian invaders threatened to tear the Roman world asunder, Rome managed, seemingly miraculously, to pull back from the brink of ruin. Beginning in the year 268, a series of strong military leaders took control, and in the next sixteen years they pushed back the Germans and defeated illegal imperial claimants in various parts of the realm. With the Empire reunited and minimal order restored, in 284 a very intelligent and capable leader named Diocletian ascended the throne. He initiated numerous reforms—substantially reorganizing the provinces, the tax system, and the imperial court—creating what was in effect a new Roman Empire. Modern historians often refer to this realm, a grimmer, more dangerous and regimented, and far less optimistic society than that of the *Pax Romana* era, as the Later Empire.

## Disaster in the Teutoberg Forest

The worst military disaster of Augustus's reign, a defeat that foreshadowed Rome's large-scale losses to Germanic tribes in later centuries, occurred in A.D. 9 when a Roman force commanded by Publius Quinctilius Varus was cut to pieces in Germany's dense Teutoberg Forest (about eighty miles east of the Rhine River). This description of the event is from the Roman History of the second-century Greek historian Dio Cassius.



A violent downpour and storm developed, so that the column [of soldiers] was strung out [over a distance]; this also caused the ground around the tree-roots. . . to become slippery, making movement very dangerous. . . . While the Romans were struggling against the elements, the barbarians suddenly surrounded them on all sides at once, stealing through the densest thickets, as they were familiar with the paths. At first they hurled their spears from a distance. . . [and then] closed in to shorter range; for their own part the Roman troops . . . were everywhere overwhelmed by their opponents [and] suffered many casualties and were quite unable to counter-attack. . . . They could neither draw their bows nor hurl their javelins to any effect, nor even make use of their shields, which were completely sodden with rain. . . . Besides this the enemy's numbers had been greatly reinforced . . . [making] it easier to encircle and strike down the Romans, whose ranks . . . had lost many men. . . . So every soldier and every horse was cut down."

As his doomed army battles on, Roman General Varus runs his sword through his body rather than accept defeat.

## Diocletian's and Constantine's Military Reforms

Another of Diocletian's major reforms (which his successors continued) was a thorough overhaul of the military. The new army that emerged reflected a general change in the Empire's overall defensive strategy that had been developing for some time. The new outlook, shaped by the sober reality of many decades of relentless barbarian incursions across the northern frontiers, was based on the assumption that it was no longer possible

to make the borders, or *limes*, completely impregnable; some invaders, the reasoning went, must be expected to get through the line of forts along the frontiers. However, these intruders could hopefully be intercepted by one or more small, swiftly moving mobile armies stationed at key points in the border provinces. To make such "defense-in-depth" strategy work, historian Arthur Ferrill points out, the forts had to be "strong enough to withstand attack and yet not so strongly defended as to become a drain on manpower weakening the mobile army."<sup>11</sup>

The emperor Gallienus (reigned 253–268) had taken a step in this direction of less static defenses in the 260s by recruiting extra cavalry forces for a mobile army that could move independently of the slow-moving main legions. Diocletian now took the idea a step further. He stationed small armies, each accompanied by detachments of cavalry, called *vexillationes*, at key positions on the frontiers. He also attached two highly trained legions to his personal traveling court, the *comitatus*, supported by elite cavalry forces, the *scholae*, thus creating a fast and very effective mobile field force.

Constantine I (reigned 307–337) further elaborated on these changes. Like Diocletian, he divided his military into both mobile forces, the *comitatenses* (from *comitatus*), and

frontier troops, the *limitanei* (from *limes*). However, Constantine withdrew troops from some frontier forts and used them to create several small mobile armies. These patrolled the frontiers, traveling from town to town, and when needed hurried to any new trouble spots.<sup>12</sup>

The actual size of these armies, as well as of Rome's overall forces, is difficult to calculate and often disputed. A realistic figure for the Empire's combined armies in the first half of the fourth century is perhaps 400,000. At first glance this sounds truly formidable. But we must factor into it certain realistic limitations. First, army lists were frequently inflated with fictitious entries, such as the names of little boys and old men attempting

The Praetorian Guard (shown here) was an elite group of soldiers whose job was to protect the emperor.



to draw free pay and rations. There were also high desertion rates, spotty training, and inadequate supplies (caused in large part because of the government's shortage of funds). Finally, the military was composed of numerous small forces dispersed across a huge realm; and the individual field armies were tiny in comparison with those of republican times. Each of Constantine's mobile army units likely consisted of little more than 1,000 infantry and 500 cavalry. These were sometimes combined to form larger armies, of course, but only rarely did generals in the Later Empire field forces numbering in the tens of thousands.

## The Army and Empire in Decline

The new grand strategy of the Empire, with its frontier forts and small mobile armies, worked well enough as long as barbarian incursions in the north were infrequent and small scale. However, as time went on these invasions became more numerous and much larger in size. In about 370, the Huns, a fierce nomadic people from central Asia, swept into eastern Europe, driving the Goths and other German tribes into the Roman border provinces. These events set in motion the greatest folk migrations in history, as the Goths, Vandals, Burgundians, Franks, Angles, Alani, Saxons, and many other tribes spread over Europe in search of new lands. That the Roman army was by now inadequate to keep all these invaders out became painfully clear on August 9, 378. On that dark day for Rome, the emperor Valens (reigned 364–378) attempted to halt the advance of some 200,000 members of a branch of the Goths, the Visigoths (meaning "wise Goths"), who had earlier poured across the Danube River. Near Adri-

anople, in northern Greece, Valens died, along with at least two-thirds of his army, perhaps as many as 40,000 men.

The disaster at Adrianople marked a crucial turning point for Rome. Thereafter, the barbarian invasions continued to increase, while the quality and morale of the Roman army steadily decreased. Part of the problem was that, by the end of the fourth century, many of the soldiers in that army were barbarians themselves. The "barbarization" of the Roman military had begun in prior centuries when the government had allowed Germans from the northern frontier areas to settle in Roman lands. Once these settlers had established themselves, they were more than willing to fight Rome's enemies, including fellow Germans. Roman leaders, always in need of tough military recruits, took advantage of that fact. However, as the recruitment of Germans into the military accelerated, this policy began to take its toll, particularly in a loss of discipline, traditionally one of the Roman army's greatest strengths. According to Ferrill, the German recruits

began immediately to demand great rewards for their service and to show an independence that in drill, discipline and organization meant catastrophe. They fought under their own native commanders, and the barbaric system of discipline was in no way as severe as the Roman. Eventually Roman soldiers saw no reason to do what barbarian troops in Roman service were rewarded heavily for not doing. . . . Too long and too close association with barbarian warriors, as allies in the Roman army, had ruined the qualities that made Roman armies great. . . . The Roman army of A.D. 440, in the west, had become little more than a barbarian army itself.<sup>15</sup>



*German-born Odoacer commanded the last of the Roman armies in Italy.*

Eventually, this military decline, coupled with the continuing invasions, severe economic decline, and other problems, caused the west-

ern Empire to shrink drastically in size and power. (The eastern portion of the Empire, centered at Constantinople, founded in 330 by Constantine, escaped most of the invasions and remained largely intact; in time, it mutated into the Greek-speaking Byzantine Empire.) The last few western emperors ruled over a pitiful realm consisting only of the Italian peninsula and portions of a few nearby provinces. And even these lands were not safe or secure, for claims by Germanic tribes continued. In 476, a German-born general named Odoacer, who commanded the last of all the Roman armies in Italy, demanded that he and his soldiers be granted lands on which to settle. When the government refused, Odoacer's men acclaimed him as king of Italy, and on September 4 he deposed the young emperor Romulus Augustulus. No new emperor took the boy's place, and most later scholars came to view the event as the fall of the western Empire.

# Recruiting, Paying, and Training Roman Troops

In many ways, the life of a Roman soldier was similar to that of soldiers in modern armies. To begin with, he joined up either through conscription, when the government sorely needed troops, or by enlisting voluntarily. He then underwent vigorous training not unlike the “boot camp” today’s military recruits endure. Eventually, his superiors posted him to a legion, fort, mobile army, naval base, or some other unit or facility where he performed various duties according to his abilities and the military’s needs.

Also like his modern counterparts, a Roman soldier often led a dangerous, harsh life, particularly when campaigning during wartime. The difference between the modern and ancient soldier in this respect is that, unless killed or seriously wounded, a modern soldier can reasonably expect to survive his term of service and go on to other endeavors, and most do so. By contrast, fewer ancient Roman soldiers made it into their retirement years. This was partly because, for many centuries (beginning in Augustus’s time), the standard enlistment term of Roman troops was twenty-five years, compared with an average of only two to five years in most modern armies. So a Roman soldier was exposed to hardship and danger much longer, increasing the odds that he would be killed, be mortally wounded, or suffer from accident or illness. And the problem of illness was compounded by the primitive state of ancient medicine. Lacking both knowledge of germs and access to antibiotics and other medicines commonly available today, many ancient sol-

diers died from ailments that modern soldiers easily survive. According to Michael Simkins,

The reality of service life . . . was harsh, with a rather limited chance that the individual would service the 25 years’ enlistment term, which usually began at the age of 18; many of the inscriptions upon surviving grave *stela*e [marker stones] indicate that the men frequently died before, or shortly after, the age of 30. Unfortunately the cause of death is not recorded, unless the man had been killed in action. . . . One assumes therefore that the majority of the premature deaths were caused by disease, accidents, or possibly blood-poisoning contracted from infected wounds that could have readily been incurred in the normal course of everyday military life.<sup>14</sup>

## Becoming a Soldier

The very first issues a prospective Roman soldier dealt with were the method of his recruitment (*dilectus*), his actual acceptance, and the length of the term of service he faced. In wartime or other national emergencies, the government conscripted however many men it needed to deal with the situation. But on the whole, Rome was at peace more often than at war, and during both wartime and peacetime voluntary enlistment was more

common than conscription. In peacetime, not all of those who desired to enlist were accepted, since there were usually only a set number of openings at any given time. It was customary, therefore, for a prospective recruit to obtain a letter of introduction or recommendation (*litter commendaticius*) to show why the military should take him over others. Such letters, such as the following surviving example from the second century A.D., came from respected citizens, especially those with military records and/or connections.

To Julius Domitius, legionary tribune, from Aurelius Archelaus . . . greetings. I have even before recommended my friend Theon to you, and once again I beg you, Sir, to consider him in your eyes as myself. For he’s just the sort of fellow you like. He’s left his family, his property, and his business and followed me, and in every way he’s kept me free from worry. And so I beg you to let him see you, and

he can tell you everything. . . . Hold this letter before your eyes, Sir, and imagine that I’m talking with you. Goodbye.<sup>15</sup>

However eloquent and praiseworthy the letter of introduction might be, it served only to get the prospective recruit’s foot in the door, so to speak. He also had to pass his *probatio*, which consisted of an interview and a physical examination. The interview mainly determined the recruit’s legal status and the branch of the service for which that status qualified him. It was required that he be a full-fledged citizen if he wanted to join a legion, for example. A noncitizen was eligible for the auxiliaries, of course, but he had to show that he was a free person and not a slave. In addition, the recruiters considered the prospective soldier’s moral character; if he had a reputation for dishonesty or laziness, he might well be rejected.

The physical exam ensured that the recruit met certain minimum height and other

*Although the government conscripted (drafted) men during war, most Roman soldiers enlisted voluntarily.*



standards. According to Vegetius, a late-third-century Roman civil servant who wrote a handbook on military matters,

I am aware that it has always been the practice for a standard height for recruits to be laid down, with the consequence that only those of six feet in height, or at the least, five feet ten inches, used to be accepted for service in the cavalry or in the leading cohorts of the legions.<sup>46</sup>

Because the Roman foot was about one-third of an inch less than a modern foot, Vegetius's two mentioned heights—the desirable and acceptable—convert to about five foot ten and five foot eight by today's standards. By his own day, in the Later Empire, manpower shortages had forced the military to lower its height standard to five foot five. Other problems army recruiters looked for in the physical exam were poor eyesight or hearing and missing fingers or toes.

If the recruit passed the *probatio*, he took the military oath, which officially made him a soldier. In republican times, he swore to follow the consuls without hesitation in whatever wars might occur during his term of service, never to desert the standards (symbols) of his unit and legion, and never to do anything unlawful. In the Empire, the oath was apparently virtually the same, except that the recruits swore to obey the emperor; in the Later Empire, after Christianity became Rome's official religion, they swore to obey both the emperor and Jesus Christ.<sup>47</sup> Having sworn the oath, the new soldier was assigned to a post in either Italy or one of the provinces.

Throughout most of Rome's history, once a recruit had been accepted into the military and assigned to a post, he faced the reality of serving for much of the remainder of his life.

Although eighteen to twenty-five was probably the average age of a volunteer, any man between the ages of seventeen and forty-six was liable to serve in an emergency. In the earliest days (during the Monarchy and early Republic), when the army was a part-time citizen militia, soldiers served short terms—usually only a few weeks or months—and when the emergency was over they went home. In time, however, terms of service became longer, especially during long wars, such as the Punic conflicts, when a legionary might serve as long as sixteen years and a cavalryman as long as ten. During the Second Punic War, a legionary usually put in six years of continuous service and then became an *evocatus*, an off-duty soldier who could be recalled at any time to fill out his sixteen-year term. In the early Empire, Augustus increased the initial period of service from six to sixteen years, followed by four on call; later he raised these numbers to twenty years of continuous service and five on call; and after his death the standard hitch became twenty-five years of continuous service. (Auxiliaries served up to thirty years, later reduced to twenty-five; sailors for twenty-six years; members of the urban cohorts for twenty years; and members of the Praetorian Guard at first for twelve and later for sixteen years.)

### Salary and Bonuses

Another important factor a new recruit had to consider was his pay. During much of Rome's history, the average legionary received a salary that was barely adequate to his needs, yet the recruit could look forward to the possibility of promotion (officers received much higher pay) and various kinds of bonuses and special payments. In the Monarchy and early Republic, soldiers were not

## The Value of a Soldier's Pay

In this excerpt from *The Army of the Caesars*, noted historian Michael Grant explains the relative worth of the denarius and other coins the Roman government issued to its troops over the centuries.

"Soldiers' pay is generally reckoned in *denarii* or *sestertii*, of which there were four to the *denarius*. . . . In the time of Caesar [mid-first century B.C.] silver *denarii* were coined, but not *sestertii*. Under Augustus . . . the *denarius* was the standard silver coin, valued at one-twenty-fifth of the standard gold coin, the *aureus*. The *sestertius* was at this period a large brass token coin.



Here, a Roman coin shows the face of the emperor Augustus.

Unfortunately, it is quite impossible to give any useful modern equivalents of these denominations, owing to the notorious absence of ancient economic statistics. . . . The Romans did not understand or appreciate token currencies [those consisting of cheap metals or paper rather than precious metals]. The population was never prepared to admit a token principle for the coinage in precious metals, which they invariably expected to contain gold or silver worth one *aureus* or one *denarius* respectively. Yet one emperor after another failed to resist the temptation to erode these values by issuing coins that were increasingly debased [made mostly of cheaper metals] or light-weight, or both. . . . In the third century A.D., this and other economic misfortunes caused an acute inflation which brought widespread misery and destitution. The inflation also meant that the soldiers [of the Later Empire], whom the emperors urgently needed to satisfy, had to be . . . given substantial payments in-kind [in the form of goods and services], as well as additional allowances."

paid, since they served only on an occasional basis for short periods and made their livings from their farms. By the early fourth century B.C., however, the troops received a small daily cash payment (*stipendium*) to help

cover their living expenses, and cavalrymen received money to maintain their horses when on campaign. As time went on and soldiers' terms of service lasted for years, these daily payments evolved into a regular salary



(still referred to as a *stipendium*) that was paid in three installments—in January, May, and September (later increased to four installments).

These installment payments were mostly “on paper,” for most Roman soldiers did not receive their whole pay up-front, as modern soldiers do. First, it had long been standard procedure to deduct some of the soldier’s salary to cover the cost of his armor and weapons (if he could not supply them himself), food, bedding, his burial if he died on duty, and other expenses. The government deposited a large portion of what was left in a military bank. This money, says Vegetius, was “saved there for the men themselves to prevent it from being wasted by them through extravagance or the purchase of useless articles.”<sup>18</sup> After the initial deductions and savings deposit had been made, the soldier received the small amount remaining as pocket money. It is no wonder, then, that an average serviceman frequently found himself strapped for cash. In a surviving letter (found in Egypt), a young soldier complains to his mother,

When you get this letter I shall be much obliged if you will send me some money. I haven’t got a penny left, because I have

bought a donkey-cart and spent all my money on it. Do send me a riding-coat, some [olive] oil, and above all my monthly allowance. When I was last home you promised not to leave me penniless, and now you treat me like a dog. Father came to see me the other day and gave me nothing. Everybody laughs at me now, and says, “his father is a soldier, his father gave him nothing.” Valerius’s mother sent him a pair of pants, a measure of oil, a box of food, and some money. Do send me money and don’t leave me like this. . . . Your loving son.<sup>19</sup>

The actual pay a Roman soldier received was most often in the form of currency based on a common silver coin called a *denarius*. In the early second century B.C., shortly after the end of the Punic Wars, a regular legionary received 112.5 *denarii* per year.<sup>20</sup> This amount remained standard until the mid-first century B.C., when Julius Caesar doubled the pay of his legionaries to 225 *denarii*. Rival generals had no choice but to follow his example, and that figure remained standard for more than a century. In about A.D. 84, the emperor Domitian (reigned 81–96) raised the legionary’s pay to 300 *denarii*, and in the early third century

the emperor Caracalla (211–217) upped it to 675 *denarii*. (When adjusted for steadily rising prices due to inflation, these increases were not as substantial as they might seem.)

Through all these centuries, other kinds of soldiers received higher wages than regular legionaries. Centurions (each in charge of a century of men), for instance, the key officers who kept the army running from day to day, earned from 3,750 to 15,000 *denarii* per year under Augustus. This means that even the lowest paid centurion made almost seventeen times more than a regular legionary. Moreover, the pay for centurions more than doubled in the early third century. Praetorians at first received 375 *denarii* under Augustus; he later raised their pay to 750 *denarii*; and Caracalla raised it to perhaps 2,250 *denarii*.

In addition to their standard salaries, all of these soldiers on occasion received bonuses or bounties called donatives and sometimes received retirement gifts. The donatives usually consisted of either booty (valuables captured from the enemy in wartime and doled out by a general to his men) or direct cash payments. But they could also take the form of money bequeathed to soldiers in a general’s or an emperor’s will. For example, in his will, Augustus left each praetorian 250 *denarii*, each member of the urban cohorts 125 *denarii*, and each of a select group of legionaries 75 *denarii*. Retirement gifts included land grants, cash bonuses, and, in the case of auxiliaries (beginning in the mid-first century A.D.), the granting of Roman citizenship. (Auxiliaries did not receive donatives, however, and sailors evidently received neither donatives nor retirement gifts.) Not surprising, some recruits joined the army mainly in hopes of acquiring generous donatives and/or retirement rewards at some later date.

In general, the pay structure in the Later Empire (from Diocletian’s time on) was very



In the third century A.D., a Roman legionary like this one would have been paid 675 *denarii* per year.

different from what it had been in prior ages. Partly because the Empire’s economy more or less collapsed during the upheavals of the century of crisis, the society that emerged



Roman soldiers were paid in *denarii*, common silver coins.

## The Proper Use of the Sword

*Much of the weapons training Roman military recruits underwent involved the use of their sword, the gladius. As scholar Michael Simkins explains in this excerpt from his Warriors of Rome, the way these swords were used was the key to their effectiveness.*

"The method taught was to thrust, rather than to slash at an opponent; for a slash-cut rarely kills, but a thrust makes a deep penetration of the vital organs. The Roman short sword was clearly designed for stabbing, with its sharp angled point, though it

could be, and certainly was on occasion, used to effect cutting strokes. The skulls belonging to the hapless defenders of the great . . . fortress of Maiden Castle in Dorset, England, show the appalling fatal wounds inflicted by the soldiers of [the Roman legion] LEGIO II AUGUSTA against adversaries who were most probably unhelmeted. The use of the thrust also meant that the Roman kept himself covered with the bones of his own arm. To raise the arm to make a cut necessarily exposed his entire right side."

afterward was less prosperous or stable and more poverty stricken. Consequently, the government had more trouble making ends meet. So a hefty part of a soldier's pay was in-kind (in the form of goods and services rather than money), including many items for which troops in earlier ages had been required to pay. Oxford University scholar Roger Tomlin elaborates,

Late-Roman soldiers did not have to pay for their uniforms, arms and equipment, and were issued with rations which increased as they rose in rank. Payment in-kind was supplemented by a regular salary paid in . . . bronze small change, and by donatives paid in silver and gold at five-yearly intervals. Officers also received imperial gifts [gifts from the emperor], inscribed silver plates, gold and silver medallions, gold and silver belt fittings and brooches. These terms were generous in an empire where most of the population lived at subsistence level.<sup>21</sup>

### Training Methods

Immediately following a Roman soldier's recruitment process came his training. To say that this training was extensive is an understatement, for the Roman army in its prime was by far the best-trained army the world had yet seen. Little is known about early Roman military training methods. Fortunately, Polybius described the Roman general Scipio's retraining of some troops soon after capturing the Carthaginian stronghold of New Carthage in 209 B.C., at the height of the Second Punic War. On the first day of each week, the soldiers had to run about 3.7 miles in full armor, an extremely arduous feat; on day two, they cleaned and polished their weapons and underwent an exacting inspection; on day three, they rested; on day four, they endured relentless weapons drills—practicing sword play, spear throwing, and the like; on day five, they ran another 3.7 miles in armor; on day six, they had another inspection; and on day seven, they rested again. The following week they repeated the process.

As time went on, the training became even more wide-ranging and rigorous. During the early Empire, new recruits learned to march by engaging in exhausting parade drills twice a day until they were able to cover twenty-four miles, wearing full armor, in just five hours. Next, they had to march mile after grueling mile, day after day, carrying a full pack consisting of some sixty pounds of weapons, tools, and rations. They also learned how to build a camp, how to ride a horse, and how to swim. Then came weapons training, as described by Vegetius:

They [the trainers] made round wicker-work shields, twice as heavy as those of service weight, and gave their recruits wooden staves [sticks] instead of swords,

and these again were of double weight. With these they were made to practice at the stakes both morning and afternoon. . . . A stake was planted in the ground by each recruit, in such a manner that it projected six feet in height and could not sway. Against this stake the recruit practiced . . . just as if he were fighting a real enemy. Sometimes he aimed as against the head or the face, sometimes he threatened from the flanks [sides], sometimes he endeavored to strike down the knees and the legs. He gave ground, he attacked, he assaulted, and he assailed the stake with all the skill and energy required in actual fighting . . . and in this exercise care was taken to see that the recruit did not rush forward so rashly to

*New recruits were subjected to rigorous training methods, including forced marches, spear throwing, and sword play.*





Within the Roman army, there were clearly defined ranks, with officers having the most authority and advantages.

inflict a wound as to lay himself open to a counter-stroke from any quarter. Furthermore, they learned to strike, not with the edge [of the sword], but with the point. For those who strike with the edge have not only been beaten by the Romans quite easily, but they have even been laughed at.<sup>22</sup>

Alternating with such drills with sword and shield were others with throwing spears, as well as forced marches, long runs in armor, and practice at jumping and felling trees. Eventually, the recruits lined up in an open field and practiced shaping the various common battle formations until they could do so quickly and precisely. Finally, they engaged in mock battles (in which the points of their swords and javelins were

covered to prevent serious injuries). The Romans took war and soldiering very seriously; failure, in training as well as on the battlefield, was not an option. As a result, as Vegetius informs us,

so strict was the attention paid to training, that weapons training instructors received double rations, and soldiers who had failed to reach an adequate standard in those exercises were compelled to receive their rations in barley [a grain then considered inferior to wheat] instead of wheat. The wheat ration was not restored to them until they had demonstrated by practical tests, in the presence of the . . . tribunes or the senior officers, that they were proficient in every branch of their military studies.<sup>23</sup>

## To Rise Through the Ranks?

It goes without saying that nearly every new recruit hoped he would somehow manage to gain promotions and rise through the ranks. Especially desirable was becoming an officer, which carried with it many advantages, including better pay, more authority and respect, and increased prestige and social and political opportunities. In the imperial army, the first step up from an ordinary legionary was the position of *immunis*. The *immunes* were so named because they were immune from normal, and often unpleasant, daily military duties because they possessed special skills.<sup>24</sup> An *immunis* received higher pay than a legionary and generally worked on his own and at his own pace. A small sampling of the more than one hundred kinds of known *immunes* includes *aerarii* (bronze workers), *agrimensores* (surveyors), *carpentarii* (carpenters), *ferrarii* (blacksmiths), *lapidarii* (stonemasons), *librarii* (clerks), *medici* (orderlies or doctors), *sagittarii* (arrow makers), *stratores* (grooms), *tubarii* (trumpet makers), and *veterinarii* (veterinarians).

Above the legionaries and *immunes* were the officers, grouped into commissioned, or senior, officers, and noncommissioned, or junior, officers. The junior officers, called *principales*, were divided into two groups—those in the century and those at the legion's headquarters. Of the century's junior officers, the lowest ranking was the *tesserarius* (from *tessera*, meaning "watchword"), a type of sergeant who made sure the legionaries were doing their jobs. Above him was the *optio*, the deputy centurion who assumed command of his century in the centurion's absence. Another *principalis*, the *signifer*, bore the century's standards, a highly prestigious duty. The headquarters *principales* included a large number of specialized officers, among them

the *aquilifer*, who bore the Eagle, the standard for the legion; the *imaginifer*, who carried a portrait (*imago*) of the emperor; and several kinds of *beneficarii* (later called *officia*), head clerks and assistants on the staffs of the senior officers.

The lowest-ranking senior officer was the centurion, a kind of top sergeant or sergeant-major, somewhat equivalent to a company

A Standard Bearer (left) and Roman Commander were two of the ranks soldiers could achieve in the Roman army.



commander in a modern army. The highest-ranking and most prestigious centurion in a legion was the *primus pilus* ("first spear"), who had the right to attend meetings and strategy sessions with the tribunes. In his history, Livy includes a passage in which a centurion of the early second century B.C. describes his own career. The speech shows how an ordinary soldier with skill, guts, perseverance, and a bit of luck might rise through the ranks.

I am Spurius Ligustinus, of the tribe of Crustumina. . . . I joined the army in the consulship of Publius Sulpicius and Gaius Aurelius; I served two years in the ranks in the army which was taken across to Macedonia [in the early 190s B.C.], in the campaign against King Philip [V]. In the third year Quinctius Flaminius promoted me, for my bravery, [to the position of] centurion of the tenth maniple of

*hastati* [young infantrymen who fought in the front rank in a battle]. . . . [Later, in Spain, the consul Marcus Porcius] judged me worthy to be appointed centurion of the first century of *hastati*. I enlisted for the third time, again as a volunteer, in the army sent against the Aetolians [a federation of Greek cities]. . . . Marcus Acilius appointed me centurion of the first century of the *principes* [infantrymen who fought in the second rank]. . . . Four times in the course of a few years I held the rank of chief centurion [*primus pilus*]; thirty-four times I was rewarded for bravery by the generals.<sup>25</sup>

Ranked above the centurions in both a republican and imperial legion were its six tribunes. In the Republic after about 190 B.C., one or more legions might be under the command (usually for a relatively short period) of

a higher-ranking officer, the legate (*legatus*), appointed by the Senate. Above the legates were the consuls, until the late Republic when elected officials no longer commanded the army during their terms of office. In the early Empire, Augustus introduced the position of legionary legate, who had charge of a single legion for several years and reported directly to the general commanding the whole army (who was sometimes the emperor himself). There also appeared at this time the position of camp prefect (*praefectus castrorum*). Similar in rank to a tribune, the camp prefect, supported by a large staff, laid out the army base or encampment and maintained order, sanitation, medical services, and weapons training within it.

This general command structure continued until the Later Empire, when dramatic changes in military organization called for the creation of some new officers. The frontier armies of these times were commanded by *duces* (from which the title "duke" evolved); the mobile armies were led by the *magister equitum* ("master of cavalry") and *magister peditum* ("master of infantry"); and small detachments of the mobile armies were led by a *comes* ("count"). Because of a lack of firm evidence, it remains uncertain whether traditional regimental offices and positions, such as tribune, centurion, and *optio*, still existed in this period, but considering the characteristic Roman reverence for military tradition, it is likely that many of them did.

## The Courageous and Respected Centurions

*This informative examination of Roman army centurions is from historian John Warry's Warfare in the Classical World.*

"Following the reforms of Marius [in the late second century B.C.], centurions' . . . importance grew and by Caesar's day they were the men who actually commanded the troops, while the still amateur and youthful tribunes, nominally superior to them, held mainly staff appointments. In imperial times the legion had 59 centurions, comprising five in the 1st cohort and 54 in the remainder. Those of cohorts 2-10 were equal in rank and differed only in seniority. Above these ranked the senior centurions (*primi ordines*) who each commanded a double

size century of the first cohort. . . . Caesar's respect for his centurions is revealed by his many tales of their courage and leadership. . . . [The rank of] a centurion of the 1st century A.D. [was] . . . denoted by his transverse [helmet] crest, which might be of horse hair or feathers. . . . His rank [was] also signified by his vine "swagger stick," which was sometimes used to administer corporal punishment. His armor [was] of mail or scales [small pieces of metal sewn into cloth or leather] and, unlike the legionaries', was richly decorated and sometimes silvered. The centurion carried his *gladius* [sword] on the opposite side to the legionaries and in battle carried shield and *pila* [spears] like his men."

# Roman Soldiers on the March

Since Rome was at peace more often than it was at war, many Roman troops saw little or no action during their careers. And even when an army was in the field (on campaign in wartime), the soldiers spent most of their time marching and making and breaking camp. The distances they had to cover to reach the enemy were often large. And because the Romans rarely used ships to transport land armies long distances, walking was the chief mode of travel. Therefore, several days of marching might be required if the battlefield was in Italy (as it often was in the Second Punic War) and several weeks if the front was in a distant province or foreign land.

The highly practical, regimented Romans developed systematic and efficient methods and rules for moving armies from place to place early on. These are sometimes referred to as field logistics. There was a set order of march, for example, in which specific groups and units (scouts, surveyors, the general and his bodyguards, the cavalry, the legionaries, the baggage train, and so on) always occupied the same positions in the line. The Romans also raised the task of constructing an army camp to a virtual art. It is revealing that Polybius's description of a Roman army on the march, written in the mid-second century B.C., and Josephus's description, composed more than two hundred years later (and not influenced by Polybius's), are nearly identical. This illustrates that once the Romans found an efficient way to do something, they usually stuck with it. The Roman army's field

logistics were so well planned and efficient that Josephus, a former adversary, was moved to say,

When planning goes before action, and the plans are followed by so effective an army, who can wonder that [the Romans have managed to conquer the whole Mediterranean world]? One might say with truth that the conquests are less remarkable than the conquerors.<sup>26</sup>

## The Soldiers' Heavy Burdens

If one could transport him- or herself back in time and witness a Roman army on the march, he or she would immediately be struck by the tremendous amount of equipment each soldier carried. In the early Republic, baggage trains of mules carried much of the load, but from Marius's time (late second century B.C.) on, to enable the army to move faster, the number of pack animals was reduced and the men ("Marius's mules") carried more. The legionaries marched along with their shields hanging from a shoulder strap and their helmets strapped to their right shoulders. In his hands, each soldier carried his javelins and a bundle of long wooden stakes that would later be used to erect the stockade fence protecting the camp. Over his left shoulder he carried a pole to which his pack was attached, a load that typically included a bronze mess tin (*patera*), a portable

hand mill to grind grain, a cooking pot or bucket, a leather bag containing extra clothes, and a sack containing from three to fifteen days' worth of rations, depending on the length of the trip. (In the Later Empire, soldiers in the mobile armies always carried twenty days' worth of rations.)

In addition, the men carried the tools they used for building roads and bridges in remote areas and the camps in which they spent their nights while on the march. Each member of a *contubernium*, a group of eight men who ate together and shared the same tent (equivalent

to a modern army platoon), carried a few of these tools. Among them were a saw, basket, coil of rope, pickax (*dolabra*), sickle, length of chain, turf cutter, bundle of small wooden or metal stakes, and so on. Often, the members of a *contubernium* shared one mule, which carried their tent, perhaps a larger millstone for grinding grain, and other extra baggage. Apparently, some of the soldiers who could afford it also had a personal slave to help carry equipment, a servant who could be sold and replaced as need dictated. (The army also had a few large wheeled carts to carry heavy siege

*This section from the famous column erected by the emperor Trajan shows Roman soldiers cutting and carrying wheat, which they will grind into grain.*



equipment.) Incredibly, considering they were loaded down with such heavy burdens and faced with the time-consuming daily tasks of clearing their route and both erecting and dismantling a camp, the troops managed to march about eighteen miles a day on average and thirty or more miles a day under emergency conditions.

According to Polybius, the two orders of march (for normal or dangerous conditions) in the mid-Republic were as follows:

As a rule the *extraordinarii* [elite troops of the forces supplied by Rome's Italian allies] are placed at the head of the column; after them come the right wing of the allies and behind them their pack animals; next in order is the first of the Roman legions with its baggage behind it, after which comes the second followed by its pack animals [the consuls and their baggage well protected in their midst], together with the baggage train of the allies who bring up the rear, the left wing of the allies providing the rearguard. The cavalry sometimes ride in the rear of their respective divisions, sometimes along with the baggage animals, so as to keep them together and protect them. When an attack is expected from the rear, the same general formation is maintained, but the allied *extraordinarii* drop back and form the rearguard instead of the advanced guard. . . . If a situation of unusual danger threatens, however, they adopt a different order of march, assuming there is sufficient open ground. In this case the army advances in three parallel columns. . . . The baggage trains of the leading maniples are placed in front, those of the second immediately behind, and so on, the baggage trains being interspersed between the bodies of fighting troops. With

this formation, if the column should be threatened, the troops face to the right or left, according to the direction from which the attack comes, and can then quickly get clear of the baggage train and confront the enemy.<sup>27</sup>

The normal order of march in the early Empire was very similar, although by that time some minor changes had taken place. Notably, the consuls had been replaced by a commanding general appointed by the emperor. And since the *extraordinarii* had long since ceased to exist (when the Italian allies became citizens in the early first century B.C.), the advance guard was now made up of contingents of noncitizen auxiliaries from the provinces. Likewise, units of auxiliaries took the allies' place in the rearguard. Describing an army on the march led by the emperor Titus (reigned 79–81), Josephus fills in some blanks left by Polybius:

[After the advanced guard] came road-makers and camp-constructors, then the officers' baggage with its armed escort. Behind these came the commander-in-chief [general] with his spearmen and other picked soldiers, followed by the legionary cavalry. These marched in front of the [siege] engines, with picked men behind them commanded by tribunes . . . then came the Eagle [symbol of the legion], surrounded by the standards, with their trumpeters in front, and after them the main column, marching six abreast.<sup>28</sup>

### Laying Out the Camp

In the late afternoon, the traveling army slowed and prepared to encamp for the

## A Camp Like a Mushroom Town

*The following account of the building of a Roman army camp, written by the first-century A.D. Jewish historian Josephus, excerpted here from his Jewish War, is quite similar to that of the Greek historian Polybius, who wrote over two centuries earlier.*

"Whenever they [the Romans] invade hostile territory they rigidly refuse battle till they have fortified their camp. This they do not construct haphazardly or unevenly, nor do they tackle the job . . . without organized squads; if the ground is uneven it is thoroughly leveled, then the site is marked out

as a rectangle. To this end, the army is followed by a large number of engineers with all the tools needed for building. The inside is divided up, ready for the huts. From outside, the perimeter looks like a wall and is equipped with towers evenly spaced. In the gaps between the towers they mount [mechanical] spear-throwers, catapults, stone-throwers . . . all ready to be discharged. Four gates are constructed, one in each length of wall, practicable for the entry of baggage-animals and wide enough for armed sorties [detachments of combat troops], if called for. The camp is divided up by streets, accurately marked out; in the middle are erected the officers' huts, and in the middle of these the commander's headquarters, which resembles a shrine. It all seems like a mushroom town, with marketplace, workman's quarters, and orderly-rooms."



*These stone foundations mark the site of a permanent Roman army camp, which, like a marching camp, was laid out in an orderly manner.*

evening. (Sometimes, after the army had reached its destination, for instance, such camps remained in place for days or even weeks or more.) At this time, says Polybius, "One of the tribunes and those of the centurions who are in turn selected for this duty go ahead to survey the whole area where the camp is to be placed."<sup>29</sup> Once the site was selected, surveyors marked the spot having the

best general view of the camp and surrounding countryside with a white flag and measured off a square roughly one hundred feet per side around it. Here, the soldiers would soon erect the consul's tent (*praetorium*). About fifty feet to one side of the square, a red flag marked the line where the tribunes' tents would be placed, and a hundred feet in front of the tribunes' tents, another red flag

indicated where the tents of the legionaries were to be pitched.

Next, the surveyors used an instrument called a *groma* to obtain the measurements

for the remainder of the camp. The *groma* consisted of two boards fastened together so that they crossed each other at a right angle. The boards were mounted horizontally on a

vertical post and plumb lines were hung from their four ends, allowing a user to adjust the boards so that they were perfectly level. The user sighted along the leveled boards in four directions to determine the measurements for a rectangular grid. Two of the most important lines measured within the grid were those that would become the camp's two main streets. These were the *via principalis*, which ran between the row of tribunes' tents and the first row of legionaries' tents, and the *via praetoria*, which connected with the *via principalis* in front of the *praetorium* and ran away from the other street at a right angle, dividing the camp in half. The rest of the streets, lined with tents, ran off of these two main streets. And as Polybius says, "the arrangement both of the streets and the general plan gives it the appearance of a town."<sup>30</sup> (Indeed, modern scholars suspect that the Romans borrowed the concepts for laying out army camps from contemporary Italian town planners, who had likely derived their own ideas from Greek town planners.)

Finally, if the soldiers were in hostile territory, the whole camp was surrounded by a defensive ditch (*fossa*) about three to ten feet deep (the latter if camped near the enemy). The troops piled up the earth excavated from the ditch to make a rampart (*agger*), a mound forming a protective barrier, along the inside of the ditch. On top of the mound, the men embedded the stakes they had carried all day (or if necessary cut new ones from nearby trees), creating a stockade fence. In a typical camp, these outer defenses formed a perimeter nearly two miles in extent, containing between forty and fifty thousand stakes. As noted military historian Peter Connolly explains,

These stakes were cut from trees and usually had two, three, or at the most four lateral branches, all with sharpened points

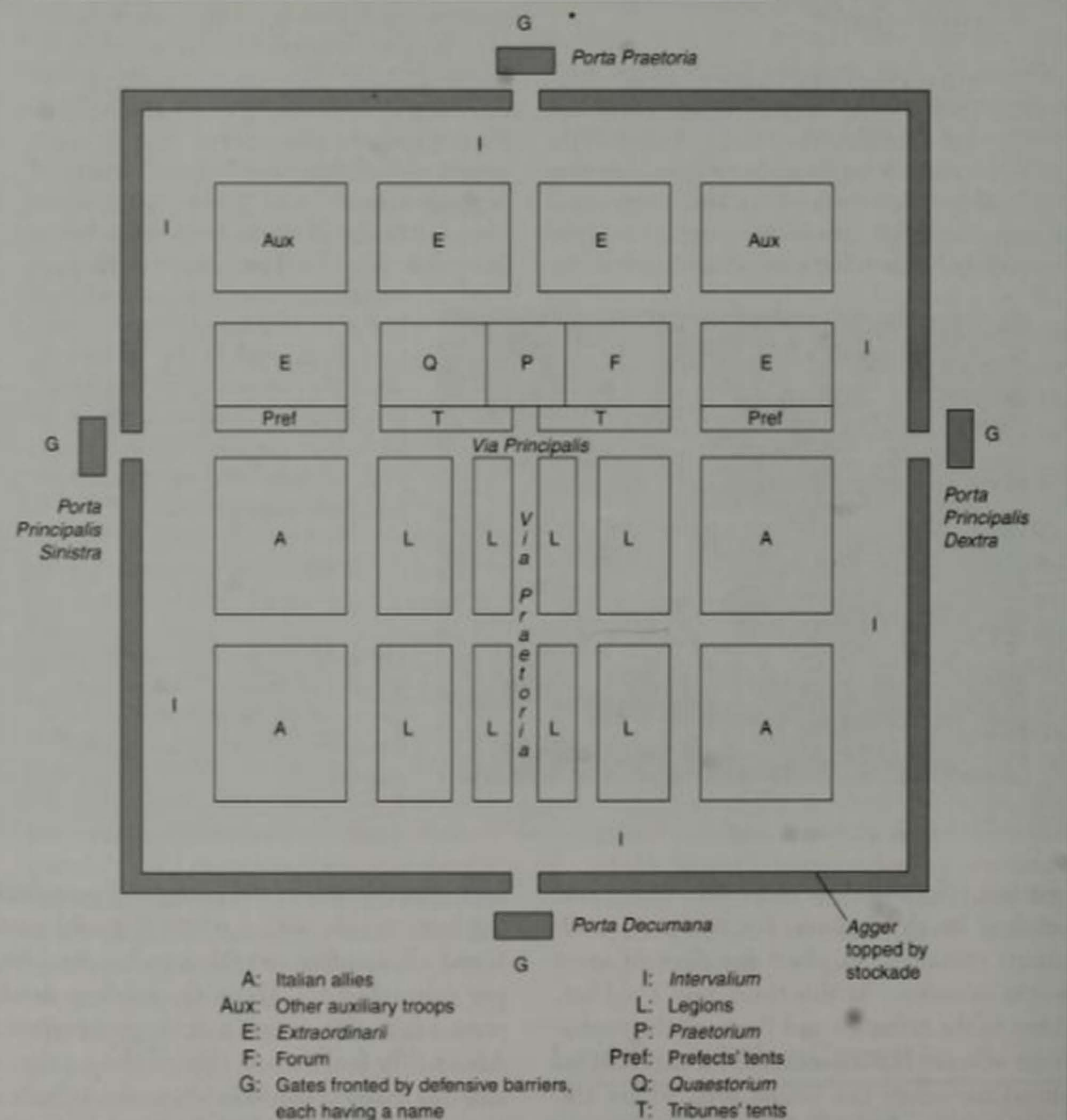
on one side. They were planted so that the branches intertwined in such a way that it was not easy to see which branch belonged to which stake; nor was it easy to pull out one by itself. As they were planted very close together, it was difficult for more than one attacker to get hold of the same stake, and they would gash their hands trying to do so.<sup>31</sup>

Polybius describes another ingenious feature of the camp's outer defenses:

The rampart is dug on all sides at the distance of 200 feet from the [outermost row of] tents, and this empty space [*intervalium*] serves a number of important purposes. First, it provides the proper and necessary facilities for marching the troops in and out; it ensures that they all march into this space by way of the road which passes their own quarters, and thus do not enter any one street in a mass, and so hustle or jostle one another. Also, all cattle which are brought into the camp and all plunder captured from the enemy are collected in this precinct and safely guarded during the night. But the most important use made of this space is that if the camp is attacked by night it prevents the tents from being set on fire and keeps the soldiers out of range of the enemy's missiles [arrows, stones, etc.], or if a few of them do carry so far, they are almost harmless because of the distance and of the margin which has been left in front of the tents.<sup>32</sup>

The army camp of imperial times was in most ways similar to that of Polybius's day. One important difference was the use of the areas adjoining the *praetorium*, which housed the commander. In the republican camp described

### The Roman Army Camp of the Mid-Republic\*



Standard soldiers' duties included setting up and striking the camp, pitching the officers' tents, and preparing the meals. This section of Trajan's column shows the felling of trees to make a stockade.



by Polybius, an open area to the right of the *praetorium* was occupied by the forum, a market where the soldiers could buy various goods. To the left of the *praetorium* stood the tents of the *quaestor*, a public official who supervised the army's financial affairs. In the imperial camp, by contrast, the space beside or directly across from the *praetorium* along the *via principalis* was occupied by the *principia*, a legionary headquarters and camp operations center. The forum and *quaestorium* (now run by a camp prefect) rested elsewhere in the camp, usually near the perimeter.

## Duties and Routines

Most of the legionaries shared the duties of setting up (and later striking) the camp, including digging the *fossa* and erecting the *agger* and stockade. Of course, the eight men in each *contubernium* were also responsible for pitching their own tent. Typically, it was about ten Roman feet (9.7 English feet) square and made of leather. "Everyone knows exactly in which street and in which part of that street his tent will be situated," Polybius tells us,

since every soldier invariably occupies the same position in the camp, and so the process of pitching camp is remarkably like the return of an army to its native city. When that happens, the troops leave their ranks at the city gate and each man makes straight for his home.<sup>31</sup>

In addition, some men had the permanent responsibility of pitching the commander's, tribunes', and other officers' tents.

Once the camp had been erected, the soldiers performed other standard duties. Some were assigned to keep the *via principalis* and other vital streets clear and clean, for example. Specialists, such as engineers, blacksmiths, weapons makers, and doctors, set up their own workshops (*fabrica*) or headquarters, among them a hospital for the troops (*valitudinarium*) and one for the horses (*veternarium*). Josephus provides this brief account of other duties and camp routines:

All other duties are carried out with attention to discipline and security, wood, food,

and water as required being brought in by the units detailed [assigned]. They do not have supper or breakfast just when they fancy at their individual discretion, but all together. Times for sleep, guard-duty, and reveille [wake-up call] are announced by trumpet calls, and nothing whatsoever is done without orders.<sup>34</sup>

As for the meals the men ate together, on the march they usually consisted of the rations they carried. The main staple was biscuits baked from whole wheat (sometimes with honey added to the dough to sweeten it). Supplementing these were other foods that could be preserved for many days and also easily carried, including bacon, cheese, and sour wine. When the army was encamped for several days or more (or if the camp was a permanent one on the frontier), the diet was more varied and appetizing; beef, pork, poultry, eggs, fish, fruits, and vegetables were common fare. If camped near a town or village in Roman territory, the soldiers could get most of these items from local farmers, but if

## Falling Asleep on One's Shield

In his famous history of Rome, the first-century-B.C. Roman historian Livy (Titus Livius) includes this interesting footnote to the subject of soldiers falling asleep on their night watches. The consul mentioned, who offered a partial solution to the problem, was Lucius Aemilius Paulus the Younger, who served in that office in 168 B.C.

"The consul also introduced a new rule forbidding sentries to carry a shield while on watch. 'A sentry,' he said, 'is not going into battle, so as to make use of weapons; he is

going on guard [duty], so that when he is conscious of the approaching enemy, he may retire and arouse the others to arms. Men stand on guard with their shield set upright in front of them, and their helmet on their head. Later on, when they are tired, [some of them have been known to] lean on their spear, put their heads on the rim of their shield, and stand there dozing—with the result that the enemy can catch sight of them from afar in their gleaming armor, while they themselves do not see anything coming.'"



they were in foreign or remote areas, such foodstuffs had to be gathered by hunting and foraging parties.

## The Harshness of Military Discipline

One of the regular duties—guarding the camp throughout the night, especially its outer perimeter and gates—was vitally im-

portant. Without watchful sentries, under the cover of darkness an enemy force might well sneak up to and cut its way through the stockade, putting the whole legion in jeopardy. To make sure that the guards remained awake, the Romans devised a very practical and effective safeguard. Each evening a tribune handed a tablet on which a watchword had been written to each of the sentries in charge of the various guard posts. In addition, a special group of four soldiers was selected to pa-

trol the camp. The duty of these inspectors, one for each of four nightly watches, or shifts, was to check up on the guards. "When the appointed time comes," Polybius explains,

the man who has drawn the first watch by lot [random selection] makes his rounds, taking some friends with him as witnesses. He visits the posts which are detailed in his orders. . . . If he finds the guards of the first watch awake, he takes their tablet, but if he finds any one of them asleep or absent from his post, he calls upon those with him to witness the fact, and continues on his rounds [without taking the tablet]. The same procedure is repeated by those who go the other rounds on the other watches. . . . Each of the men who have made the rounds returns the tablets at daybreak to the tribune. If all are handed in, the men are dismissed without question, but if any one of them delivers a smaller number of tablets than the number of the posts he has visited, the signs [watchwords] on the tablets are checked so as to discover to which post the missing one belongs.<sup>35</sup>

At this point, the tribune ordered the centurion who commanded the unit to bring the suspects in for questioning. The inspector then called his witnesses and a court-martial (military trial) ensued. If the accused was found guilty, he was condemned to be beaten to death, a penalty known as the *fustuarium*, usually immediately. "This is carried out as follows," says Polybius.

The tribune takes a cudgel [club] and lightly touches the condemned man with it, whereupon all the soldiers fall upon him with clubs and stones. . . . But even

those who contrive to escape are no better off. . . . They are not allowed to return to their homes, and none of their family would dare to receive such a man into the house. Those who have once fallen into this misfortune are completely and finally ruined. . . . The consequence of the extreme severity of this penalty and of the absolute impossibility of avoiding it is that the night watches of the Roman army are faultlessly kept.<sup>36</sup>

Other infractions punishable by the *fustuarium* were stealing from the camp stores; lying under oath; trying to avoid one's duties by wounding oneself; abandoning one's post in battle out of fear; throwing away one's sword or shield in battle; and lying to a tribune or other officer about one's exploits in battle.

On rare occasions, when a whole unit was accused of cowardice or some other serious offense, the officers meted out a dreaded punishment called decimation. First, the men of the disgraced unit had to line up in front of the assembled legion. Then the tribunes selected 10 percent of them by lot. The unfortunate ones chosen were executed via the *fustuarium*, while the rest of the men in the unit, according to Polybius, "are put on rations of barley instead of wheat and are ordered to quarter themselves outside the camp in a place which has no defenses."<sup>37</sup>

Penalties for minor infractions varied according to the individual whims of the officers who meted them out. Reduction in rank (*gradus deiectio*) was one option; Julius Caesar is said to have punished a *signifer* by stripping him of his coveted rank. Transferring the offender to a less prestigious branch of the service was another option; a common scenario was for a legionary to be transferred to the navy, which was widely viewed as a step down. Other typical minor punishments included

Sentries who fell asleep at their posts were accused, tried, and punished.



## Soldiers on Parade

Roman soldiers marched and rode their horses not only in the field while on campaign but also in their victory parades, called triumphs, and in other kinds of parades. This description of cavalry soldiers parading at a sporting event (quoted in Webster's Roman Imperial Army) comes from a military handbook compiled by the second-century Greek historian Arrian.



Here, soldiers march in a victory parade in ancient Rome.

"The horsemen enter the exercise ground fully armed, and those of high rank or superior in horsemanship wear gilded [gold-covered] helmets of iron or bronze to draw the attention of the spectators. Unlike the helmets made for active service, these do not cover the head and eyes. . . . From the helmets hang yellow plumes, a matter of décor [decoration] as much as of utility. As the horses move forward, the slightest breeze adds to the beauty of these plumes. They carry oblong shields of a lighter type than those used in action, since both agility and smart turnout [appearance] are the subjects of the exercise and they improve the appearance of the jerkins [coats] embroidered with scarlet, red, or blue and other colors. On their legs they wear tight trousers. . . . The horses have frontlets [decorative headpieces] carefully made to measure and have also side armor."

flogging (usually with a stick) and standing outside at attention all day. The Roman military did not employ imprisonment as a penalty, as modern armies do. Although there was a camp prison, it was used only to detain soldiers who were awaiting trial or execution.

### Breaking Camp

After one or more days, the soldiers received the order to strike camp and move on. Fortu-

nately, Josephus's account of the Roman army includes a vivid description of this process:

When the camp is to be struck, the trumpet sounds and every man springs to his duty. Following the signal, tents are instantly dismantled and all preparations made for departure. The trumpet then sounds "Stand by to march!" At once, they load the mules and wagons with the baggage and take their places like runners lined up and hardly able to wait for

the starter's signal. Then they fire [burn] the [wooden portions of the] camp, which they can easily reconstruct if required, lest it might some day be useful to the enemy. For the third time the trumpets give the same signal for departure, to urge on those who for any reason have been loitering, so that not a man may be missing from his place. Then the announcer, standing on the right of the supreme commander, asks three times . . . whether they are ready for war. They three times shout loudly and with enthu-

siasm "Ready!" hardly waiting for the question, and filled with a kind of martial [warlike] fervor they raise their right arms as they shout. Then they step off, all marching silently and in good order, as on active service every man keeping his place in the column.<sup>28</sup>

Having marched and camped for days, weeks, or more, and finally locating the enemy, the Roman field army proceeded to the task for which it was and still is most famous—fighting and winning a battle.

# The Battlefield Tactics of Roman Troops

The new tactical fighting system the Romans devised after their disastrous defeat by the Gauls in the early fourth century B.C. broke down the old phalanx into smaller units—the maniples. On the battlefield, the maniples were arranged into lines with open spaces between both the maniples and the lines. This allowed individual units to move back and forth with ease, permitting tired troops to fall back and rest while fresh ones pressed forward into the fray. When need dictated, various-sized contingents of maniples could also separate from the army's main body and fight on their own.

Because the new system was both flexible and effective, it remained in place for a

long time. Even after the army's structure underwent another important revision in Marius's time (the late second century to early first century B.C.), most generals employed basically the same battlefield tactics as their predecessors had. The main difference was that the maniples had been replaced by larger units—the cohorts—which were arranged into attack formations of various shapes. Highly gifted generals such as Scipio and Caesar, who devised some new and innovative tactics, were rare. Most of their colleagues were content to fall back on the tried-and-true tactics that had so long and so well exploited the Roman army's greatest asset—its highly disciplined



Julius Caesar leads his troops across the Rubicon River, initiating one of the civil wars that brought down the Roman Republic.

and superbly trained infantrymen. Simply put, for century after century, Rome won most of its battles primarily because the Roman foot soldier was a more formidable fighter than most of the opponents he faced. When that ceased to be the case, Rome was doomed.

## Preparing for Battle

Except in unforeseen or emergency situations, the Roman army followed a more or less standard procedure on the day of a battle. It was common for the Romans and their enemy to camp a few miles from each other

### “Follow the Path of Justice!”

*Like other Roman battle speeches, the one delivered by Octavian just prior to the battle of Actium (in 31 B.C.) extolled Roman strengths and virtues and belittled the enemy leaders and troops. In this excerpt from Dio Cassius's reconstruction of the speech (from his history of Rome), Octavian emphasizes the need to uphold Roman justice, tradition, and pride, and at the same time heaps abuse on his opponents, Antony and Cleopatra.*

“Soldiers, there is a conclusion I have reached. . . . It is a truth I have taken to heart above all else, and I urge you to keep it before you. This is that in all the greatest enterprises of war, or indeed in human af-

fairs of any kind, victory comes to those whose thoughts and deeds follow the path of justice and reverence for the gods. No matter how great the size and strength of our force might be . . . still I base my confidence far more upon the principles which are at stake in this war than upon the advantage of numbers. We Romans are the rulers of the greatest and best parts of the world, and yet we find ourselves spurned and trampled upon by a woman of Egypt. This disgraces our fathers. . . . It [also] disgraces our own generation. . . . Who would not tear his hair at the sight of Roman soldiers serving as bodyguards of this queen? Who would not groan at hearing that Roman knights and senators grovel before her? . . . Who would not weep when he sees and hears what Antony has become? . . . He has abandoned his whole ancestral way of life [and] embraced alien and barbaric customs. . . . I cannot describe to you any greater prize than that of upholding the renown which your forefathers won, of preserving the proud tradition of your native land, of punishing those who have rebelled against us, of conquering and ruling over all mankind!”



Augustus Caesar (Octavian), the first Roman emperor, was the victor of the sea battle of Actium.

near the area where the battle was to take place. The Romans, as well as many of their adversaries, were very religious and superstitious; they believed that the gods and fate had ordained that some days were favorable for major undertakings while others were unfavorable. To discover which day was favorable for battle, each morning the Roman commander consulted his augurs. These were soothsayers who read the omens (supernatural signs) supposedly inherent in birds' flight patterns, cloud shapes, and other natural occurrences. Once he made the decision that a certain day was favorable to engage the enemy, the commander tied a red cloak to a spear and planted it outside his quarters.

After the camp had been alerted that battle was imminent and the tribunes had received their orders and passed them along to the centurions, the army assembled outside the camp. Like so many other Roman military procedures, this was accomplished in a highly

logical, practical, and efficient manner. In republican times, the standard placement of troops on the battlefield was the legions in the center, the allies to their left and right, and the cavalry on the wings. To move the troops out of the camp and into this battle order in the quickest, least confusing way, the various units departed through separate gates. The legions marched out of the camp's front gate; the allies exited the two side gates and moved to their places beside the legions; and the two main cavalry units exited the back gate. The Roman horsemen swung around one side of the camp and took their places on the right wing, while the allied horsemen moved along the opposite side and formed the left wing.

Once the soldiers had assembled on the battlefield, many (if not all) of the troops in the opposing army got their first look at a Roman field army fully arrayed in its ranks and ready to fight. In Polybius's time, the front of such an army consisted of a long

line, a few ranks deep, of light-armed skirmishers, the *velites*, very young men usually wearing no armor and carrying throwing spears. According to Polybius, "They also wear a plain helmet which is sometimes covered with a piece of wolf's skin or something similar, which serves both to protect and identify the soldier."<sup>39</sup>

Arrayed behind the *velites* was the bulk of the army, the infantry deployed in *manipular* fashion. The term *manipular* refers to the maniples, which assembled in three long lines facing the enemy. In each line there were spaces separating the maniples, each space being the same width as a maniple. At the same time, the maniples and spaces of the three lines were staggered in such a way that there was open space in front and back of each maniple, overall rendering a sort of checkerboard effect.<sup>40</sup>

The three lines of maniples were distinct because each contained a specific kind of soldier. The front line was made up of the *hastati*, young men with minimal experience but possessing a great deal of vigor and endurance. Each maniple of *hastati* (and each maniple in the other two lines) was composed of two centuries, one positioned behind the other. The front century was termed the "prior" and the back one the "posterior." Each maniple of *hastati* had 60 men to a century and therefore 120 men in all. (The other 20 of a century's standard 80 men were *velites*, who stood in their separate line.)

Behind the *hastati* were the *principes*, experienced fighters in the prime of their life (probably age twenty-five to thirty). Their maniples were also composed of 120 men each. Both the *hastati* and *principes* wore full armor, consisting of a breastplate (*cuirass*), helmet, and greaves (lower-leg protectors), and each was armed with two *pila* (one light, the other heavy) and a sword (*gladius*).

Finally, the rear line was made up of the *triarii*, older veterans who lacked the physical endurance of the others but possessed more experience. Each century of *triarii* had 30 men, so these rear maniples had 60 rather than 120 men each. Polybius says that the *triarii* had the same armor and weapons as the others, "except that instead of the throwing-spear, the *triarii* carry long thrusting spears."<sup>41</sup>

## The Manipular Tactic

Traditionally, just prior to battle, the opposing commanders delivered speeches designed to steel their soldiers' nerves and to rouse their enthusiasm for the fight ahead. The actual contents of these speeches are unknown. Numerous ancient historians attempted to reconstruct them, a typical example being the second-century Greek historian Dio Cassius's version of Mark Antony's speech preceding the battle of Actium. "Soldiers," said Antony,

all preparations for the war which it is my duty to undertake have been completed in good time. You belong to an army whose strength is as overwhelming as its quality is unsurpassed. . . . Your training has given you such a mastery of every form of combat that is known in our times that each of you, man for man, can strike fear into our adversaries. . . . If we are resolute, we shall win the greatest prizes of all; if we are careless, we shall suffer the worst of misfortunes.<sup>42</sup>

(It must be emphasized that this and similar speeches from the works of ancient historians are at best paraphrases based on secondhand testimony and probably more often complete fabrications, so they cannot be taken at face value.)

In an historical reenactment, Roman soldiers line up in battle formation.



Having said his piece, the Roman commander signaled the trumpeter to sound the attack, and the army advanced on the enemy. When the enemy line drew close enough, the *velites* opened the battle by charging forward and hurling their javelins. "The purpose of this," Peter Connolly explains, "was to try to break up the enemy formation in anticipation of the charge of the heavy infantry. . . . When both sides had lightly armed troops in front, this tactic was neutralized."<sup>10</sup>

As the enemy line neared the Roman infantry, another trumpet blast signaled for the most common battlefield maneuver of republican times—the manipular tactic—to begin. The *velites* suddenly retreated, passing quickly through the open spaces in the three lines of maniples and re-forming their line in the rear, behind the *triarii*. Meanwhile, after the last of the skirmishers had made it past the *hastati* in the front line, the posterior centuries of *hastati* swiftly moved from behind the prior centuries and filled the gaps in the line. This formidable solid bank of infantry now charged forward, the men shouting fiercely in unison in an attempt to frighten the enemy. At a distance of about one hundred feet, the *hastati* hurled their light javelins and a few seconds later followed with their heavy ones. Then they drew their swords, rushed forward, and crashed into the enemy ranks with as much impact as possible.

The charge of the *hastati* sometimes damaged and demoralized the enemy enough to force his retreat, giving the Romans an easy victory. On the other hand, if after a while the *hastati* could make no headway or appeared to be in trouble, the Roman trumpet signaled the next stage of the manipular tactic. The *hastati* retreated, their posterior centuries returning to their original positions behind the prior centuries. They then hurried through the gaps separating the maniples of *principes*

and *triarii* and stood behind the *triarii*. Meanwhile, just as the *hastati* had done earlier, the *principes* formed a solid line and charged the enemy, who now faced a force of fresh soldiers with even more battle experience than the *hastati*.

If the charge of the *principes* was not enough to defeat the enemy, they retreated the same way the *hastati* had and filled the gaps between the *hastati*'s maniples. Then one of two scenarios played out. If it looked as though the battle could still be won, the *hastati*, having had a chance to rest, pressed forward and had a second go at the enemy. However, if the Roman commander decided it was best to quit and fight again another day, he ordered the fresh and very experienced *triarii* to enter the fray. They formed a solid line and pointed their spears forward in phalanx fashion, creating a protective barrier behind which the whole army retreated in an orderly manner.

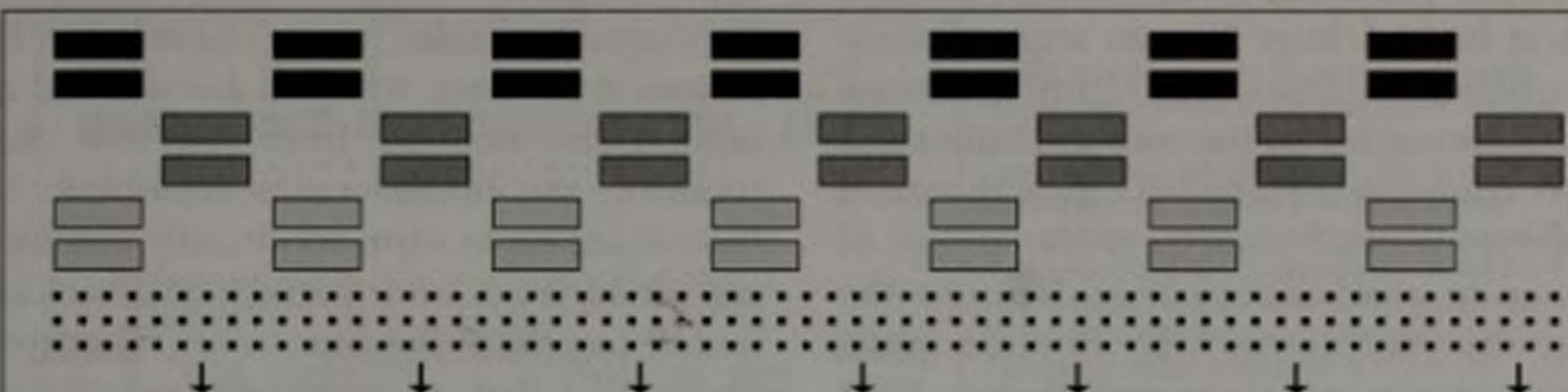
### Catastrophe at Cannae

The manipular tactic helped to revolutionize warfare in the Mediterranean world. The highly disciplined and efficient Roman soldiers, trained to deliver one devastating charge after another during battle, succeeded in exhausting and/or crushing many enemy armies. Therefore it is not surprising that the Romans were able to conquer so many diverse peoples in only a few centuries.

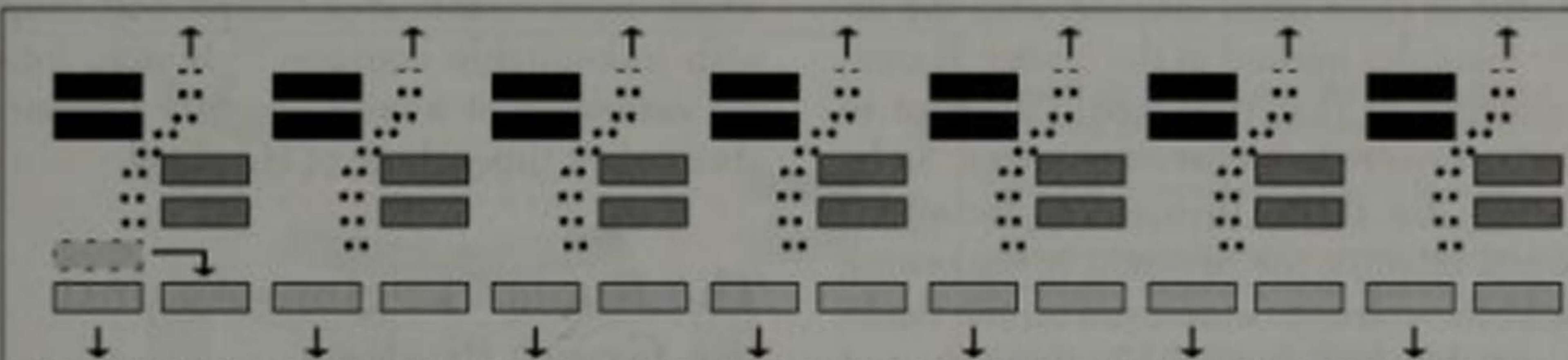
There were occasional exceptions, however. The effectiveness of standard Roman battle tactics could be blunted or even nullified if the enemy commander was gifted enough. The classic example was Carthage's Hannibal (247–182 B.C.), one of the greatest generals of all time. During the early stages of the Second Punic War, he defeated one Ro-

## The Roman Manipular Tactic

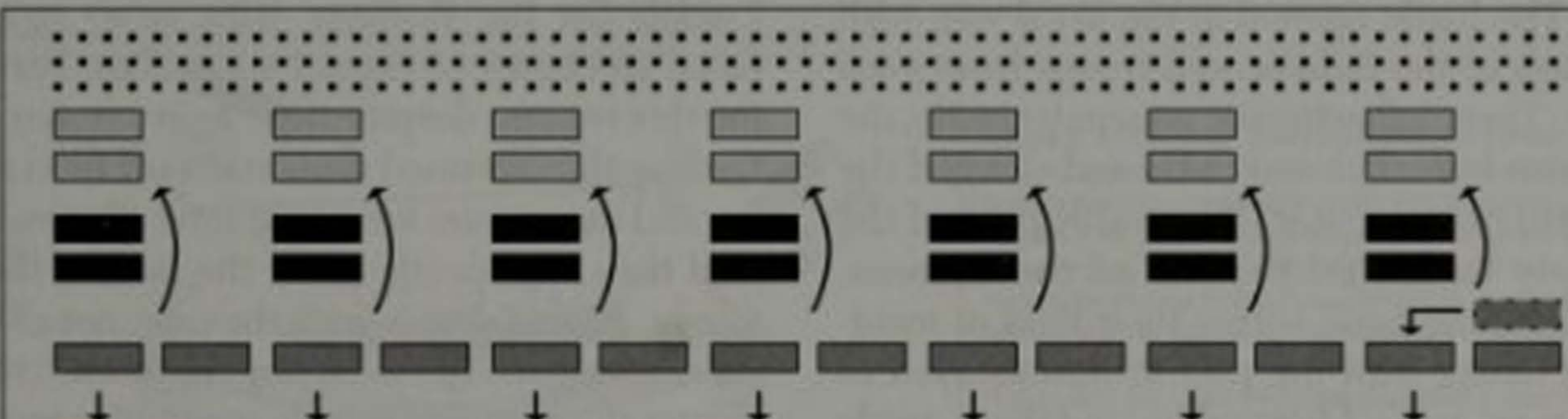
Triarii
  Principes
  Hastati
  Velites



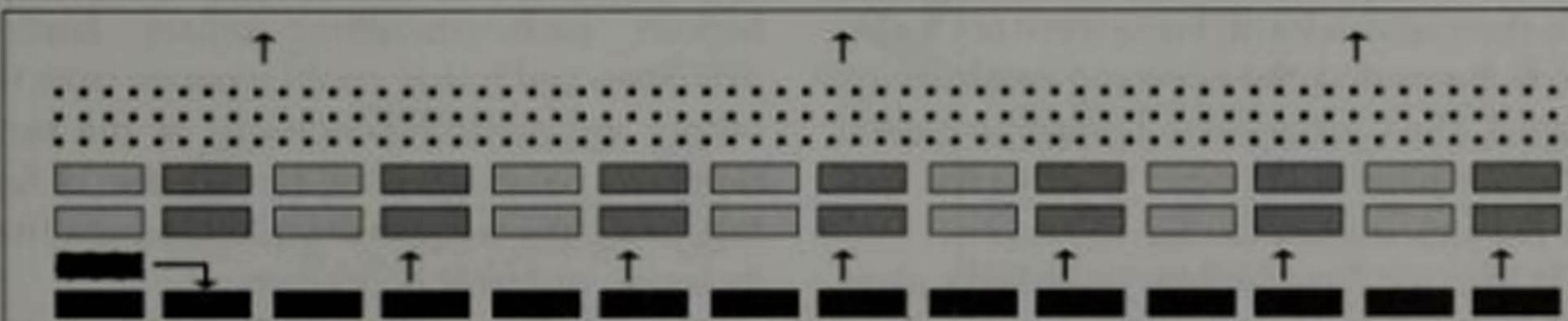
**Stage 1.** The army assembles with the *velites* forming a frontal screen. The maniples (each composed of two centuries) of *hastati*, *principes*, and *triarii* are arranged in a checkerboard pattern behind them. The battle begins with the *velites* running forward and hurling their javelins at the enemy.



**Stage 2.** At a given signal, the *velites* retreat through the gaps among the maniples and re-form their line in the rear. Meanwhile, the posterior centuries of the maniples of *hastati* move forward and fill the gaps in their line, forming a solid front. The *hastati* then charge and engage the enemy.



**Stage 3.** If the enemy is able to resist the *hastati*'s assault, or if the *hastati* begin to suffer serious losses, a trumpet blast orders them to retreat and they move back through the gaps among the maniples. The centuries of the maniples of *principes* now form a solid line, as the *hastati* did earlier, and launch their own charge on the opposing army.



**Stage 4.** If the *principes* are unable to secure a victory, they retreat through the gaps among the maniples of *triarii* and fill in the gaps among the maniples of *hastati*. The *hastati*, who have had a chance to rest, might now move forward and attack the enemy again. Or, if continued fighting appears fruitless, the centuries of *triarii* form a solid line and the whole army retreats in orderly fashion behind the *triarii*'s upraised spears.

man army after another, inflicting horrendous losses and bringing Rome almost to its knees.

The stunning victory Hannibal achieved in 216 B.C. proved to be the Roman soldier's darkest hour. A huge Roman army of some seventy-five thousand to eighty thousand men, commanded by the consuls Paullus and Varro, confronted Hannibal's forty thousand troops on a small plain near the village of Cannae in southeastern Italy. Because the plain was very narrow, the Romans made their maniples narrower and deeper than usual. Seeing that the Romans had assembled for battle in their usual manner, with the infantry maniples massed in the center, Hannibal anticipated that they would attempt to attack and overwhelm his own center. So he set a trap for them. Instead of placing his strongest infantry, the Africans, in the center, he held these troops in reserve on the flanks and put his less formidable Spanish and Celtic infantry in the center.

The battle opened in the usual way, with a clash of the light-armed troops from each side. Then, following the manipular tactic, the Roman *hastati* closed ranks and charged the Carthaginian center. They easily pushed the enemy back. And the rest of the Romans, maintaining ranks within their lines of maniples (along with the *velites*, now arrayed in the rear), moved forward behind them, ready to enter the fight if needed. The confident Roman infantrymen had no idea that meanwhile their comrades on horse were not faring so well. Soon after the opposing cavalry units engaged, the Carthaginian horsemen gained the upper hand and began to drive the Roman horsemen from the field.

It was not long before Hannibal's giant death trap snapped shut on the unsuspecting Romans. Just as he had expected, the Roman infantrymen, still led by the *hastati*, drove the Carthaginian center back so far that they

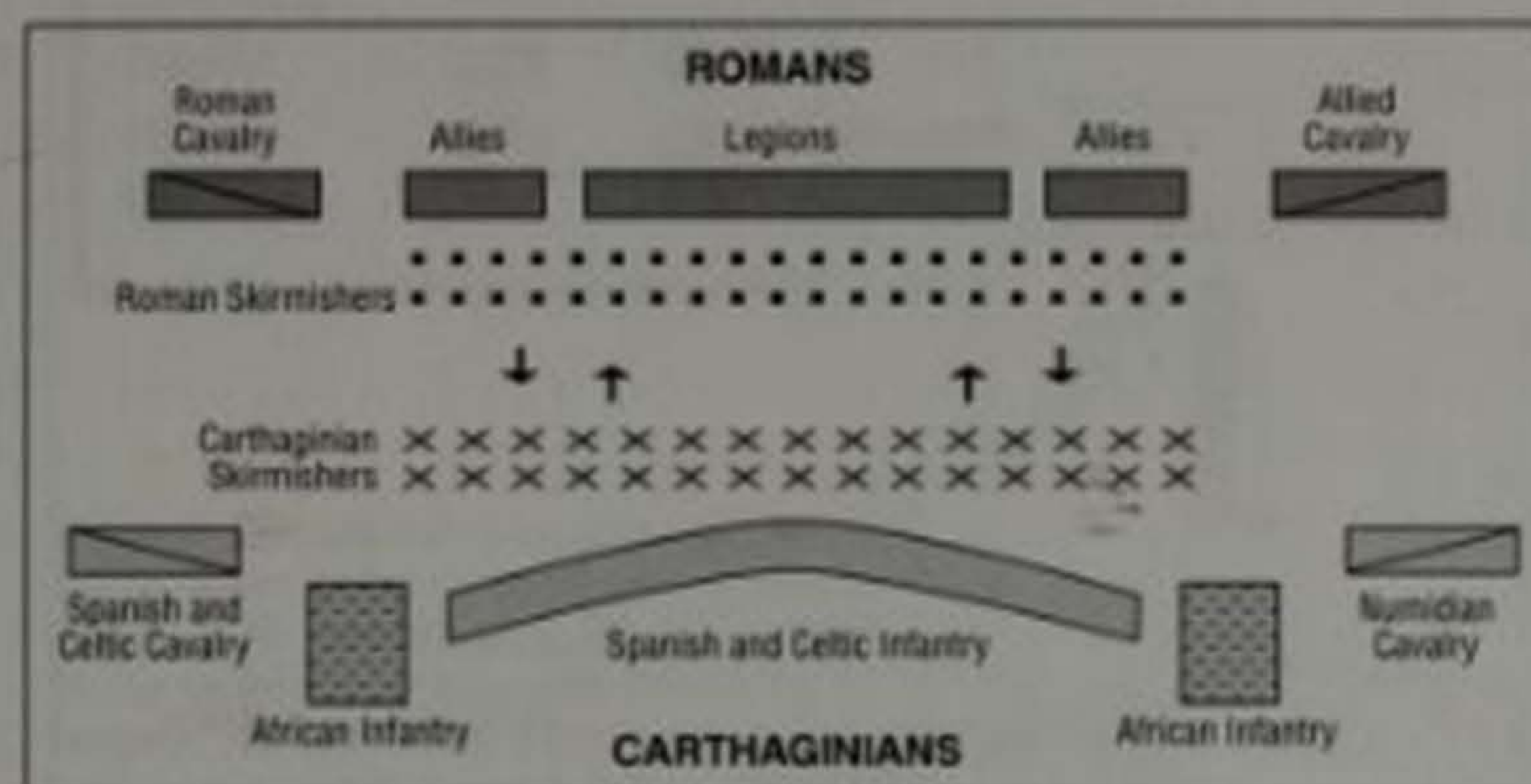
passed by and between his elite troops, the Africans, still standing on the flanks. These completely fresh units now turned inward and attacked. At the same time, the Carthaginian cavalry, having chased away the Roman horsemen, wheeled around and assaulted the Romans from the rear. Surrounded, the Roman ranks crumbled. "As their outer ranks were continually cut down and the survivors were forced to pull back and huddle together," Polybius writes, "they were finally all killed where they stood. . . . So ended the battle . . . at Cannae, a struggle in which both victors and vanquished fought with indomitable courage." Roman losses are estimated at a crippling fifty thousand, about eight times those of Hannibal.

### The Roman Legions Against the Greek Phalanx

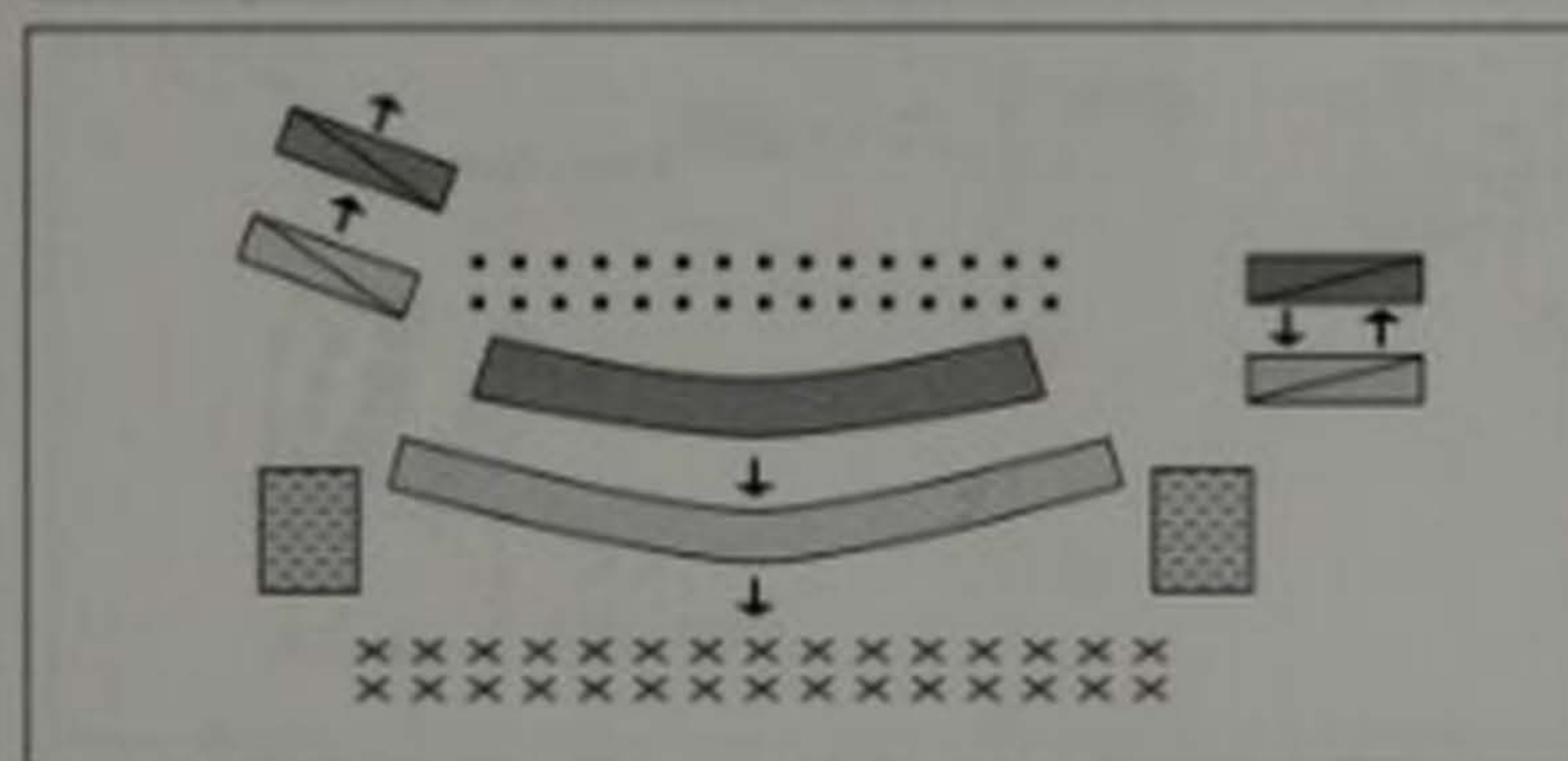
Luckily for the Romans, they never again faced an enemy of Hannibal's caliber. Partly for this reason, despite their heavy losses at Cannae they retained their standard field array and maneuvers for a long time afterward. And they won nearly all of the battles they fought. As had always been the case, not all of these engagements went "by the book," following the neat and simple manipular tactic step by step. The chief strength of the Roman system was that it was flexible. One or more legions, each containing *velites*, *hastati*, *principes*, and *triarii*, could separate from the others and act independently; at the same time, if a situation called for it, a line of *hastati*, *principes*, or *triarii* could separate from its legion and fight on its own.

Nowhere was this flexibility shown better than in the pivotal battle of Cynoscephalae (fought in 197 B.C.), which demonstrated once and for all the superiority of the Roman

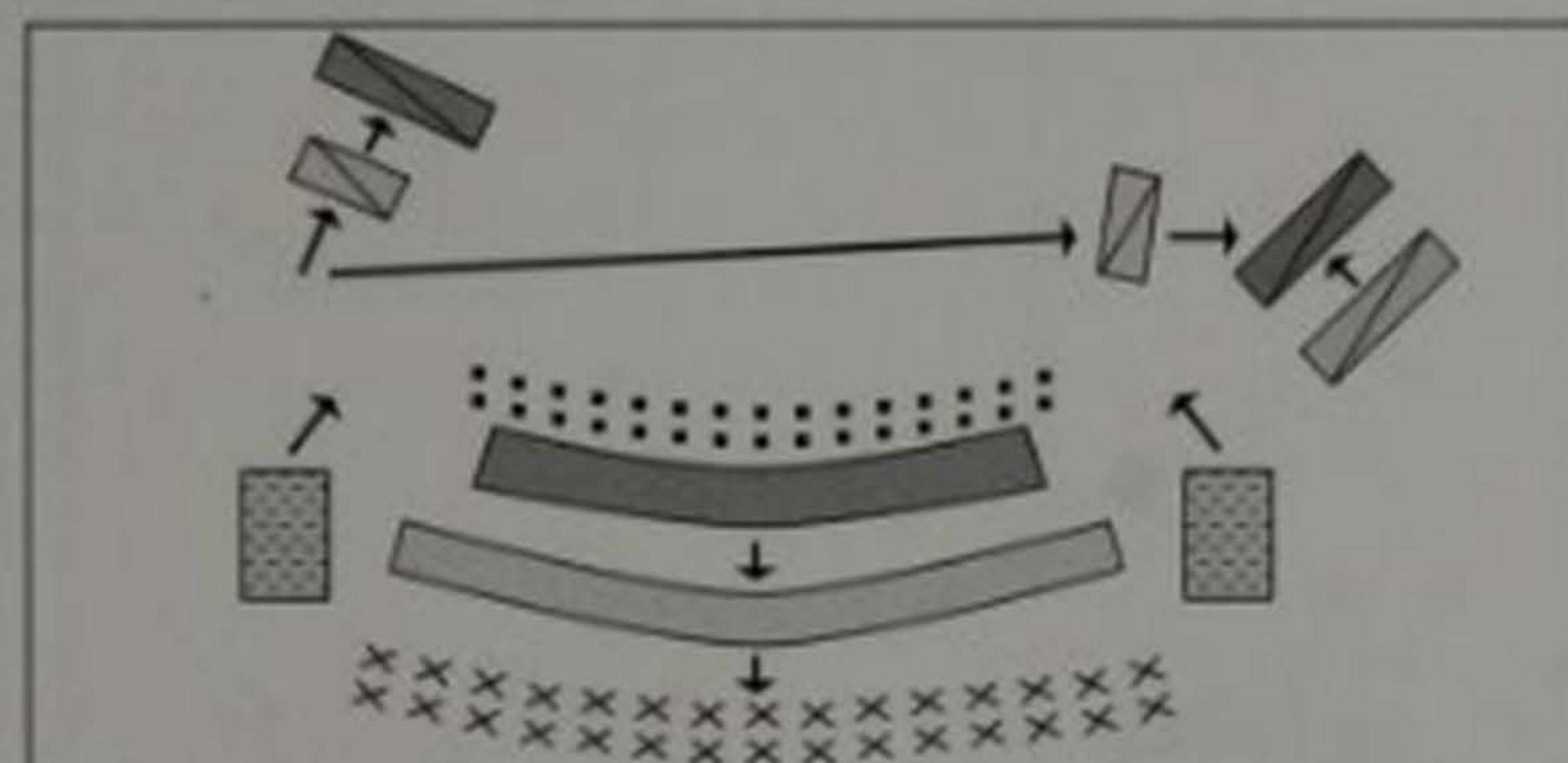
## Battle of Cannae



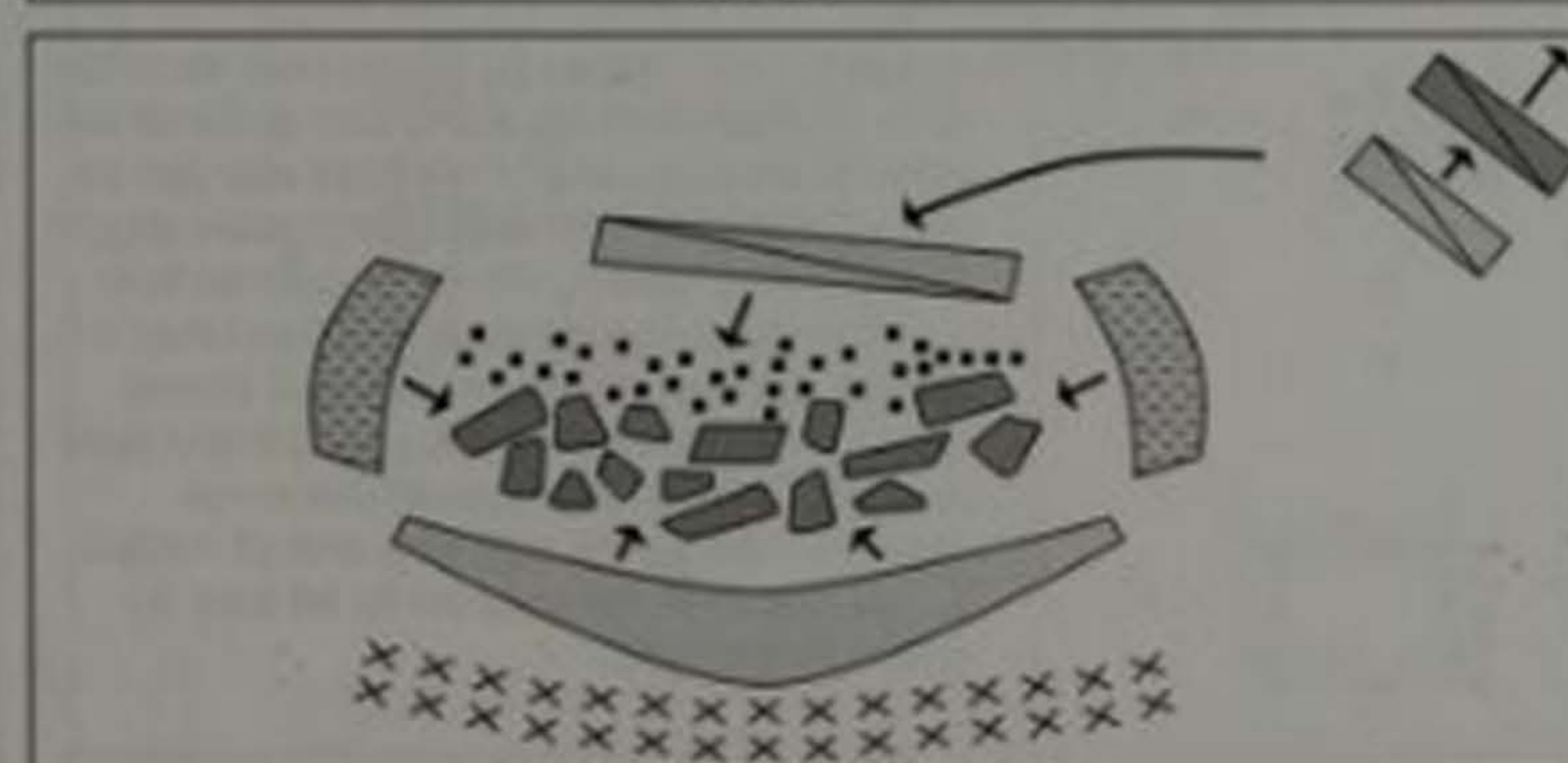
**Stage 1.** As the opposing armies prepare for battle, the Romans form ranks in their usual fashion, with their strongest infantry—made up of Roman legionaries—in the center, flanked by their allied infantry, and on the wings the Roman and allied cavalry units. Aware that the Romans mean to aim for his own center and overwhelm it, Hannibal moves his strongest infantry—the Africans—back to holding positions on the flanks and draws up his less formidable Spanish and Celtic infantry units in a crescent formation in the center. The battle opens with a clash of the light-armed skirmishers of the opposing sides.



**Stage 2.** After the initial, indecisive exchange between the skirmishers, per the usual procedure they retreat to the rear and the opposing infantry units advance on each other. The Roman legions and allied units push the weaker Carthaginian center backward, just as Hannibal had anticipated they would, while he shrewdly continues to hold his Africans in reserve. Meanwhile, the cavalry units on the right clash, while on the left the Roman cavalry breaks and flees from the numerically superior Spanish and Celtic cavalry.



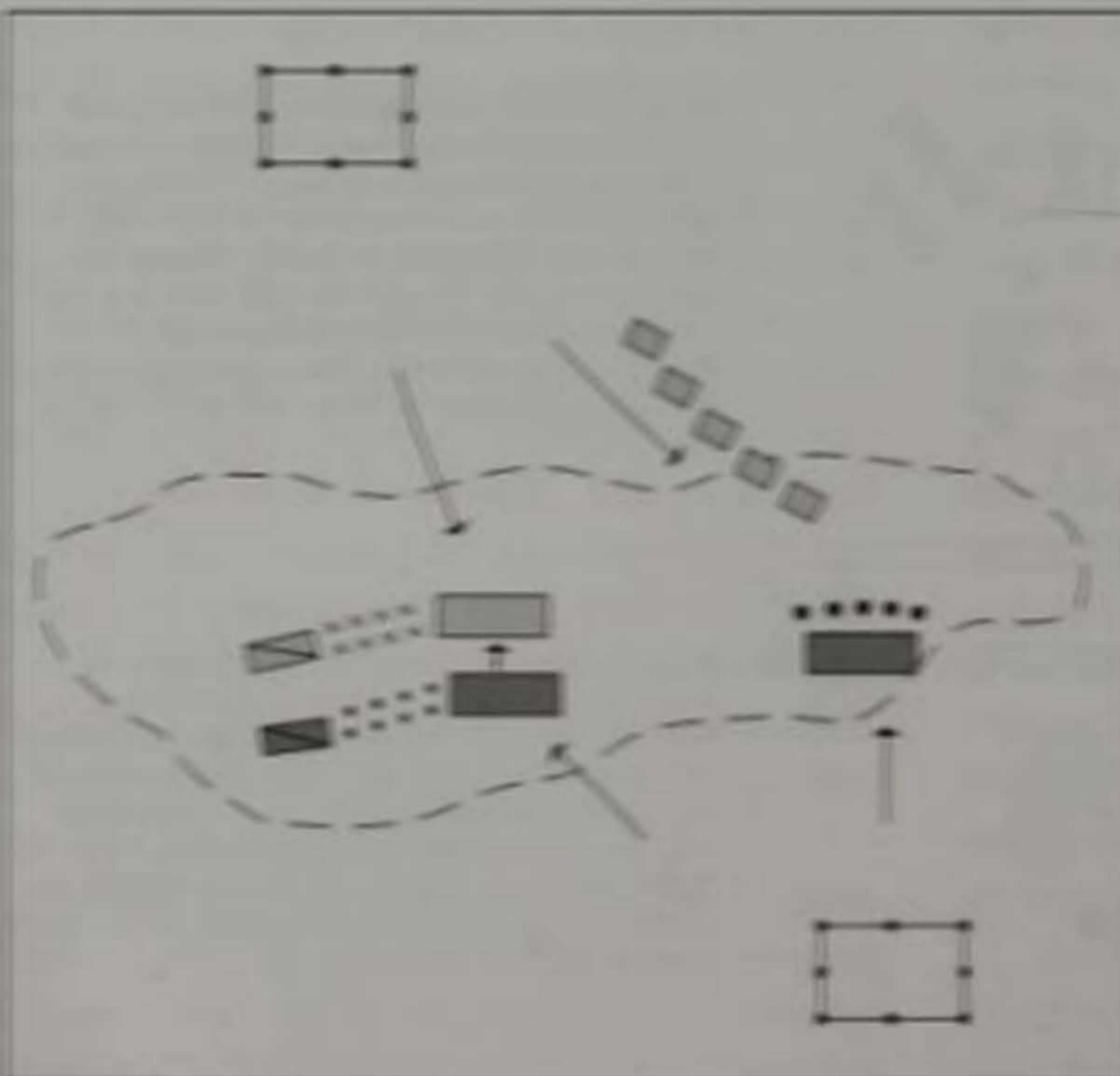
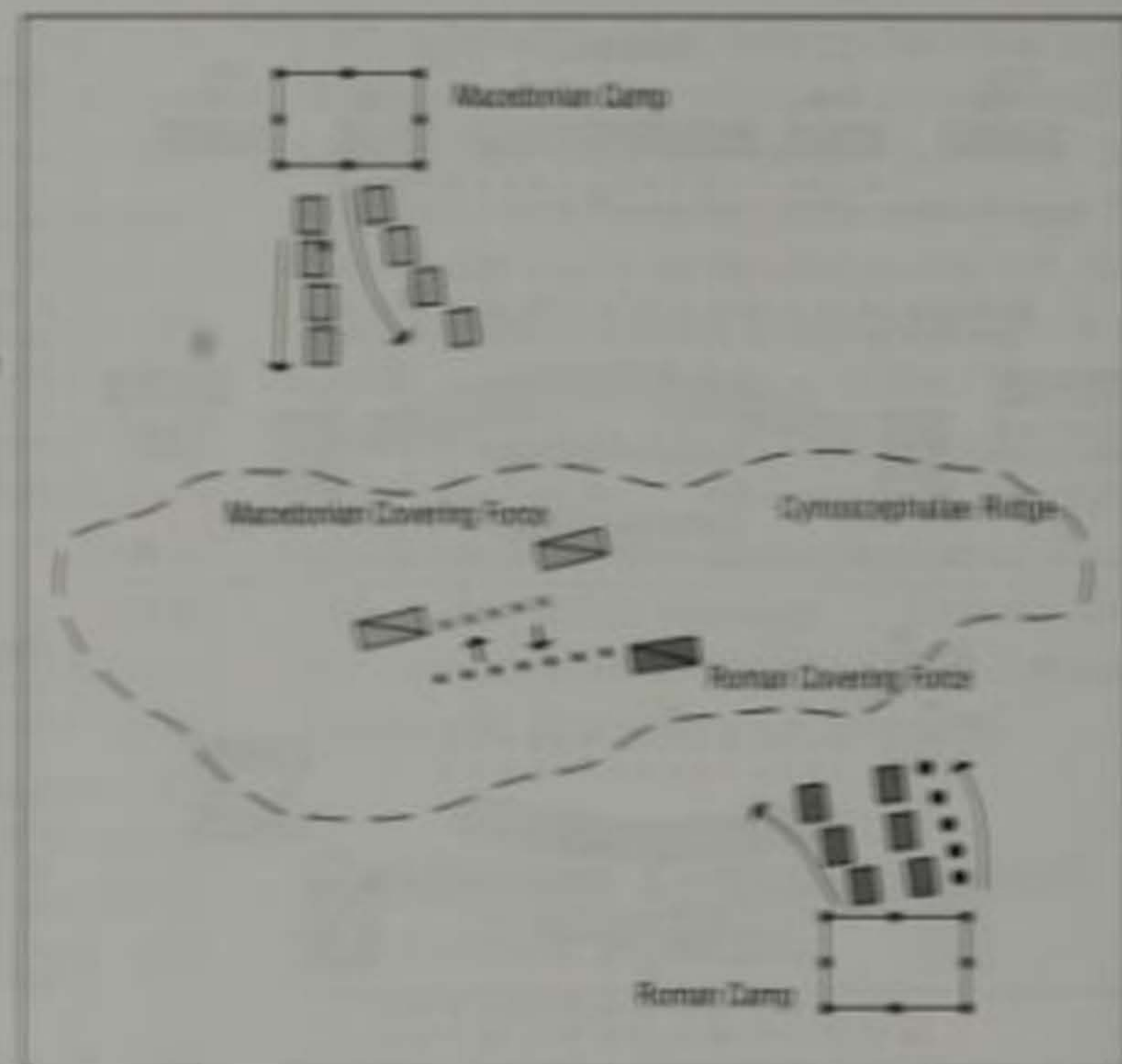
**Stage 3.** As the Roman infantrymen continue to press forward, believing they are winning the battle, Hannibal's brilliant trap begins to spring on them. With the added support of his skirmishers in the rear, his center holds. At the same time, his Africans turn toward the center and begin to envelop the Roman flanks. Meanwhile, as a small contingent of his Spanish and Celtic cavalry pursues the Roman horsemen off the field, the rest swing behind the Roman army and attack the Roman allied cavalry from the rear.



**Stage 4.** Assaulted front and back by the enemy, the Roman allied cavalry breaks and flees, pursued by Hannibal's Numidians. His Spanish and Celtic cavalry then wheels around and attacks the Roman center from behind. Now nearly surrounded, the normally disciplined Roman ranks fall apart and a massive slaughter ensues. Some 50,000 Romans are killed, the largest single battlefield loss in Rome's history, while Hannibal, whose victory is complete, loses only 6,000 to 7,000 men.

## Battle of Cynoscephalae

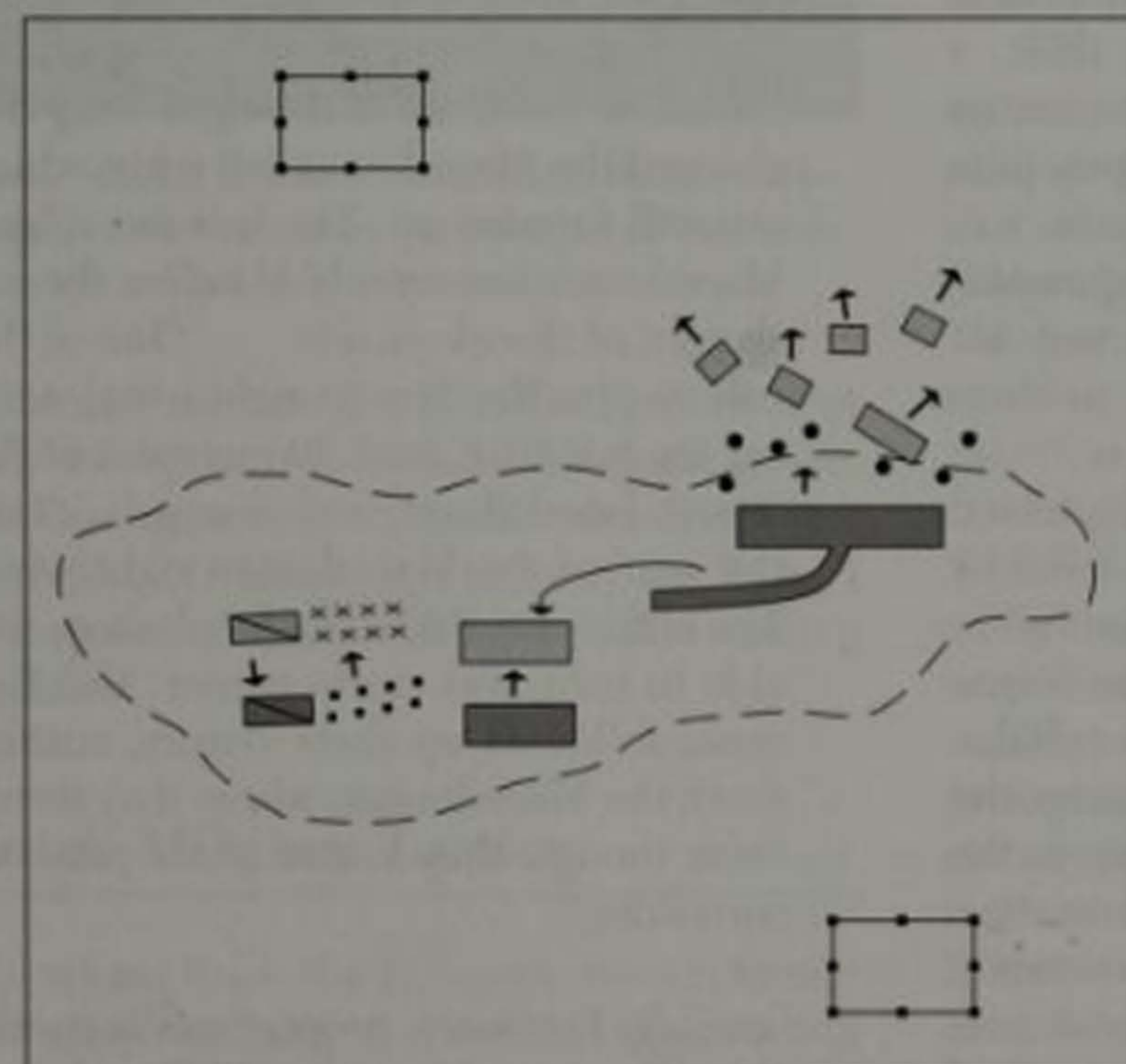
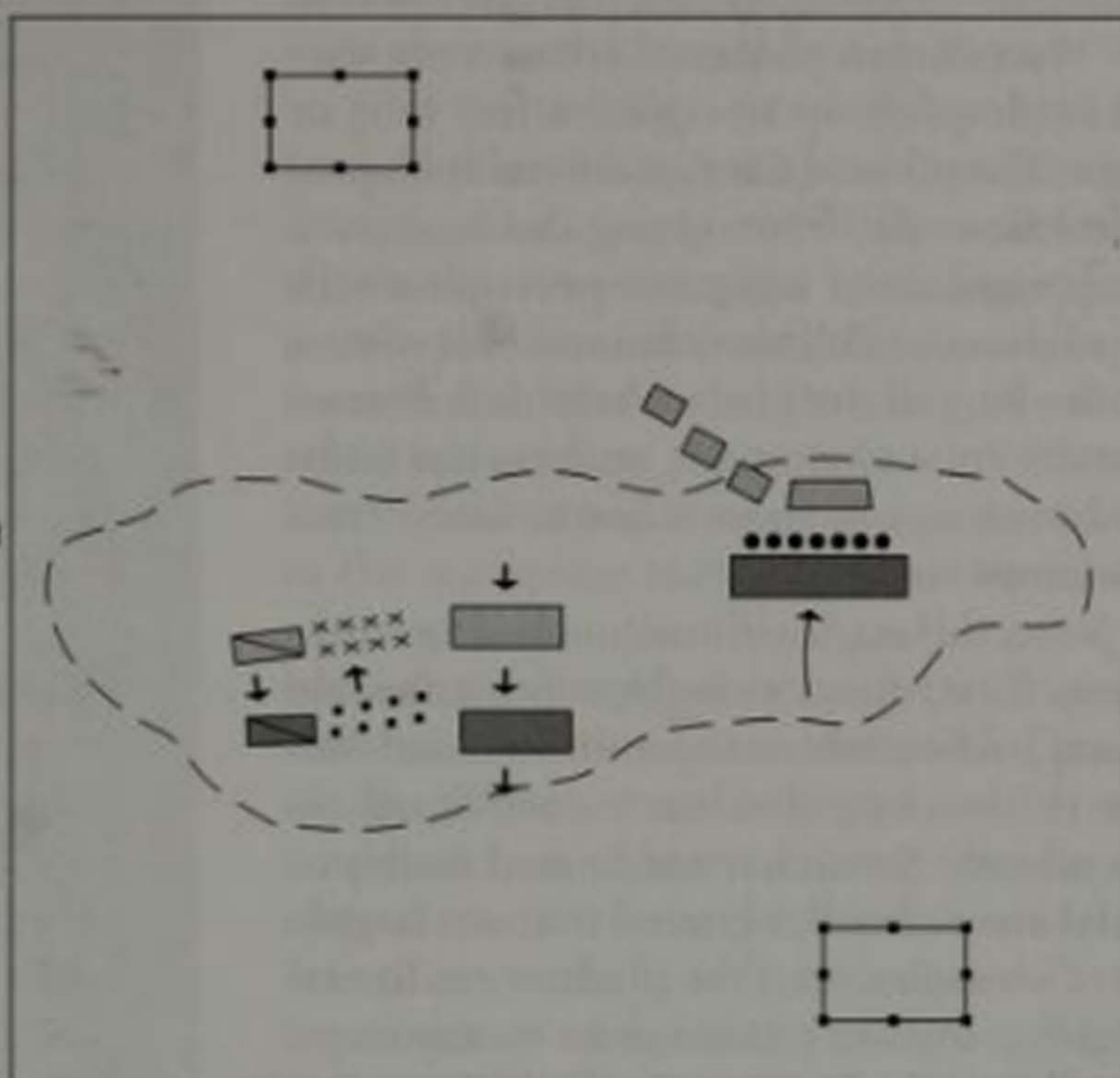
**Stage 1.** In the morning of the battle, the Macedonian forces, under King Philip V, were camped north of the ridge and the Roman army, commanded by Titus Flamininus, was camped only a few miles to the south. But because of heavy rains during the night and a morning fog, neither was aware of the other's presence. At first light, Philip and Flamininus each sent a covering force of light-armed skirmishers and a few horsemen to occupy the hill's summit. There, these units encountered each other and began fighting, and as the morning progressed and the battle escalated in size, each commander moved to assemble his whole army in hopes of being first to gain the advantage.



**Stage 2.** Partly because the Roman camp was closer to the hill, Flamininus was able to form up his left and right infantry wings before Philip could assemble his entire phalanx. The right wing of the phalanx managed to deploy at the summit with the Macedonian light-armed troops and cavalry positioning themselves to its right. However, the left wing of Philip's phalanx was still in the process of forming some farther down the north slope. Flamininus placed a screen of elephants in front of his right wing, ordered that unit to hold its ground, and advanced his left wing against Philip's right.

Opposing Forces	Macedonian	Roman
Skirmishers	x x x	. . .
Cavalry	▧	▩
Infantry	▭	▮
Elephants		●●●

**Stage 3.** With only half of his army deployed, Philip realized that he had to act quickly and ordered the phalanx on the ridge to charge. This succeeded in driving the Roman left wing partway down the hill. In response, Flamininus hurried over to his right wing and led it in an assault on the barely half-formed Macedonian left.



**Stage 4.** The devastating charge of the Roman elephants and infantry easily dispersed the soldiers of the Macedonian left wing, who ran for their lives. At this crucial juncture, an unnamed Roman tribune took it on himself to lead twenty maniples (about 2,400 men) of the Roman right wing back up and over the ridge and directly into the rear of Philip's right wing. Unable to swing their long pikes around to defend their backs, the Macedonian infantrymen were caught between two Roman forces and cut to pieces. Philip's losses were some 8,000 dead and 5,000 captured; by contrast, the victor, Flamininus, lost only about 700 men.

system over the Greek one. The Greeks relied on their long-feared phalanx. (By this time, the traditional phalanx, whose soldiers wielded six-foot-long spears, had given way to the "Macedonian phalanx," whose men carried battle pikes up to eighteen feet long or longer. The pikes of the first several rows protruded from the front, giving the formation the appearance of a gigantic porcupine with its quills erect.) Polybius's famous observation that "so long as the phalanx retains its characteristic form and strength, nothing can withstand its charge or resist it face to face,"<sup>6</sup> was an accurate one.

Nevertheless, the formation had its weaknesses. First, it was a single, solid, inflexible mass of soldiers whose separate lines and files were neither intended nor trained to act independently. Second, it was limited mainly to frontal attacks on flat ground that was largely free of obstacles. So if the phalanx was forced to fight on uneven ground or an enemy unexpectedly attacked it from the rear, it was seriously vulnerable. Sooner or later, then, a more flexible system was bound to exploit its weaknesses. As Lawrence Keppie aptly puts it, "The Macedonians and Greeks, who . . . carried the phalanx to extremes of regimentation and automation, fossilized the very instrument of their former success, to their eventual downfall."<sup>7</sup>

In the crucial battle that foreshadowed that downfall, the Macedonians were led by their king, Philip V, while the Romans were commanded by Titus Quinctius Flamininus. The two armies approached Cynoscephalae ridge (in central Greece) and made camp, the Macedonians to the north, the Romans to the south. The next morning, each commander, unaware of the enemy's close proximity (mainly because fog blanketed the area), sent out a small covering force of skirmishers and horsemen to take control of the ridge. These

forces ran into each other on the hill. A fight ensued, and in the coming hours it steadily escalated. "As the mist was clearing," Connolly explains,

both sides now decided to bring up the rest of their forces. The Romans were nearer to the pass and managed to deploy their forces while Philip was still bringing up his. Only his right wing [i.e., the right half of his phalanx] had reached the top. . . . [His] cavalry and light-armed [troops], who were already engaged [with the Romans], were withdrawn and formed up on the right [of the phalanx]. Flamininus placed the elephants which were with his army in front of his right wing, told his troops there to stand fast, and advanced with his left wing. Philip . . . ordered [the members of] his phalanx to lower their spears and charge. . . . The charge of the phalanx drove the legionaries back down the slope. Flamininus, seeing the imminent destruction of his left wing, threw himself at the head of the right wing and charged the Macedonian left wing, which was still forming up. The half-assembled Macedonian line crumbled before the onslaught of the elephants. . . . One of the tribunes [in the Roman right wing], seizing the initiative, took 20 maniples of the *triarii*, faced about, and charged. . . into the rear of the Macedonian right wing. The action was decisive; the phalanx, unable to turn, was cut to pieces. The Romans followed up their victory, cutting down the Macedonians where they stood, even though they raised their pikes to surrender.<sup>8</sup>

The casualty lists were, proportionally speaking, like Cannae in reverse. Philip's losses were some eight thousand killed and five



Much of what scholars know about Rome's mid-republican army comes from the Greek historian Polybius, pictured in this statue.

thousand captured, while the Romans lost only seven hundred men. In this single stroke, the Romans rendered the Greek military system obsolete and paved the way for Rome's absorption of the Greek lands in the coming decades.

### Later Military Tactics

For a long time, the Roman system retained the same flexibility as it evolved. Even when the maniples were abandoned as battlefield units in favor of cohorts in the early first cen-

tury B.C., battlefield tactics did not change very much, for the following reasons. To begin with, each cohort, made up of six centuries of eighty men, was, like a maniple, an individual unit that could act on its own. And on the battlefield, the cohorts typically formed three lines, just as the maniples had. A common arrangement of the cohorts (of which there were ten to each legion) was four in the front line and three each in the second and third lines. One line of cohorts could advance on the enemy while the cohorts of the other lines waited in reserve, as in the manipular tactic. In fact, the cohorts were even more flexible than the maniples because they could more easily be arrayed in unusual formations. One that proved particularly effective was the "pig's head." It consisted of one cohort in front, two in the second row, three in the third row, and the other four in the fourth row, together creating a massive wedge that was highly effective in frontal attacks.

The major difference between the old system and the new was the makeup of the soldiers themselves. The distinctions in armor, weapons, and tactics among the *velites*, *hastati*, *principes*, and *triarii* ceased to exist. The former *velites* donned armor and began carrying the infantry shield (*scutum*) and sword, as well as two *pila*, and the former *triarii* traded in their thrusting spears for *pila*. Well before Caesar's time, all of these kinds of fighters had become regular legionaries armed and trained in similar fashion.

The legion/cohort system and its time-proven tactics built around the formidable legionary remained the mainstay of the Roman military until the advent of the Later Empire. In the western Empire's last two centuries, with increasing numbers of enemies pressing on the borders, the burden of defending the realm fell mainly on the mobile armies developed by



Diocletian and Constantine. These forces came to emphasize the role of cavalry, which became a principal attack force. The infantry, on the other hand, increasingly fell into a supporting role, especially after the loss of so many infantrymen at Adrianople in 378. (Because of the huge costs of recruiting, outfitting, arming,

and training so many soldiers, many of them were never replaced.) One effect of the legionary's reduction in importance and prestige was a steady decline in the training and discipline of foot soldiers. This in turn contributed heavily to the Roman military's decreased effectiveness in the Empire's last years.

CHAPTER  
5

## Roman Fortifications and Siege Warfare

All Roman soldiers were trained to endure the difficulties and dangers of wartime campaigning, including forced marches, camp building, and of course fighting battles. The truth is, though, that many of the men who enlisted and trained for these duties never experienced an actual military campaign. This was because there were periods of several years or more when there were few or no military emergencies or wars. And even when a war broke out, more often than

not only a small part of Rome's total forces were needed to fight it. The rest of the troops on the military rolls continued to man the various bases, often in frontier areas, to which they had been assigned after the completion of their training. Indeed, it was not unusual for a soldier to spend his whole career and retirement living in and around such a base.

This situation became increasingly common beginning in the early Empire. On the

*The Romans, seen here laying siege to an enemy town, became highly skilled at the use of siege devices and tactics.*



one hand, the relatively peaceful conditions of the long *Pax Romana* era ensured that most Roman soldiers would not see action. On the other, it was in the latter part of this period that the Roman realm reached its largest extent, so there were a great many provinces and frontiers to protect, requiring tens of thousands of troops to be in uniform at any given time. In the second century, for example, three legions were stationed permanently in Britain, one in Spain, fifteen along the Rhine and Danube Rivers (marking the frontiers between Roman and German lands), nine in the Near East, and two in north Africa.

The tendency of many of the soldiers stationed in these areas to settle in them after retirement had two important consequences. First, the men spread Roman civilization to the frontiers, helping to tame them; second, they created local manpower pools from which the army drew new generations of troops. Since the military desired a continuing supply of manpower, noted scholar Lionel Casson explains,

it encouraged them to form liaisons [relationships] with local women. . . . Thus, many a veteran simply continued to live on where he had been based, where he had founded a family. Often he had the pleasure of seeing a son replace him in the ranks and, profiting from having a father who was an ex-serviceman and could pull strings, move up [in the ranks] faster and higher than he had. Centurions often retired with the money and respect to make them pillars of society in the modest communities where they settled down.<sup>48</sup>

Although the majority of Roman soldiers, like those stationed in distant provinces or on the frontiers, remained on the *defensive* side of fortifications, some of the few who did see action found themselves on the *offensive* side.

These were the troops who engaged in siege warfare—surrounding and capturing enemy fortresses and towns. As Peter Connolly points out, “Fortifications and siege warfare are inextricably [inescapably] combined. The development of one inevitably stimulates changes in the other,”<sup>49</sup> and therefore the two must be considered together. Even the largely calm *Pax Romana* saw its share of such sieges, including one of the most dramatic and famous of ancient times, the siege of the Jewish fortress of Masada (A.D. 72–73). The Romans did not invent most of the siege techniques they employed there and elsewhere; rather, in their usual manner, they borrowed the ideas from others and then applied them in the ways that best suited their own needs.

### Protective Walls and the Defensive Mentality

In Rome’s earliest days, there were no distant provinces or frontiers to defend, of course. Archaeological evidence shows that some of the original seven hills of Rome were fortified by mounds of earth topped by stockade fences and fronted by ditches, similar to the outer defenses of later Roman marching camps. The residents apparently relied on these simple barriers, along with the steepness of the hills, to discourage large-scale attacks. In 378 B.C., the Romans began work on the so-called Servian Wall, a more formidable stone barrier that ran around the city’s entire perimeter. It was backed (and strengthened) by an enormous rampart of earth and fronted by a wide, deep ditch (or moat). As time went on and Rome’s territory expanded, other Roman cities, as well as forts, were protected by similar barriers.

The only significant innovation the Romans made in the art of fortification during



Roman armies built stone walls, moats, and forts to protect themselves from outside enemies.

the remainder of the Republic and early Empire was the portcullis, which later became a familiar feature of medieval castles. This was a heavy door, usually made of wood and shod with iron for extra strength, that protected a wall or a fortress’s gateway. A system of ropes and winches located in a chamber above raised and lowered the door. The fourth-century-B.C. Greek writer Aeneas Tacticus gives this description of a version of his own time:

If a large number of the enemy come in . . . and you wish to catch them you should have ready above the center of the gateway a gate of the strongest possible timber overlaid with iron. Then when you wish to cut off [part of] the enemy [forces] as they rush in, you should let this drop down and the gate itself will not only as it falls de-

stroy some of them, but will also keep the [rest of] the foe from entering, while at the same time the forces on the wall are shooting at the enemy at the gate.<sup>50</sup>

By the reign of the emperor Hadrian, in the early second century A.D., the Romans had come to perceive a need to fortify not just individual cities and forts but the realm as a whole. So they began building defensive walls, fortresses, and forts in larger numbers and on a grander scale than ever before. (In the Later Empire, with increasing numbers of enemies pressing on the borders, especially in the north, this defensive mentality became deeply ingrained.) The most spectacular surviving example of a fortification wall meant to keep enemies out of Roman territory is Hadrian’s Wall, begun in 122. In its heyday, it

Hadrian's Wall (shown here), designed to keep Scottish tribesmen from moving southward into Roman-occupied territory, was seventy-three miles long and stood sixteen feet high.



stretched for some 73 miles (117 kilometers) across the north-central section of the province of Britain (conquered by the Romans in the previous century). "This stone wall," writes Durham University scholar Brian Dobson,

was perhaps some 5 meters [16 feet] high, fronted with a broad berm [space between the ditch and the wall] and a ditch 8 meters [26 feet] wide and 3 meters [10 feet] deep. It was defended by eighty small mile-castles about 1,500 meters [a Roman mile, slightly less than a modern mile] apart and some 160 turrets [defensive towers]. Two turrets were placed between each mile-castle about 500 meters [1,640 feet] apart. . . . There were gateways at 1,600 meter intervals, though the majority of these seem in time to have been narrowed to passages for people on foot.<sup>31</sup>

The huge and complex project not only required many years to complete but also underwent periodic alterations and restorations for more than three centuries. Thus it is hardly surprising that thousands of Roman soldiers over several generations spent most or all of their careers either building or guarding it. (The soldiers also labored on construction projects in the towns that grew up alongside the wall.) Beginning in about 140, Hadrian's successor, Antoninus Pius (reigned 138–161), erected a similar but smaller wall several miles north of Hadrian's. The new fortification was intended to replace the old one and guard an expanded Roman frontier. But about six or seven decades later, the Romans abandoned the Antonine Wall and fell back to the one Hadrian had built.<sup>32</sup>

## Fortresses Versus Forts

Both Hadrian's and Antoninus's walls had roads running behind them, and along these roads were forts, where most of the soldiers assigned to man the walls lived. In the case of Hadrian's Wall, the forts were spaced about six miles (ten kilometers) apart. Beginning in the late first century, the Romans constructed a much larger network of forts linked by roads along the Rhine and Danube frontiers bordering Germany. Significantly reinforced and expanded by Hadrian in the second century, this defensive line stretched for some twenty-five hundred miles, from the North Sea in the northwest to the Black Sea in the east. And it later became the basis for an even more formidable network of frontier defenses installed by Diocletian and his successors in the Later Empire. The forts were eventually spaced about five to six miles apart (or closer in some places), and between them loomed numerous imposing *burgi* (solidly built, freestanding square watchtowers from twenty to forty feet per side) and intermittent sections of stockades and ditches, all guarded by sentries.

Constituting the next level of defense, a system of fortresses backed up the forts. The major factors that distinguished the fortresses from the forts were their size and/or the kinds of soldiers who manned them. Generally, the forts were relatively small—each covering about two to fourteen acres and accommodating a few hundred to perhaps a thousand men. Some housed only auxiliary troops, almost always inhabitants of the provinces or noncitizens; Roman legionaries or a mixture of legionaries and auxiliaries garrisoned the others. Fortresses, by comparison, were much larger. Each covered fifty or more acres and housed at least one legion, up to five thousand or more men, usually Roman (rather than aux-

iliary) troops. There were obviously fewer fortresses than forts at any given time.

Despite these differences, Roman forts and fortresses, which can be classified together as fortified military bases, had much in common. Both were structurally similar, being more permanent versions of the traditional and temporary Roman marching camp. Like marching camps, permanent bases had outer defenses, including ramparts and ditches. However, the defenses of the bases were much more elaborate, like those of fortified towns, including towers at intervals in the walls and wider and deeper moats.

## Life on a Roman Army Base

Indeed, a Roman army base was in almost every sense of the word a town in its own right. It had streets arranged in a grid pattern (called the *via principalis*, *via praetoria*, and so forth, just as in a marching camp). It also featured blocks of barracks, at first made of timber and later of stone, in place of the marching camp's tents. Each block had ten or eleven sets of double rooms, each of which housed an eight-man *contubernium*. The main room, about fifteen square feet, was for sleeping, while the second, somewhat smaller, room provided storage for the men's equipment. A centurion's quarters was located at the end of each block of barracks. Because of his rank and prestige, a centurion had eight or nine rooms, including a latrine and washroom, arranged around a central corridor. (Some of these chambers were probably offices and storerooms, and it is possible that a centurion's *optio* shared the quarters with him.) Tribunes had their own separate houses, equipped with kitchens, dining rooms, and suites for their personal staffs.



The central courtyard and other remains of the Roman army base at Lambaesis, in north Africa, is the best preserved example of a Roman fortified base.

Also like a town, an army base had various civilized amenities. These included bathhouses, introduced into legionary fortresses in the first century A.D. Later, some auxiliary forts also featured bathhouses (smaller in scale of course), most often located just outside the walls. Unlike the relatively simple modern bath or shower, says former Univer-

sity of Birmingham scholar Graham Webster, the Roman method of bathing

demanding a series of rooms of varying temperatures and humidity which induced a perspiration subsequently sluiced [washed] off by warm or cold water, followed by massage and oils rubbed into the body. It must

have been an exhilarating experience and its effect on the morale of the troops very considerable.<sup>53</sup>

Much more than a mere bathing facility, however, a Roman bathhouse was a place in which people exercised, played sports, gambled, read, and socialized. And it is a good bet that a soldier spent a good deal of his time in the local bathhouse when his daily shift was over.

It is also likely that off-duty servicemen frequented their local amphitheaters (arenas with wooden or stone seating, such as the Colosseum in Rome) in those bases that had them. From the second century on, small amphitheaters were erected outside the walls of many of

the fortresses (the forts were generally too small to merit such luxuries). One of these amphitheaters, excavated at Caerleon in southwestern Britain, measures about 265 by 220 feet and sat an estimated 6,000 people, well more than the complement of an average legion. A few such arenas were even larger, but most were probably a bit smaller. These arenas were only occasionally used for staging gladiator and wild animal fights, since these shows were very expensive to stage and were rarely seen outside of Rome and other large cities. Less expensive sorts of entertainment, such as boxing, trained animal acts, and pantomimes, may have been presented a bit more often. For the most part, though, activities such as campwide religious

## The Base's Administrative Center

*In the following excerpt from The Roman Imperial Army, scholar Graham Webster offers this reconstruction of the principia of a typical Roman fortress.*

"This was the administrative center, a large complex of buildings with a central courtyard. . . . The broad façade of the *principia* along the *via principalis* would have been carefully planned to present to the visitor an impressive appearance. . . . There would probably have been an external colonnade [row of columns] and a massive central gate facing the *via praetoria*. One passed through this opening into the square with its paved or graveled surface. On three sides behind a colonnade were the ranges of storerooms and the offices of the quartermaster and his clerks. Facing one would be the great cross-hall, dwarfing the surrounding buildings. . . . A modern visitor would immediately be struck by the similarity in

appearance to a great Norman cathedral, but without the . . . religious embellishments. . . . At one end of the cross-hall stood the tribunal, a platform on which the commander could stand to address the troops. No one has yet satisfactorily explained the purpose of this enormous building. . . . It was undoubtedly used as a court of justice and probably for swearing in new recruits and receiving foreign dignitaries. The hall was approached through a central doorway in the square . . . [across from] the *scallum*, or shrine of the [legion's] standards. Like the altar in a church, this was the focus of religious attention. . . . The shrine had a secondary function, for below the floor . . . was a small cellar in which was kept the great iron-bound box which constituted the soldiers' bank, since the standard-bearers acted as treasurers of these funds. Thus, any attempt at robbery was overshadowed by the greater crime of sacrilege."



The bathhouses on Roman army bases were a good deal smaller and less ornate than this one, in the city of Rome.

ceremonies, group exercise, and military drills took place in these arenas.

In addition to housing, baths, and in some cases amphitheatres, army bases had many other kinds of buildings, some of them familiar and others whose functions have not yet been firmly identified. Every base, large or small, had an administrative center (*principia*), located in the center; commander's quarters (*praetorium*); a hospital; and granaries and food stores (*horrea*). In addition, says Webster, there were

stables for the horses and workshops (*fabricae*). . . . At Neuss [on the Rhine in western Germany, where the remains of a large Roman army base have been found]

there was the little prison (*carcer*), with its cells, by one of the gates. Here also, there is . . . the so-called *schola*, which has been considered a kind of officers' club. . . . At [the Roman bases in] Chester [in west-central Britain] part of an odd building has been excavated northwest of the *principia*. It has a curved wall fitted into a corner with traces of radial walls. . . . It could possibly be a drill-hall with a small arena for arms practice and demonstrations. . . . In most fortresses . . . the two main streets are normally lined with rooms of open-fronted structures, identified as shops [and/or taverns].<sup>54</sup>

It appears that the soldiers were not the only ones who patronized these shops and availed themselves of some of a base's other facilities. Recent excavations of a Roman fort at Vindolanda, just south of Hadrian's Wall in northern Britain, have revealed that some women used the base bathhouse (lying just outside the fort's walls). Debris from the bathhouse drains contains women's hairpins and combs. And of the more than fifteen hundred documents found in the fort (many consisting of thin wooden sheets, called leaf tablets, inscribed with ink), some were written by and to females. In one, Claudia Severa, the wife of the commander of a neighboring fort, writes to Sulpicia Lepidina, the wife of Vindolanda's commander, Flavius Cerialis:

Greetings. I send you a warm invitation to come to us on September 11th, for my birthday celebrations, to make my day more enjoyable by your presence. Give my greetings to your Cerialis. My [husband] Aelius greets you and your sons. I will expect you sister. Farewell sister, my dearest soul, as I hope to prosper, and greetings.<sup>55</sup>

These women probably lived in a settlement adjoining the town and visited the base and its bathhouse on a regular basis, enjoying the social life these facilities afforded. It is unknown whether the wives of ordinary soldiers were allowed this same privilege.

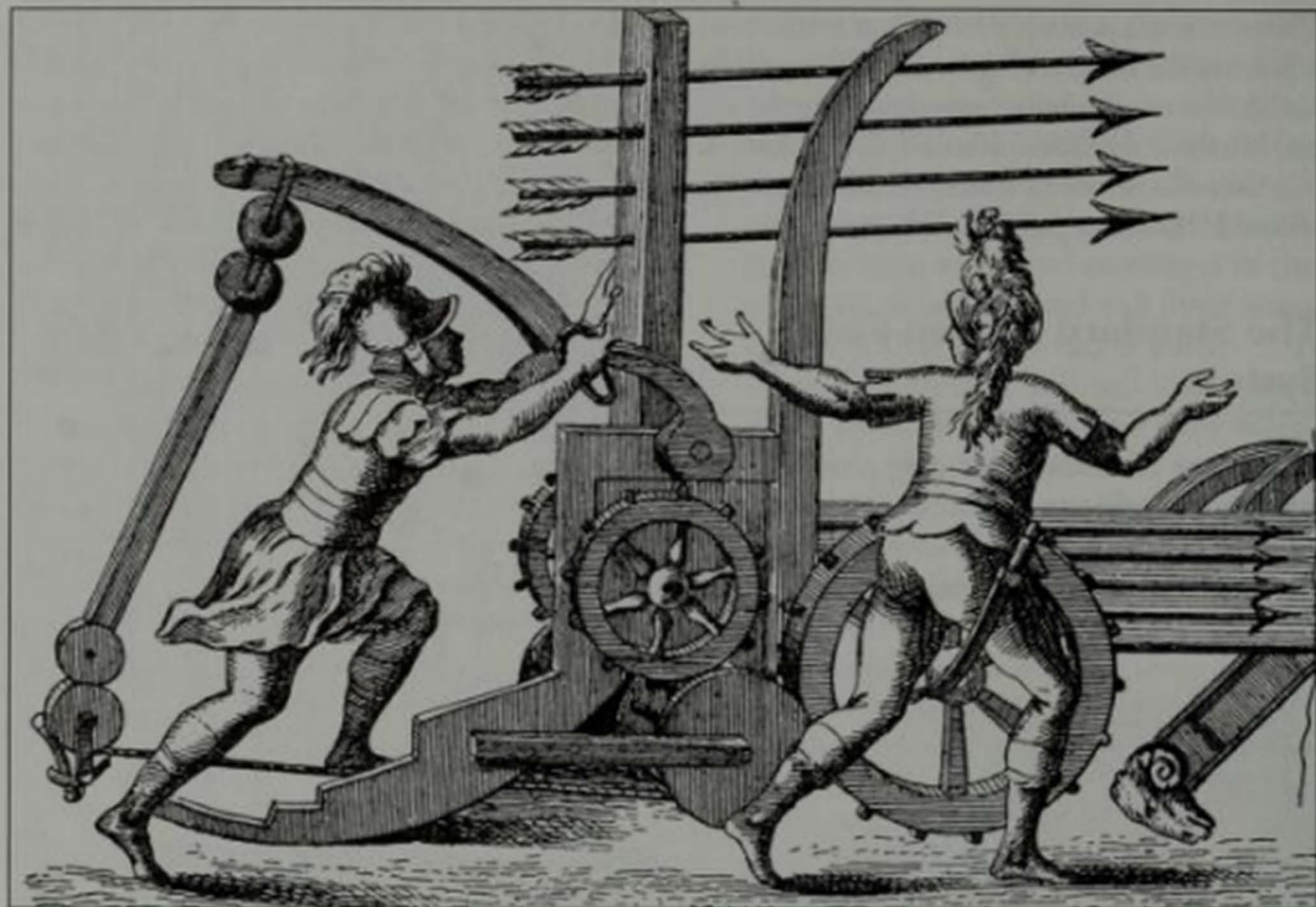
## The Standard Roman Siege System

The image of soldiers hanging around their base for years on end, leisurely socializing in

their off-duty hours, and rarely if ever seeing action might give the impression of a not-so-formidable fighting force. However, when the Romans were on the other side of a fort's or town's walls, as attackers, they were all business and nearly always victorious. Very little is known about Roman siege warfare before the time of the Punic Wars (third century B.C.). According to later ancient historians, the Romans besieged the Etruscan city of Veii in the late fifth century B.C. and finally captured it by digging a tunnel under its walls; however, although we know that Veii did fall to the

*The recently excavated remains of the Roman army base at Vindolanda, seen here, have revealed much about every day life in such military installations.*





Field artillery pieces like this dart thrower constituted only a small portion of the siege techniques employed by the Roman military.

Romans, the details of the siege remain unconfirmed.

The first Roman siege for which details are known was that of the Sicilian town of Agrigentum in 262 B.C., near the start of the First Punic War. Here, the besiegers used a technique that they borrowed from the Greeks and that became the standard Roman siege system. This was circumvallation, basically blockading a town or fort by surrounding it. According to Connolly,

Several camps would be established around the besieged town at some distance from it. These would be joined by lines of trenches and [earthen] ramparts cutting the town off from the surrounding

country and preventing anyone from escaping. If there was no enemy army in the field this would be sufficient, but if there was any possibility of relief from the outside, a second line of ramparts and ditches [bircumvallation] would be established facing outwards. Between the two lines there was a broad thoroughfare [roadway], often several meters wide, facilitating rapid troop movements to any part of the fortifications. Forts and picket [sentry] posts were placed at intervals along the whole circuit so that every point of the line was watched.<sup>56</sup>

This was the method Julius Caesar employed in his famous siege of the Gallic

fortress of Alesia in 52 B.C. Because the fearless Gauls repeatedly sent out warriors to harass the Roman soldiers guarding the perimeter, he thought it prudent to make some additions to the usual ramparts, ditches, and guard posts. In that way, Caesar tells us in his surviving personal log, the *Commentary on the Gallic Wars*,

our lines could be defended by a smaller number of men. Tree trunks or very stout branches were cut down and the ends were stripped of bark and sharpened; long trenches, five feet deep, were dug and into these the stakes were sunk and fastened at the bottom so that they could not be torn up, while the top part projected above the surface. There were five rows of them in each trench, fastened and interlaced together in such a way that anyone who got among them would impale himself on the sharp points. The soldiers called them "tombstones." In front of these, arranged in diagonal lines forming quincunxes, we dug pits three feet deep and tapering downward toward the bottom. Smooth stakes as thick as a man's thigh, hardened by fire and with sharp points, were fixed in these pits and set so as not to project more than about three inches from the ground. To keep them firmly in place, the earth was trodden down hard to a depth of one foot and the rest of the pit was filled with twigs and brushwood so as to conceal the trap. These traps were set in groups, each of which contained eight rows three feet apart. The men called them "lilies" from their resemblance to that flower. In front of these was another defensive device. Blocks of wood a foot long with iron hooks fixed in them were buried underneath the surface and thickly scattered all

over the area. They were called "spurs" by the soldiers. When these defenses were completed, I constructed another line of fortifications of the same kind, but this time facing the other way, against the enemy from the outside. These additional fortifications had a circuit of thirteen miles.<sup>57</sup>

Caesar's siege of Alesia was ultimately successful. He was able to defeat both the Gauls within the fortress and an even larger force that attacked the outer perimeter of his defenses.

### The Siege of Masada

The considerable time and energy Caesar and his men expended sealing off the Alesia fortress clearly illustrates the difference between Roman siege techniques and those of the Greeks, from whom the Romans learned the art of siege warfare. In the Republic's last few centuries, the Greeks developed numerous clever, sophisticated, and often enormous siege machines. These included giant drills that could pierce stone walls and monstrous siege towers that moved on rollers and held dozens of catapults and other mechanical missile throwers (artillery). The Romans also employed siege towers and artillery, but their versions were generally smaller and used less frequently. More often, the Romans preferred to exploit the nearly limitless muscle-power of the thousands of soldiers making up their legions. The men took weeks, or even months, to build the kind of elaborate defenses and booby traps that Caesar employed at Alesia or to erect gigantic earthen ramps or long underground tunnels to gain access to the town or fortress they were besieging. In almost every



The hill-top fortress of Masada, the ruins of which are shown here, was besieged by a Roman army under the command of the governor of Judaea.

Roman siege, therefore, dogged persistence and patience, along with sheer manpower, won the day.

The siege of Masada was a classic demonstration of the Roman approach to siege warfare, combining methodic patience, enormous muscle-power, the technique of circumvallation, and a huge siege ramp. This was the last of three major sieges conducted by the Romans against the Jews (in the province of Judaea in Palestine), who rebelled against Rome from A.D. 66 to 73. The town of Jotapata, commanded by the historian Josephus, fell in 67 after a fifty-day siege. Captured by the Romans, Josephus went on to desert the Jewish cause, to become a Roman citizen, and eventually to compile his now-famous detailed account of the war. The siege of Jerusalem lasted five months and ended in 70 with the Roman troops pillaging and burning the city.

With Jerusalem's fall, most of the revolt collapsed. But a few militant diehards retreated to Masada, a seemingly impregnable

fortress at the summit of an imposing rock plateau overlooking the western shore of the Dead Sea. There, the leader of the group, Eleazar ben Ya'ir, and some 960 men, women, and children bravely determined to resist, to their dying breath, the might of Rome.

In 72, the new Roman military governor, Flavius Silva, set about capturing Masada. The manpower at his disposal was considerable—two full legions (ten thousand men) and several thousand Jewish prisoners, resources that helped him to solve his first major problem. This problem was that the fortress was perched in the midst of a desert wasteland with no ready access to food, drinking water, or timber. So Silva ordered the creation of a vast supply train of men and mules to carry in the food, water, timber, and equipment he needed to prosecute the siege.

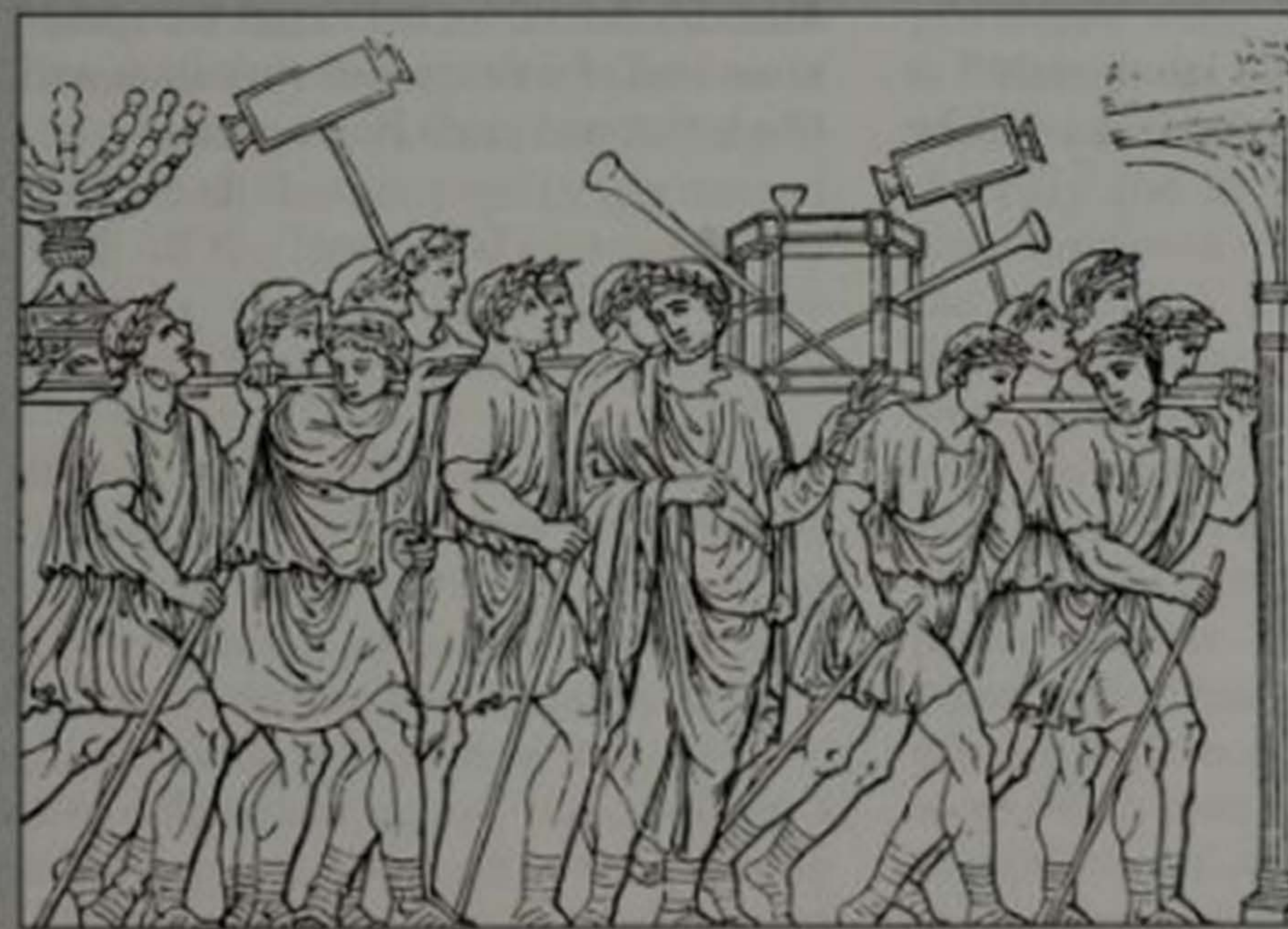
Then the Roman commander proceeded to circumvallate Masada, in the usual Roman fashion. He surrounded the plateau with a six-foot-thick stone wall with guard towers

## Roman Soldiers Sack a City

*After besieging and finally capturing a town, Roman troops, like soldiers of many other nations throughout history, often went on a rampage of killing, looting, and burning. Here, from his Jewish War, Josephus describes the brutal sacking of Jerusalem after it fell to the Romans in A.D. 70.*

"Masters now of the walls, the Romans set up their standards on the towers and with clapping and singing celebrated their victory. . . . [Then] they poured into the streets, sword in hand, cut down without mercy all who came within reach, and burnt the houses of any who took refuge indoors, occupants and all. Many they raided, and as they entered in search of plunder, they found whole families dead and the rooms full of the victims of starvation. Horrified by the sight, they emerged empty-handed. Pity for those who had died in this way was matched by no such

feeling for the living. They ran every man through whom they met and blocked the narrow streets with corpses, deluging [flooding] the whole city with gore, so that many of the fires were quenched by the blood of the slain. . . . Every man who showed himself was either killed or captured by the Romans, and then those in the sewers were ferreted out, the ground [above the sewers] was torn up, and all who were trapped [below] were killed. There too were found the bodies of more than 2,000, some killed by their own hand, some by one another's, but most by starvation. So foul a stench of human flesh greeted those who charged in that many turned back at once. Others were so avaricious [greedy] that they pushed on, climbing over the piles of corpses; for many valuables were found in the passages and all scruples [morals] were silenced by the prospect of gain."



*After capturing a city, it was common practice for Roman troops to pillage it of valuables.*

spaced at intervals of about eighty to one hundred yards. Beyond the wall, his soldiers erected two large camps (accommodating about half a legion each) and six smaller ones. Then Silva ordered the construction of a huge assault ramp (of earth and stone, reinforced by large timbers) and other siege works on Masada's western slope. Describing this tremendous logistical feat, Josephus writes,

They [the Roman legionaries] worked with a will and with ample manpower, and soon a solid platform had been raised to a height of 300 feet. As this did not, however, seem either strong or big enough . . . they built on top of it a pier composed of great stones fitted together, 75 feet wide and the same height. . . . Further, a tower was erected 90 feet high and covered all over with iron plate. . . . Meanwhile, Silva had a great [battering] ram constructed. Now, by his orders, it was swung continuously against the wall till at long last a breach was made and a small section collapsed.<sup>58</sup>

(The remains of Silva's giant ramp, as well as his camps and perimeter walls, can still be

seen around the plateau's base, some of them in an excellent state of preservation.)

Having executed most of the siege with perfect precision, the Romans braced themselves for the final stage, a round of savage hand-to-hand combat with the defenders. But Silva's men were in for an unexpected and eerie surprise. "The Romans armed themselves at dawn," Josephus continues, "bridged the gap between platform and ramparts with [wooden] gangways and then made their assault. Seeing no enemy, but [instead] dreadful solitude on every side . . . they were at a loss to guess what had happened."<sup>59</sup> Soon they learned that all of the defenders (except for two women and five children) had killed themselves in a suicide pact, preferring death to surrender.

The Romans who found the bodies had nothing but respect and admiration for these former enemies. Generation after generation of Roman soldiers saw dying for one's homeland as the noblest, most heroic deed a person could perform. And in the final, defiant act of Masada's defenders, the victors recognized the same kind of courage, determination, and fortitude that had made Rome great.

## CHAPTER 6

# The Crews and Tactics of Roman Warships

Because the Romans were not originally a maritime people, as the Carthaginians were, Rome had no appreciable navy of warships in the Monarchy and early Republic. Only when the Romans perceived an urgent need did they build such ships, and then they did so with amazing speed and on a grand scale. These were the 120 warships that Polybius tells us they produced in only two months to meet the challenge of fighting Carthage in the First Punic War. "The Romans are an anomaly in maritime history," remarks Lionel Casson,

a race of [land]lubbers who became lords of the sea in spite of themselves. Only a nation of born landmen would have dared, as they did, to pit against one of the greatest navies afloat [i.e., Carthage's] a jerry-built fleet, manned by green crews fresh off the farms, and commanded by admirals who lost four ships to the weather for every one to enemy action.<sup>60</sup>

Rome's military tradition as a land power was so ingrained, in fact, that even after its navy became an institution, it was for the most part viewed as secondary to and considerably less prestigious than the army. So for a long time young Roman men aspired to be soldiers rather than sailors. "God willing, I hope to be transferred to the army," a young naval recruit wrote home in the early second century A.D. "But nothing will be done around here without money [for bribes?], and

letters of recommendation will be no good unless a man helps himself."<sup>61</sup>

The ships' rowers and other crewmen were mostly noncitizens or foreigners, who were organized as auxiliaries rather than legionaries. (The rowers were not slaves, nor were they chained to their oars, as so often depicted in Hollywood movies.) In the Republic most of these seamen were members of Rome's Italian allies, while in imperial times they tended to be Greeks, Egyptians, Phoenicians, Syrians, and others from societies with long-established maritime traditions. Often their major motivation when signing on for their grueling twenty-six-year hitch was to be granted Roman citizenship as a reward when discharged.

Though the Roman sailor served in what was seen as the inferior branch of the service, the navy and its personnel had important, sometimes even vital, duties and responsibilities to perform. First, when the need arose, they fought enemy navies. Although these encounters rarely decided the outcome of a war, on occasion they did, as in the case of the First Punic War or the civil conflict between Octavian and Antony. Second, the ships transported consuls, governors, emperors, and other high officials (and sometimes contingents of land troops) to distant locations much more swiftly than was possible over land. The ships also bore important military dispatches and orders during both wartime and peacetime. Finally, sailors routinely acted as police forces for commercial ports; guarded the





The Roman fleet was secondary to the land army, but still a formidable fighting force. Here, Roman warships emerge victorious from the Battle of Mylae, during the first Punic War.

rivers along the frontiers; pursued and defeated pirates who threatened commercial shipping; guarded the grain supplies in Rome and later in Egypt and other provinces; and worked on civil engineering projects, including raising and lowering the giant awning that protected Rome's great amphitheater, the Colosseum.

### Evolution of Rome's War Fleets

The sailors who performed these duties were part of a Roman naval tradition that, though not as ancient and venerable as that of the army, was still long and eventful. Rome's first

warships were a handful of small craft built in 311 B.C. to police the local waters of western Italy against pirates who periodically raided the area. About twenty years later, some of these Roman ships made the mistake of getting into a fight with the war fleet belonging to the still independent Greek city of Taras (Tarentum in Latin), in southern Italy. The Romans were beaten so badly that they scrapped their ships. And for the next several years they relegated the task of policing their coast to ships from nearby Greek cities that were already subjects of Rome.

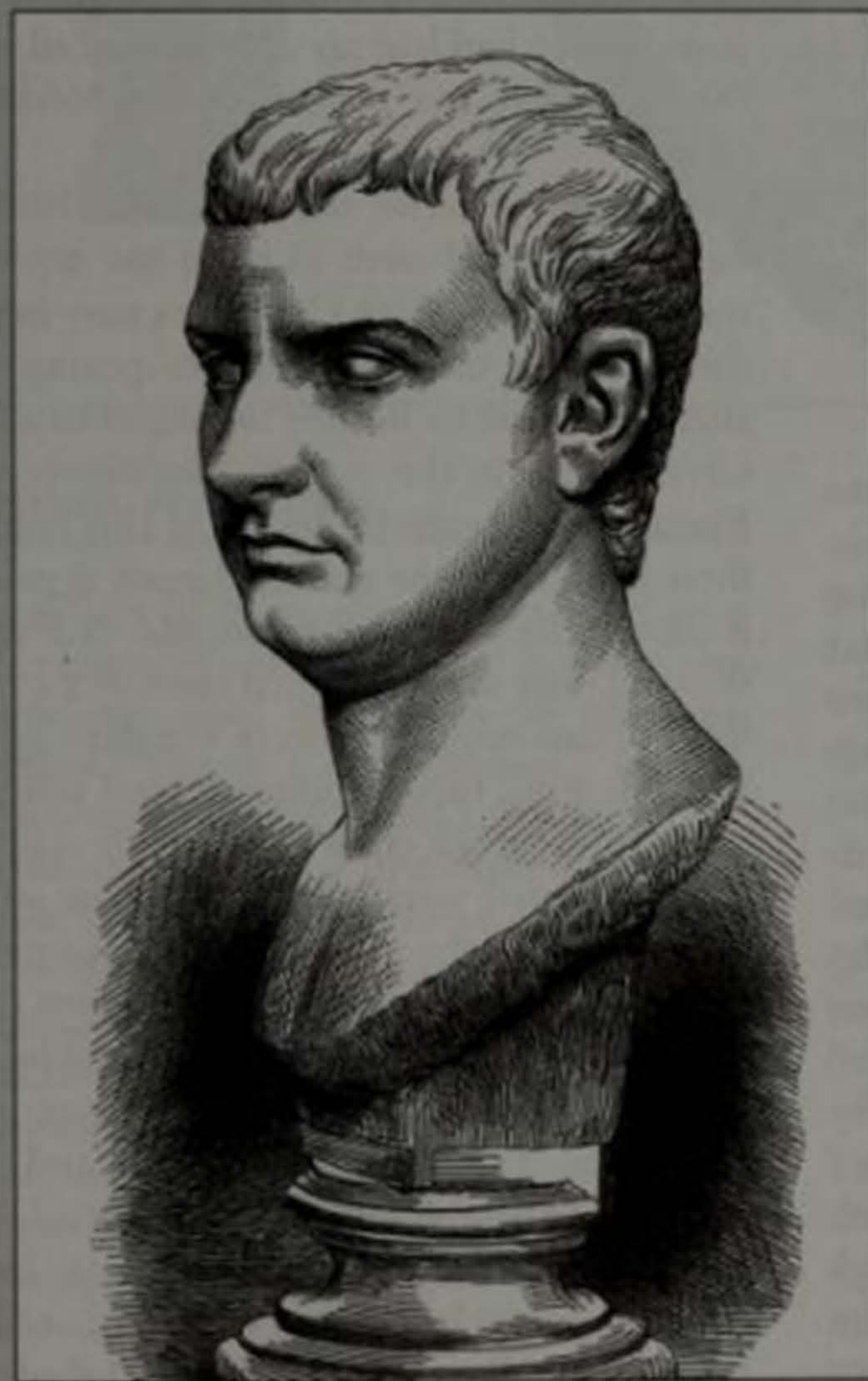
In the mid-260s B.C., however, Rome's relations with Carthage grew strained and led to a war declaration. After the First Punic War

## Ridding the Sea Lane of Pirates

The decline of the Roman navy in the second century B.C. increasingly emboldened bands of pirates, who became a menace to shipping. In this excerpt from his *Life of Pompey* (Rex Warner's translation in *Fall of the Roman Republic*), Plutarch tells how the famous general Gnaeus Pompey managed to rid the sea lanes of these marauders. In a lightning operation launched in 67 B.C., his forces burned some thirteen hundred pirate vessels and captured four

hundred more, all without the loss of a single Roman ship.

"The power of the pirates extended over the whole area of our Mediterranean sea. The result was that all navigation and all commerce were at a standstill; and it was this aspect of the situation which caused the Romans . . . to send out Pompey with a commission to drive the pirates off the seas. . . . Pompey was to be given not only the supreme naval command but what amounted in fact to an absolute authority and uncontrolled power over everyone. The law provided that his command should extend over the sea as far as the pillars of Hercules [Strait of Gibraltar] and over all the mainland to the distance of fifty miles from the sea. . . . Then he was . . . given power to . . . take from the treasury and from the taxation officials as much money as he wanted, to raise a fleet of 200 ships, and to arrange personally for the levying of troops and sailors in whatever numbers he thought fit. . . . He divided the Mediterranean and the adjacent coasts into thirteen separate areas, each of which he entrusted to a commander with a fixed number of ships. This disposal of his forces throughout the sea enabled him to surround entire fleets of pirate ships, which he hunted down and brought into harbor. . . . All this was done in the space of forty days."



The renowned general Gnaeus Pompey became a national hero for ridding the sea lanes of the pirate menace.

commenced in 264, the Romans at first attempted to defeat the enemy on the island of Sicily (off Italy's southwestern coast), the western half of which Carthage controlled. But the Carthaginian navy kept its country's Sicilian strongholds well supplied, and Rome's efforts came largely to nothing. Eventually, the Roman Senate accepted the hard reality that the Carthaginians would have to be fought on their own terms. Rome would have to wrest control of the sea from the enemy, and to do this, it would have to construct a large fleet of warships.

The problem, of course, was that the Romans had little, if any, idea how to build a proper, effective warship. They also did not have the thousands of trained crewmen that would be needed to operate the new fleet. Luckily for Rome, it had earlier come into possession of a Carthaginian warship that had accidentally run aground. "It was this ship," Polybius explains,

which they [the Romans] proceeded to use as a model, and they built their whole fleet according to its specifications; for which it is clear that but for this accident they would have been prevented from carrying out their program for sheer lack of necessary knowledge. As it was, those who had been given the task of shipbuilding occupied themselves with the construction work, while others collected the crews and began to teach them to row on shore in the following way. They placed the men along the rowers' benches on dry land, seating them in the same order as if they were on those of an actual vessel, and then . . . trained them to swing back their bodies in unison. . . . When the crews had learned this drill, the ships were launched as soon as they were finished.<sup>62</sup>

By 256 B.C., the Romans had some 330 warships. Many of these were lost in battle or in violent storms, so they continually built new warships and fleets. Incredibly, during the First Punic War, which was fought mostly at sea, Rome lost an estimated 700 warships and troop transports and more than 100,000 crewmen. These remain the largest naval losses ever suffered by a single nation in one war, yet the determined and resilient Romans still managed to win the war. They then proceeded to defeat Carthage again in the Second Punic War. By 201 B.C., at the close of that conflict, Rome, which less than seventy years before had had no war fleets at all, was the mightiest sea power in the Mediterranean.

In the centuries that followed, Roman navies came and went as need and circumstances dictated. With Carthage's navy out of the way, the only other fleets posing the slightest threat to Rome's belonged to a few Greek states in the eastern Mediterranean. Rome quickly gained control of this region, though, and with the seaways largely at peace, it allowed its war fleets to decline. Not until the civil wars of the late first century B.C. did the Romans require fleets of warships again; and this time they commandeered most of them from Greek cities under their control. Once the civil wars were over, these same ships became the nucleus of the imperial fleets organized by Augustus. In the first century A.D. he and his successors established fleets on the coasts of Italy, Egypt, Syria, the Black Sea, the English Channel, and the Rhine and Danube Rivers. In the second century the fleets began to decline again, however. Sea power had almost no role in warfare in the Later Empire; and by the end of the fourth century, the once-mighty Roman navy had virtually ceased to exist.



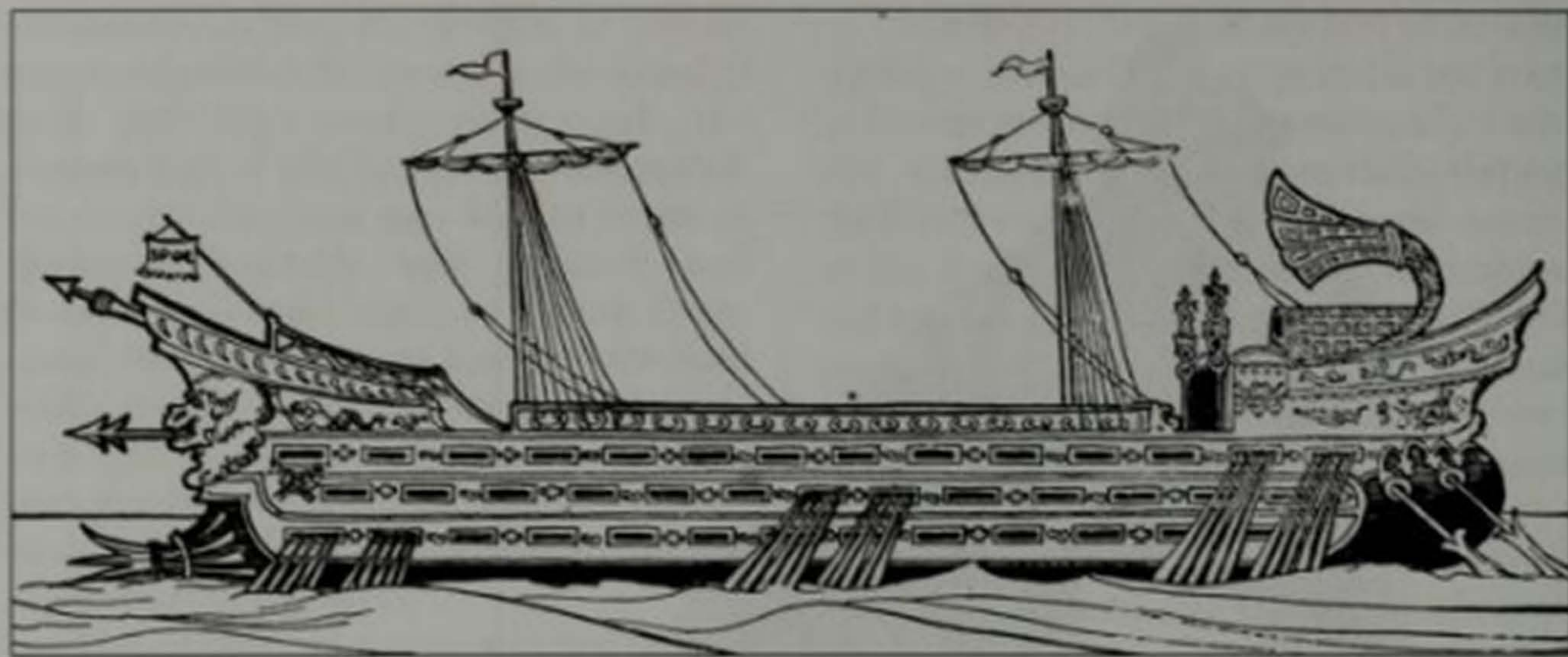
Wooden figureheads, such as this one were mounted on the bows of the Roman warships. Images of gods and goddesses were particularly popular.

## Roman Warships

The sailors of these war fleets served on a wide variety of vessels. But the Romans predominantly used four kinds of warships: triremes ("threes"), quadriremes ("fours"), quinqueremes ("fives"), and Liburnians. The original designs of the first three types were Greek; and over the centuries, a large number of the sailors who manned the Roman versions continued to be Greeks (who, if they lived long enough, gained Roman citizenship at the ends of their hitches). As its name suggests, the trireme had three banks of oars, with one man to an oar. A Roman trireme probably carried a complement of about 220 to 250 men, including about 170 rowers (with between 50 and 60 in each oar bank), about 15 to 20 crewmen, and a few dozen marines (fighters). Adding together the hull, decks,

mast, oars, men, weapons, and supplies, such a vessel would have weighed, or in nautical terms "displaced," 80 to 90 tons. Yet it was relatively quick for its time. In short spurts, when attacking for instance, it could attain a speed of perhaps 7 to 8 knots (8 to 9 miles per hour).

The quadrireme and quinquereme were both somewhat larger than a trireme. A quadrireme appears to have had two banks of oars, with two men to each oar. The quinquereme likely took this design a step further so that it had three oar banks, the top two having two rowers to an oar and the bottom one having one man to an oar.<sup>63</sup> Perhaps the most common warship in Roman navies during the mid- to late Republic, the quinquereme was up to 120 feet long and carried some 270 rowers, 30 crewmen, and from 40 to 120 marines (the larger number in battle).



Roman warships were of four types: triremes (like the one shown here), quadriremes, quinqueremes, and Liburnians.

By contrast, the Liburnian, invented by a tribe of pirates inhabiting what is now Bosnia, was much smaller. "It was a destroyer," says Casson,

a light, fast, highly maneuverable vessel, ideal for pursuit of pirates or for quick communications. . . . The Romans found it useful enough to adopt as a standard [naval] unit, particularly for the provincial fleets which used such craft almost exclusively. Originally, it was most probably single-banked, but its borrowers developed a heavier version driven by two banks of oarsmen. . . . Its two banks were easier to handle than the three of the [trireme and quinquereme] and . . . its mast and sail . . . perhaps could be lowered under way for a fight without disturbing the rowers. The Liburnian became so popular in the Roman navy that the term eventually came to mean warship in general.<sup>64</sup>

The seamen who manned these ships gave them names, just as sailors name their

boats today. One difference was that Roman sailors did not inscribe ships' names on the sides of their hulls; rather, they prominently displayed wooden figureheads and other carvings on the bows. Many ships were named after deities, especially those associated with the sea. Popular names were Neptune, lord of the sea; Neptune's son, Triton; and Nereus, the "old man of the sea," a god thought to possess the gift of prophecy. Roman sailors were also partial to Isis, an Egyptian goddess who came to be widely worshiped across the Roman Empire. Other common names for Roman warships included important abstract concepts such as Justice, Liberty, Peace, and Piety.

### How Roman Sailors and Marines Fought

To the average Roman sailor, peace was more than the name of a ship. It was also the state he hoped the Roman realm would be in during his term of service, for going to war greatly increased the chances that he would

be seriously wounded or even killed. Because Rome was at peace more often than at war, the majority of Roman sailors, like Roman land troops, never actually took part in a military campaign. But those who did experienced the horrors of naval warfare, which included the high risk of drowning if one's ship sustained major damage and sank.

When the Romans learned about naval affairs from the Greeks and Carthaginians during mid-republican times, they adopted the basic naval battle tactics then widely in use. The first of these was the employment of a bronze-coated beak mounted on the ship's bow to ram an enemy vessel. The object was to open a hole in the enemy ship's side and thereby sink it. Among the tactical maneuvers a fleet used to gain the advantage and increase the likelihood of sinking enemy ships was the *periplus*, in which an attacking fleet managed to outflank (envelop the sides of) the enemy fleet; this allowed some of the attacking ships to ram the exposed sides of the outer ships in the enemy's line. Another common maneuver was the *diekplus*. One ship at-

tacked an enemy vessel at an angle, sheering off most of its oars on one side and thereby rendering it helpless; then a second attacker, stationed directly behind the first, moved in for the killing ramming run.

Although the Romans sometimes used these maneuvers, they much preferred the second basic naval battle tactic—boarding an enemy ship and taking control of it via hand-to-hand fighting. Perhaps it was the long and prestigious record of their army that led to their increased emphasis of land warfare techniques in naval battles. The first major advance in this direction was their invention of the *corvus* ("crow" or "raven") in the early years of the First Punic War. This was a long wooden gangway with a spike attached to its end. The *corvus* stood in an upright position on the front deck of a Roman ship until the vessel pulled up alongside an enemy ship, at which time sailors dropped the device onto the enemy's deck. The spike pierced the deck, holding the gangway in place, and Roman marines charged across and attacked the enemy vessel's crew. Describing the first use of

### How the Raven Was Constructed

*In his Histories, Polybius provides this detailed description of the corvus, the offensive naval device introduced by the Romans during the First Punic War.*

"[The 'raven'] was constructed as follows. A round pole about twenty-four feet high and ten inches in diameter was erected on the prow of the ship. At the top of this pole was a pulley, and at its base a gangway four feet in width and thirty-six in length made of planks which were nailed across each other. Twelve

feet from one end of the gangway, an oblong slot was cut, into which the base of the pole was fitted, and each of the long sides of the gangway was protected by a rail as high as a man's knee. At the outboard [far] end of the gangway was fastened an iron spike. . . . When the ship charged an opponent, the 'raven' would be hauled up by means of the pulley and then dropped onto the deck of the enemy vessel; this could either be done over the bows, or the gangway could be swiveled round if the two ships collided broadside on."

these ingenious contraptions, in the sea battle of Mylae in 260 B.C., Polybius writes,

As they neared the enemy and saw the "ravens" hoisted aloft in the bows of several [Roman] ships, the Carthaginians at first did not know what to make of these devices, which were completely strange to them. However, as they still felt an utter contempt for their opponents, the leading ships attacked without hesitation. Then, as they came into collision, the Carthaginians found that their vessels were invariably held fast by the "ravens," and the Roman troops swarmed aboard them by means of the gangways and fought them hand-to-hand on deck. Some of the Carthaginians were cut down and others were thrown into confusion by these tactics and gave themselves up, for

the fighting seemed to have been transformed into a battle on dry land. The result was that they lost every one of the first thirty of their ships . . . crews and all . . . At last the [rest of the] Carthaginians turned and fled, for they were completely unnerved by these new tactics, and in all they lost fifty ships.<sup>68</sup>

In republican times, these marines who boarded enemy ships were not sailors but army legionaries who had been trained to adapt their use of *pilum*, sword, and shield to the narrow confines of ships' decks. Therefore, the *corvus*, as Peter Connolly phrases it, "turned a naval battle into a fight between marines, which the superb Roman infantry were bound to win."<sup>69</sup>

In time, the Romans abandoned the *corvus* because its weight made their ships unbal-

Roman marines charge across a *corvus* that holds their ship and an enemy vessel in a deadly embrace.



## Ships Used Like Cavalry and Infantry

*Sometimes the tactics employed by the crews of Roman warships were dictated by the size of these vessels. This is well illustrated by the battle of Actium (31 B.C.), in which Octavian defeated Antony. Here, from his history of Rome, Dio Cassius tells how Octavian's smaller ships used ramming runs and other tactics exploiting speed and maneuverability, while Antony's larger vessels attempted to pound their opponents into submission and then board them. In a way, Dio points out, it was like a land battle fought at sea.*

"The two sides used different tactics. Octavian's fleet, having smaller and faster ships, could advance at speed and ram the enemy. . . . If they sank a vessel, they had achieved their object; if not, they would back water [row backwards] before they could be engaged at close quarters, and either ram the same ship suddenly a second time, or let it

go and turn against others. . . . They would sail up suddenly so as to close with their target before the enemy's archers could hit them, inflict damage or cause enough confusion to escape being grappled, and then quickly back away out of range. Antony's tactics, on the other hand, were to pour heavy volleys of stones and arrows upon the enemy ships as they approached, and then try to entrap them with iron grapnels. When they could reach their targets, Antony's ships got the upper hand, but if they missed, their own hulls would be pierced by the rams and they would sink, or else, in the attempt to avoid collision, they would lose time and expose themselves to attack by other ships. . . . Octavian's ships resembled cavalry, now launching a charge, and now retreating . . . while Antony's were like heavy infantry, warding off the enemy's efforts to ram them, but also striving to hold them with their grappling hooks."

anced, unsteady, and more prone to capsizing in stormy conditions. However, they continued to develop and use devices that allowed them to hold fast and board enemy ships. These included long poles or lengths of chain with large grapnel (hooks) attached to the ends; when their ship maneuvered close enough to an enemy vessel, Roman sailors tossed the grapnel, snagging the enemy's deck, and the marines boarded on wooden planks or ladders. In the 30s B.C., Augustus's talented admiral, Agrippa, introduced the *harpax*, a grapnel with long ropes or chains attached that was shot from a catapult mounted on the deck of a Roman ship; this allowed an enemy ship to be ensnared from a much greater distance. Larger ships also sometimes featured wooden towers mounted

on the deck at front and back; javelin men or archers stationed atop these towers fired down on an enemy ship's deck as the opposing ships neared each other, softening up the enemy before the marines boarded.

### The Opportunity for Promotion

The wide range of duties and skills involved in such battles (rowing, steering, lowering the sails, fighting, commanding and coordinating, and so on) required a diversity of personnel and a command structure no less complex than that for the land army. And within that command structure, there was the chance for promotion through the ranks. A major exception

was the topmost naval position—admiral. The admiral was always a Roman citizen from a prominent family, so noncitizens in the lower ranks could not aspire to his post. In the Republic, the admirals—commanders of whole fleets and the home bases where these fleets docked—were usually senators. In the Empire, in contrast, they held the rank of prefect and tended to be well-to-do, high-ranking army officers. (The fact that these admirals were drawn from the army rather than the navy reflected and reinforced the common perception that the navy was the inferior of the two services.)

As they did with so many other naval concepts and customs, the Romans borrowed the terms used to describe most of the other naval officers from the Greeks. The commander of a squadron, perhaps about ten ships, was a *navarch* (from the Greek *navarchos*), and the captain of an individual ship was called a *trierarch* (from the Greek *trierarchos*). *Navarchs* were generally promoted from the position of *trierarch*, and *trierarchs* were likely promoted from the lower ranks of navy men. In the early Empire, both positions were filled mainly by experienced Greek sailors.

Under a *trierarch*, as under an army tribune, existed a number of junior officers who made up the captain's staff. These included a chief administrator (*beneficarius*) and various kinds of clerks with specialized jobs, such as making reports to the admiral's office and keeping financial records. The *trierarch* also had deck officers to help him run his ship. Among them were the *gubernator* (the term from which the word *governor* evolved), who supervised the steersmen from his station on the aft (rear) deck; his assistant, the *proreta*, stationed on the prow (front), who kept an eye out for rocks and shoals in the vessel's path; the *celeusta*, who used wooden mallets

to pound out a beat for the rowers to follow; two or three *velarii*, experts at raising and lowering the sails; and a *nauphax*, in charge of the ship's physical upkeep, and his carpenters, the *fabri*. (It is probable that only larger ships, such as quinqueremes, had a full complement of such specialists; the fewer crewmen manning Liburnians and other small craft likely doubled up on these jobs.) Usually, these junior officers and specialists received double the pay (or more) of an ordinary sailor.

In addition, each warship had its complement of marines. Since an individual warship was, for organizational purposes, designated as a naval century, these fighters were trained and commanded by a centurion. As in an army century, he was assisted by an *optio*. The relationship between the centurion and the *trierarch*, including who had more authority in specific areas, remains unclear. But it is almost certain that the centurion made all the important decisions concerning actual combat.

The lowest-ranking naval personnel, the rowers and other ordinary sailors, were well aware of the drawbacks of naval service when they signed up. In addition to the navy's inferior status, as compared with that of the army, they faced long hitches featuring hard and sometimes dangerous work and little pay. Still, for a poor boy from an Italian or provincial farm or city slum, the rewards of serving in the navy could well outweigh the drawbacks. Even if small, the pay was steady and often amounted to more than he could make as a farmhand or ordinary laborer. There was also the opportunity for travel and seeing far-away cities and peoples. Most of all, the potential for promotion and eventually becoming a citizen loomed large.

These factors fueled the enthusiasm and optimism revealed in the following letter, written home by a young recruit named Apion

sometime in the second century. Having left his village in Egypt and joined the Roman navy, Apion had been assigned to the naval base at Misenum in Italy. Per common custom, he dropped his Egyptian name for a proper, more prestigious-sounding Roman one.

Dear Father: First of all, I hope you are well and will always be well, and my sister and her daughter and my brother. I thank the god Serapis that when I was in danger on the sea [in a storm?] he quickly came to the rescue. When I arrived at Misenum

I received from the government three gold pieces for my traveling expenses. I'm fine. Please write me, Father . . . so that I can kiss your hand because you gave me a good education and because of it I hope to get quick promotion if the gods are willing. . . . I've given Euctemon [a friend on leave?] a [painted] picture of myself to bring to you. My [new] name is Antonius Maximus, my ship the *Athenonice*. Good-bye. P.S. Serenus, Agathodaemon's son, sends regards, and so does Turbo, Gallonius's son.<sup>67</sup>

# The End of the Roman Military

When the Roman soldier ceased to be the determined, enthusiastic, effective fighter he had been for many centuries, Rome's days were numbered. Indeed, the decline of the Roman military and the often-discussed "decline and fall of the western Roman Empire" are intimately related. Over time, poor pay and training, loss of prestige, high desertion rates, increasing recruitment of less disciplined non-Roman Germans, and other factors greatly reduced the effectiveness of Rome's armed forces. Deprived of the chief tool it needed to keep its territories from falling to the northern tribes, the central government could not stop the western realm from steadily shrinking. And eventually, the last remnants of that realm fell under the control of an army that called itself Roman but was in fact made up of and commanded by Germans. This was part of the ongoing process by which the traditional Roman world in the West slowly but steadily changed into something else—what came to be called Europe.

## From Offense to Defense

The seeds of Roman military decline were planted long before the Later Empire, the realm that eventually succumbed to the forces of deterioration and change. Strategic military decisions made hundreds of years before set in motion a series of events and trends that later profoundly affected the lives

and fortunes of Roman soldiers and civilians alike. Beginning in the early Republic, Rome's overall military strategy was for a long time largely offensive, stimulating a steady expansion of the realm. The usual scenario was for the Romans to defeat a people, consolidate their territory, and then Romanize and absorb them, thereby expanding Roman frontiers.

The fateful turning point that signaled the coming transition from an offensive to a defensive military posture came in A.D. 9, late in the reign of the first Roman emperor, Augustus. When he had come to power, the Empire's northern border was a ragged, ill-defined frontier that ran west to east through south-central Europe. Over the centuries, the Germanic tribes who inhabited the regions north of that border had periodically pressed southward, threatening Roman territory. The defeat of the Romans by the Gauls at Allia in the early fourth century B.C. had been one example. An invasion of two warlike tribes, the Cimbri and Teutones, whom Marius had routed in 102 B.C., had been another. Like other Roman leaders, Augustus felt that the Germans' close proximity to the Roman heartland was dangerous and intolerable. So he set about pushing the northern borders back. Beginning in the mid-20s B.C., his armies slowly advanced northward, establishing new towns in the areas they secured.

These campaigns increased in size and speed. And after several years of intermittent fighting, Roman territory extended to the

Danube River, prompting the creation of some new provinces. The frontier then remained relatively quiet for a few years, until Augustus sent an official named Publius Quinctilius Varus to turn a section of Germany into still another new province. In A.D. 9, in the dense Teutoburg Forest (some eighty miles east of the Rhine River), a large force of Germans ambushed Varus and his fifteen thousand troops, killing them almost to the last man. According to the first-/second-century-A.D. Roman historian Suetonius, Augustus "took the disaster so deeply to heart that he left his hair and beard untrimmed for months; he would often beat his head on a door, shouting: 'Quinctilius Varus, give me back my legions!'"<sup>68</sup> Varus could not give the legions back, of course. And the fact was that

no one, including Augustus, could replace them. Raising, outfitting, and training three entire legions was too expensive a proposition, even for someone as wealthy as the emperor.<sup>69</sup>

More importantly, Varus's defeat ended up having important consequences for Rome's future. In the years immediately following it, the Romans became discouraged, wrote off Germany as a loss, and pulled their forces back, allowing the natives to maintain control of the area. The result was that Germany was not absorbed into the Empire and thoroughly Romanized. Permanently retaining their independence, the northern tribes proved an increasingly dangerous threat in the centuries to come, especially in the bleak days of the Later Empire. (In view of their final triumph over Rome, the encounter in the Teutoburg

*A Germanic chieftan like the one pictured in this modern reconstruction, defeated the Roman general Varus and his legions in the Teutoburg Forest.*



Forest ranks as one of the most crucial and decisive battles in world history.)

## Serving in the Army Loses Its Allure

Meanwhile, the size and power of the Empire peaked in the early second century. After that, with the Germans and others increasingly pressing on the borders, the Romans were almost constantly on the defensive. As the chaos of the third-century crisis and the financial restrictions of the Later Empire took an added toll, the tasks and duties of the average Roman soldier became increasingly thankless and hopeless. And serving in the military, once a prestigious and coveted goal, steadily lost its allure.

Because now fewer Roman men enlisted in the army than had in prior, more peaceful times, to keep troop numbers up Diocletian made service for the sons of veterans compulsory. But conscription remained unpopular and difficult to enforce. To avoid serving, some young men resorted to extreme measures, such as amputating their own thumbs. When this practice became widespread, the government at first ordered that such shirkers be burned alive, but later, as the need for new soldiers became more desperate, the authorities spared self-mutilated men from the stake and forced them to serve in the army despite their handicap. "Those who tried to evade their duty were liable to be rounded up by recruiting officers," historian Stewart Perowne explains.

Every estate or village, or group of villages, had to provide so many recruits every so many years. The levy fell wholly on the rural population. . . . As soon as they were enrolled, recruits were branded, as a precaution against desertion. This fact alone shows how unpopular the service had become, and consequently how hard it now was to find enough recruits.<sup>20</sup>

Other factors contributed to the erosion of the Later Empire's military establishment. Not only were the soldiers paid very little, but because of the government's frequent money problems their wages were often months or even years in arrears, which damaged morale. Lack of military funding, in combination with other factors, also affected the quality of weapons and armor. "By the end of the fourth century, weapons and weapons training had deteriorated drastically," writes Arther Ferrill. "Except for heavy cavalry . . . body armor was almost abandoned by the Roman army. While cavalry wore mail shirts and metal helmets, infantry had only leather caps."<sup>21</sup> In addition, after Christianity became the official state religion in the fourth century, increasing numbers of Christians refused to fight, claiming it violated their moral principles.

Put simply, the traditional Roman soldier—the tough and tenacious legionary who eagerly volunteered to defend family and state—eventually ceased to exist. And with him perished the last remnants of the western Empire.

## Notes

### Introduction: The World's First Truly Professional Warrior

1. Josephus, *The Jewish War*, trans. G. A. Williamson, rev. E. Mary Smallwood. New York: Penguin Books, 1970 and 1981, pp. 194–95.
2. Polybius, *The Histories*, trans. Ian Scott-Kilvert. New York: Penguin Books, 1979, p. 62.
3. Polybius, *The Histories*, p. 513.
4. Michael Simkins, *Warriors of Rome: An Illustrated History of the Roman Legions*. London: Blandford, 1988, pp. 22–23.

### Chapter 1: The Evolution of Rome and Its Military System

5. Lawrence Keppie, *The Making of the Roman Army: From Republic to Empire*. New York: Barnes and Noble, 1984, p. 14.
6. The anniversary of this humiliating defeat, July 18, thereafter became known as the dark "Day of Allia," an unlucky date on the calendar.
7. Keppie, *The Making of the Roman Army*, p. 19.
8. The term *Punic* derived from the Latin word *Punicus*, meaning Phoenician, the name of the Near Eastern maritime/trading people who originally founded Carthage in about 850 B.C.
9. Plutarch, *Life of Marius*, in *Fall of the Roman Republic: Six Lives by Plutarch*, trans. Rex Warner. New York: Penguin Books, 1972, p. 25.
10. For this reason, they are often referred to as the "five good emperors."
11. Arther Ferrill, *The Fall of the Roman Empire: The Military Explanation*.

New York: Thames and Hudson, 1986, p. 45.

12. The exact nature and chronology of Rome's frontier forts and mobile armies is still a matter of debate among historians. Among the major works advocating the defense-in-depth strategy are Edward N. Luttwak's *The Grand Strategy of the Roman Empire from the First Century A.D. to the Third* (Baltimore, MD: Johns Hopkins University Press, 1977) and Arther Ferrill's *The Fall of the Roman Empire* (see note 11). In contrast, some scholars argue that archaeological evidence supporting a defense-in-depth is scanty, that such a strategy never took hold in the Empire's eastern sector, and that the *limitanei* developed after, rather than during, Constantine's time. See, for example, Averil Cameron's *The Later Roman Empire: A.D. 284–430* (Cambridge, MA: Harvard University Press, 1993), pp. 141–43.
13. Ferrill, *The Fall of the Roman Empire*, pp. 84–85, 140.

### Chapter 2: Recruiting, Paying, and Training Roman Troops

14. Simkins, *Warriors of Rome*, p. 23.
15. Quoted in G. R. Watson, *The Roman Soldier*. London: Thames and Hudson, 1969, p. 38.
16. Vegetius, *On the Roman Military*, quoted in Watson, *The Roman Soldier*, p. 39. Vegetius (Flavius Vegetius Renatus) drew together assorted information from the military handbooks and records

of earlier ages, most of which are now lost. Because he covered material from several different periods, a good deal of it difficult to date precisely, historians tend to be cautious about drawing conclusions from his treatise. Nevertheless, the work remains a valuable resource.

17. The exact wording of the oath has not survived. But most of its major terms can be pieced together from remarks made by ancient historians. See, for example, Books 10 (18.2) and 11 (43) of the Greek historian Dionysius of Halicarnassus's *Roman Antiquities* (7 vols., trans. Earnest Cary. Cambridge, MA: Harvard University Press, 1963).
18. Vegetius, *On the Roman Military*, quoted in Watson, *The Roman Soldier*, p. 105.
19. Quoted in Michael Grant, *The Army of the Caesars*. New York: M. Evans, 1974, p. xxvi.
20. Actually, it was 180 old-style *denarii*. In about 122 B.C., the currency underwent a revaluation in which a *denarius* became more valuable; apparently under the new system 180 old-style *denarii* were equivalent to 112.5 new-style *denarii*.
21. Roger Tomlin, "The Late Roman Empire," in Sir John Hackett, ed., *Warfare in the Ancient World*. New York: Facts On File, 1989, p. 238.
22. Vegetius, *On the Roman Military*, quoted in Grant, *The Army of the Caesars*, p. xxvii.
23. Vegetius, *On the Roman Military*, quoted in Watson, *The Roman Soldier*, p. 57.
24. Although most of their specialties existed in Augustus's time and many of them much earlier, they apparently did

not receive the name *immunes* until the early second century.

25. Livy, *The History of Rome from Its Foundation*, excerpted in *Livy: Rome and the Mediterranean*, trans. Henry Bettenson. New York: Penguin Books, 1976, pp. 517–18.

### Chapter 3: Roman Soldiers on the March

26. Josephus, *The Jewish War*, p. 197.
27. Polybius, *The Histories*, pp. 335–36.
28. Josephus, *The Jewish War*, p. 291.
29. Polybius, *The Histories*, p. 337.
30. Polybius, *The Histories*, p. 328.
31. Peter Connolly, *Greece and Rome at War*. London: Macdonald, 1998, p. 135.
32. Polybius, *The Histories*, p. 328.
33. Polybius, *The Histories*, p. 337.
34. Josephus, *The Jewish War*, pp. 195–96.
35. Polybius, *The Histories*, p. 332.
36. Polybius, *The Histories*, pp. 332–33.
37. Polybius, *The Histories*, p. 334.
38. Josephus, *The Jewish War*, p. 196.

### Chapter 4: The Battlefield Tactics of Roman Troops

39. Polybius, *The Histories*, p. 320.
40. Because this pattern resembled the dots representing the number five on a dice cube, which the Romans called a *quincunx*, they gave the battlefield formation the same name.
41. Polybius, *The Histories*, p. 321.
42. Dio Cassius, *Roman History: The Reign of Augustus*, trans. Ian Scott-Kilvert. New York: Penguin Books, 1987, pp. 47, 50.
43. Connolly, *Greece and Rome at War*, p. 142.
44. Polybius, *The Histories*, pp. 273–74.
45. Polybius, *The Histories*, p. 509.

46. Keppie, *The Making of the Roman Army*, p. 19.
47. Connolly, *Greece and Rome at War*, pp. 205–206.

### Chapter 5: Roman Fortifications and Siege Warfare

48. Lionel Casson, *Daily Life in Ancient Rome*. New York: American Heritage, 1975, pp. 76–77.
49. Connolly, *Greece and Rome at War*, p. 274.
50. Aeneas Tacticus, *On the Defense of Fortified Positions*, quoted in Sidney Toy, *Castles: Their Construction and History*. New York: Dover, 1984, p. 17.
51. Brian Dobson, "The Empire," in Hackett, *Warfare in the Ancient World*, p. 218.
52. The Romans had originally intended to conquer all of Caledonia (Scotland). But in the end of the second century, most of the troops stationed at the Antonine Wall were withdrawn by a Roman general to use in fighting a civil war. This allowed the Scots to raid southward, and later Roman attempts to conquer them were halfhearted and proved fruitless.
53. Graham Webster, *The Roman Imperial Army*. Totowa, NJ: Barnes and Noble, 1985, p. 204.
54. Webster, *The Roman Imperial Army*, pp. 206–207.
55. Quoted in Paul G. Bahn, ed., *The Cambridge Illustrated History of Archaeology*. New York: Cambridge University Press, 1996, p. 300.
56. Connolly, *Greece and Rome at War*, pp. 292–93.
57. Julius Caesar, *Commentary on the Gallic Wars*, in *War Commentaries of Caesar*,

trans. Rex Warner. New York: New American Library, 1960, pp. 172–73.

58. Josephus, *The Jewish War*, p. 397.
59. Josephus, *The Jewish War*, p. 405.

### Chapter 6—The Crews and Tactics of Roman Warships

60. Lionel Casson, *The Ancient Mariners: Seafarers and Sea Fighters of the Mediterranean in Ancient Times*. Princeton, NJ: Princeton University Press, 1991, p. 157.
61. Quoted in Casson, *The Ancient Mariners*, p. 211.
62. Polybius, *The Histories*, p. 63.
63. Modern scholars have long debated the number of oar banks and rowers in a quinquereme. Some used to argue that it had one bank with five men to each oar, while others held that it had five banks with one man to each oar. However, most scholars have come to favor the notion of three banks, having two men to an oar in each of the upper two banks and one man to an oar in the lower bank.
64. Casson, *The Ancient Mariners*, pp. 213–14.
65. Polybius, *The Histories*, p. 66.
66. Connolly, *Greece and Rome at War*, p. 273. Like other legionaries, these marines received higher pay, served shorter hitches, and enjoyed a higher status than the sailors. By the early Empire, however, it appears that the army no longer supplied the navy with legionaries; instead, a centurion trained some of the rowers and other sailors to fight, and they then performed the function of marines during battle.
67. Quoted in Casson, *The Ancient Mariners*, p. 212.



## Epilogue: The End of the Roman Military

68. Suetonius, *Lives of the Twelve Caesars*, published as *The Twelve Caesars*, trans. Robert Graves, rev. Michael Grant. New York: Penguin Books, 1979, p. 65.
69. For many years to come, there-

fore, the Roman army operated with twenty-five instead of twenty-eight legions.

70. Stewart Perowne, *The End of the Roman World*. New York: Thomas Y. Crowell, 1966, p. 21.
71. Ferrill, *The Fall of the Roman Empire*, p. 50.

## Glossary

**aerarii:** Bronze workers.

**agger:** A defensive mound raised around the perimeter of a Roman army camp.

**agrimensores:** Surveyors.

**alae sociorum:** "Wings of allies"; in Rome's republican army, legions and other units composed of noncitizen allies.

**aquila:** "Eagle"; Rome's chief identifying symbol; also, a silver eagle used as the symbol for an army legion.

**aquilifer:** A soldier who bore his legion's *aquila* and other standards.

**as (plural, asses):** A copper coin worth one-fourth of a *sestertius*.

**augurs:** Soothsayers who read omens (supernatural signs) that supposedly existed in natural phenomena such as the flight patterns of birds and the changing shapes of clouds and flames.

**aureus:** The most valuable Roman coin, composed of about one-quarter ounce of gold.

**auxilia:** Military forces consisting of noncitizens recruited from the provinces that supplemented the regular Roman legions.

**beneficarii (or officia):** Head clerks and assistants on the staffs of senior army or naval officers.

**berm:** In a fort, castle, or defensive fortification, the space between the moat and the outer wall.

**burgi (singular, burgus):** Freestanding watch-towers placed at intervals between forts in Rome's later frontier defensive systems.

**carpentarii:** Carpenters.

**centuries:** Small units within a Roman legion, at first containing one hundred men each and later containing eighty men each; a naval century consisted of the crew of one warship.

**circumvallation:** A basic siege technique of surrounding a town or fortress with troops and fortifications so that none of the besieged can escape and no one can get in to reinforce or supply them.

**cohort (cohors):** A unit of a Roman army legion, usually consisting of about five hundred men, used in the late Republic and thereafter.

**cohortes urbanae:** "Urban cohorts"; Rome's police force, instituted by the emperor Augustus.

**comes:** "Count"; in the Later Empire, the commander of a detachment of a mobile army.

**comitatenses:** In the Later Empire, mobile armies stationed in towns.

**comitatus:** In the Later Empire, the emperor's traveling court.

**consul:** In the Roman Republic, one of two jointly serving elected chief government administrators who also commanded the armies; their office was the consulship and matters pertaining to it or them were termed consular.

**contubernium (plural, contubernia):** An army platoon composed of eight men who shared the same tent and traveled and ate together.

**corvus:** "Crow" or "raven"; a naval warfare device consisting of a wooden gangway with a spike protruding from the end, which stood upright on a Roman deck until dropped onto an enemy deck; the spike penetrated the deck and held the ships together while Roman soldiers ran across and boarded the other vessel.

**cuirass:** Chest armor.

**decimation:** A Roman military punishment in which one-tenth of the members of a unit of soldiers convicted of cowardice were chosen by lot and executed.

**denarius (plural, denarii):** A silver coin worth one-twenty-fifth of an *aureas*.

**dilectus:** Method of recruiting soldiers (either conscription or voluntary enlistment).

**donatives:** Bonuses or bounties consisting of booty or cash payments, given by a Roman commander to his troops.

**dux (plural, duces):** "Duke"; in the Later Empire, the commander of a frontier army.

**equites:** "Knights"; Roman businessmen and other well-to-do individuals who made up a non-land-based aristocracy second in prestige only to the landowning patricians; also, the cavalrymen drawn from this class.

**evocatus:** An off-duty soldier who could be recalled at any time to fill out his term of service.

**extraordinarii:** During the Republic, elite troops of the forces supplied by Rome's Italian allies.

**fabrica:** Workshops in a Roman army camp.

**ferrarii:** Blacksmiths.

**forum:** A city's main square, used for public gatherings and as a marketplace; also, the marketplace of a Roman army camp.

**fossa:** A defensive ditch dug around the perimeter of a Roman army camp.

**fustuarium:** A form of Roman military execution in which the condemned man was beaten to death by other soldiers.

**garrison:** A group of soldiers manning a fort or other installation.

**gladius:** The short sword wielded by Roman soldiers.

**gradus deiectio:** A Roman military punishment of reduction in rank.

**groma:** A surveying instrument used for sighting and measuring large areas.

**gubernator:** A Roman naval officer in charge of a ship's steersmen.

**harpax:** A grapnel (hook) hurled at an enemy ship by a catapult mounted on the deck of a Roman ship; the object was to hold fast the other ship so that it could be boarded.

**hastati:** In Rome's mid-republican army, young soldiers who fought in the first line of infantry.

**hoplite:** A heavily armored infantry soldier who fought in the phalanx formation.

**horrea:** The granaries or food stores of a Roman army camp or base.

**imaginifer:** The soldier in a Roman legion who carried a portrait of the emperor.

**imago:** A lifelike mask or painting of a person; in a Roman imperial army legion, a soldier carried an *imago* of the emperor as one of the legion's standards.

**immunis (plural, immunes):** A soldier who was excused (and therefore immune) from normal daily military duties because he possessed a special skill.

**intervalium:** In a Roman army camp, the open space between the stockade and the outer rows of tents.

**lapidarii:** Stonemasons.

**legatus:** "Legate"; in the mid-to-late Republic, an officer in command of one or more legions.

**legatus legionis:** "Legionary legate"; from Augustus's time on, a military officer in command of a single legion.

**legion:** An army battalion, consisting at first of about three thousand men, then about forty-two hundred, and later about five thousand or more.

**legionary:** An ordinary Roman soldier.

**librarii:** Clerks.

**Liburnians (liburnae):** Small, fast, highly maneuverable warships used by the Romans, especially in their provincial fleets.

**limes:** Frontier zones or borders.

**limitanei:** In the Later Empire, troops stationed on the frontiers.

**litter commendaticius:** A letter of introduction or recommendation.

**magister equitum:** "Master of cavalry"; in the Later Empire, the commander of the horsemen of a mobile army.

**magister peditum:** "Master of infantry"; in the Later Empire, the commander of the foot soldiers of a mobile army.

**maniple:** A tactical fighting unit, usually consisting of about 120 men, used in Rome's early and mid-republican armies.

**manipular tactic:** A basic combination of battlefield maneuvers in which the Roman maniples formed lines, each of which engaged in a separate charge against the enemy.

**mare nostrum:** "Our sea"; an informal term used by the Romans to describe the Mediterranean Sea after they had gained control of all of its lands and peoples.

**medici:** Orderlies or doctors.

**navarch:** The commander of a Roman naval squadron.

**oligarchy:** A government controlled by a small elite group of individuals.

**optio:** A Roman army sergeant who was second in command to a centurion.

**panoply:** A soldier's complete array of armor and weapons.

**patricians:** Landowners who made up Rome's wealthiest and most privileged class.

**Pax Romana:** "Roman Peace"; the highly peaceful and prosperous era initiated by Augustus, lasting from about 30 B.C. to about A.D. 180.

**phalanx:** A battle formation introduced by the Greeks and adopted by the early Romans; ranks (lines) of infantry soldiers stood one behind the other, their upraised shields and thrusting spears creating a formidable barrier.

**pilum:** A throwing spear (javelin).

**portcullis:** A heavy door made of wood and iron; raised and lowered by ropes and winches, it protected the gate of a fortress or wall.

**praefectus castrorum:** "Camp prefect"; the Roman army officer who laid out a base or an encampment and maintained order and essential services within it.

**praetores:** In the Republic, government officials who managed the legal system and also administered the city when the consuls were away; a *praetor* could also command an army in a consul's stead.

**praetorium:** In a Roman army camp, the consul's or general's quarters.

**primi ordines:** Senior-ranking centurions in a Roman legion.

**primus pilus:** "First spear"; the highest ranking centurion in a Roman legion.

**principales:** Noncommissioned or junior officers in the Roman army.

**principes:** In Rome's mid-republican army, soldiers in the prime of their life, who fought in the second line of infantry.

**principia:** In a Roman imperial army camp, the operations center, generally situated in the center of the camp.

**probatio:** The initial interview and physical examination undergone by a military recruit.

**quaestor:** During the Republic, a public official in charge of financial matters; in a Roman army camp, his office was called the *quaestorium*.

**quincunx:** The pattern of dots displayed for the number five on a dice cube; also used to describe the checkerboard arrangement of the Roman maniples on the battlefield during republican times.

**quinquereme:** A warship likely having three banks of oars, with two men to an oar in the upper two banks and one man to an oar in the lowest bank.

**sagittarii:** Arrow makers.

**scallum:** A shrine containing a Roman legion's standards, usually located within the central administrative center of an army camp or base.

**scholae:** In the Later Empire, cavalry forces guarding the emperor's traveling court.

**scutum:** A Roman soldier's originally oval and later rectangular shield.

**Senate:** The Roman legislative branch, made up of well-to-do aristocrats; it directed foreign policy, advised the consuls, and in general controlled the state during the Republic.

**sestertius (plural, sestertii):** A silver or bronze coin originally equal to 2.5 *asses* and later 4; also one-fourth of a *denarius*.

**signifer:** A soldier who bore his century's standards.

**socii:** Rome's noncitizen Italian allies during the Republic.

**standards:** The emblems, flags, or colors of an army or army unit, usually raised on a pole as a rallying point for the soldiers.

**stelae:** Inscribed stone markers.

**stipendium:** A soldier's pay.

**tesserarius:** A type of low-ranking sergeant who made sure the Roman legionaries were doing their jobs.

**trarii:** In Rome's mid-republican army, older veterans who fought in the third line of infantry.

**tribune (tribunus):** "Tribal officer"; one of the six elected officers who ran an army legion; they ranked below a legate but above a centurion.

**trierarch:** The captain of a Roman warship.  
**trireme:** A warship having three banks of oars, with one man to each oar.  
**tubarii:** Trumpet makers.  
**valitudinarium:** The hospital in a Roman army camp.  
**velarii:** Roman seamen skilled at raising and lowering a ship's sails.  
**velites:** In Rome's mid-republican army, light-armed skirmishers who threw javelins at the enemy and then retreated behind the infantry.

**veterinarii:** Veterinarians; their facility within a Roman army camp was the *veterinarium*.  
**vexillationes:** In the Later Empire, cavalry units stationed at frontier forts.  
**via praetoria:** In a Roman army camp, a major street running at a right angle to the *via principalis*.  
**via principalis:** In a Roman army camp, the main street, running in front of the commander's quarters.  
**vigiles:** Firefighters introduced by Augustus for the city of Rome.

## For Further Reading

Isaac Asimov, *The Roman Empire*. Boston: Houghton Mifflin, 1967. A fine, clearly written general overview of the main events of the Empire.

F. R. Cowell, *Life in Ancient Rome*. New York: G. P. Putnam's Sons, 1961. A useful, easy-to-read synopsis of how the Romans lived: their government, homes, streets, pastimes, foods, religion, slaves, marriage customs, and more.

Jill Hughes, *Imperial Rome*. New York: Gloucester Press, 1985. This nicely illustrated introduction to the Roman Empire is aimed at basic readers.

Anthony Marks and Graham Tingay, *The Romans*. London: Usborne, 1990. An excellent summary of the main aspects of Roman history, life, and arts, supported by hundreds of beautiful and accurate drawings reconstructing Roman times. Aimed at basic readers but highly recommended for anyone interested in Roman civilization.

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Lucent Books, 1998; *Rulers of Ancient Rome*. San Diego: Lucent Books, 1999; *Games of Ancient Rome*. San Diego: Lucent Books, 2000. These concise but detailed overviews of Roman history, institutions, and important leaders and other figures provide a useful background for an introductory study of the development and exploits of the Roman army.

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which includes detailed and vivid descriptions of the sieges of Jerusalem and Masada, as well as other episodes.

Naphtali Lewis and Meyer Reinhold, eds., *Roman Civilization, Sourcebook I: The Republic* and *Roman Civilization, Sourcebook II: The Empire*. Both New York: Harper and Row, 1966. Huge, comprehensive collections of original Roman documents from the founding of the city to its fall, including inscriptions, papyri, and government edicts, as well as formal writings by authors ranging from Livy to Cicero to St. Augustine. Also contains much useful commentary.

Livy, *The History of Rome from Its Foundation*. Books 1-5 published as *Livy: The Early History of Rome*. Trans. Aubrey de Sélincourt. New York: Penguin Books, 1971; books 21-30 published as *Livy: The War with Hannibal*. Trans. Aubrey de Sélincourt. New York: Penguin Books, 1972; books 31-45 published as *Livy: Rome and the Mediterranean*. Trans. Henry Bettenson. New York: Penguin Books, 1976. Excellent translations of these parts of Livy's massive and masterful history, written during Rome's golden literary age of the late first century B.C.

Plutarch, *Fall of the Roman Republic: Six Parallel Lives* excerpted in *Lives by Plutarch*. Trans. Rex Warner. New York: Penguin Books, 1972; and *Makers of Rome: Nine Lives by Plutarch*. Trans. Ian Scott-Kilvert. New York: Penguin Books, 1965. We are indebted to Plutarch, a Greek who lived and wrote in the late first and early second centuries A.D., for his biographies of ancient Greek and Roman figures, which contain much valuable information that would

otherwise be lost. His lives of Antony, Caesar, Marius, Sulla, Pompey, Crassus, Cicero, and Brutus contain much information about various Roman military campaigns and battles during the first century B.C.

Polybius, *The Histories*. Trans. Ian Scott-Kilvert. New York: Penguin Books, 1979. This Greek historian's work is valuable for its often comprehensive coverage of the wars the Romans fought against Carthage and the Greek kingdoms of the eastern Mediterranean during the third and second centuries B.C. His detailed comparison of the Greek and Roman military systems is priceless.

Suetonius, *Lives of the Twelve Caesars*, published as *The Twelve Caesars*. Trans. Robert Graves, rev. Michael Grant. New York: Penguin Books, 1979. Suetonius's biographies of Caesar and Augustus contain much valuable information relating to the armies that took part in the first-century-B.C. civil wars and collapse of the Roman Republic.

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Peter Connolly, *Greece and Rome at War*. London: Macdonald, 1998. A highly informative and useful volume by one of the finest historians of ancient military affairs. Connolly, whose stunning paintings adorn this and his other books, is also the foremost modern illustrator of the ancient world. Highly recommended.

Arther Ferrill *The Fall of the Roman Empire: The Military Explanation*. New York: Thames and Hudson, 1986. In this excellent work, written in a straightforward style, Ferrill supports the position that Rome fell mainly because its army grew increasingly less disciplined and formidable in the Empire's last two centuries, while at the same time the overall defensive strategy of the emperors was ill conceived.

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Michael Simkins, *The Roman Army from Caesar to Trajan: An Illustrated Military History of the Roman Legions*. London: Osprey, 1984. The weapons, uniforms, camps, and battle tactics of Roman soldiers during the early Empire are highlighted in this nicely illustrated volume.

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scholarly volume examines the gradual, nearly three-century-long, decline of the Roman army, beginning with the events of the "century of crisis" (the third century B.C.). Included are illuminating sections on weapons factories, fortifications, siege warfare, and troop morale.

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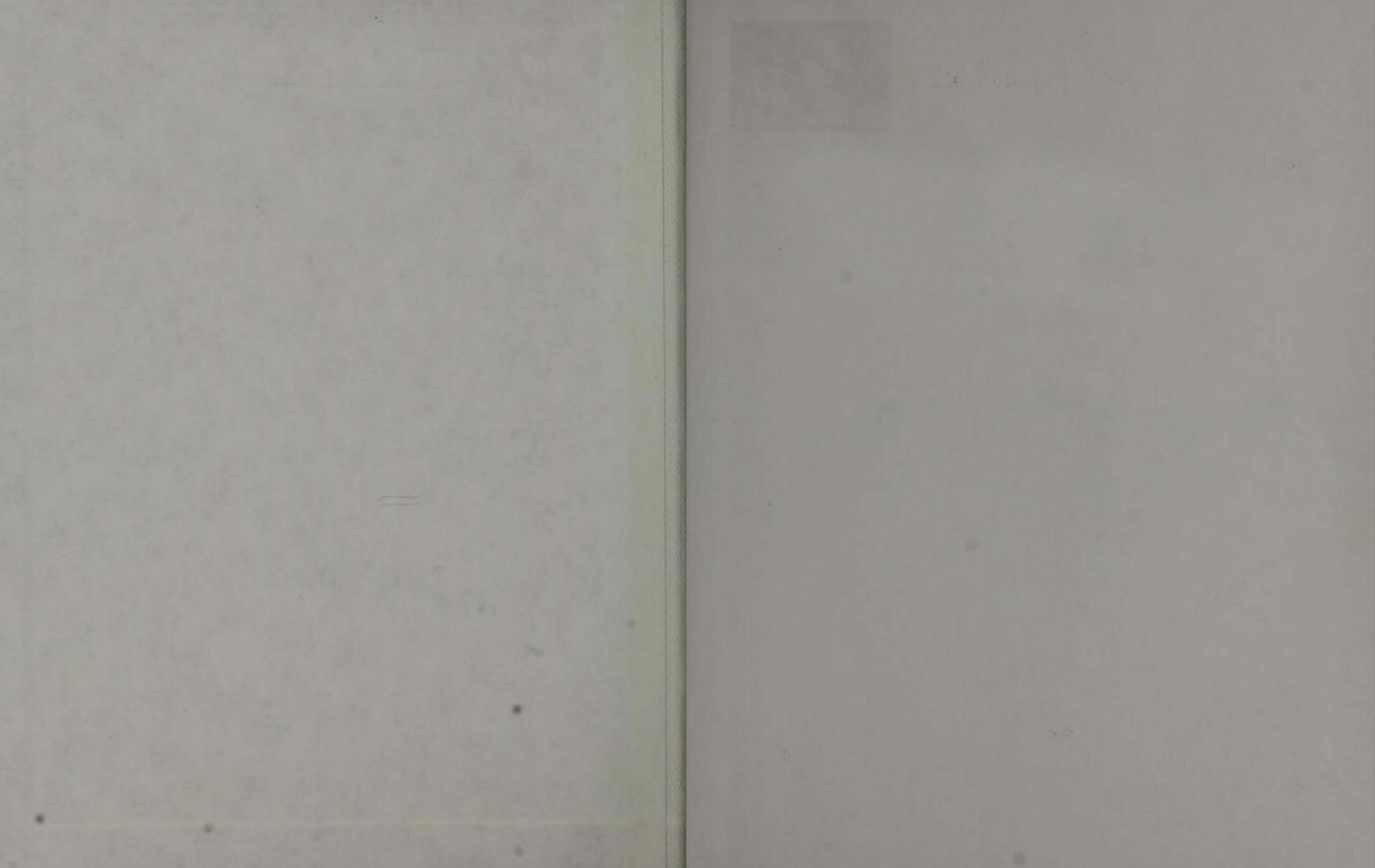
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## About the Author

Historian Don Nardo has written numerous volumes about the ancient Greek and Roman world, including *Life in Ancient Athens*, *Greek and Roman Sport*, and *Life of a Roman Slave*. He is also the editor of literary companions to the works of Homer and Sophocles and Greenhaven's *Complete History of Ancient Greece*, a massive compendium of information on Greek history and culture. He resides with his wife, Christine, in Massachusetts.



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