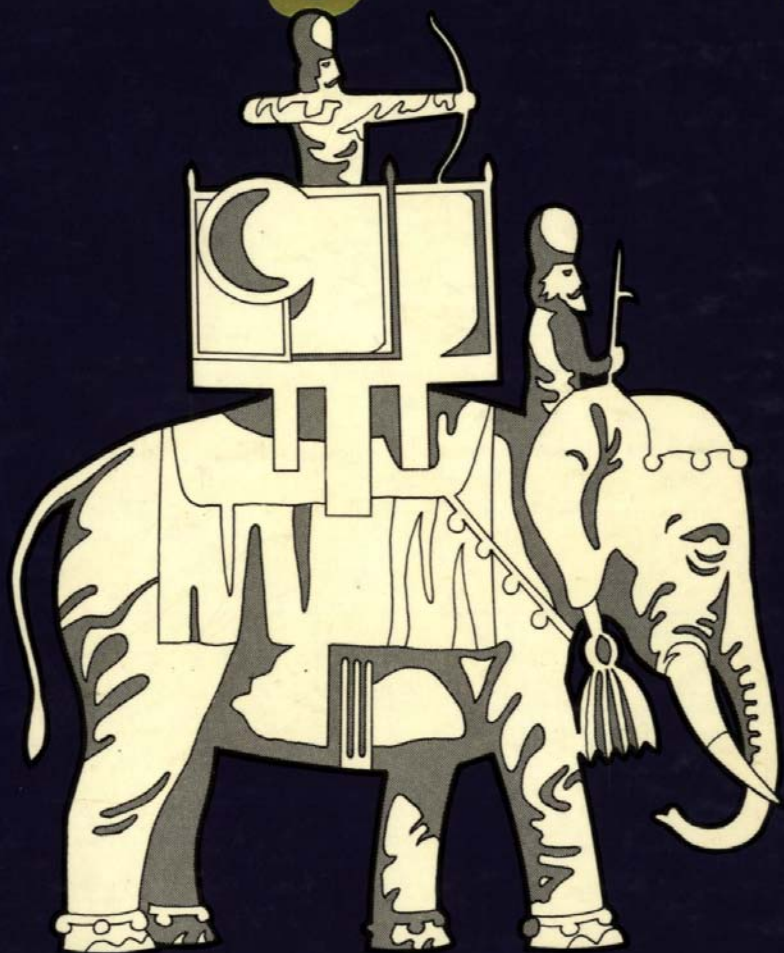


**AIRFIX**  
magazine guide 9

# Ancient Wargaming



**Phil Barker**

**AIRFIX**  
magazine guide 9

# Ancient Wargaming

Phil Barker

Patrick Stephens Ltd  
in association with Airfix Products Ltd



© Copyright 1975  
Patrick Stephens Ltd

All rights reserved

No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Patrick Stephens Ltd

First published — September 1975

ISBN 0 85059 212 7

Cover design by Ian Heath

Text set in 8 on 9 pt Helvetica Medium  
by Blackfriars Press Limited,  
Leicester.  
Printed on Fineblade cartridge 90 gsm  
and bound by The Garden City Press  
Limited, Letchworth, Herts.  
Published by Patrick Stephens  
Limited, Bar Hill, Cambridge CB3  
8EL, in association with Airfix  
Products Limited, London SW18.

### Don't forget these other Airfix Magazine Guides!

- No 1 *Plastic Modelling*  
by Gerald Scarborough
- No 2 *Aircraft Modelling*  
by Bryan Philpott
- No 3 *Military Modelling*  
by Gerald Scarborough
- No 4 *Napoleonic Wargaming*  
by Bruce Quarrie
- No 5 *Tank & AFV Modelling*  
by Gerald Scarborough
- No 6 *RAF Fighters of World War 2*  
by Alan W. Hall
- No 7 *Warship Modelling*  
by Peter Hodges
- No 8 *German Tanks of World War 2*  
by Terry Gander and Peter  
Chamberlain
- No 10 *Luftwaffe Camouflage of  
World War 2*  
by Bryan Philpott

## Contents

Editor's introduction	4
one Troop types, weapons and equipment	5
two Formations and drill	17
three Tactical precepts	20
four How ancient wargaming began	25
five The Wargames Research Group rules	28
six Choosing your army	33
seven Raising an army	45
eight Tactics on the wargames table	52
nine Wargames campaigns, reconstructions and fantasy gaming	62
Bibliography	64

## Editor's introduction

Europe, and the Mediterranean area in particular, was the birthplace of modern Western civilisation, thanks to the interaction of many different cultures in a limited geographical area. But wherever different cultures meet, historically, sooner or later they have to fight in order to determine the dominance of one over the other. Hence the Mediterranean also became the arena for the greatest battles of ancient history.

Greeks, Romans, Carthaginians, Egyptians, Persians and others all vied, at the same or different times, for power over what was then the entire world, and the multiplicity of different

nationalities, together with the colourful nature of their costumes and armour and the relative simplicity of the weapons employed, makes the ancient period a fascinating, popular and rewarding one for the wargamer.

In this book, Phil Barker — a founder member of the Wargames Research Group, whose Ancient Rules have now become accepted as a national standard and are used by all serious wargamers specialising in this period — sets out to introduce the fascinations of the period to the novice ancient wargamer. He describes not only the troop types, weapons and tactics of the period, but also shows how to begin amassing armies of wargames figures which are balanced in their composition, and how to use these same armies to win ancient battles on the tabletop using the WRG set of rules.

The book will also therefore be invaluable to wargamers who already have an army or armies from the period, but would like to know in more detail how to organise them, as well as those who, despite long association with the period, still succeed in losing most of their games.

BRUCE QUARRIE

## Troop types, weapons and equipment

The earliest of the many ancient military manuals to come down to us is that of Asclepiodotus, probably written about 50 BC, but based on earlier works by Poseidonius and others. It therefore comes at the end of the Hellenistic military era and at the start of the Roman. That it kept its interest is shown by its paraphrasing by Aelian in the time of the Emperor Trajan, and by Arrian under Hadrian. Its main use to us at this point lies in its preliminary list of troop type definitions.

Troops are first divided into those who fight on foot, and those who fight mounted. Foot are divided into *Hoplites*, *Peltastes*, and *Psiloi*. *Hoplites* were intended to fight at close quarters, and formed up in close order. *Psiloi* fought at a distance with missiles, and formed up in a loose skirmishing order. *Peltastes* formed a compromise class, capable either of skirmishing or of close combat, but, like most compromises, being inferior to the specialists in each. However, they could fight better in rough terrain than the *Hoplites* and move faster, and so made useful supports for, or defences against, *Psiloi*.

Mounted troops are divided into the majority who rode horses, and those who rode in chariots or on elephants. To these we can now add camel riders, whom Asclepiodotus either did not know of or forgot. Horsemen are divided into *Cataphractoi*, fighting only at close quarters with both man and horse heavily armoured, *Akrobo-listae* who fight at a distance with missiles, and *Elaphroi* who form the same sort of compromise for cavalry

one

as do *Peltastes* for infantry.

It is convenient to use these various classes, which we still encounter as late as the Byzantine manuals of the 10th century AD, as a basis for discussing weapons and equipment.

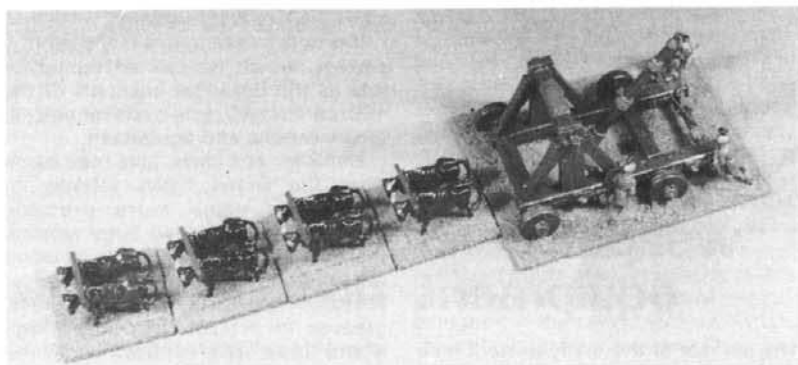
*Hoplites*, as a class, take their name from the Greek heavy infantry to whom the name more properly belongs. These carried large shields, three feet in diameter, made of wood but often faced with a thin layer of bronze. They wore bronze helmets, greaves to protect their lower legs where these were exposed under the shield, and to start with, body armour for the torso of bronze plate. They were armed with a long spear, held in one hand, and usually thrust over arm, so as to avoid being obstructed by the soldier's, or his neighbour's, shield. This spear was very rarely thrown, but at first some *Hoplites* also carried a light javelin to be thrown before contact. A short sword completed the average man's outfit. Little reliance was placed on this, it being a 'last ditch' weapon for use if the spear was broken. Even so, the bronze ferrule of the spear butt was often preferred! Rich citizens might also have pieces of bronze armour to cover the upper arm and thigh.

Thin bronze plate does not provide very good protection relative to its weight, and the shield was in any case the main defence. It is not therefore surprising that first the extra arm and

*Hinchliffe Sassanid Persian elephant (John Westwood).*







Late Roman Onager by Hinchliffe, with converted Minifigs crew and Minifigs animals, seen 'limbered' and 'unlimbered'.

thigh defences were abandoned, the javelin also going about the same time, and then the plate corslet was replaced by a more effective type. This was of leather, with metal scales sewn in it, and was in use at the time of the great Persian wars.

Later still, the metal corslet was largely abandoned in favour of the *spolas*, which has been explained both as a corslet made of layers of canvas glued together, and as a thigh-length quilted jacket. Either of these would be much lighter and cheaper than bronze, while still providing reasonable protection against a cutting blow, if less so against the point of an arrow or spear.

The next development came from Macedonia, where King Philip, possibly inspired by earlier reforms by a mercenary leader named Iphicrates, introduced a much longer spear. This

was initially ten cubits long. Ten cubits is equivalent to 15 feet. A scholar named Tarn did not believe such a length to be practical, and invented a short 'Macedonian cubit' to bring the length down. This was quickly recognised as arrant nonsense, but one still finds the shorter length mentioned by modern authors who have not taken their research further back than the 19th Century.

Such weapons must be held with two hands, and are called pikes. Their big advantage is that, when formed in close order, an attacking enemy is faced by a succession of rows of pike points, projecting up to 12 feet, before he can get to grips with their wielders. They have two corresponding disadvantages. The first is that a pikeman not supported by colleagues is easy meat for a swordsman who can dodge past or ward off his single point, while

a body of pikemen in disorder could get into a most unholy mess with their long cumbersome weapons. Pikemen are therefore not suited to difficult terrain where the ranks must be opened out if disorder is not to ensue. The second is that a man who needs both hands for his weapon cannot handle his shield very effectively. This had to be reduced to two feet in diameter and strapped to the forearm instead of the forearm being passed through a loop at the centre of the shield so that the hand could grasp a grip at the rim, as with earlier shields. Having both a smaller shield, and less freedom to move it, the pikeman is very vulnerable to missiles.

Because they depended so heavily on being in close formation, pikemen became known as *phalangites*, from the *phalanx* formation. The first phalangites wore the *spolas*, but it became recognised that more protection was needed due to the decreased effectiveness of the shield. Those of Alexander the Great's successor kings therefore reverted to metal corslets, at the same time increasing their pike length to up to 18 feet. Such phalangites could bear down any other troops they met if they could retain formation.

The pike phalanx did not spread over the entire ancient world, the Carthaginians of North Africa, for example, retaining the long spear. Such spears can be up to 12 feet long, and still be capable of being wielded in one hand. However, as they must be grasped at the point of balance to be thrust overarm, they do not outreach swords by any great margin. As many of the less civilised nations of the west made great use of swords, there was therefore some reason to make the spear shorter and handier so that it could be thrown with effect just before contact, and then followed with the sword. This approach was adopted by the Carthaginians' main rivals in the area, the Roman republic.

Having decided on a combination of thrown spear followed by the sword, the Romans took this to its logical extreme. Their throwing spear, the

*pilum*, was made very heavy, with a very high proportion of iron to wood. This reduced its range when thrown, but gave it great armour penetration when hurled at short range. If caught on a shield, it would hang in it and weigh it down, making the owner effectively shieldless until he managed to remove it. If missed, and not dodged, it would penetrate practically any body armour. It was thus essential to reserve its use for very close range, immediately before contact, if the full effect was to be gained. It can therefore be classed as a close combat rather than a missile weapon.

The *pilum* could also be retained in the hand and thrust to hold off cavalry, though it was much less suited to this than a conventional spear. Steady troops would instead fling it at the horse to bring the rider down at their feet, but this called for good nerves and excellent timing.

The other half of the partnership was not neglected, and each Roman soldier was taught to fence with the sword, making use of both point and edge. His shield was grasped by a single grip behind the central iron boss, and this made it possible for him to use it offensively, punching the boss into his opponent's face, then stabbing him in the abdomen with an underarm action. However, the Roman *gladius* was not the pure stabbing sword that is often suggested. It is, in fact, nicely balanced for cutting, and archaeologists have found many skeletons of Roman enemies that demonstrate such use.

The Roman shield was fairly large in area, and at different times either oval or semi-cylindrical in shape. It was called a *scutum*. The legionary also wore an iron or bronze helmet, and the better equipped had a mail corslet made of interlocking iron rings. This was an expensive armour to produce, but the freedom of movement it allowed was especially valuable to a swordsman. The poorer soldier under the republic, and those enlisting during the civil wars when immense armies were overstraining the muni-

tions industry and the taxpayer, made do with rawhide armour.

In their wars, the early Romans demonstrated that the combination of pilum and gladius had a slight edge over the long thrusting spear. Against the pike phalanx, the issue was more doubtful. If the phalanx could be tempted into unsuitable terrain, or if it could be disordered by dreadful volleys of pila, the Romans won. If not, they lost. In either case, casualties would be heavy on both sides. As the pike phalanx disappeared, and the Roman method for a time became standard, the latter *could* be judged to be superior, but it is worthy of note that the Roman legions never had to meet a phalanx led by an Alexander!

Having disposed of all their civilised opponents, the Romans turned their eyes to the barbarians. The first reason to modify their equipment was given them by the Parthians, whose arrows proved capable of penetrating mail at close range. In answer to this, the Romans adopted the well-known *lorica segmentata*, a laminated armour of steel plates designed to slide over each other to provide freedom of movement.

Elsewhere, the problem was different. The heavily armoured legionary was finding fewer customers, being unsuitable for chasing lightly clad barbarians over the hills. The pilum was increasingly supplemented by lighter throwing weapons with which they could hit back at ambushers or raiders before these could scurry away.

From the 3rd Century onwards, the Roman empire was in danger from greatly increased numbers of barbarian tribes beyond its borders, who now formed not just raiding bands but armies of invasion. The Roman army had to be almost doubled in size, putting a greatly increased load on the munition industry at a time when cavalry were needing more and more armour. There was only a certain amount of metal armour to go round, and so we find the legionary wearing a moulded rawhide cuirass. Rawhide is tough, though more effective against a

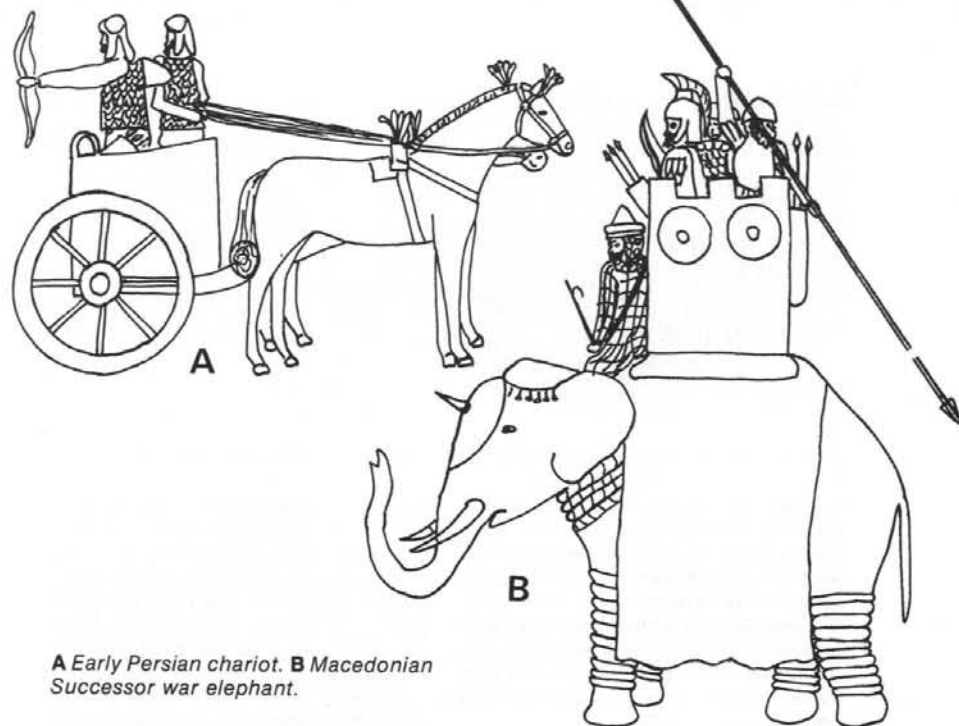
cut than a thrust, is relatively light, and reasonably cheap. It is, however, less flexible than segmentata or mail, and this possibly explains why we find the gladius being replaced by a longer thrusting sword, the *spatha*, previously used by only cavalry and light troops.

The barbarians used little armour, except in the east, where heavily armoured Sassanid cavalry were the main worry, and so the change to longer-ranged light throwing weapons continued. One variety called *martio-barbuli* were short lead weighted darts, five of which were kept in the hollow of the legionary's big oval shield, and thrown as he charged. More conventional throwing spears and javelins were used as well.

There is some evidence that long thrusting spears were adopted for use against the Gothic cavalry of the Danube region and the Sassanids, but the most successful tactic against the latter was found to be to dive under the horseman's lance as he charged and stab up at his horse's unarmoured belly with the sword. The Emperor Julian had learned this trick from the Germans who employed it against his own cataphract cavalry at the Battle of Argentoratum in 368 AD, and had taken it with him on his Persian expedition.

A more conservative approach was used by the Byzantine empire, into which the surviving half of the Roman Empire developed after the extinction of the western half. They used mailed infantry equipped with long thrusting spears to keep off enemy cavalry, and relied on swords and short one-handed axes to deal with infantry, first hurling their clumsy spears at the enemy to get rid of them.

The only other infantry coming into our first class before the ancient period turns into medieval are exemplified by the Saxon housecarles of the Bayeux tapestry. These wear long mail coats, and carry long heavy axes to be swung with both hands. Such weapons could smash through any armour, but the user, needing both hands for his weapon, could not use a



A Early Persian chariot. B Macedonian Successor war elephant.

shield at the same time. He therefore relied very heavily on his armour for protection, and could be especially vulnerable to longer weapons than his own.

Psiloi could be armed with bows, crossbows, slings or staff slings, or javelins. They did not wear armour, but occasionally carried a small round parrying shield, hung at their belt when not in use. To a man in open order, such a shield can be as useful as a much larger one, because he can move it around freely to catch a blow or missile, unencumbered by his companions when he dodges.

To begin with, the most important of the various possible weapons was the javelin. The exact distance to which a military javelin can be hurled effectively is not precisely known. These were mostly considerably lighter than the javelins used in modern athletics, but of inferior aerodynamic form. More important, a modern javelin gets a considerable proportion of its range from acceleration during a preliminary run, which would be impractical for a man having to maintain his place in

the ranks of even a loose formation. Even having arrived at a figure for maximum range, this must then be adjusted for effective range.

Effective range is defined as that at which the results obtainable justify the expenditure of ammunition. Javelins, being relatively bulky, are likely to be used more sparingly than some other missiles of which a greater stock can be carried. Other factors affecting effective range are accuracy, the possibility of the target soldier dodging, or intercepting the missile with his shield, and the probability of defeating any armour he may be wearing. All these depend on the remaining velocity of the missile to a greater or lesser extent. Javelin effective range in the hands of an average soldier is presently estimated at about 40 paces, but there are indications that this may be over-conservative, and that it might be as much as 60 paces. More research is needed on this.

The mechanics and ballistics of archery are much better understood, and we not only have much modern experience to build on, but also a



Minifigs Indian chariot modified for four horses and six men (Sue Barker).

number of medieval Arab archery manuals incorporating earlier work dating back to the Sassanids. However, for foot archers, our best source for effective ranges is in a manual by the late Roman writer Vegetius, who tells us that Roman archers in his day practised at targets set up 600 feet away, which is equivalent to 240 paces.

Lower ranges are quoted by Byzantine and Arab sources for horsed archery, but this is probably due to the reduced accuracy of shooting from a moving animal. This will be more fully discussed later.

The suggestion is often made that bows varied widely in power, the English longbow, Turkish composite bow and Indian bow all being favoured as especially effective. Unfortunately, all the evidence lies in the opposite direction. A bow is a machine for storing energy that is put into it gradually by the human body during the draw, and then releasing it suddenly to accelerate the arrow away. To judge a bow by the draw weight, that is, by the amount of energy that can be stored in it, ignores the fact that the energy not only has to accelerate the arrow, but also return the string and the arms of the bow to their original position. Some forms of bow absorb less energy in doing so than others, and the eastern composite bow is quite good in this respect, cunningly combining in its construction sinew, which resists in tension, and horn, which

resists in compression, as well as wood. This is often contrasted with the crude self bow, made only of wood, and hence less efficient. Unfortunately for this argument, most self bows are also composite, combining heart wood and sap wood to produce similar effects.

Replicas have been made of self bows from iron age, Roman period, and English late medieval archaeological contexts. These have proved to have a similar performance to the composite bows listed in the Arab sources. The conclusion must be, that as stated by the Arabs, a man should provide himself with a bow suitable to his own strength, and that any variation in design efficiency merely varies the size of the bow that is suitable. A medieval English archer would then have a six foot longbow, his Arab opposite a four foot composite bow, but both would produce the same effect at the target.

It is often suggested that ancient archers were mighty men, trained from boyhood to produce performances beyond those of today's experts. I don't think that this can hold water. It presupposes that the average archer of yesterday was markedly better than the best of today. There is certainly nothing about the draw weights of the archaeological replicas or the bows listed by the Arabs to suggest this.

One advantage of the bow is its usefulness for what a modern artiller-

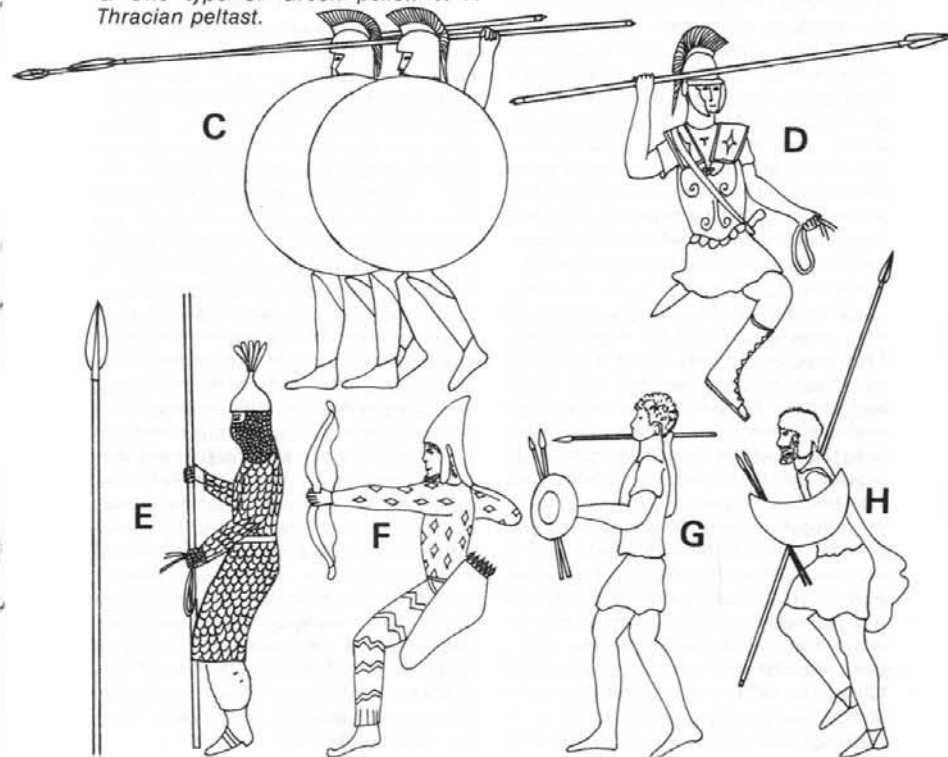
man would call 'upper register fire', pointing it up at an elevation between 45 and 90 degrees, so as to clear intervening objects or men and fall steeply behind them. The possibility of this has been recently queried, which is somewhat surprising as the technique is fully described by the Arabs, will be familiar to every schoolboy who has ever heard of 1066, and was still being reported by British soldiers in the 19th Century!

How close such arrows could be dropped to one's own front rank is a more open question, but the Arab writers seem happy that men could be taught to do so within ten paces. Of course, there being neither radios or

forward observers in those days, true indirect shooting would be impossible, and there must have been some indication to the shooter of the target that he could see from his own position, even if only a front rank to just clear.

Shooting rates with a bow are not so much limited by the archer's ability as by his ammunition supply. An average man could certainly shoot ten times in a minute, but with a quiver containing, at the most, 50 arrows, he would not do so for very long. Most shooting appears to have been much more deliberate, often in volleys at word of command. Resupply seems to have been rarely attempted. I can think of only one occasion on which fresh arrows were brought up on pack animals, and another two where foraging for spent enemy arrows is mentioned. Possibly this was because an archer's arm gets tired after 50 shots

**C** Greek hoplites. **D** Early elaphroi: a Macedonian Companion cavalryman. **E** An early type of cataphract cavalryman armed with kontos. **F** Typical akrobolistae: a Scythian horse archer. **G** One type of Greek psiloi. **H** A Thracian peltast.





in quick succession.

Archery does not seem to have had a really decisive effect in any ancient battle, but rather to have demoralised and weakened the enemy until an otherwise insufficient attack at close quarters with hand-to-hand weapons could succeed.

The crossbow is usually thought of as a medieval weapon, but was in fact known from Macedonian times on, first as the *Gastrophetes*, then as the late Roman *Arcubalista*, and then as the Byzantine *Solenarion*. All the sources agree that it outranged ordinary bows by a large margin, and penetrated any armour easily. I estimate its effective range as about 300 paces.

Sling ranges have been the subject of much discussion lately, mainly due to an article in *Scientific American* which quoted two Turkish shepherds slinging missiles of unknown weight to extreme range. This was compared to Vegetius' figure for effective bow range, and much play was also made with extracts from Xenophon's *Anabasis* where various types of bow and sling missile are compared. More properly, the shepherd's achievements should have been compared to the well documented accounts of Turkish bow shots to 800 paces and beyond, which, like them, have little or no military significance.

Another factor often held to affect sling range is the use of specially cast lead shot instead of random stones. This should certainly make it possible to shoot further, as for the same weight, the lead shot will be smaller and smoother, and so produce less drag. However, as lead shot cannot be picked up from the battlefield and stones can, a man using the former is more likely to economise by shooting slower. The difference between a smaller number of efficient projectiles and a larger number of less efficient will probably not amount to much. All in all, I would still estimate the effective range of a hand sling to be about 120 paces. Within this range, it is more dangerous than a bow.

Slings are not capable of shooting

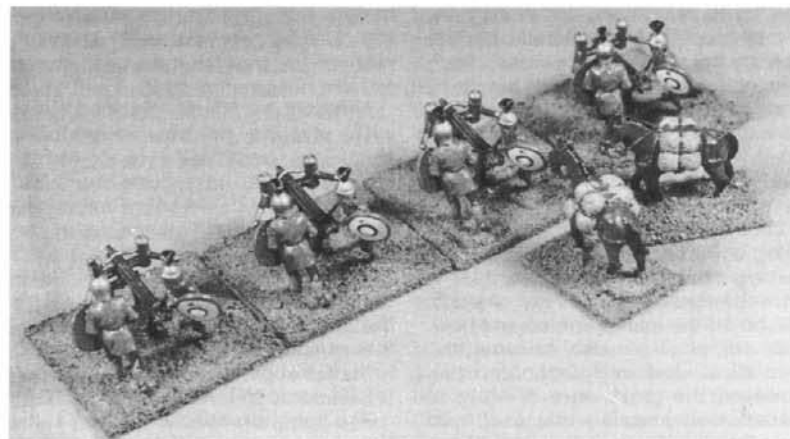
overhead, but have a compensating advantage in that they do not require the continuous use of both hands. It is therefore possible to guard with a small shield against incoming missiles.

The staff sling does need both hands. The extra power provided, plus the extra leverage from its four foot pole, gives it a much better range than the hand sling, and Vegetius gives it the same range as a bow. Its heavier missiles should provide greater hitting power, but the shooting rate might be rather low.

The first troops we hear of described as Peltastes are Thracians. These wild tribesmen from the European side of the Dardanelles were so warlike that it was said that they would conquer the world if they ever got through fighting each other! They never did, but managed to work off their energies in slack periods by enlisting as mercenaries.

They were armed with either a long spear or a bunch of javelins, and carried a shield, usually the small, crescent shaped *pelta*, but sometimes a larger variety. Their most normal side arm was a cutting sword, but we also hear of a mysterious weapon called a *Rhomphaia*. My identification of this with a weapon carried by the related Dacians on Trajan's Column and the monument at Adam-Klissi is not universally accepted, but has won fairly general favour. The Dacian weapon resembles a scythe blade set as a continuation of a four foot haft, and swung with both arms. Its effect would be similar to that of other two-handed cutting weapons such as axes.

Thracians were such a success that other nations took up the Peltastes type. These chiefly differed by having both spear and javelins, and by sometimes wearing the *spolas*. Their shield was usually the light oval *thureos*. Iphicrates in particular made excellent use of the new type, and it was said that Hoplites on occasion refused to face them. The Hypaspistai of the Macedonian army were probably Peltastes, because they were later confused with them.



Late Roman Balistas by Hinchliffe, with converted Minifigs crew and Hinton Hunt animals.

The standard type of Roman auxiliary infantryman under the early empire falls into the Peltastes class. These were armed with a light throwing spear called the *lancea*, lighter javelins, and the *spatha* previously mentioned. Their defensive equipment included a helmet, light oval shield, and at least some of them, possibly all, had a short mail or scale armour corslet. The others may have made do with a leather jerkin. Monumental evidence is quoted as showing that all wear armour, but I would be happier with this if more mail turned up in excavations. The later Roman army had similar troops in its Auxilia Palatina. These wore no armour, and often lacked a helmet, instead relying successfully on their large oval shields. Finally, we find them in the later Byzantine army, wearing helmet and quilted cotton body defence, carrying a small round shield, and primarily armed with a 12 foot spear and light javelins.

Nearly all the troops mentioned so far have been the regulars of civilised nations. The tribesmen of barbarian peoples in fact fit into much the same pattern of type and armament except that certain weapon types were not used, some because they were too

complicated to use, and some because they were too complicated to make. These included pikes, crossbows and staff slings.

Cataphract cavalry of a sort were used by the Achmaenid Persians, Armenians, and Sarmatians, but reached their full development in the Palmyran and late Roman armies. The riders were completely armoured from head to toe, including gloves, shoes, and a metal face mask. Their horses were similarly protected down to the knees. Their main weapon was a 12 foot long spear with a broad heavy head called a *kontos*, this being backed up by a sword, mace or similar weapon.

Such cataphracts were largely invulnerable to arrows, slings, javelins, spears and swords, but could be attacked effectively with crossbows, axes and staff sling missiles. Their weight of armour made them relatively slow moving, and we know of one case when a unit commander's horse collapsed with its exertion, demoralising the unit. Their vision was restricted, and this could have them in trouble if their formation became split up, or if infantry could mingle with them to hamstring the horses.

The earlier varieties I mentioned previously were not quite as completely armoured, the rider's legs and face often being left uncovered, and the horse having either metal protec-

tion for its face, neck and chest only, or more complete non-metallic protection of horn, felt, or rawhide. Such cavalry could gallop, and handle a bow or javelins. The defects of the heavier kind of Cataphractoi led to a great revival of the earlier type, and this revival is first seen in the armies of Sassanid Persia.

The Persian Clibanarii, the name being a Roman pun on the Latin for 'baking-oven', but deriving originally from the Persian 'Grive-Pan', warrior, combined the use of kontos and bow. This combination also became the theoretical ideal in Byzantine armies. However, the great wave of Mohammedan Arab invasion that destroyed their Persian rivals at the start of the 7th Century AD, greatly weakened the Byzantines, who from then on used a largely territorial type army, and found it difficult to equip and train to full pitch. We therefore find their heavy cavalry fighting in five ranks of which only the first have armoured horses, the first, second and last ranks having

*Minifigs Rajah on command elephant, and elephant riders. Other elephants by Britains. Sunshade by Hinchliffe (Sue Barker).*



kontos but no bow, the others having bow but no kontos. The kontos retained its length, but the head seems to have become lighter.

Akrobolistae could be armed either with javelins or bow. Hannibal's Numidians were typical of the former sort, and must have been much like the Numidians depicted in Roman service on Trajan's Column, with no armour or helmet, dressed in a cloth tunic, carrying a small shield and bundle of javelins, and riding small, rough but hardy ponies. The town of Tarentum in southern Italy also specialised in such troops, and came close to giving its name to the type.

The light horse archer is seen at his best in the armies of Parthia, where they were combined with a smaller number of Cataphractoi. These hated close combat, and so could often be kept beyond their most effective range by the threat of charge from other cavalry.

The Byzantines quote a bow shot as being 180 paces, and this is confirmed by the medieval Arab manuals. However, the preferred range is about half that, and a study of the training methods laid down tells us why. These concentrated heavily on snap shots at

very small individual targets in quick succession while moving past them. At longer ranges, area fire techniques would be necessary, much as with infantry archers, or with the Byzantine heavy cavalry, whose front rank were told to shoot at the feet of charging enemy so as to hit them in the chest, but whose rear ranks were to shoot high to drop their shafts steeply.

The later Roman armies often contained a high proportion of light horse archers, but also took the lead in countering them with the so-called 'Illyrian' light cavalry. These comprised the Moors we have already heard of, some ex-legionary cavalry units called Promoti, Scutarii, who had especially large shields, and Dalmatians. Having short range weapons and shields, these had every motive for getting close quickly, and once at short range their shields gave them a tactical as well as a morale advantage over their opponents.

The Elaphroi were by far the most numerous of ancient cavalry. They wore helmets, and sometimes a leather jerkin, but more often a mail or scale armour corslet. After cavalry started using shields in about 300 BC, they would always have these as well. A shield is more difficult to use for a cavalryman, who must control his horse with the same arm, so these took a long time to catch on, but once Alexander's men had come up against shield-using cavalry in India, the benefits could not be denied.

Their weapons could be light javelins, or heavier weapons that could be both thrust and thrown, more usually both. These were backed by a sword or similar sidearm. From the end of the 1st Century AD, Roman cavalry occasionally carried the kontos instead. This gave them the advantage during the initial contact, but they would suffer from the shorter, handier weapons in a continued mêlée if they did not break their opponents immediately.

Modern authors almost invariably state that cavalry were ineffective before the invention of stirrups, which the slightest knowledge of ancient

battle accounts should show to be complete nonsense. Modern trials in which I personally took part established very clearly that the stirrup only became of real advantage when striking a cutting blow downwards with a sword, and that it actually hindered javelin throwing and the sort of all round spear thrusting necessary in a mixed mêlée, confining the rider far too tightly in one position on the horse. A saddle did help at all times, but not to any overwhelming extent.

For interest, we first hear of stirrups in a Byzantine manual of the late 6th Century AD, while saddles were in full use by the Roman army from the start of the 1st Century. They may well have been around earlier. Other harness was much as today, but with the additions of breast strap and crupper. Roman bits differ very little from a modern snaffle.

Chariots came in many shapes and sizes. The Egyptian chariots of 1500 BC had two horses and carried a single archer together with their driver. The Assyrians started off with similar vehicles, but then developed these into a larger version with four horses and two extra fighting men armed with javelins and carrying shields to protect the other crewmen. The Persians and Seleucids used chariots fitted with scythe blades and spear points to charge into and disrupt enemy formations. These were not usually very successful, as the drivers abandoned them before impact, giving the horses time to swerve. The biggest of all chariots were the Indian ones with four horses, two javelin armed drivers, two archers, and two more javelinmen. Ancient British chariots had two horses, a driver, and a single warrior with javelins and sometimes a long spear.

War elephants also varied in total crew. The original Indian ones had a driver and two javelinmen sitting astride, with only a king or general riding in a howdah. Hellenistic elephants had a driver sitting on the beast's neck, and three men in the howdah armed with a pike, javelins and bow, respectively. Sassanid Persian

elephants could have a howdah crew of up to four, all archers.

The weights of the howdahs and crews were well above modern standards for loading elephants, so it is not surprising that the beasts could not be armoured effectively, except possibly for the personal mounts of Indian kings, which would be both unusually strong and be lighter loaded. In practice, elephants were very vulnerable to missiles of all kinds, and were given to panic routs through their own troops, which was hard on the latter's nerves and made the formations look untidy. Drivers were therefore often given a sort of hammer and chisel with which to kill their elephant by driving it through his spinal cord in emergency. This, of course, pre-supposed that the driver was not the first target!

Camels were quite widely used as pack animals, but occasionally were also used as mounts for fighting men. Sometimes this was because they could carry a heavier weight of armour than a horse, sometimes because they tended to frighten horses that were not used to them, but more often because a poor Arab could not afford a horse. The Roman army used them in small numbers for desert patrol.

Camels made a big target, and were slow and clumsy to manoeuvre. An Arab raider would ride his camel leading his horse, then change to the horse when the enemy were sighted

An Arab who lacked a horse usually dismounted to fight.

Last we come to artillery. In the ancient world, this was invariably torsion powered, depending on springs of twisted animal sinew or hair. The standard types were the one cubit *balista*, shooting a heavy 18 inch bolt with high velocity and great accuracy, but capable of being manhandled by two men in emergency, and the much heavier ten mina, thirty mina, one talent, and three talent stone throwers. The ten mina machine was field artillery and shot a ten pound projectile capable of smashing buildings, ships or field defences. The 30 mina engine was too heavy for field work, and too light for battering walls, but useful for counterbattery against hostile engines and siege works. The one and three talent engines were the largest and smallest useful battering engines, and shot stone balls weighing 60 and 180 pounds respectively. The bolt throwers were strictly anti-personnel weapons. All these engines had an effective range in the region of 480 paces, but battering usually had to be carried out at 150 paces or less, to get the benefit of a low trajectory.

This list of types of soldier and their weapons is far from complete, because, after all, we have some 4,000 years of history to cover. However, it should give you some idea of the sort of fighting men that there were, and the sort of things they could do with their weapons.

two

and Asclepiodotus to that of the Romans and Macedonians.

Regular infantry usually formed up either four or eight ranks deep, only pikes and Byzantines forming 16 ranks deep. The Hellenistic manuals such as Asclepiodotus recognise three densities of formation; open order with six feet per file and six feet per rank, close order with three feet per file and three feet per rank, and 'locked-shield' order with one and a half feet. The last was used only when standing on the defensive. Open order was used by skirmishers. Other possible variations include being in close order in frontage, but open in depth. This was in fact the standard Roman legionary formation, each file having a frontage of three feet, and each rank being allowed a depth of six feet, including one foot for the man and five interval.

Drill movements included doubling and halving ranks, left and right face, marching to the front, marching obliquely to right or left, counter-marching, opening out and closing in, and turning about. Column was formed from line and vice versa by turning to the right or left. The Byzantines had an additional movement which turned the rear half of the unit about for all round defence.

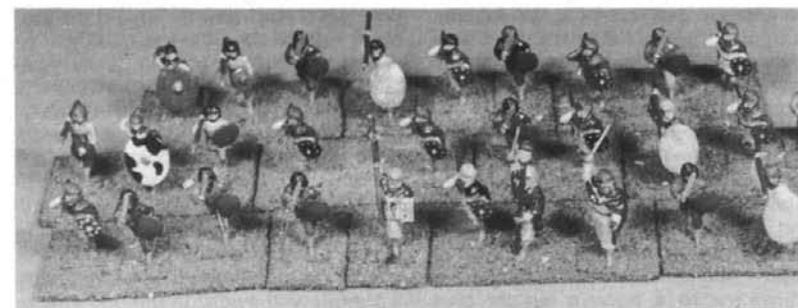
There were a number of special drills for receiving cavalry. That used by the Romans during the 1st Century AD had the front rank thrusting at the horses' chests with their pila, while the remaining ranks threw their pila and javelins, then put their shields against the backs of those in front and leaned

## Formations and drill

I have sometimes almost wept to see Hollywood spectacles with thousands of gorgeously equipped extras representing Roman or similar armies moving about in what could most kindly be described as 'column of mob'. Even the barbarian nations were not that bad, being well convinced of the safety of fighting in a rough line supported by neighbours to left and right. Some even managed quite complicated formations like the *cuneus* or 'wedge', while the thought of ten or twenty thousand horse archers galloping about individually, shooting away as they please, makes me for one fall into a bottomless boggle!

The regular armies had a standard and system of drill superior to anything to be seen again before the end of the 18th Century, and indeed, our present British system can be traced back through the 16th Century paraphrases of such authors as Vegetius

*Minifigs Irish pirates, led by a converted Celtic Saint!*





on them to take the shock of impact. The Byzantines, who had long spears instead of pila, used these pushed into the ground at an angle to brace them against the shock, and followed up with swords when the cavalry had been halted.

The normal marching rate for Roman troops, and presumably others similarly equipped and trained, was 20 miles in five summer hours. Note the phrase 'summer hours'. The Roman hour did not have 60 minutes like our own, but was one twelfth of daylight. The march rate actually works out to 120 paces to the minute, equivalent to that of today, and much higher than in Napoleonic times. There was also a forced march rate of 25 miles in the same time, working out at 150 paces to the minute, and this may have been the normal battlefield rate of the lighter troops.

These, of course, are single unit movement rates, an army on the march with all the delays and confusions that are inevitable would probably do between 10 and 15 miles a day, and have to take occasional rest days.

The last part of an advance to contact would almost certainly be made at a brisk double to gain the morale advantage of going forward, and there is at least one case of Greek hoplites doubling for a considerable distance. Normally, this would be shunned as leading to disorder, but against the Persians they met at Marathon, the Greeks may not have been too worried about this, and chosen instead to reduce the number of arrows they would receive by moving faster. There are many instances in the late Roman campaigns against Sassanid Persia of Roman legionaries moving fast to sweep opposing archers away with hardly a shot fired.

Cavalry formations had either three or six feet frontage for each file, but the smaller of these could not be retained at anything faster than a trot, and so had to be opened out to four feet when moving. The minimum depth needed for each rank was equivalent to a horse's length, plus

half a length to prevent kicking, totalling 13½ feet. A full length's interval is more practical, and this would need to be increased to several lengths during a charge.

There were initially many different shapes of cavalry formation. The Thessalians used a rhomboid, Scythians, Thracians and Macedonians a wedge, Persians and Sicilians a square with as many ranks as files, and the Greeks an oblong with twice as many files as ranks. This gradually vanished, and we find Roman cavalry usually in a four rank deep line, Byzantines in a five or ten deep line.

Lines answer very well in a charge, especially when they charge in succession as the Byzantine manuals lay down, the front line breaking into a gallop at 100 paces away from the enemy, while the succeeding lines remain at the trot until those before make contact, thus providing a succession of shocks. However, they are not ideal for skirmishing, and so others must be employed.

The standard horse archer tactic was to remain stationary in a body while small detachments broke away in turn, galloped past the enemy shooting rapidly, making a difficult target themselves because of their speed, and then returning to breathe their mounts while the next lot had their turn.

The standard method for Roman javelin-armed cavalry was to form a galloping circle, each man in turn throwing as he came to the point nearest the enemy. Again, they made a difficult moving target, and in addition, each man had his shield on the outer side of the circle and could use it effectively for protection. This has been compared by 19th Century commentators to the 16th Century caracole, and condemned along with it. I think this puts insufficient value on the effect of such a constant stream of missiles necessarily delivered at one spot. There must have been an excellent chance of opening a gap in the enemy ranks that could be exploited in a charge with sword in hand.



*Hinchliffe Byzantine cavalry (John Westwood).*

Byzantine cavalry were trained to perform all the drill movements that infantry could, with the exception of oblique movements or inclines, as they are now called. Control was by a combination of visual and audible signals, as with the infantry. Sub-unit officers controlled their men with hand or lance signals. Unit command groups used a trumpet or similar instrument to attract attention, and then conveyed their meaning by movements of the standard, rather like those by which targets are marked on army rifle ranges today.

Unit sizes varied sharply between armies, and it is sometimes difficult to distinguish between administrative units, tactical units, and sub-units. However, the equivalent to a present-day battalion was between 250 and 1,200 strong, depending on time and nationality. The smallest direct sub-unit of these was between 50 and 200 strong. As in other periods, units were often very much below strength.

In nearly all cases, units had only one type of fighting man. Exceptions to this start to creep in with the Roman auxiliaries of the early empire, a few of whom carried slings in addition to their other weapons. Later we find the new small, more mobile legions of the 4th Century reforms incorporating a

proportion of light troops as skirmishers. Finally, the Byzantines are found combining archers with close fighting troops in the same unit as a standard practice. This is not the case of an attached skirmishing screen, but of differently armed men in the same formation, though located in different parts of it. We have already covered this as it applies to the cavalry. The infantry units instead consisted of three-quarters armoured spearmen with one-quarter unarmoured archers. The latter either formed up equally on each wing or behind the spears.

Barbarians had the nice consistent habit of organising in tens, hundreds and thousands, and so need little comment. Family members would fall in together, then families of the same clan, and so on, giving the body some sort of corporate unit to set against the disciplined framework of the regulars. Their main problem must have been in transmitting orders. First, everyone must be persuaded to listen, then orders given on the lines of 'You lot go over there'. No 'Company will move to the left in fours. Left turn. Quick march', for barbarians.

As with the previous chapter, I cannot hope to list the unit sizes and organisations of all nations and times that come within our scope. However, you will be able to get these from the books listed in the bibliography at the end, so have patience and read on.

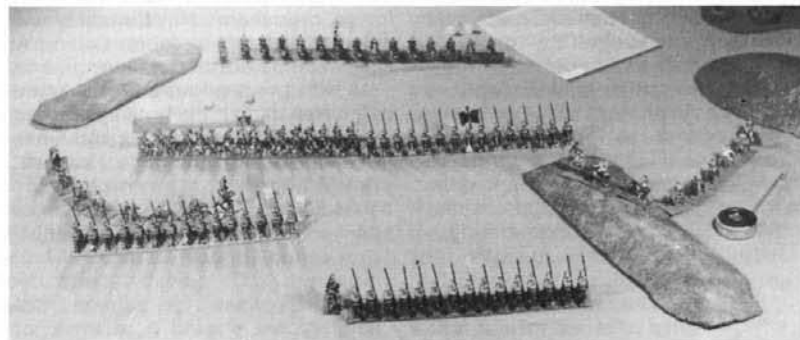
three

## Tactical precepts

Tactics, I define as the art of the general in deploying and ordering units on the battlefield, as opposed to Strategy, which is the art of manoeuvring and scheming so as to bring your troops to the battlefield with the maximum advantages that can be obtained, or even making battle unnecessary, and Drill, which is the science of moving soldiers quickly and simply within their units.

Asclepiodotus, whose book is the earliest that has come down to us, did not draw such distinctions. His attention is almost entirely focused on the drill aspects. However, he tells us that the phalanx is the main arm, and that cavalry and lighter infantry are subordinate to it. The approach march is to

**Byzantines versus Huns.** *The Huns have tried to outflank the first Byzantine line and are being charged by the second. The single play sheet lying on the table contains all the information required by the players in most circumstances.*



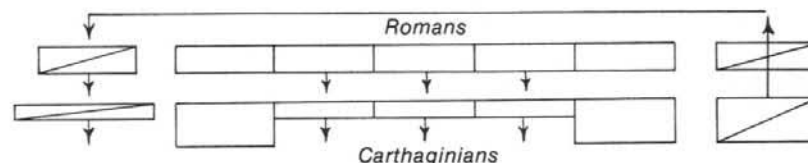
be in column, deploying into a broader formation eight or 16 men deep on the battlefield. The units making up the phalanx can be side by side, or with some further forward than others, so as to make an echelon or wedge formation. He does not discuss why either of these should be desirable.

The light infantry are to be deployed 'according to the demands of the battle', sometimes in front of the phalanx, sometimes behind it, and sometimes on the flanks. Again, no reasons for choice are given.

The cavalry are treated equally vaguely, but he does say that the lightest variety are useful to provoke the enemy to break ranks, seize and hold points of advantage ahead of the army, lay ambushes, scout, fight off enemy cavalry, and act as a mobile reserve after battle has been joined.

He does not mention peltasts, chariots or elephants, but we know from historical accounts that these were intended respectively as supports for lighter infantry, for disorganising a phalanx by charging into it, and either as a tank-like shock weapon or for disorganising cavalry from a distance by frightening the horses.

Our next author, Onasander, who wrote in the reign of the Emperor Claudius, is much more practical. Much of his work is on the qualities needed by a general, on inspiring the troops, and the supervision of training. When he comes to tactics, he tells us that marches should always be made in battle order, even in friendly country, to get the troops into good



**The Cannae Manoeuvre: Envelopment.** *The deliberately weakened Carthaginian centre gives ground, enticing the Roman infantry into a sack which is closed by the Carthaginian cavalry after the Roman cavalry has been destroyed by a combination of skirmishing Numidian light and Carthaginian heavies.*

habits and make them proof against surprise.

He advises that march formations should not be too narrow, because if the enemy appears suddenly in front, the head of the column will be outflanked and driven in, if an attack is made from the flank the column will be split in two, if attacked in the rear both these misfortunes are likely. Medical staff, baggage and pack animals should be in the centre of the army, not trailing along outside it. Cavalry should be sent to scout ahead for enemy ambushes, and if the march is to be through mountain defiles, the general should send troops ahead to picket the heights overlooking them. As much attention should be paid to the rear of the army as to its front.

When it is important to secure a position before the enemy, the general can hurry his troops as much as he likes, and make night marches as well. However, if he intends to force battle as soon as he meets the enemy, he should make short, slow marches, so as not to fatigue his troops. When passing through allied territory, discipline must be ruthlessly preserved, because quite small reasons are often enough to alienate allies and turn them into unfriendly neutrals or even enemies. However, when marching through enemy territory, he should forage from the enemy and cause the utmost possible destruction, to weaken both the enemy's will to wage war, and his

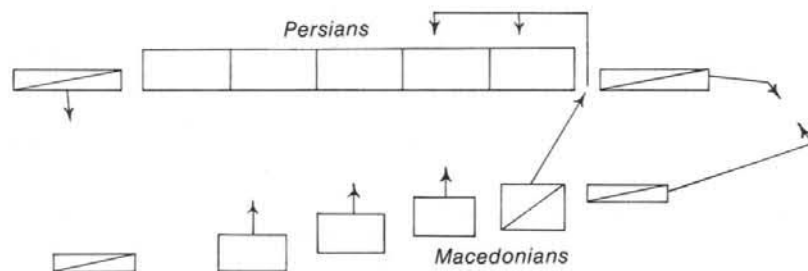
power to do so. He should cross into hostile territory as soon as possible, so as to reduce the strain of supporting the army on his own and his allies' resources, but must be careful to ensure the safety of his supply lines from home.

When in hostile territory, the army should make a fortified camp each night. The position of this should be chosen for its healthiness, rather than for defensive advantages, and in summer it is a good idea to change the camp site frequently. The camp makes a good rallying point if defeated. Sentries and guards within the camp should be supplemented by pickets and mobile patrols at a distance.

When deploying for battle, the cavalry should be positioned where it is most capable of being used effectively, in relatively clear terrain. Its main duty is protecting the flanks, and it should be formed in depth to do this most effectively.

The skirmisher infantry should be placed in front of the close combat infantry, because if placed behind, the efficiency of their shooting is much reduced. When the enemy closes, they should pass through the intervals of the troops behind them. If they try to go round the flanks instead, they will be caught and slaughtered. They can also be deployed on the flanks, where they can come forward and shoot into the shieldless flanks of the enemy heavies, having once disposed of their opposite numbers. If part of the battlefield is broken or hilly, this is an especially suitable place for the lighter infantry, who are equal or superior to heavies in such terrain.

It is not a good idea to extend your army too much to prevent a superior enemy outflanking you, because by thinning your centre you increase the risk of the enemy breaking through,



which could be even more disastrous. If inferior in numbers, you should try to rest your flank against some sort of impassable obstacle, or else use a wedge, crescent, or echelon formation, strengthening the parts of your army that will engage first, in the hope that they will obtain sufficient initial advantage to offset the weakness of the others.

It is essential to have a picked body of troops in reserve to repair a misfortune, or exploit a sudden opportunity, or support troops that are hard pressed. If these can be sent round the enemy's flank to his rear, they will have a deadly effect on his morale.

Our next author, Arrian, wrote in the reign of Hadrian. One of his books is a paraphrase of Asclepiodotus, but with a much expanded section on cavalry drill and training. Another describes an order of battle taken up against the Alans, a tribe of horsed barbarians. Arrian's order of march was arranged so that a simple wheel into line of the whole army turned it into a battle formation. The cavalry were detached as a screen while the infantry formed up eight deep along the forward slope of a low ridge, rising slightly at both ends into low hills. His considerable number of archers were behind the legionaries, but could shoot freely over them because of the slope. The hillocks were held by his auxiliary spearmen, with the artillery behind, shooting over them. The artillery had been well forward in the column of march to ensure it getting into action in time.

Once the infantry deployment was complete, the cavalry fell back until directly behind the infantry wings.

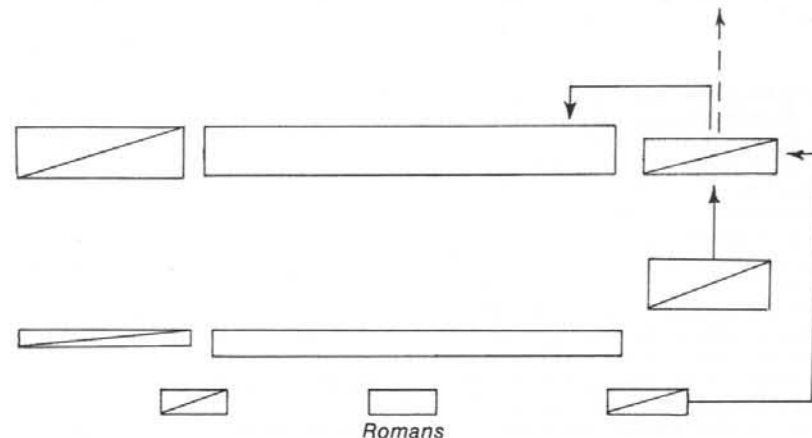
#### The Arbela Manoeuvre: Penetration.

Alexander's light cavalry feint an envelopment, drawing off the Persian cavalry to counter it, thus opening a gap. Alexander leads his heavy Companion cavalry through the gap to fall on the rear of the Persian centre, who are fixed by the threat of the slowly advancing Macedonian infantry.

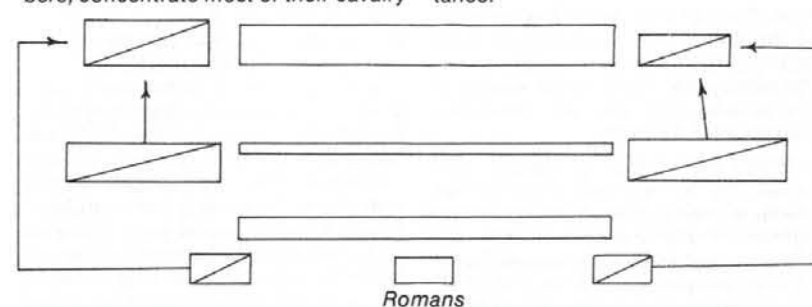
From here they could charge out at an advantage against the barbarian cavalry as it tried to wheel round the flanks, catching them in disorder. Once the frontal attack, weakened by a storm of arrows, bolts and javelins, had been repulsed, the cavalry were to charge out and pursue them. However, only half would pursue at speed. The others would follow up more slowly in support, accompanied by infantry archers, in case any of the enemy managed to rally.

We now come to Vegetius. He wrote in the 5th Century AD, but his book was to remain popular with generals for another thousand years. It incorporates much from earlier authors whose books have since been lost.

Vegetius makes the great point that before making battle plans it is advisable to know as much about the enemy army and your own as you can, and compare their strengths and weaknesses. With regard to the cavalry, he must decide who has the most, and whether they are cataphract, and whether chiefly armed with the bow or close fighting weapons. If his own army is stronger in cavalry, the general should prefer to fight in the open plains. If inferior, he should choose terrain encumbered by woods, marshes and hills.



**Vegetius' proposed attack on one wing.** The Romans, inferior in numbers, concentrate most of their cavalry on one wing while the rest of the army makes threatening gestures at a distance.



**Vegetius' proposed attack on both wings.** The Romans, stronger in cavalry but inferior in infantry, attack on both wings while screening their centre with light infantry.

However, the main strength of the army lies in its infantry, and he must examine who has the most, which are better armed, and which the higher in discipline and morale.

His camp should always be fortified, and he should patrol vigorously, with much use of ambush and surprise attacks, because small successes give the troops confidence. Training and weapon practice should be of a high order, because 'No man fears to do that he knows he does well'.

The infantry should be formed six men deep. If the ground is very restricted, this depth can be doubled, but it is unwise to halve it to prevent the army being outflanked, as this risks it being penetrated. The cavalry

should be drawn up on the wings, the cataphracts and lancers being nearest the infantry, the lighter armoured and archers being at the tips of the line. Weak cavalry should be supported with light infantry armed with javelins.

There should be three separate bodies of reserves. The commander-in-chief should be between the infantry and right flank cavalry, and he commands a reserve of cavalry and light infantry which he should use to outflank the enemy opposite him.

The second-in-command should be behind the centre with a force of picked infantry to close any gaps the enemy may make, and spearhead the final attack. The third-in-command is on the left with a reserve of cavalry and light infantry, to be used to foil enemy outflanking attempts.

Enemy chariots should be dealt with by light infantry or scattering caltrops to lame the horses. Similar methods can be used against elephants, who



can also be shot down by the artillery.

A general whose troops are superior both in number and in discipline should attack simultaneously all along the line. If his army is inferior, he should advance obliquely with his best troops advancing ahead of the others on the right, and his weak left hanging back. He should try to outflank and crush the enemy opposite before the rest of their army can come to their aid. You can also reverse this order by strengthening and advancing with your left flank instead. As the left is usually the weaker flank, this may catch him out.

If your men are weaker in numbers, but well disciplined, you should strengthen both wings at the expense of the centre with a screen of light infantry. You then advance quickly on the wings, but slowly in the centre. If the attacks fail, you will have the centre to fall back on.

If you are inferior in cavalry, you should try to rest one flank on an obstacle, then put all your cavalry and light infantry on the open flank.

If you are forced to retreat, send light infantry to occupy high ground on the chosen route, then pull back units in succession, covered by a screen of cavalry.

The final sources to be considered are the various Byzantine writers.

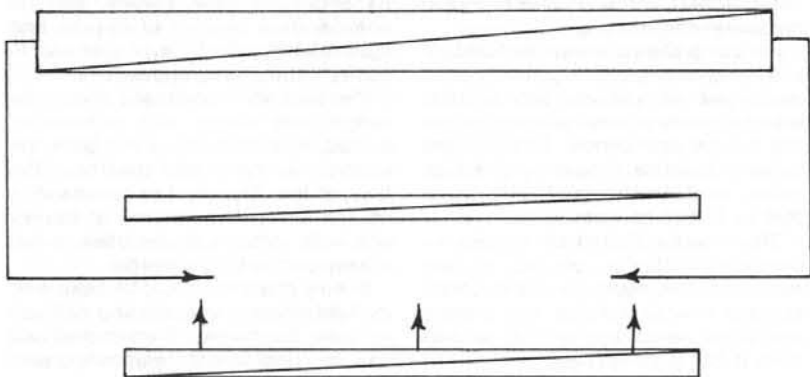
**Byzantine formation against horse archers.** The horse archers, unlikely to break through in front, must encircle

These too make the point that your tactics should be tailored to specific opponents. For example, when fighting Normans or similar westerners whose mounted charge was especially impetuous, you should not counter-charge, but get out of the way, shooting at them with your bows until they are weakened, tired, and have lost their enthusiasm. Conversely, you should not exchange arrows with Turkish horse archers, but charge into them with the lance and roll them over.

Meanwhile, the cavalry as they collected would dog the raiders' footsteps, limiting their opportunities for loot and damage. When the enemy and their masses of pack animals tried to get back through the pass, then came the time for the cavalry to attack.

When fighting a formal battle with both cavalry and infantry present, the Byzantines formed their cavalry on the flanks of the infantry. They considered it especially important to have infantry with them if engaging horse archers, because spears would keep these off and foot bows outshoot them. If forced to face them with cavalry alone, the army would form up in two equal lines with a space of 100 paces or more between. Any enemy coming round the flanks of the first line could then be sandwiched against them by a charge from the second line.

*the Byzantine flanks. As they do so, the second line charges, sandwiching them.*



## How ancient wargaming started

The first war games were played on boards, and can fairly be called 'ancient' wargames, because they were invented in the ancient (or pre-gunpowder) period. The oldest, Wei-Hai, was first played in ancient China about 3,000 BC, and is still going well today under the name of Go. Another, Chaturanga, was played in India in the 5th Century AD. It was a much closer approximation to real warfare than Wei-Hai, and had four players in two nominally allied pairs. I say nominally allied, because a player who weakened his own forces by too precipitate an attack was in serious danger of a takeover bid from his ally! The board was marked with a stylised terrain, the pieces represented Kings, Elephant troops, Chariots or Boatmen, Cavalry and Infantry, and movement was dictated by dice throwing. During my only game of Chaturanga, I found my King in the path of a hostile Elephant. The Elephant needed to throw a 4 to charge, the King a 5 to get out of the way. For five successive turns I threw a 3, useful only to move a Cavalryman — which I had just lost!

It was probably such frustrations that led to the game going through modifications leading in the end to Chinese Chess and modern Chess.

A number of similar chess family games simulating contemporary warfare appeared in the 17th Century, and towards the end of the 18th Century, these were joined by the first of the Kriegspiel family developed in Germany, played on realistic maps with pieces representing military units, and with very complicated rules. These

became very widely used for military training, first in Germany, then all over the western world. They fell from favour early in the 20th Century for two main reasons, firstly, that the rules became overcomplicated, secondly, that junior officers were apt to beat their seniors, which was bad for discipline.

A new type was then adopted in which an umpire made a subjective judgement of the results of each action rather than referring to a book of rules. This obviously depended for its training value on the military ability of the umpire, and many first-rate military disasters in real life can be traced to its adoption.

Just in time, as the military training game deteriorated into a sort of ritual for reinforcing existing prejudices, the war game saved itself by spreading into civilian circles. The author of its salvation was the novelist H. G. Wells, who in 1912 produced a book entitled *Little Wars*. Wells' game was played on a floor or table, with two-inch high lead soldiers representing individual men. The rules were simple and primitive in the extreme, casualties being assessed, for instance, by shooting at the figures with toy cannon, with consequent damage to their paint.

It cannot be said that *Little Wars* popularised wargaming as a hobby, but over the English speaking world, here and there, enthusiasts found inspiration in it and continued where Wells had left off. The crucial event was when one of these, Tony Bath, a Southampton accountant, introduced a physiotherapist named Don Featherstone to the hobby. Don was inspired to write his best-selling *War Games* in 1962, and we were off!

*War Games* included rules for many periods of history, but Tony's first love was the pre-gunpowder period, and this is where I start to come into the story. As interest built up, Don was able to organise a one-day meeting in London for enthusiasts, and here I met Tony Bath and the first ancient figures I had seen, German-made flats.

I had played as a boy with the *Little Wars*' rules, devised board games of

my own, and through an article in a local newspaper had come into contact with two others in my area who played games with modern tanks. We were, in fact, doing a demonstration with my tank rules at the London meeting, when I fell in love with some beautifully-painted Saracen cavalry. Tony kindly let me have castings from his moulds, because in those days we were reduced to pirating figures, the German flat manufacturers being sublimely uninterested in exports, and I was then the proud possessor of an ancient army.

By this time, ancient wargaming had reached much the same form it has today. The playing surface was a table top embellished with model scenery such as hills, groups of buildings, and woods made up of model trees. The playing pieces were model soldiers, realistically painted, and organised into proper units. The rules laid down different movement distances for the various kinds of troops over the different sorts of terrain, the two players moving alternately. The rules also stated the range of missiles, and their effect on different kinds of target at various ranges, and the effect of hand-to-hand weapons, a slight chance element being introduced by dice, of which more later. Finally, there were rules covering the effect on a unit's morale of certain worrying circumstances, such as being charged, losing more men than the enemy in mêlée, or seeing a neighbouring unit break. These again partly depended on the chance element provided by dice.

The next step was the founding of the Society of Ancients by Tony Bath in 1965. The society has had immense influence in the development of ancient wargaming, firstly through its journal *Slingshot*, then through its local wargames meetings, and lately, through its annual international ancient wargames league championship, which enables every member to see just how he stands in ability compared with the others. Society membership is expected to top 1,500 in 1975, and championship entries to

reach 400. Both these figures have been increasing by about 50 per cent each year, and there is no reason why this should not continue.

At much the same time came the first round figures in metal, from Miniature Figurines, founded by Neville Dickinson, another of the Southampton group, and the Airfix plastic boxed sets. Wargamers quickly learned how to modify the Airfix figures to get more variety, and as the hobby increased, many more manufacturers started producing metal figures.

In 1966 came the first British National Wargames Convention, organised by Don Featherstone at Southampton, at which teams from all over the country competed for the Airfix Trophy. Ancient games were included, but unfortunately Don missed an opportunity by not using the Society of Ancients' rules, which had been developed by Tony Bath from the simpler set published in *War Games*. Don felt these would be too complicated for the players he expected to come.

The winning team was London, who thus became hosts for the 1967 Convention, and, winning again, for the 1968 one as well. Don having set the example, London too ignored the Society of Ancients' rules, which at least had the merit of being well known, and a club member named Ed Smith wrote a new set. These had a number of very interesting new mechanisms, but unfortunately, due to lack of original research into the true characteristics of ancient warfare, and lack of extended trials, these were something of a disaster. Among other criticisms, all the archers used homing arrows with nuclear warheads, or so the effect would have us believe!

A more glaring loophole opened before me as I was playing Bob O'Brien of Worthing in the 1968 semi-final. Bob had noticed that the rules, in making provision for cavalry to become less vulnerable when they had dismounted and separated from their horses, had forgotten to make an exception to this for those that rode

armoured horses. His cataphracts therefore galloped up to the bridge which was our objective, and dismounted to defend it, and from being almost invulnerable, became completely invulnerable! I was not too pleased, but Bob is too nice to quarrel with, so instead we took Ed into the bar for a discussion afterwards.

We agreed that the London rules were not a success, but that they did have some improvements over the Tony Bath set, which, being designed for flats, were insensitive to differences in real life formations, had no provision for varying standards of training and unit sizes, and whose alternate moving produced occasional anomalies. Neither set, in our opinion, led to troops behaving as real troops often did, misunderstanding or disobeying orders, becoming overconfident or frightened, or otherwise fouling up their commanders' plans. By eliminating such mishaps, we felt that they reduced the demands on the players' skill. We decided to go away and work on a new set. I would research the warfare of the period, Ed would provide suitable mechanisms, and Bob would work on troop reaction.

When we came together a month later for our first trial game, we set up the following situation. Beside a path winding through a wood, a party of barbarians armed with bows lurked in wait, with orders to shoot from ambush at the shieldless side of any passersby when they drew level. Marching down the path came a cohort of Roman legionaries, with a detached party of light infantry scouting in front. As it happens, when the barbarians first saw the light infantry, the legionaries were out of sight beyond a bend in the path. Using the new reaction test procedure Bob had developed for the first time, we found that the barbarians did not think much of their orders. Why wait in ambush to shoot at half their number of puny light infantry? With a whoop, they bounded out of cover waving their battle axes, and raced towards the enemy.

The light infantry now had to react, and nerves shattered by the sudden eruption, decided not to stay, and made good time back down the path. The legionaries, seeing their screen emerging from the bend screaming with fear, and an unknown number of enemy following them screaming with blood lust, decided on a tactical withdrawal from the wood, and doubled smartly back down the path in good order. Simultaneously, the barbarians, having discovered to their horror that they were not charging half their number of light infantry but twice their number of heavy, changed their minds, and so, two periods after the game started, both sides were running away from each other in opposite directions!

We decided then and there that we had something, although it is only fair to say that I have never seen anything similar happen on the table since! Our new rules were adopted by Worthing for use in the 1969 Convention, which they were hosting, and somewhat to our surprise this started a general demand for them.

They have been used for every National Convention since, were adopted by the Society of Ancients, and are used in about 98 per cent of Society Championship games, outselling all other rival sets to a similar extent. Over the years they have been developed into successive revised editions, and they have been joined by other sets covering other periods of history, and by a series of books on ancient armies. Because they are so universal, this book assumes that you will use them.

Their full title is *Wargames Research Group War Games Rules 1,000 BC to 1,000 AD*, 4th edition amended June 1974, or 'WRG Ancient Rules' for short.

However, there are other rules, mainly derived from those of Tony Bath. The only widely used one is the American 'Chainmail' set by Gary Gygax and Jeff Perren, the others being the products of small local groups. Even if you use these, you will find plenty of useful hints in this book.

## The Wargames Research Group ancient rules

It is obviously impossible to quote the complete set of rules, as apart from copyright matters, they would take up most of the remainder of this book. You will therefore have to get yourself a set if I manage to convince you that you should take up our hobby. However, before I go on to discuss choosing an army, it may be helpful if I talk a little about our rule-writing philosophy, and then go into the troop type definitions, for these may well affect your choice.

The crucial test of a good set of wargame rules is whether the tactics and orders that work in real life work equally well under the rules. The first problem is to decide what really happened in an historical period that ended nearly 1,000 years before we were born. Regrettably, it is just not sufficient to read the works of popular modern writers, who pick up long exploded ideas, and dish them up again to a new generation. You should beware on principle of any book calling itself 'A History of the Art of War' or something similar, because it is odds on that the author only knows a period of a hundred years or so in real detail, and is filling in the rest from secondary and often questionable sources. A tremendous amount of misinformation is spread in this way.

Instead, you must proceed in the same way as any other competent historical researcher and dig down to the original sources. These come into three main classes. First, contemporary manuals on the art of war at a specific period. Many of these in fact exist, but relatively few are available in

a modern language, and still fewer have been translated into English. Ideally, the rule writers should be at home in classical Greek, Latin, Byzantine Greek, Arabic and Old Persian. I will admit that we must at times resort to outside help!

The second class is the contemporary history, an account of what happened by someone who was there at the time. These often touch on military subjects, and a much higher proportion are available in translation than of the manuals. However, just because someone is writing about Roman wars with Carthage in Latin, don't assume that he is necessarily an eye witness. He could be writing a hundred years afterwards, though he might also have a written source to guide him that has not come down to us. You must use your judgement.

The third class of information derives from archaeology. It is a sad fact of life that much time usually elapses between an excavation and the publication of a report, and more still before the conclusions find their way into books. Here we are lucky enough to move in archaeological circles, and so hear of interesting finds long before they find their way into print. Conversely, many professional archaeologists have been excited by things they have read in *Slingshot!*

As you may guess from the name Wargames Research Group, we pride ourselves on the quality of the research that goes into our rules and books. You may well find features in them that you do not agree with, but this in turn may be because we have access to information that you have not got.

One respect in which all wargames except those forming part of campaigns differ from real battles is that we try to ensure that both sides are equivalent in fighting power. This is not the same thing as being equal in numbers, as obviously, to take an extreme case, a highly trained soldier in complete armour mounted on a partially armoured horse is worth more in most circumstances than an

impressed peasant with a short spear and a longing to be home. We therefore have an appropriate points value for each class of troops, and armies are chosen so that each side has the same total points value. In fact, the smallest practical army is about 1,000 points, and later in this book I shall be listing some suitable 1,000 point armies of different nationalities for beginners. Most players prefer 1,250 or 1,500 points, but larger armies than these tend to slow the game excessively.

We classify troops in three different ways. The first of these depends on whether they wear armour, and on the density of the formation in which they fight.

**SHC: Super Heavy Cavalry.** Rider wears complete armour covering even face, feet and hands, and his horse is armoured all round down to the knee. Not being required to charge at the gallop, such troops form up in very close order.

**EHC: Extra Heavy Cavalry.** Rider wears armour extending down to his elbows and knees, his horse either having armour for head, neck and chest only, or more extensive lighter protection of leather, felt or horn.

**HC: Heavy Cavalry.** Rider wears at least an armour corslet protecting his torso, his horse being unarmoured.

**MC: Medium Cavalry.** Rider is either unarmoured or wears non-metallic protection of leather or horn.

**LC: Light Cavalry.** Both horse and rider are unprotected by armour. Being expected to skirmish at a gallop with missiles, they form up in very open order.

**HI: Heavy Infantry.** Close order troops wearing at least an armour corslet.

**MI: Medium Infantry.** Close order troops without metallic armour.

**LHI: Light Heavy Infantry.** Wearing an armour corslet, but trained to operate in open order as well as close order, hence especially useful in difficult terrain.

**LMI: Light Medium Infantry.** As light heavy, but without the corslet.

**LI: Light Infantry.** Unarmoured skirmishers operating always in open

order.

There are also camel, elephant, chariot and artillery troops, but those above will suffice to give the general idea. We are in fact toying with the idea of introducing two more classes, one fitting between EHC and HC, and the other a heavier infantry type than HI. These would enable us to extend the time period of the rules up to about 1250 AD.

The next classification depends on the troops' training and morale. We start by classing them as Regular and Barbarian. Drilled and Irregular would probably have been better terms had we thought of them soon enough.

Regulars can be A, B or C class. 'A' includes the highest possible quality guard troops, such as Macedonian Companion cavalry or Praetorians, 'B' elite troops such as legionaries under the early empire, and 'C' the ordinary line and light units. Regulars manoeuvre more quickly than Barbarians, can be given more elaborate signals, and are much more obedient to the orders you write down for them.

Barbarians can be B, D or E class. 'B' includes nobles and bodyguards, 'D' fighting tribesmen with much good will but little discipline, and 'E' includes timid, disaffected or incompetent levies. Barbarians are in general less predictable than Regulars, and in combat are more affected by chance than the trained man. 'E' types are predictable — predictably bad. However, they are very cheap! Elephant and chariot troops, being equally unpredictable, are always treated as Barbarian.

The final classification is according to the weapons carried. Missile weapon classes are:

**Javelins.** Any hand-hurled weapon capable of being flung to a reasonable distance. Heavy throwing weapons such as the Roman Pilum, and the German Francisca and Angon, being thrown only at the last moment before close combat, are not included here but only as close combat weapons.

**Slings.** Any sling used with one hand, whether projecting cast lead sling bullets or stones, it being assumed



that the greater availability of stones, by encouraging ammunition expenditure in otherwise doubtful cases, produces much the same overall effect.

**Bows.** All bows, whether composite or self construction. Archaeological evidence, and that of medieval archery manuals, demonstrates fairly conclusively that all military bows were of much the same power. Some methods of construction produce more efficient bows than others, but in practice this meant that bows of the standard power could be shorter and more convenient, rather than that bows of the same size became more powerful. A bow is, after all, an energy-storing device getting its power input from human muscles, and the limit is therefore likely to be the strength of the archer.

**Crossbows.** These are usually associated with medieval warfare, but were in fact used by Macedonian, later Roman and Byzantine armies under the names *Gastrophetes*, *Arcubalista*, and *Solenarion*. They were slower shooting than the weapons mentioned previously, but were exceptionally good at penetrating armour.

**Staff Slings.** These had the sling mounted on a four-foot pole, increasing the leverage, and employed both arms. They threw a much larger missile further than ordinary slings, and so we assume them to be slow shooting but effective against armoured targets, much like the crossbow.

**Artillery.** All the main types of ancient catapult artillery are catered for by treating them as multiples of a cross-bow figure, though with extra range and effect against constructions such as buildings or field fortifications.

Wargamers tend to be fascinated by weapons and to multiply categories to take into account every real or imagined difference in performance. In our opinion this makes such people's rules slow and cumbersome, and distracts attention from the more important human aspects. They like to have provision, too, for extra skill, which leads to armies of supermen on the table. Under our rules, marksmen

are all competent, except for the unfortunate 'E' class! In any case, missile action was rarely of decisive importance in ancient battles.

Cavalry hand-to-hand weapon classes are:

**Kontos.** A 12-foot-long thrusting weapon, used mainly by SHC and EHC. This is very effective against close order troops during the initial charge contact, but less so against skirmishers. In a continued mêlée, kontos-armed men count as swordsmen.

**Short Thrusting Spear and/or Javelins.** Most short cavalry spears can be thrown, and most javelins could be thrust in emergency, so it is convenient to include them in the same class. A cavalry mêlée being more open than its infantry equivalent, opportunities for throwing do occur. Being shorter and handier than a kontos, they retain their effectiveness in a continued mêlée.

**Sword only.** This includes all sidearms used in one hand, light axes and maces as well as swords. Other cavalryman are assumed to have these in addition to their primary weapons.

You will read in many places that the introduction of the stirrup in the 6th Century AD made cavalry weapons far more effective than previously. Modern tests have in fact shown this to be untrue.

Infantry hand-to-hand weapon classes are:

**Pike.** A long thrusting weapon, usually between 18 and 21 feet in length, held with both hands. Pikemen cannot make full use of their shields, and quickly become ineffective if they fall into disorder. On level ground, in good order, they will plough through most opposition.

**Short Thrusting Spear.** The ordinary five- to seven-foot spear carried by early infantry. Reasonably effective against most troops. Used in one hand.

**Long Thrusting Spear.** From eight to 12 feet long, and so better at keeping a charging enemy, especially cavalry, at a distance. Used in one hand.

**Two-Handed Cutting Weapon.** Any

weapon swung with both hands, including two-handed sword, pole axe, Thracian Rhomphaia, and Palestinian clubs. Very effective against heavily armoured enemy, but the users themselves take heavy casualties, being unshielded.

**Javelin.** Any light throwing weapon used in conjunction with a sidearm. Mainly useful against light or unarmoured troops.

**Heavy Throwing Weapon.** Pilum, Spiculum, Angon or Francisca thrown just before contact, and followed up with the sword. Better against infantry than long thrusting spears, but inferior against cavalry.

**Sword only.** As with cavalry, this covers all one hand sidearms used by men lacking a primary hand-to-hand weapon, mainly archers, artillerymen and similar. However, some figures made brandishing a sidearm are assumed to in fact represent javelinmen or heavy throwing weapon men who have discharged their missile. This is explained more fully in the rules themselves.

You will have seen references above to shields. Most close fighting troops carry these, though those using two-handed weapons cannot make full use of them. Troops without shields have increased vulnerability but reduced points cost. The reduction in points is greater for cavalry, who if they have a shield must control it and their reins simultaneously with the same hand, and thus need more skill than a foot man.

I will fully define a couple of figures now so you can see how it is done. *Macedonian Companion Cavalryman*. HC 'A' Javelins, no shield. *Roman Legionary 4th Century AD*. MI 'B' Heavy throwing weapon, javelins. Simple isn't it? Incidentally, our classifications are based quite closely on those actually used by the ancient military manuals. For example, our LMI are their 'Peltastes', and our LI are their 'Psiloi'.

Obviously, it is not enough to simulate the real life actions of the troops. You must also simulate those of the general. We try to bring out all the

qualities and skills that a real general would need. This means that you don't just pick up troops and move them as you like. Instead, once you have deployed your troops on the table, you must set to and write down orders for each unit. These should be phrased just as you would phrase them in writing to a real unit, seeking to combine brevity with lack of ambiguity. If there is any ambiguity, I warn you, the umpire will exploit it, as the rules lay down that the umpire should not be neutral, but actively hostile to both sides! You don't necessarily have to have an umpire, incidentally. You can trust your opponent if you wish.

Once the orders are written, you must move the troops accordingly until a messenger has reached them from the general figure with fresh orders, or until the troops themselves, by taking a reaction test, have decided that the orders are obsolete or stupid and should be ignored. In the latter case, the reaction test result will tell them what to do, and you must move them accordingly. The more sensible your orders in the light of the current situation, and the better the class of the troops, the more likely they are to carry on obeying them.

You, the player, are represented on the table by your general figure. You know only what he can see or is reported to him. Your orders must therefore be based on what he knows, although from your real vantage point you can see much more. This may sound unenforceable, but works in practice.

By now you are probably getting worried about the complications you are letting yourself in for. Don't. Although the main rules fill 40 pages, all you will need for most of the game is a single double-sided sheet printed on card that contains all the essentials. The rest consists of detailed definitions and explanations, information on choosing armies, deployment, and provision for a multitude of circumstances that may never arrive. Once you gain experience, you probably will not have to refer to the main rules more than once or twice in a game.

The main connecting thread between our table top simulation and the conditions of real warfare lies in a series of formal relationships which we call the Ground Scale, Figure Scale, and Time Scale.

The ground scale is the relationship between distances measured on the table and real life distances. In our rules, when using 25 mm figures, this can be expressed as 1 table inch = 10 paces, or as 1 millimetre = 1 foot. With 15 mm figures it is 1 millimetre = 1 pace. We specify paces because, metres, yards, cubits and so on were not universally applicable, while the length of the human stride has remained constant. This, incidentally, is why the traditional English mile has the odd number of 1,760 yards. It is based on 1,000 double paces of the Roman foot soldier! Our paces are roughly equivalent to 2½ feet or 0.75 metres.

All the distances quoted in the rules are in paces, to lend an air of realism. In practice, you ignore the terminal zero and measure with an expanding metal rule in inches or centimetres. For example, the effective range of horse bows according to both Byzantine and Medieval Arab manuals should be 180 paces, so under our rules they can reach 18 inches across the table. You may think quoting ranges in paces is unnecessarily pedantic, but think for the moment of a situation when you want troops to advance for a specified distance and then halt. If in your orders you write 'Advance ten inches', you will be thinking in terms of moving pieces. If you write 'Advance 100 paces', you will be thinking of manoeuvring troops, and this difference in mental attitudes can be crucial for the success of a simulation.

The figure scale governs the number of men a figure represents. In our case, this is 20, arranged in four ranks each of five men. Each figure is now mounted on a base made of cardboard or some similar material. I prefer beer mat; my best troops are mounted on those provided by Courage and Newcastle Brown. Plas-

tic card, being both expensive and too slippery to stand on the hills, is the worst.

These bases are so dimensioned that they cover the same area on the table that 20 men would at the ground scale used in real life. For example, Roman legionaries were allowed three feet to each file and six to each rank, so a single figure is mounted on a base 15 mm in frontage, 20 mm in depth.

Our base dimensions are founded on the ancient drill books, and are as follows: SHC: 15 mm front × 40 mm depth; EHC, HC, MC: 20 mm front × 40 mm depth; LC: 30 mm front × 40 mm depth; HI, MI: 15 mm front × 20 mm depth; LHI, LMI: 20 mm front × 30 mm depth; LI: 30 mm front × 30 mm depth.

Only light cavalry are usually mounted on single figure bases, in their case because they use a number of line ahead or circling formations. Other troop types usually have four, three or two figures mounted on a 60 mm wide base, with only enough singles to allow casualties to be removed.

Elephants, chariots and artillery form exceptions to the general procedure, as they are assumed to represent eight in a single line rather than 20 in four lines. They are single mounted on bases of 40 mm frontage in the case of elephants, two horse chariots, and light bolt-throwing artillery, 60 mm for four horse chariots, and 80 mm for stone-throwing engines. No fixed depths are specified, these depending instead on the talents of the model designer!

The time scale specifies that one period of play represents half a minute's real life action such as shooting, fighting or moving, and is used in conjunction with the ground scale in working out move distances for the various kinds of troops.

Because the number of playing periods in a game, when multiplied by half a minute, produces an impossibly short total time for the battle, we postulate that there is also a variable amount of inactive time between periods. If you think of a better excuse, please let us know!

six

## Choosing your army

By now, you should have a pretty good idea of the sort of weapons and troops available in the ancient world and how they were used, and have also seen a little of how we go about simulating this in a wargame. The time now comes to choose your army.

Choosing an army can be great fun, and many players spend much more thought on this aspect than on tactics—to the detriment of their table top performance! Rather like the medieval search for the philosopher's stone, which turned all it touched to gold, modern wargaming alchemists try to discover the perfect army which cannot lose. Needless to say, it does not exist, and if it did, rule writers would seek to handicap it in some way, because the great charm of the ancient period of wargaming lies in its great variety of army types, all of whom must be given a reasonable chance, otherwise the variety would disappear.

If, historically, there had been one army type that was overwhelmingly more efficient than any other in all circumstances, those less efficient would have largely died out. Not completely, because some nations would rather lose than adopt foreign methods. The Irish are a great example of this, the armies that lost to the Norman and Welsh invaders in the 12th Century, and to Elizabeth's armies in the 16th Century, being almost identical to those that failed to establish themselves in Roman Britain in the 5th Century. Most nations, however, adapted either slowly or quickly to the methods of their enemies, the Romans being a prime example of this.

This does not mean to say that the adapted armies were better all round than their predecessors. The Roman army of the 5th Century AD was better at dealing with barbarian heavy cavalry armies than that of the 2nd Century BC, but would probably have been much worse at dealing with a late Seleucid army with its pike phalanxes.

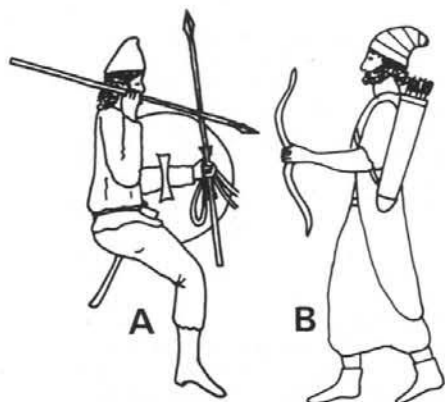
Similarly, that one army type beat another historically does not necessarily prove that the winning army was better thought out. The Persians whom Alexander beat were as badly led as any army ever has been, and the Indians he defeated had much the better of their confrontations with his successors, who themselves were quite able men.

The Parthians who destroyed Crassus' Roman army had their capital burned by the Romans so many times that it got monotonous. The army Hannibal led into Italy was a most peculiar collection of stray mercenaries, but it founded a Roman proverb, which loosely translates into 'For a disaster like the Battle of Cannae, you not only need a genius like Hannibal commanding the one side, but an idiot like Varro commanding the other'.

Broadly, this is what we find with ancient wargaming. It is the player who wins or loses and not his army. However, some players do better with some armies than with others. Similarly, some armies do better in specific types of terrain: for instance, Parthians would be nearly useless in thick forest, though



Seleucid phalangite.

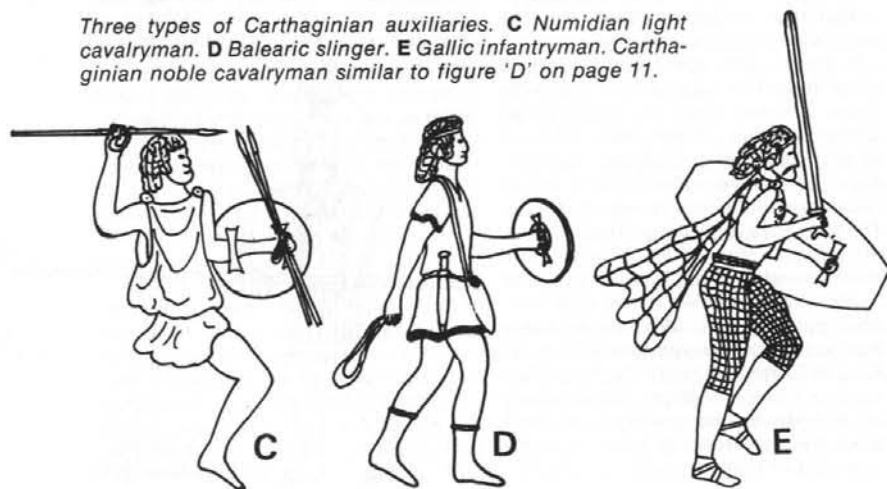


A Seleucid light cavalryman. B Syrian archer.

extremely dangerous on their home ground. It is up to the general to avoid fighting in unsuitable terrain.

Under our rules, both sides have a say in choosing terrain, which ends up in a compromise between the preferences of the two armies. This is the most likely result in real life too, as confrontations between states are likely to occur on their borders, where the terrain is in process of transition from one kind to another. I must add, though, that we also incorporate a random factor into the choosing of terrain, so both sides may end with a type they do not especially want. This simulates the use of

Three types of Carthaginian auxiliaries. C Numidian light cavalryman. D Balearic slinger. E Gallic infantryman. Carthaginian noble cavalryman similar to figure 'D' on page 11.

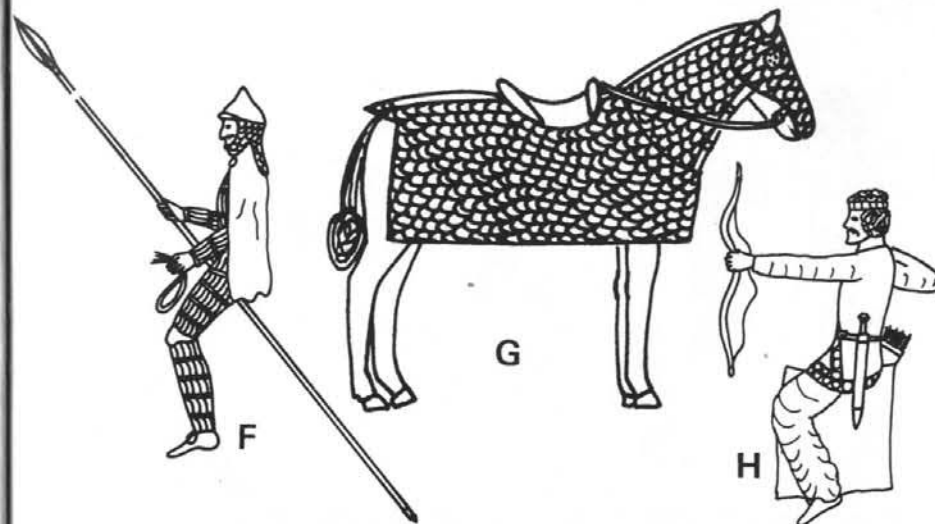


deserts, mountains or other natural boundaries.

There is therefore no perfect army, or even one with a markedly higher probability of success than all others, and you can instead choose the one that appeals to you most on other grounds.

When asked what army a new wargamer should choose, I invariably reply 'Choose one that you can love even when it loses'. For lose you will, unless you are a rare genius, or all your opponents are equally inexperienced or just dim. Each loss will engrave itself on your heart, and you will not make that mistake twice. Sooner or later, your opponents will have taught you all their tricks, and you will be as good as they.

What you must *not* do is change your army, because that would mean starting to learn all over again. There is a very common type of wargamer, who in his first game is, shall we say, defeated because his cavalry are frightened by elephants. He then goes out and buys elephants. Next time, he is trampled by super heavy cavalry, and gets some of those. Next time he is run down by chariots, and so on. He ends up with a huge army, far too big to get on to the table all at the same time, having learned nothing of tactics, and with an army so complicated that to learn to use it properly now is going to be very difficult. What he *should* have done was sit



F Parthian cataphract. G Cataphract horse. H Parthian horse archer.

down and think about the right tactics to use *against* elephants, chariots, etc.

If you are a convert from other wargaming periods, your choice of army may be relatively easy. A Napoleonic wargamer who plays with a British army is used to relying on the firepower of infantry in line. He should therefore get on well with an Egyptian or Persian army, relying on the shooting of masses of regular archers.

If he plays with a French army, then Seleucid phalanxes advancing in column screened by hordes of skirmishers and accompanied by shock cavalry may be just the thing.

A modern player, most of whom are tank-mad, despising the humble infantryman, might well enjoy a Parthian army, with its reliance on super heavy cavalry, mobility and firepower. If he likes a more balanced force, the Byzantines offer him this.

If your first interest is in ancient history, then you may well already have a favourite nation. If you are inspired by the measured tramp of the Roman legions bringing order and civilisation, by Caractacus rallying his tribesmen in defence of freedom and celtic individuality, or by Assyrian chariots rumbling down like 'the wolf upon the fold', then these armies will do well for you.

Your own personality is important,

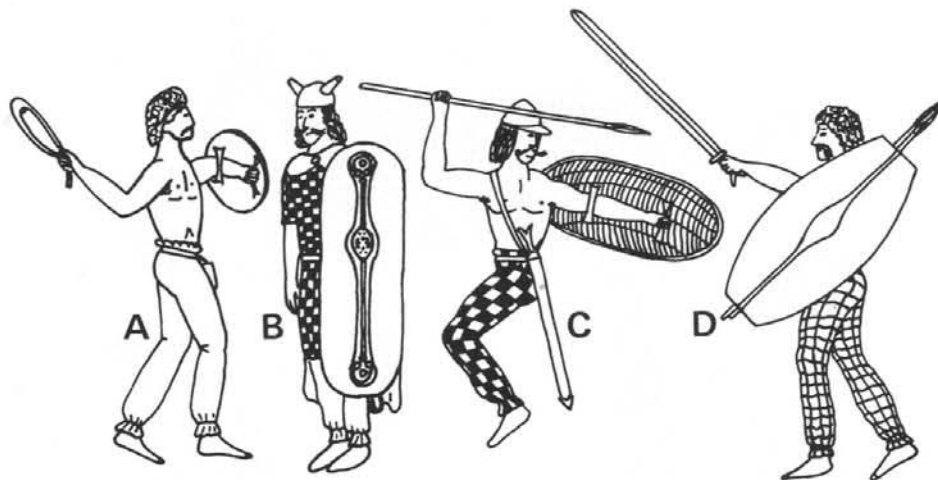
too. If you are slow and stolid, you need a disciplined army with plenty of firepower, that can safely hold its ground instead of closing. If low cunning is your speciality, your army should emphasise light cavalry, or unusual gimmick weapons such as elephants or cross-bows. Sassanid and Seleucid armies both require low cunning. If you are a restless type, you need a good proportion of heavy cavalry to fling in at the crucial moment in a breakneck charge. If you are determined, and not easily put off by losses, but can stick relentlessly to your aim, you will make a superb general for a heavy infantry army of Romans or Greeks.

My own armies are Byzantine, Late Roman and Sassanid, which should imply that I am deceitful, decadent and cunning. In fact, I just like horses. A pity really, because I would probably win more games!

Another quite good way of picking an army is to have a look at painted or unpainted figures or book illustrations and deciding which army can have the prettiest troops. Somehow, the better and more lovingly figures are painted, the better they seem to fight. As one old friend of mine put it 'If you don't love them enough to paint them, why should they love you enough to fight for you?'

This may seem an eccentric view-





British warriors. A Slinger. B Chieftain. C Light cavalryman. D Typical infantryman.

point, but it is one that you might well come to share. Most experienced players will admit that they have units that consistently do either much better or much worse than expected. My wife, for example, had two identical units of light archers. In their first game, one of these threw away their bows, drew their daggers, and as they put it in Glasgow, 'Got tore in' to a cohort of disconcerted legionaries. This unit has never been defeated, and on the two occasions their army lost, marched off in good order escorting the army pay chest. The other, on its first sight of the enemy, screamed and ran off. Fetched back by the general, they stood until approached with hostile intent, then vanished once more. Since then, if they have obeyed their orders it has been by the minimum margin on the dice that the rules allow. Not surprisingly, they got themselves sold — and carried on behaving the same way with their new owner!

All right, so we are crazy. Just watch out for your own sanity when you start mixing with us!

There are currently about a hundred army types, that is, combinations of race and period, being played with over the world. Of these, 40 are popular enough to be included in the British National Convention ancient army lists. The rest of this chapter consists of 12 of

the convention army lists.

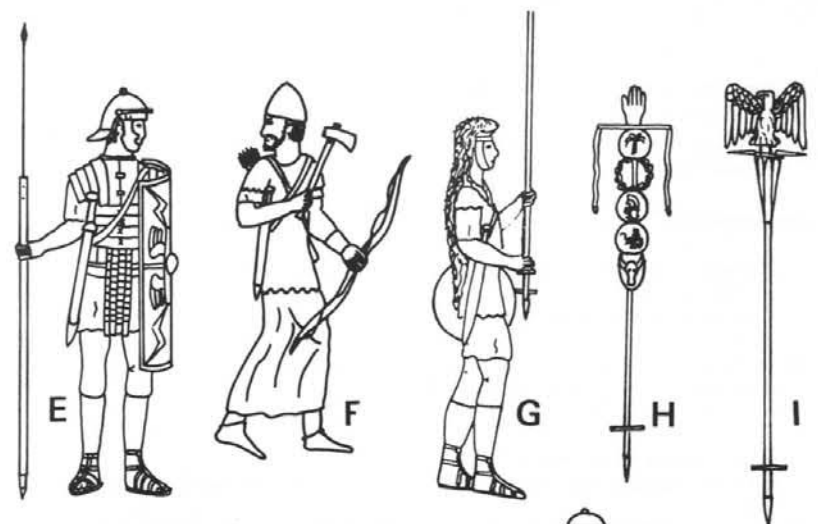
In order to ensure that an army looks something like its historical prototype, but still leaves room for variation to express individual preferences, or to meet unusual terrain conditions or opponents, the lists are split into two parts.

The first part, of approximately 500 points, is compulsory, and must be included in its entirety. The points remaining are filled by picking from the second half of the list.

Each unit must include points for its command factor, except that the general can command a bodyguard of up to 15 figures as well as his army. Barbarian units have more expensive command factors, which encourages their size to be larger than that of regular formations, and thus be less flexible.

The lists specify troop type, reaction class, weapons, and points values. All troops are assumed to have sidearms, and except for SHC who do not need them, to have shields unless the contrary is stated. Definitions will be found in the chapter on rules.

The advantage of using these lists is that your opponents are less likely to raise eyebrows when they see the composition of your army. However, if you wish to use some of the more unusual provisions in the rules, say for example, those for attacking fortifications, you



Romans. E Legionary. F Auxiliary archer. G Standard bearer. H Signum standard. I Eagle standard. J Auxiliary cavalryman (auxiliary infantry similar). One cubit balista shown on page 13.

will need to vary them to include ladders, towers, rams, engines and so on. Although the lists assume 1,000-point armies, the second half is quite extensive enough in each case to stretch the total to 1,500 points.

## Egyptian 1,500 BC

- |   | Points |
|---|--------|
| General in 2-horse chariot with driver, at 100 points.                  | 100    |
| 11 2-horse chariots 'Barbarian B' with archer and driver, at 16 points. | 176    |
| 24 Spearmen 'C' MI, short thrusting spear, at 4 points.                 | 96     |
| 36 Archers 'C' MI, bow, no shield, at 3 points.                         | 108    |
| 10 Numidian archers 'D' LI, bow, no shield, at 2 points.                | 20     |

Plus 500 points chosen from:

- |  |  |
|--|--|
| 30 2-horse chariots 'Barbarian B' with archer and driver, at 16 points.    |  |
| 5 Cavalry scouts 'Barbarian B' LC, bow, no shield, at 5 points.            |  |
| 72 Spearmen 'C' MI, short thrusting spear, at 4 points.                    |  |
| 24 Axemen or macemen 'C' MI, two-handed cutting weapon, at 4 points.       |  |
| 24 Archers 'C' MI, bow, no shield, at 3 points.                            |  |
| 24 Archers 'C' LI, bow, no shield, at 3 points.                            |  |
| 14 Numidian archers 'D' LI, bow, no shield, at 2 points.                   |  |
| 12 Kharu archers 'E' LI, bow and javelins, no shield, at 2 points.         |  |
| 24 Medjway archers 'D' LI, bow, no shield, at 2 points.                    |  |
| 12 Slingers 'C' LI, sling, no shield, at 2 points.                         |  |
| 12 Javelinmen 'C' LMI, javelins, at 4 points.                              |  |
| 24 Sherdin, Peleset or Weshwesh javelinmen 'D' LMI, javelins, at 3 points. |  |



- 36 Retennu, Hehenu, Amorite, Temehu or Canaanite javelinmen 'E' LI, javelins, no shield, 1 point.  
10 Regular command factors at 10 points. 15 Barbarian command factors at 25 points.

### Assyrian 650 BC

	Points
General in 4-horse chariot with driver and two javelinmen, at 112 points.	112
5 4-horse chariots 'Barbarian B' with archer, driver and two javelinmen, at 32 points.	160
30 Spearmen 'C' HI, short thrusting spear, at 6 points.	180
10 Slings 'C' LHI, sling, no shield, at 5 points.	50
	<hr/> 502

- Plus 498 points chosen from:
- 7 4-horse chariots 'Barbarian B' with archer, driver and two javelinmen, at 32 points.
- 20 Heavy cavalry 'C' HC, short thrusting spear and bow, no shield, at 10 points.
- 20 Heavy cavalry 'C' HC, bow, no shield, at 8 points.
- 10 Light cavalry 'C' LC, short thrusting spear and bow, no shield, at 8 points.
- 10 Light cavalry 'C' LC, bow, no shield, at 6 points.
- 10 Auxiliary light cavalry 'D' LC, bow, no shield, at 4 points.
- 20 Spearmen 'C' HI, short thrusting spear, at 6 points.
- 40 Archers 'C' HI or LHI, bow, no shield, at 5 points.
- 20 Pavise bearers 'C' HI or LHI, counting as archers in *mêlée*, and unshielded at all times, but providing partial cover for themselves and one other figure, at 8 points.
- 10 Archers 'C' HI or LHI, bow, at 6 points.
- 20 Auxiliary javelinmen 'D' LMI, javelins, at 3 points.
- 20 Auxiliary archers 'D' LI, bow, no shield, at 2 points.
- 10 Auxiliary slingers 'D' LI, sling, no shield, at 2 points.
- 10 Regular command factors at 10 points. 8 Barbarian command factors at 25 points.

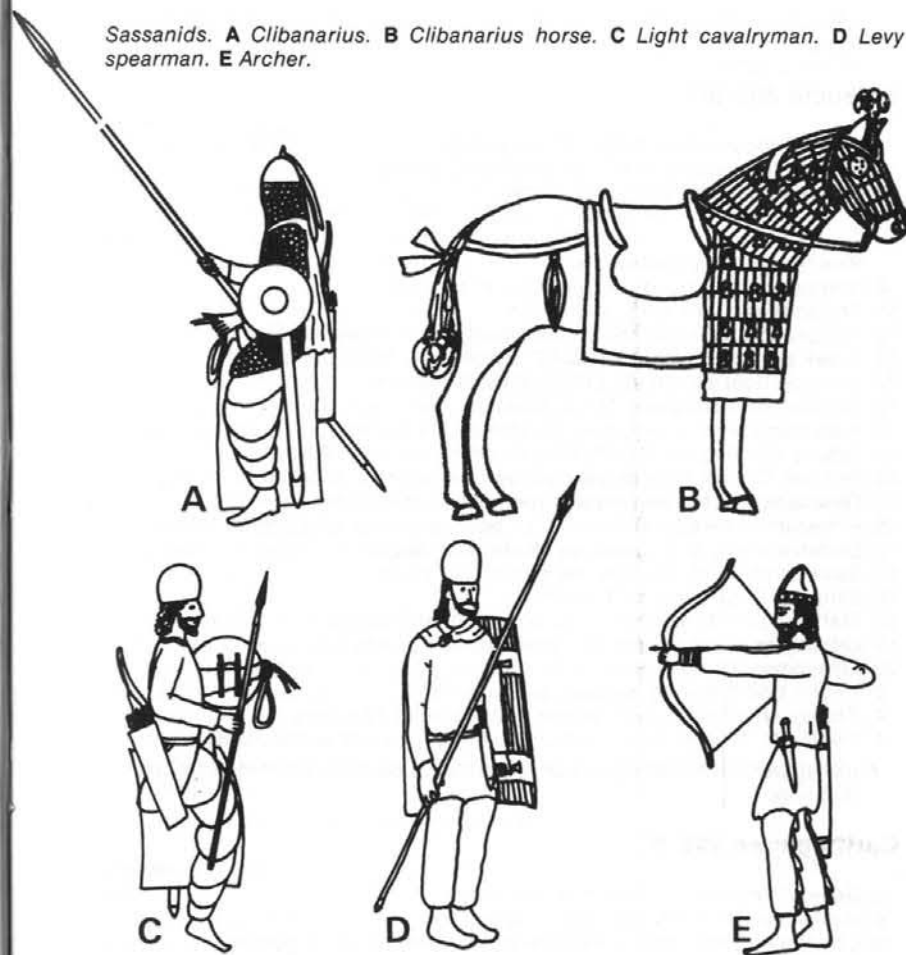
### Achmaenid Persian 500 BC

	Points
General in 2-horse chariot with driver or mounted on horse, at 100 points.	100
40 Immortals 'Regular B' HI, short thrusting spear and bow, at 9 points.	360
	<hr/> 460

- Plus 540 points chosen from:
- 10 Immortals 'Regular B' HI, short thrusting spear and bow, at 9 points.
- 50 Persian or Median infantry 'C' HI, short thrusting spear and bow, at 8 points.
- 20 Assyrian infantry 'E' MI, short thrusting spear, at 2 points.
- 10 Saka infantry 'D' LI, bow, no shield, at 2 points.
- 20 Bactrian infantry 'D' LMI, short thrusting spear and bow, no shield, at 3 points.
- 10 Indian infantry 'D' MI, bow, no shield, at 2 points.
- 10 Ethiopian infantry 'D' LI, short thrusting spear and bow, no shield, at 3 points.
- 10 Libyan infantry 'D' LI, javelins, no shield, at 2 points.
- 20 Paphlagonian infantry 'D' LI, short spear and javelins, at 4 points.
- 20 Mysian infantry 'D' LI, javelins, at 3 points.

- 20 Thracian infantry 'D' LMI, javelins, at 3 points.
- 20 Lydian infantry 'E' HI, long thrusting spear, at 5 points.
- 10 Phoenician marines 'D' LMI, javelins, at 3 points.
- 20 Egyptian marines 'E' MI, long thrusting spear or two-handed cutting weapons, at 2 points.
- 10 Lycian marines 'E' HI, bows and javelins, no shield, at 6 points.
- 30 Persian or Median cavalry 'C' HC, short thrusting spear and bow, at 12 points.
- 20 Bactrian cavalry 'D' LC, short thrusting spear and bow, no shield, at 5 points.
- 20 Saka cavalry 'D' LC, bow, no shield, at 4 points.
- 10 Thessalian cavalry 'E' LC, javelins, no shield, at 3 points.
- 10 Arab camelry 'E' LCam, bow, no shield, at 4 points.
- 4 2-horse chariots 'D' with archer and driver, at 15 points.
- 6 Regular command factors at 10 points. 16 Barbarian command factors at 25 points.

*Sassanids. A Clibanarius. B Clibanarius horse. C Light cavalryman. D Levy spearman. E Archer.*



## Greek 425 BC

General on foot or mounted on horse, at 100 points.	100
66 Hoplites 'C' HI, long thrusting spear, at 6 points.	396
	496

Plus 504 points chosen from:

84 Hoplites 'C' HI, long thrusting spear, at 6 points.	
Extra points to upgrade hoplites to 'Regular B', at 1 point.	
48 Javelinmen 'D' LI, javelins, at 3 points.	
12 Slingers 'D' LI, sling, at 3 points.	
12 Archers 'D' LI, bow, no shield, at 2 points.	
12 Archers 'C' LI, bow, no shield, at 3 points.	
12 Thracian peltasts 'D' LMI, long thrusting spear or javelins, at 3 points.	
12 Greek cavalry 'C' MC, javelins, no shield, at 6 points.	
6 Thessalian cavalry 'D' LC, javelins, no shield, at 4 points.	
5 Regular command factors at 10 points. 4 Barbarian command factors at 25 points.	

## Seleucid 300 BC

General mounted on horse, at 100 points.	100
8 Companion cavalry 'A' HC, javelins, at 12 points.	96
50 Phalangites 'C' HI, pike, at 6 points.	300
	496

Plus 504 points chosen from:

4 Companion cavalry 'A' HC, javelins, at 12 points.	
50 Phalangites 'C' HI, pike, at 6 points.	
12 Cataphracts 'C' EHC, kontos, no shield, at 10 points.	
12 Greek successor light cavalry 'C' LC, javelins, at 8 points.	
20 Seleucid light cavalry 'D' LC, javelins, at 6 points.	
10 Scythian horse archers 'D' LC, bow, no shield, at 4 points.	
10 Arab camelry 'E' LCam, bow, no shield, at 4 points.	
24 Hypaspists 'Regular B' LHI, long thrusting spear, at 7 points.	
24 Peltasts 'C' LMI, long thrusting spear and javelins, at 6 points.	
24 Thracians 'D' LMI, javelins and rhomphaia, at 4 points.	
15 Armenian or Persian archers 'D' LI, bow, no shield, at 2 points.	
12 Cretan archers 'C' LI, bow, no shield, at 3 points.	
50 Syrian archers 'E' MI, bow, no shield, at 1 point.	
15 Slingers 'D' LI, sling, at 3 points.	
10 Staff slingers 'C' LI, staff sling, no shield, at 3 points.	
10 Crossbows 'C' LI, crossbow, no shield, at 3 points.	
20 Javelinmen 'D' LI, javelins, at 3 points.	
2 1 cubit bolt-throwing engines, at 20 points.	
4 2-horse chariots 'D', with archer and driver, at 15 points.	
4 Elephants 'D', with driver, pikeman, javelinman and archer, at 30 points.	
10 Regular command factors at 10 points. 12 Barbarian command factors at 25 points.	

## Carthaginian 225 BC

General mounted on horse, at 100 points.	100
4 Noble cavalry 'A' HC, javelins, at 12 points.	48
10 Liby-Phoenician cavalry 'Regular B' HC, javelins, at 11 points.	110

10 Numidian cavalry 'D' LC, javelins, at 6 points.	60
30 Libyan spearmen 'C' MI, long thrusting spear, at 4 points.	120
20 Moorish javelinmen 'D' LI, javelins, at 3 points.	60
	498

Plus 502 points chosen from:

5 Liby-Phoenician cavalry 'Regular B' HC, javelins, at 11 points.	
10 Numidian cavalry 'D' LC, javelins, at 6 points.	
12 Spanish cavalry 'C' MC, javelins, at 8 points.	
12 Spanish cavalry 'C' LC, javelins, at 8 points.	
10 Gallic cavalry 'D' LC, javelins, at 6 points.	
24 Balearic slingers 'C' LI, sling, at 4 points.	
24 Spanish Scutarii 'C' LMI, heavy throwing spear, at 4 points.	
12 Spanish Caetrati 'C' LI, javelins, at 4 points.	
40 Gallic infantry 'D' LMI, javelins, at 3 points.	
40 Citizen spearmen 'Regular B' MI, long thrusting spear, at 5 points.	
4 Elephants 'D' with driver and three javelinmen, at 30 points.	
2 Elephants 'E' with driver and three javelinmen, at 27 points.	
10 Regular command factors at 10 points. 10 Barbarian command factors at 25 points.	

## Parthian 50 BC

General mounted on horse, at 100 points.	100
20 Cataphracts 'Barbarian B' SHC, kontos, at 13 points.	260
35 Horse archers 'D' LC, bow, no shield, at 4 points.	140
	500

Plus 500 points chosen from:

30 Cataphracts 'Barbarian B' SHC, kontos, at 13 points.	
100 Horse archers 'D' LC, bow, no shield, at 4 points.	
18 Barbarian command factors at 25 points.	

## British 50 BC

General in 2-horse chariot with driver, at 100 points.	100
8 2-horse chariots 'Barbarian B' with driver and javelinman, at 16 points.	128
20 Cavalry 'D' LC, javelins, at 6 points.	120
50 Warriors of warband 'D' LMI, javelins, at 3 points.	150
	498

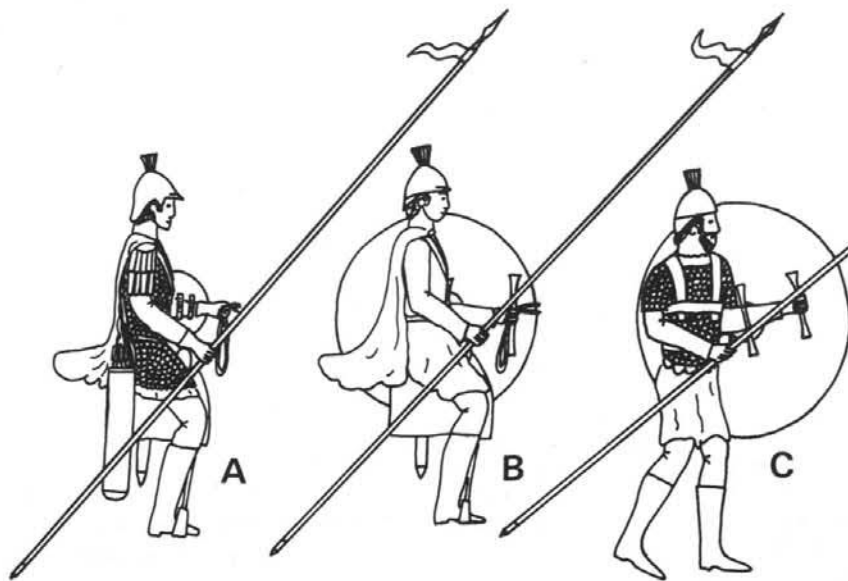
Plus 502 points chosen from:

21 2-horse chariots 'Barbarian B' with driver and javelinman, at 16 points.	
20 Cavalry 'D' LC, javelins, at 6 points.	
50 Warriors of warband 'D' LMI, javelins, at 3 points.	
150 Slingers 'D' LI, sling, at 3 points.	
30 Javelin skirmishers 'D' LI, javelins, at 3 points.	
Extra points to give chariot javelinman a long thrusting spear in addition, at 1 point.	
15 Barbarian command factors at 25 points.	

## Roman 50 AD

General mounted on horse, at 100 points.	100
48 Legionaries 'Regular B' HI, heavy throwing spear, at 7 points.	336





3 1 cubit bolt-throwing engines, at 20 points.

60

496

Plus 504 points chosen from:

- 16 Legionaries 'Regular B' HI, heavy throwing spear, at 7 points.
- 24 Praetorians 'A' HI, heavy throwing spear, at 8 points.
- 24 Archers 'C' LHI, bow, no shield, at 5 points.
- 64 Auxiliary infantry 'C' LHI, javelins, at 6 points.
- 4 Equites Singulares (General's bodyguard only) 'A' HC, javelins, at 12 points.
- 32 Auxiliary cavalry 'C' HC, javelins, at 10 points.
- 10 Moorish cavalry 'D' LC, javelins, at 6 points.
- 15 Barbarian javelinmen 'D' LI, javelins, at 3 points.
- 15 Barbarian slingers 'D' LI, sling, no shield, at 2 points.

Extra points to give up to 1/4 of each auxiliary infantry unit slings in addition to their javelins, at 2 points each.

8 Regular command factors at 10 points. 3 Barbarian command factors at 25 points.

3 Regular sub-unit command factors, to be used only for the sling-equipped portion of an auxiliary infantry unit, or to add a sub-unit of 6 auxiliary cavalry to an auxiliary infantry unit to make up a Cohors Equitata, at 5 points.

### Sassanid Persian 250 AD

Points

- General mounted on horse, at 100 points.
- 25 Clibanarii 'Barbarian B' EHC, kontos and bow, at 12 points.
- 50 Levies 'E' MI, long thrusting spear, at 2 points.

100

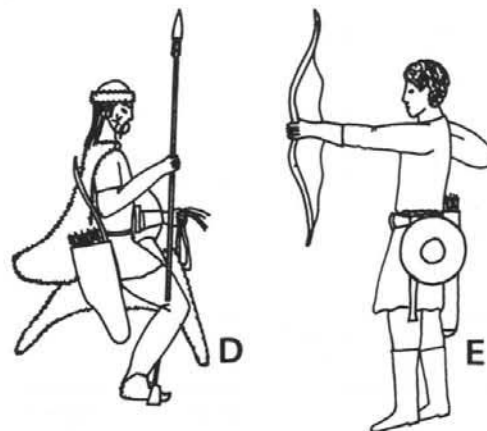
300

100

500

Plus 500 points chosen from:

- 30 Clibanarii 'Barbarian B' EHC, kontos and bow, at 12 points.
- 20 Catafractarii 'Barbarian B' SHC, kontos, at 13 points.
- 3 Elephants 'D' with driver and two archers, at 25 points.
- 30 Light cavalry 'D' LC, javelins and bow, at 7 points.
- 50 Archers 'D' LI, bow, no shield, at 2 points.



Byzantines.  
A Kataphractus.  
B Trapezitos.  
C Skutatos.  
D Hun auxiliary  
horse archer.  
E Psilos.

20 Slingers 'D' LI, sling, at 3 points.

Extra points to increase the number of archers carried by an elephant by 1 up to a total of 4.

12 Barbarian command factors at 25 points.

### Hunnic 450 AD

Points

- General mounted on horse, at 100 points.
- 4 Nobles (General's bodyguard only) 'Barbarian B' HC, kontos and bow, at 10 points.
- 50 Light cavalry 'D' LC, javelins and bow, at 7 points.

100

40

350

490

Plus 510 points chosen from:

- 10 Nobles (General's bodyguard only) 'Barbarian B' HC, kontos and bow, at 10 points.
- 60 Light cavalry 'D' LC, javelins and bow, at 7 points.
- 15 Ostrogothic cavalry 'E' HC, javelins, at 7 points.
- 15 Ostrogothic cavalry 'E' MC, javelins, at 5 points.
- 30 Ostrogothic archers (only if equal numbers of Ostrogothic cavalry present) 'E' LI, bow, no shield, at 1 point.
- 15 Gepid cavalry 'E' HC, kontos, at 7 points.
- 10 Sarmatian cavalry 'E' HC, bow, no shield, at 5 points.
- 10 Alan cavalry 'E' LC, bow, at 5 points.

15 Barbarian command factors at 25 points.

### Byzantine 575 AD

Points

- General mounted on horse, at 100 points.
- 23 Kataphratoi 'Regular B' EHC, kontos, bow and darts, at 17 points.

100

391

491

Plus 509 points chosen from:

- 27 Kataphratoi 'Regular B' EHC, kontos, bow and darts, at 17 points.

- 12 Trapezittoi 'C' LC, kontos and darts, at 10 points.  
 48 Skutatoi 'C' HI, long thrusting spear, at 6 points.  
 24 Psiloi 'C' MI, bow, at 4 points.  
 48 Psiloi 'C' LI, bow, javelin or crossbow, at 4 points.  
 12 Huns 'D' LC, bow and javelins, at 7 points.

Extra points to convert MI archers into HI, at 2 points.

12 Regular command factors at 10 points. 2 Barbarian command factors at 25 points.

Skutatoi can be in units of 24, or in units of 16 Skutatoi and 8 MI or HI archers. MI or HI archers can only be used in mixed units. In mixed units, the archers must form either behind or equally on both flanks. There must be at least twice as many LI archers as javelinmen, and three times as many as crossbowmen.

### Unit sizes

These army lists assume that your units will have the same scale size as real life ones. Appropriate sizes for the 12 armies are:

Nation	Arm of service	Unit name	Number of men	Number of figures
Egyptian	Infantry & cavalry	Company	250	12
	Infantry & cavalry	Pdt	500 or 750	24 or 36
	Chariots	Squadron	25 chariots	3 models
	Chariots	Double squadron	50 chariots	6 models
Assyrian	Infantry & cavalry	Kisri	100 or 200	5 or 10
	Chariots	Kisri	50 chariots	6 models
Greek,	Heavy infantry	Syntagma	256	12
Seleucid,	Heavy infantry	Pentakosiarchia	512	24
Carthaginian	Heavy infantry	Chiliarchia	1,024	48 or 50
	Light infantry	Hekatonarchia	128	6
	Light infantry	Psilagia	256	12
	Light infantry	Xenagia	512	24
	Cavalry	Eilarchia	128	6
	Cavalry	Tarantinarchia	256	12
	Cavalry	Hipparchia	512	24
	Chariots	Keras	32 chariots	4 models
	Elephants	Ilarchia	8 elephants	1 model
	Elephants	Elephantarchia	16 elephants	2 models
	Elephants	Keras	32 elephants	4 models
Roman	Infantry	Cohors Milliaria	800	40
	Infantry	Cohors Quingenaria	480	24
	Cavalry	Ala Milliaria	769	38
	Cavalry	Ala Quingenaria	513	24
	Mixed	Cohors Equitata. As other cohortes, but adding 128 or 256 cavalry, depending on size		
Byzantine	Infantry	Arithmos	256	12
	Infantry	Tagma	480	24
	Cavalry	Bandon	300	12 to 15
Barbarians, whether included in armies above or not			Multiples of 100	Multiples of 5

You will see that we do not always stick very rigidly to the scale size, but sometimes, reduce it a little to make an exactly symmetrical formation of figures. This can be rationalised as the units being slightly understrength, as they often were.

seven

## Raising an army

Having chosen your army, it is time to set about raising it. There are different sizes of figures, referred to as 30 mm, 25 mm, 15 mm and so on. These dimensions indicate the height of a figure representing a six-foot man. The most popular size at present is 25 mm, which corresponds to the well-known 1:72 scale for plastic model aircraft and vehicles. 15 mm figures have their advantages, being both cheaper and giving a bigger battlefield with more scope for manoeuvre, and are increasing in popularity, but I assume that as a beginner you will want to match your potential opponents' armies.

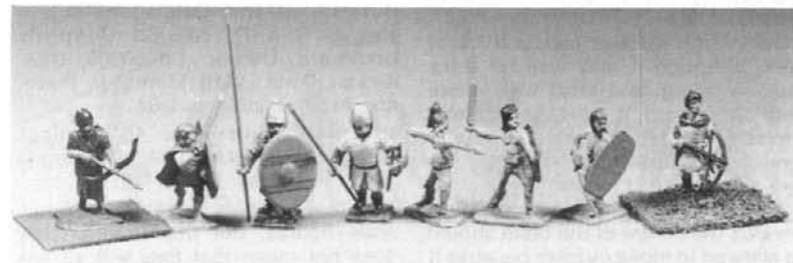
Having decided on 25 mm as the size, your next choice is between plastic and metal. The big advantage of plastics, which for practical purposes means the Airfix boxed sets containing 40 or so figures, is their cheapness. Their disadvantages, however, are numerous. Firstly, there are only two sets of ancient warriors

available, Ancient Britons and Romans. Secondly, the choice of figures to be moulded, and the accuracy with which they are depicted, is not ideal from a wargamer's point of view. For example, there are no cavalry, and the British chariot has solid disk wheels instead of the light spoked type it should have. Thirdly, the polythene plastic in which the figures are moulded is hard to glue, thin parts such as spears bend into strange shapes, and paint does not adhere well.

Human nature being what it is, wargamers in search of cheap figures have found at least partial answers to all these problems. The first two were solved by the invention of conversion techniques, pioneered by Stan Colby and Bob O'Brien. The techniques are basically simple. You stick a large needle in a cork, and holding it by the cork, hold the point in a candle flame. If it is held in the flame while you count three slowly, it becomes the equivalent of a welding torch. If you count to five, it becomes a cutting torch. You now take bits of various figures intended as something else entirely, and reassemble them into a new figure.

One example will suffice. To make a Roman cavalryman, take one box of Airfix Romans, one of American Civil War Cavalry, a sheet of cheap pins, and a box of drawing pins. Cut away the Roman figure's spear and shield, and then cut him in two at the waist. Cut an American figure at the waist, then join

**Metal infantry.** From left to right: Peltast, two Warrior Ancient Britons, Minifigs Auxiliary Archer and Gaul, Hinchliffe Ancient Briton and Byzantine crossbowman.





*Airfix Romans. Chariot, legionaries with pila and swords, and officer.*

his legs to the Roman's torso. Give him a round shield by pushing the point of the drawing pin into his left side. Next take a pin, hold it in a pair of pliers, and push it halfway through the figure's hand. As it cools, the plastic will harden round it and hold it firm. The pin can now have its point flattened to make a javelin head, and its round top cut off.

This is the sort of conversion any beginner can do. Experts can take it much further, using a fine pointed soldering iron sometimes instead of the needle and cork, and engraving decorations on the figure. The scope for ingenuity is immense, and components can be found in all sorts of places. Thin slivers of tin can be inserted into a slit in a helmet to make a crest, kitchen foil cloaks can be draped round them, and drawing pins for shields come in several different sizes. Incidentally, when using pins as javelins, buy the cheap iron kind that come pushed through folded sheets of paper. The more expensive steel ones do not flatten as easily.

The third problem, that of paint flaking off, is much reduced by using metal spears, and can be further reduced by using special paint, as described later.

Converting plastics means a lot of work, although it may well be work you like doing, and most wargamers who can afford it now have metal armies. I prefer the heft of metal myself, and have some sympathy for the suggestion I once heard that troops following a lead elephant towards the centre of the table should be allowed to move quicker because it

was down hill! However, I have to admit that plastics fight just as well, as my wife's Ancient Britons have frequently demonstrated.

Having decided on metal figures, you will have an embarrassing choice of manufacturers, with more springing up almost every month. The best way to find out about them all is to watch the advertising pages of monthly publications such as *Airfix Magazine* and *Military Modelling*, but I will mention the biggest of them now.

**Miniature Figurines.** 28/32 Northam Road, Southampton SO2 0PA. Illustrated catalogue 50p. Also Box P, Pine Plains, New York 12567, USA. Catalogue \$1.25.

**Hinchliffe Models.** Meltham, Huddersfield HD7 3NX. Illustrated catalogue complete with organisational details and painting instructions £1.50. List 10p. See also Heritage Models, 4311 Lemmon Avenue, Dallas, Texas 75219, USA.

**Greenwood & Ball.** 61 Westbury Street, Thornaby-on-Tees, Tees-side. Catalogue 45p. See also Coulter-Bennett, 12158 Hamlin Street, North Hollywood, California 91606, USA.

**Warrior.** 23 Grove Road, Leighton Buzzard, LU7 8SF. Catalogue 10p. See also C S & D, 731 So University Boulevard, Denver, Co 80209, USA. Kirwan Dists, 1516 Montclair Place, Ann Arbor, Michigan, USA.

**Lamming Miniatures.** 45 Wenlock Street, Hull HU3 1DA. Catalogue 15p.

All these manufacturers make 25 mm scale figures, but this unfortunately does not mean that they will all mix

with another manufacturer's figures. There has been a general tendency for figures to grow in bulk, this enabling the designers to incorporate more lively positioning, deep undercuts, and much extra detail. This makes many figures look extremely chunky and deformed when viewed unpainted. However, when painted, and viewed from above as they would be on the table, they put the earlier figures to shame. As I write I have two painted Minifigs before me on the table, one of normal human proportions, and another that I described bitterly when first seeing him unpainted as a 'Harry Secombe' figure. Now they are painted, I have to admit the latter looks far prettier.

Be that as it may, you must choose according to your fancy, and if there are things you don't like about the figures, write and tell the designers. I have been running a private campaign for years for smaller and prettier horses. If enough people say the same thing, the designers will take their feelings into consideration.

Spears have always been slightly controversial. Minifigs, after many years of giving their figures barge poles, have recently started to make them quite slender, though often still too long. Greenwood & Ball, whose spears used to be over fragile, now make young tree trunks! Hinchliffe and Lamming have chosen the coward's way out, and supply pieces of steel wire to be glued into the figure's hand!

Just as plastic figures can be converted, so can metal, though most wargamers confine themselves to turning rank and file figures into the officers, standard bearers and musicians that manufacturers often forget to supply. The essential tool is a modelling knife, preferably one of the Swann-Morton type available at most model shops. Most books on model soldiers suggest getting a set of small files for cleaning off the flash that metal figures acquire when the mould is getting a little elderly or overheated by a high production rate. I find a knife does this very much better, and is



*Airfix ancient Britons, including standard bearer, chieftain, chariot and slinger.*





available for other jobs as well. If you are going to do a lot of ambitious conversion, a small pair of clippers will also be a help.

Just as pieces of metal can be removed with clippers and knife, parts of the figure can also be built up, and my favourite material for this is Plastiline. I find the best technique is to take a piece larger than you need and push or smear it into place very firmly, then cut the surplus away with a knife. It then must be painted with Banana Oil to harden it off, and when this has dried I finish off with a coat of gloss varnish to strengthen it.

Real experts use a powerful electric soldering iron with a very narrow tip, both to sculpt and engrave or to add solder where more bulk is required. If you get good at that, a job as a figure designer probably awaits you!

Many conversions just involve sticking something on, whether a steel spear to replace a lead one, or part of another figure you have dismembered. All the books tell you to use the two part Epoxy adhesives. Ignore them. Our old favourite is Rawplug Durofix, which produces an adequate metal-to-metal bond in a fraction of the time. Better still, but a little tricky to use, is Devcon Zip-Grip 10. This is known to some wargamers as 'Colonel Sanders' glue — because it is finger-sticking good! This is literally true, and if you get careless you will find thumb and forefinger joined to the extent that they have to be cut apart. Definitely not suitable for kiddies. I reinforce all my joints with gloss varnish, which gets into the crannies and sets.

Having bought and converted your troops, the next thing is to paint them. Choice of paints depends on the individual, but desirable qualities are that coats should dry quickly, and should not obscure fine detail in the casting. Airfix matt enamels are perfectly acceptable, though my own favourites are Humbrol 'authentic'. Never use gloss paints, they take too long to dry. You can always use gloss varnish afterwards.

Plastic figures are best painted with one of the water-based acrylic paints

such as Rowneys, available from art shops. These were originally intended for use on transparent plastic overlays, and so can stand a lot of flexing before they flake off. My wife swears by them, and Miniature Figurines recommend them for metals as well, but I find them difficult to apply accurately. However, I love the Rowney Middle Violet, which is the only good purple for imperial robes that I have ever come across. Add a tiny bit of washing-up liquid to the water.

Never economise on brushes. Only the best sable will give you decent looking painted figures. With care, they last a long time, although initially expensive. I find that I can get along very adequately with only two, a number five and a number two. Any art shop should stock Reeves or Rowney brushes of approximately the right type, but make sure that the ones you get are pointed, and have not had any bristles turned back by the protective plastic tube being put on carelessly. If the shopkeeper tells you, or shows you by damping the bristles with a wet finger, that all brushes can be brought to a point, tell him this is not good enough for the work you will be doing.

Periodically while painting, and after finishing a colour, wash your brush thoroughly in thinners and wipe it on a paper tissue. When you have finished for the evening, put it back carefully in its protective tube. Never stand it in a jar of thinners, because the bristles will bend and spoil your point for good. If an odd bristle gets bent back, pinch it off before it gives one of your figures a blue moustache or something equally unpleasant. Incidentally, acrylic paint should be washed off in water, and helps your brushes last longer.

Do not take your paint straight from the jar or tin. Use a palette of some kind. If you don't, you will find that you never get to the bottom of the tin, because the quick drying paint will be exposed to the air while you have the lid off, and in time will go solid. This will happen all the quicker if you have the other bad habit of wiping off surplus paint on the edge of the tin, as the



**Metal cavalry.** From left to right: Hinchliffe Ancient Briton and Palmryan, Mini-figs Byzantine light and heavy cavalry and late Roman Cataphract, Lamming Assyrians. The end Mini-fig belongs to the 'thick spear' era.

build up of dry paint will prevent the lid sealing properly when you do put it back on. My favourite palettes are the lids of the small personal plastic jars of jam or marmalade one gets at motorway restaurants.

Your choice of colours must depend to some extent on those used in real life, and you will find the War-games Research Group series on army books useful in this respect. Regulars will usually be in uniform, and while barbarians will all be different to their neighbour, the range of dyes available to them should be similar.

Weapon colours are much the same whether regular or barbarian. Spear shafts and similar wooden parts are best a greyish cream colour, and for barbarians might well vary a little according to their age and hence the amount of dirt acquired. Don't be afraid to mix colours.

Spear, sword and axe blades should be silver, but not so sockets, or iron armour. Iron mail is best painted with Gunmetal, while scale or lamellar armour, plate or helmets should be painted with Steel. Officers or guardsmen may, of course, have parts of their helmets decorated with silver or gold inlay. Bronze armour can be simulated by Airfix Bronze or by any of the various copper or bronze metallic paints that are available. Roman 'bronze', however, has recently been demonstrated to in fact have been brass, so Brass should be used. Silver, gold and brass paints take unusually long to dry, and I prefer to paint them

after varnishing the figure rather than before.

Dyed cloth was not always used in the ancient world, especially by the poorer element, and so two very useful colours to have are the new Humbrol Natural Linen and Natural Wool. If you can't get these, try mixing white with a little yellow and brown, and with a little grey and brown, respectively.

The Airfix Flesh paint is quite good for Europeans, but the Humbrol equivalent needs a little red or red-brown mixing in it. Otherwise you can mix white, red and brown till you get the shade you need for the nationality you are dealing with. Remember that soldiers lead an outdoor life, so are likely to be redder and more tanned than modern Englishmen. It is a very good idea to vary the hair colour in a unit. If you look about you in the streets at men's hair, they being less likely to improve on nature than girls, you will find very few darker than dark brown, and very few lighter than khaki. Asiatics, however, are better black haired. Few negroes have really black skins, and various browns can be quite successful. Some players try to detail facial features. I don't find this works very well, but try to vary faces with different combinations of beards and moustaches where this is possible.

Just as human hair should be varied, so should that of horses. Units sometimes managed to get all their horses of the same colour, say for instance bay, but never the same kind of bay.



*The thin and chubby: early Imperial Roman command groups by Tradition,*

*painted by Malcolm Woolgar, and by Minifigs, painted by Phil Barker.*

Your horses should always therefore vary in shade, and it is a very good idea for them also to vary in pose, as apart from the Spanish Riding School in Vienna, no one has ever taught horses to march in step! Most manufacturers do in fact have sufficient variety in their horses to allow this, but you usually have to ask for it specifically.

The most common horse colours are bay, chestnut and grey. Black and white are both rare, black, skewbald and piebald were considered unlucky, and white was reserved for generals. Ponies could also often be dun or roan, but these colours were rarer, in big horses.

A bay has body and upper legs of some brown shade, with lower legs, mane and tail black. I use a dark brown or a red brown for my basic colour, and mix in varying amounts of black for each horse.

A chestnut has a brown body and brown legs, with mane and tail either the same colour or lighter. I mostly use a light red-brown, but mix varying amounts of yellow or dark brown with it for a few horses. Manes and tails I vary between khaki and a yellowish cream, trying not to get two shades that scream at each other.

Greys were often mixed in with chestnuts, both being less common

than bays. Some clever people manage to produce all the varieties such as dappled, flea bitten and so on, but I usually confine myself to a dark grey or blue roan patterned like a bay but with gunmetal body, and a lighter grey patterned like a chestnut with a steel body, and mane and tail of steel mixed with a little white.

Duns are bay patterned with a khaki body, but have a thin black line, the 'eel mark', running along their spine. Strawberry roans are best shown as chestnuts with khaki mixed into their red-brown.

Nearly all horses have some white markings, if only on their faces. This can be a small star, a larger blaze, or a full length streak. A light coloured horse with a white marked face often has a flesh coloured nose. I always mark my horses' eyes with a black dot. In addition, most horses have at least one white foot, though four are rare. The old saying goes 'One white foot, buy him, two, try him, three, sell him, four, shoot him'. These markings can be stockings, going a third the way up the leg, but are more commonly socks, going only a short way above the hoof. I paint the hoof itself khaki, though the exact shade should really depend on whether the foot is white or not.

The actual painting is best done in batches, taking a whole regiment and

going through all the figures in turn painting one colour, then coming back and starting the second colour, by which time the first coat will be dry and ready to paint over. Your first colour should always be the most awkward one to get at, and you should splash it on with your largest brush. Don't bother about accuracy, because at this stage you can always paint over.

Accuracy isn't really all that important anyway, because if you make a mistake you can always come back and correct it. If you start painting your easier figures first, or the horses, you will find that you have acquired enough skill by the time you finish them to go on to the more complicated. I am no great shakes as a painter myself, but I reckon to average one minute per colour per figure, and my troops look quite presentable. Remember that they are not going to be examined with a jeweller's eyeglass, and that inaccuracies in a complicated scheme are less likely to be noticed than those of a simple one. If you can't be accurate, be complicated!

Once you have completed the painting, you have to decide whether your figures are going to be varnished, and if so, with matt or gloss varnish. A few

years ago, practically nobody varnished their figures, because they thought it would look unrealistic. Now, an increasing number are doing so, and using the toughest high gloss polyurethane varnish they can get. The reasons are two-fold. Firstly, a matt finish duplicates the highlights and shadows of a real object rather poorly, so that artificial highlights and shadows have to be painted in. Secondly, that people got rather tired of repainting their figures! Matt varnishes were neither matt enough or protective enough to satisfy most wargamers. In case you have not guessed, our figures are all gloss varnished, and we add any gold, silver or brass paint after.

The last step is to decorate the card bases that the figure is stuck to. It is no longer the fashion to leave these as just a bare painted surface. Our solution is coat them with water soluble PVA, sprinkle on model railway scenic flock, and then go over them again with a mixture of PVA and water soluble acrylic paint, usually Pale Olive Green. Others use plastic wood to embed the figures in, and further decorate the bases with foliage and rocks. I have never been tempted by this, as my troops are all too capable now of tripping up and falling flat on their faces without any more excuse!

## Tactics on the wargames table

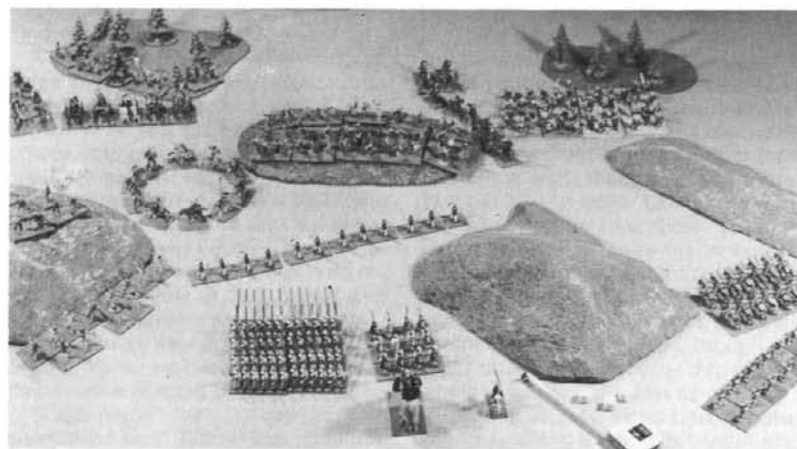
I had best start by saying that if the rules used are a good simulation of ancient warfare, then the best tactics to employ will be those actually used by the army in question. Relatively few players, however, believe this. They go away instead and try something weird

**The Battle of the Celtic Hills.** The Macedonian General is sending half his cavalry through the defile on his right, supported by a unit of archers who are to scale and picket the heights on the right of the defile. The Celtic chieftain unfortunately has also seen the importance of the heights and has sent a warband to seize them. A small unit of light cavalry is to co-operate with them. Meanwhile, in the centre, the Macedonian phalanx grinds slowly forward, accompanied by the General, a unit of Thracian

and wonderful of their own — then blame the army when it does not work. I can quote one shining example, though, in the shape of Malcolm Woolgar of Worthing, who in his early days with a Roman army similar to the one I specified earlier, used to form them up and give the order 'Advance and engage the enemy'. He then sat back and awaited results, while his opponent's imaginative plans collapsed under the steady physical and mental pressure of advancing hordes of unimaginative Romans. I can assure you that he gave me some difficult times.

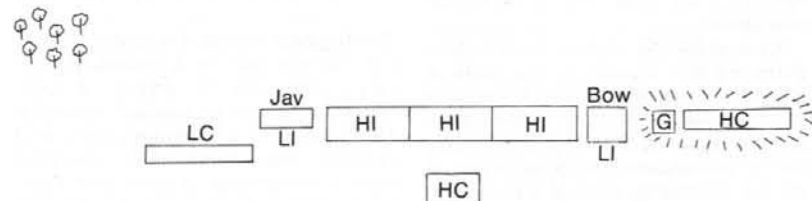
Many books quote things called 'Principles of War'. Generations of staff college instructors have boiled these down into single words or phrases like 'Concentration' and

Peltasts, and an elephant, and screened by a unit of slingers. The slingers are being annoyed by javelin-throwing light cavalry and are nervous about the warband uphill to their front. They would feel worse if they could see the chariots behind the cavalry! Left of centre, Macedonian javelinmen are about to try to drive more slingers from a dominating steep hill. The Macedonians are Minifigs owned by 'H' Branson. The Celts are my wife's Brigantes, and are mainly Airfix plastics.



**How not to form up.** This player has committed nearly all the sins in the book. His light cavalry are out in front, exposed to a charge by heavier enemy cavalry. If he orders them to skirmish, they cannot evade without getting mixed up with the heavy cavalry behind them. These cannot charge effectively because the lights are in the way. The archers have an excellent position on the hill to shoot in support of the light cavalry, but if these countercharge, the enemy will be

outside effective range. Are the light cavalry just going to huddle there until destroyed? He has occupied the wood with light javelinmen. Why? Because it is there! The wood hampers the charge of his remaining heavy cavalry. In the centre, his infantry are formed too thinly to resist a cavalry charge, and can each be outflanked through the gaps. The General is tucked away safely — where he can't see anything, and most of his army can't see his signals!



**How to form up.** This is a great deal better. The right wing heavy cavalry are on the low hill which they can charge down with increased impetus. The General is on the hill with them so that he can see and be seen. He can quickly get to the second heavy cavalry unit in reserve behind the infantry to lead them in a charge or exploit opportunity or repair disaster. The archers are ready to march forward alongside the heavy infantry and shoot

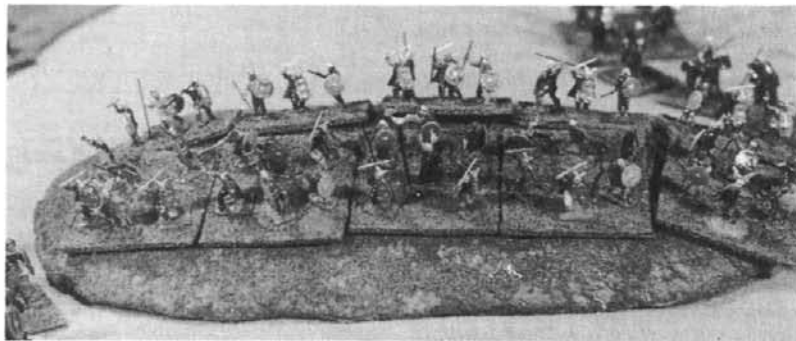
in their support, or that of the cavalry. The heavy infantry are in a deeper formation, and closed right up so that they cannot be outflanked. Their left flank is protected by the javelinmen, the light cavalry, and the obstruction to manoeuvre provided by the wood. If charged by heavier enemy, one of these can evade while the other charges the enemy flank. If any enemy try to occupy the wood, the light cavalry can prevent them.

'Maintenance of the Aim'. The trouble with these is that they need an hour's lecture to explain them, and even then are capable of being explained in more than one way. This is why generals who for the last hundred years have been trained on these principles still manage to go wrong just as often as their predecessors! A better set than the official ones was invented by B. H. Liddell Hart, and can be found

in Part IV of his book *Strategy*, a must for all involved in wargames campaigns as opposed to single battles.

Instead of expounding these, I will give you a few hints, which if followed consistently, will make you a better table top general than 80 per cent of ancient period players. I might add, that if you followed them all the time, you would be a better player than me!, and that, if you can add the sort of





The centre war band starts to charge downhill.

telepathy that tells you the exact moment to strike to exploit an opportunity, or tells you what your opponent is going to forget before he has forgotten it, then you are a potential champion.

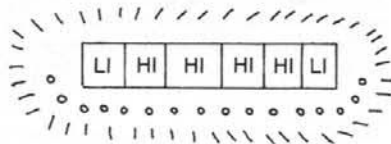
Your planning should start before there are any troops on the table. If your army has a ten per cent superiority in light cavalry, our rules entitle you to be told your opponent's exact army list, as well as any intentions he has of forced marching. Even if you do not have this information, you should be able to guess something of the opposing army from its nationality, and possibly from having seen it before and knowing the opposing player. Ask yourself; what are its potential weaknesses and strengths in relation to your own army's? What are its general's strong points, weaknesses, favourite tricks, in short, his 'Modus Operandi'?

When you have chosen the terrain together, think again before starting to make your deployment map. Are there areas where the terrain is likely to favour or handicap certain troop types? Who has more of these types, him or you? What should your opponent's logical deployment be, and how will his personality alter this?

How can your troops be deployed to make your opponent's probable deployment unsuitable? Are there any terrain features such as hills or woods that you would gain by occupying, possibly by a forced march of part of

your army? Be careful here; most wargamers occupy every scrap of woodland, line every obstacle, and climb every hill, regardless of whether this will help their plan or not. However, it may well be useful to occupy a hill from which to shoot over your own

**The feigned retreat.** The enemy is on a hill, surrounded by a pallisade, and very dangerous to attack. A light cavalry unit comes forward to within 15 inches, then immediately turns and retreats. The enemy must now take their 'first sighting' reaction test. Each unit on the hill will count five friendly units, no enemy facing, enemy retreating, enemy downhill, and flank or rear tempts. If one of them gets 'uncontrolled advance', those still to test count friends advancing also, and each friendly unit charging, making a descent from the safety of the hill even more likely.

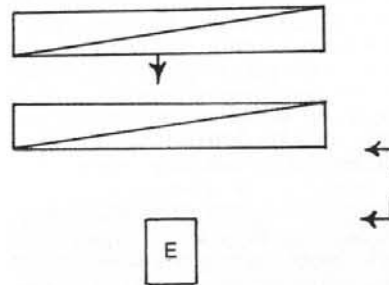


Ancient Wargaming

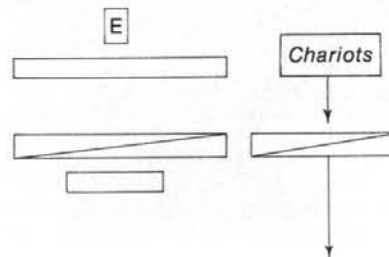
troops, or to seize a forward position which he must gain from you or risk attack from the flank as he advances past it. Any delay in carrying out his plans will help yours mature.

Where should your reserves be best placed so as to intervene to support any of your troops that get into trouble or to exploit enemy misfortunes? Where should your general be placed, to allow him to see as much as possible, to signal to his troops, but not be unduly exposed to danger?

**Using elephants to disorganise.** Cavalry 'A' have no elephants in their own army, and so will be disorganised by frightened horses at ten inches distance. 'B's' horses are used to elephants and so only become disorganised at three inches. The result is that 'A' fights 'B' at only half effect.



**Fighting chariots and elephants.** Elephants stand out above other troops so can be shot at overhead by archers, or at even longer ranges by crossbows or engines. They quickly die or get discouraged. Chariots are also sensitive to archery. Here they are being dealt with by skirmishing light cavalry who evade, shooting behind them.



Tactics on the wargames table

How convenient would it be to modify your deployment after the game starts, if you have misguessed the enemy's intentions?

Having deployed, are there any enemy weaknesses to exploit? If so, you had better arrange to exploit them quickly before he can guard them, but be careful, it may be the bait for a trap. Not likely, though, few players think of setting traps.

Don't plan to do nothing. To just sit there, surrendering the initiative to the other side, is invariably fatal against a good player. One reads of historical battles in which one side keeps to a rigid defence, while the other wastes itself in vain frontal attacks, but these are all cases where the attacking army's general was either stupid or had lost control of his troops.

If you try it against a good player, you will find small bodies of his troops coming forward, then turning in feigned flight to draw yours out of their positions. He may even sacrifice a unit in a vain attack to make it seem even more convincing. If his troops are barbarians, then he will have his general in front of them threatening to cut down the first man to charge without permission. Finally, if he fails to draw your men off, you will find a concentrated assault coming in at the weakest part of your defences, moving by a route that cuts down the amount of missiles they take, and screened by light troops to protect them further. You will not be able to move many extra troops to the spot, because minimum-sized holding attacks will be made elsewhere along your line. Once he is inside your defences or your troops are outside, his army will be superior, not having wasted its points on ditches and palisades. Field fortifications were a lot less effective in ancient times than they are in this age of rifles and machine-guns.

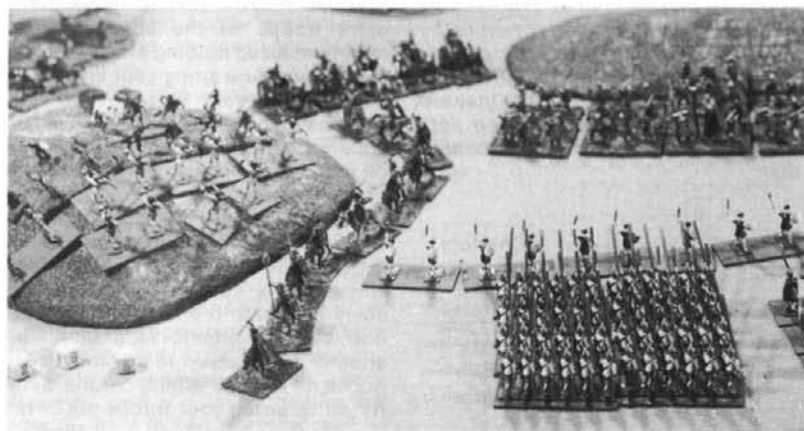
Don't do what your opponent wishes you to do. If he has made obviously adequate preparations to meet one kind of attack, face him with another. If he seems to be pinning his hopes on a major attack on one wing, try withdrawing your troops out of his

way. I can remember Keith Rotherham of Hull looking dumbfounded, when Bob O'Brien's Huns got up and moved to the other side of the table during the first period of play. By the time Keith had got his Sassanids into action, the other wing of his army had disappeared from the field, leaving the remainder facing overwhelming numbers.

Don't fight your opponent's entire army with only part of yours. Don't send out units to attack singly or in widely divergent directions, and if you use diversions, make sure that they don't divert more of your strength than of his. Liddell Hart recommended dispersing your own troops to encourage the enemy to disperse his, then reconcentrating faster than he could to hit him at his weakest, usually at a gap developing between his centre and one of his wings. If fighting a more mobile enemy, watch out for tricks like this, and also ensure that your units do not get separated, exposing their flanks.

Remember that battles are not won by skirmishing. Use skirmishers to

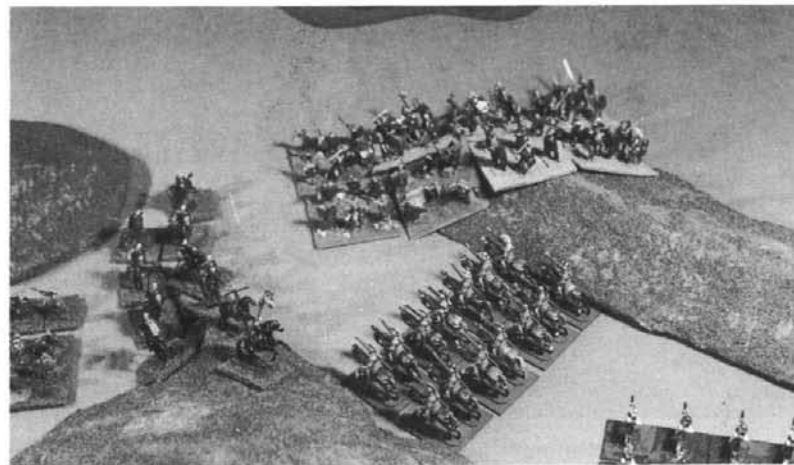
*Seeing the warband charging towards them, the Macedonian slingers are running for the shelter of their phalanx. The Macedonian javelinmen are at grips on the hill, and the Celtic cavalry are taking advantage of the gap created by their movement.*



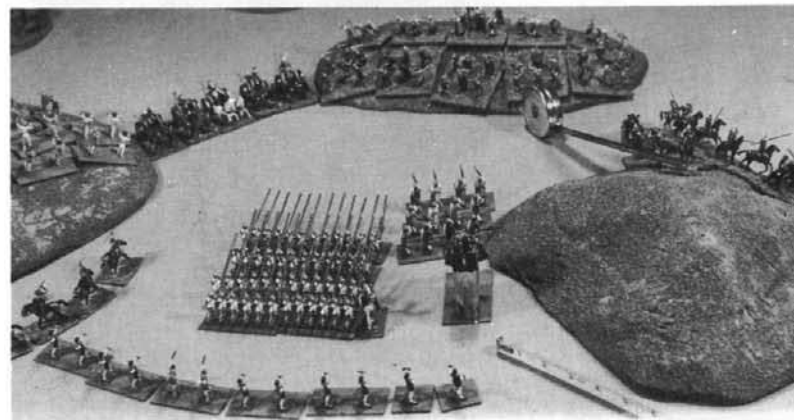
protect your own more solid troops and to weaken the enemy's, but sooner or later, the battle must come to close quarters. Watch that your skirmishers do not get in the way when it does. I recently won a game in three periods, when my opponent deployed with successive lines of skirmishers in front of his centre. My Byzantines charged immediately, sweeping the light troops away. Some of the heavies behind them panicked and joined the rout, and others were so disorganised by friends pushing through them that they broke on first contact. To cap it all, his general was in the path of the breakthrough. I draw a veil over this sad scene.

Remember that the straightest route is not necessarily the best to attack by. If you can get round an enemy flank, or avoid the worst of enemy missiles by use of cover, do so. Peter Gilder of Hull relies heavily on the elephants of his Sassanid army, but takes care to keep them out of sight behind woods or in dead ground until the crucial moment, though the suggestion that they have been known to hide down rabbit holes is definitely untrue!

Don't fight an enemy with his own weapons. If, for example, he is superior in archers, don't stand back and shoot, getting the worst of the exchange, but get stuck in as quickly as possible. Don't charge skirmishing cavalry, though, unless you know that



**Above** The flank warband has gained the heights commanding the defile on the Macedonian right before the archers could reach them, and the archers have instead halted to shoot up. Simultaneously, the Celtic cavalry has taken to the high ground on the other side of the defile. The Macedonian cavalry have not charged, because they have orders to wait for the archers! **Below** The centre warband, having chased the slingers off, has rallied back on to its hill. Being unable to see the trouble his cavalry outflanking forces are getting into, or the threat of a chariot charge, or the enemy cavalry passing the phalanx, the Macedonian General continues his advance.

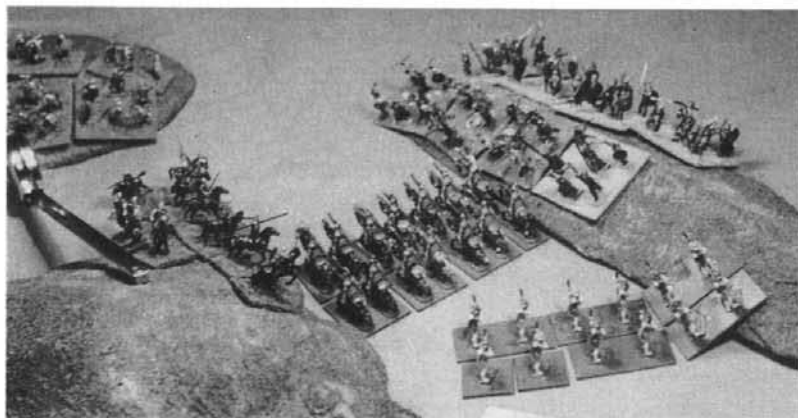


they cannot evade out of reach because of friends or an obstacle behind them, or that your troops can be protected as they rally back.

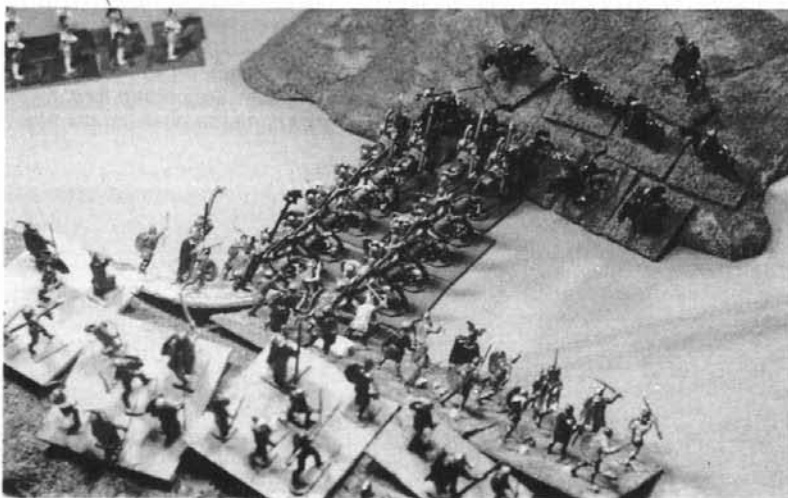
The side that can effectively destroy all the opponent's cavalry really has it made, as it can then envelope their

infantry and either charge it in the rear or besiege it on the battlefield.

If your cavalry is slightly inferior, try putting most of it on one flank, instead of the more usual equal division between the two, then attack fast on that flank in the hope of beating the



**Above** The Macedonian right flank cavalry is also in trouble, being attacked downhill by disorganised cavalry on one side, and a warband on the other. **Below** The archers, ordered to charge to the rescue, take a reaction test, and decide to sneak off quietly instead.



opposite enemy wing before he can act against your weak one.

If your cavalry is markedly inferior, keep it close to your infantry, and fight only with their support. If he has better cavalry, you must have better infantry, so you should still attack. Spears are better for holding off horsemen than bayonets, remember.

If your cavalry is overwhelmingly inferior, keep it behind your infantry,

but be ready to loose it when the infantry bounce back an enemy cavalry charge. If you do this, it will probably turn a repulse into a rout. If you don't, the enemy will reform and come again — and next time may succeed.

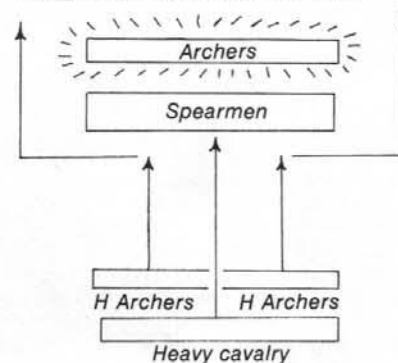
Some troops are useful for psychological reasons, and cramp the enemy's style merely by being there and needing to be avoided, though the

strong-minded accept the risk and concentrate on worrying their opponent equally in other ways! Elephants, chariots, pike phalanxes, cataphract cavalry and engines can all come into this class. Stephen Reed of Worthing, for years the undefeated Society of Ancients' Champion, depended quite heavily on this sort of psychological pressure, both on the troops and on their commander.

While dealing with psychology, be nice to the umpire. It can't do any harm, and takes the place of the real life practice of praying and sacrificing for victory! Sam Johnson of Glasgow, last year's Society runner-up, is the most famous example of this, refusing even to state his opinion in a dispute over rule interpretation, and leaving his opponent and the umpire to sort it out.

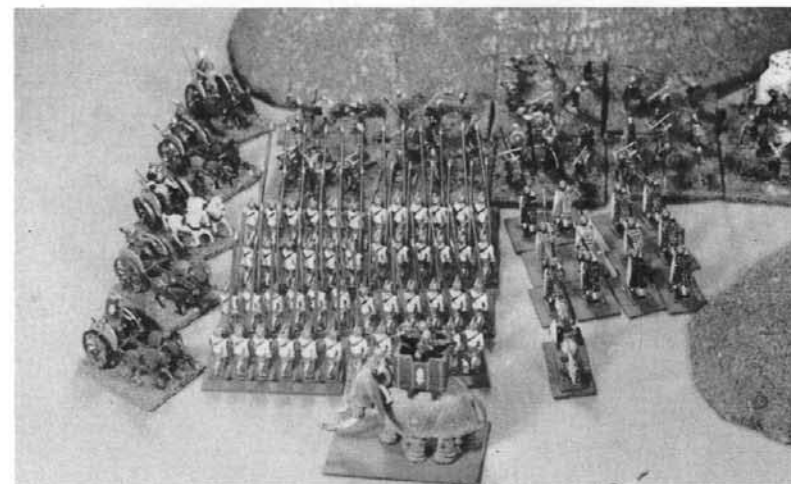
While I'm at it, why not be nice to your opponent as well, especially if he seems to be losing? Brigadier Peter Young's book *Charge* contains a lovely phrase exemplifying this. '“Oh bad luck old man,” he said insincerely.' Dave Millward, this year's

**Combining heavy cavalry and horse archers.** The heavy cavalry declare a charge. The horse archers move in front of them, shooting at the spearmen and absorbing the shooting of the enemy archers on the hill, then split off on each side to allow their heavies through. The spearmen are weakened by shooting, the charging cavalry are not. The horse archers, being dispersed and fast-moving, are a poor target, and finish their move ready to pursue a beaten enemy or charge the archers from the flank.



The centre warband now charges downhill into the phalanx and Thracians, who meet them with a counter charge. Simultaneously, the chariots charge into the flank of the phalanx.

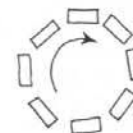
The elephant moves over to intervene and disorganises the chariots by frightening their horses. However, the phalanx is also disordered by the impact, and breaks next period.



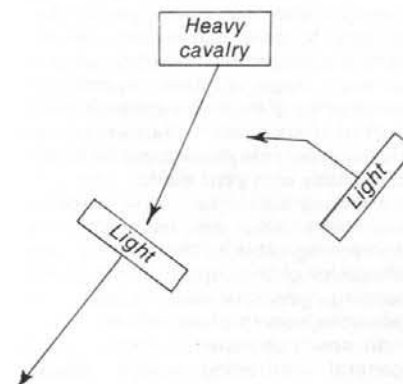




Enemy



**Cantabrian circles.** *The circling cavalry figures are assumed to do so continuously throughout the period. Their shields are on the outside of the circle, so they count shielded and a moving target. Each in turn throws javelins at the nearest enemy figures, few of whom will be in range to throw back.*



**Light cavalry against heavy.** *Whichever light unit the heavies charge can either evade or defend itself, while the other comes in on the charger's flank, disorganising him.*

Champion, is always nice to his opponents when they are losing. If you let your opponent have his way in minor

points, he may be more ready to give way to you when the vital ones come up. He may also be willing to play you again.

You may wonder why there should be rule disputes. Well, basically, because the scope of ancient wargaming is such that new situations are still arising after tens of thousands of games. There are always rules to apply, if you know the book well enough. Some don't.

Still on psychology, a general has lost when he concedes that he has lost. Some concede much too early, as battles often see-saw for a while. I have seen a conceded game taken over by another player and fought to a win. I have also seen Charlie Tarbox of California, the top American player, grimly rallying what looked like two men and a dog for another stand, one reason why he is very hard to beat.

The last point; know when to throw the book away! Study the great generals of all periods, and you find that at times they took seemingly insane risks. You will also find that the enemy did not take advantage of their lapses, because they only made them when he was psychologically incapable of doing so, and so could afford a bold stroke to turn an indecisive day into a blazing victory. If you are to make similar strokes, or guard against those of the enemy, you will need a reserve, preferably of shock cavalry of the highest class. If you commit this too soon, you have wasted its points. If you do not commit it at all, you have also wasted them. Choose the moment, put your general at their head, and ride to glory! In a wargame only feelings get hurt, so you can forget the other alternative!

## Campaigns, reconstructions and fantasy gaming

So far, I have been writing about games in which each side stands an equal chance, as would be the case in a casual game against a friend, or a competition game in the Society of Ancients' league, the Nationals, or other, local, competitions.

Very few real life battles fell into this class, although sensible generals tended, of course, to avoid battle if the odds were markedly against them. Battles against odds, where you must minimise your disadvantages, play for time, or seek to disengage safely, or battles in which your forces are temporarily superior, but must force the issue before enemy reinforcements arrive, can be even more interesting.

It is possible to set up such situations in a casual friendly game, but they then often appear a little contrived, and both players know too much about the situation compared with real life. Most players prefer to let such situations occur naturally in the course of a wargames campaign.

Most campaigns start as mere map movement, but quickly diversify into such aspects as supply, pay, and the cost and time to raise new troops. Once they have done so, further logical extensions become almost inevitable. To buy supplies, if you have that kind of army, or pay your troops, you need money. Civilised states raise money in their own countries by taxation. The amount of tax that can be raised depends on the extent of the area ruled, how repressive the ruler is prepared to be, and the wealth of his subjects as measured by their manufacturing skills, the fertility of the land, strategic positioning on trade routes, and so on.

Once economic factors have been brought into the campaign, politics quickly follows. Subversion, revolution, prolonged bad weather, raiders, piracy, trade cartels, sometimes invoked by the umpire through some sort of chance device, but sometimes by the other role players, may interfere drastically with your plans.

Personalities may now become important. You will have to know something about the history and character of the captain of the guard, leading generals and nobles, and possible leaders of opposition.

In short, you are no longer just a general controlling troops, though you may well be that too, but a ruler controlling a state. When battles do occur, they may be on sea as well as on land, or be replaced by sieges of fortified places. Such land battles as

do occur must take into account the weather and time of day. All these extra factors on land are taken into account in the rules as optional extras, and we have a separate set of rules covering naval actions.

Such full-scale campaigns require a map, an umpire, an assistant to help the umpire fight the battles, and several role players, all of whom must be good at answering letters quickly, but who can be of varying abilities according to the demands of the characters. The umpire communicates with the players on two levels. First, he sends them individual written reports with the information that they could have in real life, and they in turn send him their orders. Secondly, he publishes a news sheet, which all get. This contains some genuine information, some false, all dressed up as rumours, much propaganda provided by the players, and much entertainment value!

Not all campaigns in fact function this way. Some make the mistake of having the role players also fighting the table top battles, some do not have the news sheet to maintain interest when nothing is happening, and some try to run the whole affair by democratic vote instead of having a dictatorial umpire. These last invariably collapse in short order.

A campaign game of the type I recommend can, by way of contrast, go on for years. I am currently taking part in one such, Tony Bath's Hyborian campaign. Tony has written a book on wargames campaigns which includes the full Hyborian rules. You will find this in the bibliography.

Another product that must be mentioned here is Warplan 5-5, produced by Fereff/Hirstle Press Ltd, School Road, Elham, Canterbury. This is a complete campaigning kit including a map each for two players and an umpire, topographical information, order cards, and so on. It is produced in two versions at present, version 1 covering the horse and musket era, version 2 incorporating provision for railways and aircraft. Unfortunately, there is no specifically ancient ver-

sion, but version 1 will do at a pinch. The basic set costs £4.50 post free in the UK, and an expansion set costing £2.50 roughly doubles the map area.

Although it is possible to have a campaign based on real life countries and an historical situation, this is very rarely done, just as it is rare to reconstruct an actual ancient battle. In the latter case, the reason is fairly simple. Both sides know how the original battle went, and avoid the original mistakes — usually to provide bigger and better mistakes of their own! In the case of campaigns, it is probably due to the difficulty of reconstructing the original situation, though this is certainly not impossible.

Most campaigns take realistic national armies, but place them in imaginary countries. These maps are sometimes derived from those in books of fantasy fiction. The Hyborian campaign is one such, being broadly based on the 'Conan' novels of Robert Howard. It is also possible to create your own maps, of your own ideal countries, and I suspect that many campaign players prefer creating maps to actually playing!

It is also possible to create your own ideal army, though it is best if you do this to have some background idea of the sort of state that is raising it. For example, a combination of ancient British warriors and elephants would not be convincing, unless of course, you converted the elephants into mammoths! However, you will not find such armies welcome in most competitions.

Many of the fantasy novels on which ancient campaigns have been based have a large magical element, and this occasionally carries through to the wargaming. Our rules have an appendix dealing with this, together with a detailed spell-casting procedure designed to ensure that magic does not overpower the other aspects of the game. Both Minifigs and Hinchliffe have ranges of fantasy figures, those of Minifigs being primarily based on the Tolkien *Lord of the Rings* trilogy, and Hinchliffe on the Edgar Rice Burroughs 'Barsoom' books.

**Fantasy figures.** From left to right: Saints, Warg, Dragon, Wizard, careless Wizard, Giant, Gallis Heros and friend, giant Eagle, talking Raven and warrior Saint. Minifigs, conversions, and purchases from Woolworths toy counter.



## Bibliography

All books are in print unless otherwise stated.

### Ancient military texts available in English translation

Aeneas Tacticus, Asclepiodotus, Onasander. Published, bound together, by Loeb Classical Library. *Stratagemata*. Sextus Julius Frontinus. Loeb Classical Library. *The Military Institutions of the Romans*. Flavius Renatus Vegetius. In *Roots of Strategy* by T. R. Phillips. Out of print, but often in big libraries.

None of the Byzantine military writers are available in English, but they are extensively quoted in C. W. C. Oman *The Art of War in the Middle Ages*. The enlarged two-volume edition of this is out of print, but is available from large libraries.

### Wargames Research Group publications

*Wargames Rules 1000 BC to 1000 AD*.  
*Naval Wargames Rules for Fleet Actions 1000 BC to 500 AD*.  
*Armies of the Macedonian and Punic Wars*. P. Barker.  
*Armies & Enemies of Imperial Rome*. P. Barker.  
*Warfleets of Antiquity*. R. Nelson.

*Setting Up a Wargames Campaign*. T. Bath.  
*Armies & Enemies of Ancient Egypt & Assyria*. A. Buttery.  
Forthcoming shortly:  
*Armies of the Greek & Persian Wars*. R. Nelson.  
*Armies & Enemies of Imperial China*. J. Greer.  
*Armies of the Dark Ages*. I. Heath.  
*Early Medieval Armies*. I. Heath.  
Send SAE to WRG, 75 Ardingly Drive, Goring by Sea, Sussex, for details.

### Other useful books

*War Gaming*. A. Wilson.  
*Discovering Old Board Games*. R. C. Bell.  
*War Games*. D. F. Featherstone. (And many other books too numerous to list here.)  
*Little Wars*. H. G. Wells.  
*Arms and Armour of the Greeks*. A. M. Snodgrass.  
*The Year of Salamis and Armada from Athens*. P. Green.  
*Greek and Roman Artillery*. E. W. Marsden.  
*The Roman Imperial Army*. G. Webster.  
*The Battle of Actium*. J. M. Carter.  
*Trajan's Column and the Dacian Wars*. L. Rossi.  
*Strategy*. B. H. Liddell Hart.  
*The Pattern of War*. F. Tüker. Out of print, but often in big libraries.  
Forthcoming shortly:  
*The Battle of Ctesiphon as a Wargame*. P. Barker.  
*The Battle of Salamis as a Wargame*. R. Nelson.  
*Ancient Wargames*. C. Grant.  
All ancient wargamers benefit by belonging to the Society of Ancients, who publish the bi-monthly journal *Slingshot*, which is essential reading. Write for details to the Treasurer, 44 Shaftesbury Avenue, Worthing, Sussex.



**AIRFIX**  
magazine guide 9

# Ancient Wargaming

Now any wargamer can lead a Roman legion into battle, ride to war on an elephant or chariot or relive the siege of Troy. This book, written by expert wargamer Phil Barker, provides all the basic information required to amass and fight intelligently with Greek hoplites, Roman legionaries, Parthian horse archers and many of the other colourful troops of the ancient world. It includes details on troop types, tactics, and how to win battles using the Wargames Research Group playing rules.

£1.20 net



ISBN 0 85059 212 7