Classics

From the Renaissance to the nineteenth century, Latin and Greek were compulsory subjects in almost all European universities, and most early modern scholars published their research and conducted international correspondence in Latin. Latin had continued in use in Western Europe long after the fall of the Roman empire as the lingua franca of the educated classes and of law, diplomacy, religion and university teaching. The flight of Greek scholars to the West after the fall of Constantinople in 1453 gave impetus to the study of ancient Greek literature and the Greek New Testament. Eventually, just as nineteenth-century reforms of university curricula were beginning to erode this ascendancy, developments in textual criticism and linguistic analysis, and new ways of studying ancient societies, especially archaeology, led to renewed enthusiasm for the Classics. This collection offers works of criticism, interpretation and synthesis by the outstanding scholars of the nineteenth century.

Hellenistic Military & Naval Developments

First published in 1930, this is a collection of essays by the noted classical scholar W. W. Tarn, originally delivered as Lees Knowles Lectures in Military History at Trinity College, Cambridge. Tarn draws on a range of sources to trace the history and development of warfare in the Hellenistic period, with particular emphasis on military strategy under Alexander the Great. The first lecture outlines the role of infantry, analysing the weaponry used in various battles. In the second lecture, Tarn examines the development of cavalry, its history in Macedonia, Thessaly and Iran, and its use of elephants and camels. The final lecture explores improvements in siege and naval methods, with particular attention to advancements in artillery. Providing valuable insight into a period of extensive military innovation, this book gives an overview of the military and naval arts and sciences of the Hellenistic era.
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HELLENISTIC
MILITARY & NAVAL
DEVELOPMENTS
Hellenistic
Military & Naval
Developments

BY

W. W. TARN
M.A., F.B.A.

CAMBRIDGE
At the University Press
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PREFACE

The three lectures here published are the Lees-Knowles Lectures in Military History for 1929–30, delivered at Trinity College, Cambridge, in the spring of this year; they were somewhat shortened in actual delivery. The two matters which may perhaps claim some novelty, the evolution of the great war-horse and of the Hellenistic great ships, are now rather more fully treated, chiefly by means of notes and appendices; indeed, the principal justification for the appearance of these lectures in book form must be the section on the ships, about which comparatively little has hitherto been written to much purpose. Professor F. E. Adcock very kindly read through my typescript before it went to the publishers and made several suggestions, more particularly in the early part of the first lecture, which have much improved the book. My best thanks are due to him, and also to the Syndics of the Cambridge University Press for undertaking the publication of these lectures.

W. W. TARN
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Lecture I

GENERAL OUTLINE & INFANTRY

My subject is the development of warfare in the Hellenistic period, that is, roughly speaking, in Greece and Asia between Alexander and Augustus; I am not dealing with Rome. I shall take first the general outline of the subject and the history of infantry; the second lecture will deal with the use of animals in war, that is, cavalry and elephants, for this was essentially the age of cavalry; the third lecture must be given to machines, that is, siege warfare and naval warfare. I am afraid that in this lecture I shall only be treating well-known things, but I hope afterwards to have a little that is new both about horses and about ships. It may be an unfortunate thing that war should have occupied such a large place in the outlook.

The latest text-book is J. Kromayer and G. Veith, Heerwesen und Kriegführung der Griechen und Römer, 1928, which gives the literature of the subject. Accounts of most of the battles referred to can be found in the Cambridge Ancient History.
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of every State during the period I am considering, but if we are going to try and understand the ancient world we cannot leave out any part of it. Some indeed believe that for the Graeco-Roman world war was at first, speaking generally, the normal condition and peace the abnormal one, and it is not difficult to find facts to support this, such as treaties of peace made for a short and definite term of years.

The warfare of the little states of classical Greece had once been a kind of seasonal occupation; the harvest was reaped early, and there was little to do for the rest of the summer: there were not many amusements, so you fought somebody. This phase was assisted by the shortage of agricultural land in Greece; even a few farms made a difference, and there was a constant temptation to start early and reap your enemy's harvest. Even in the third century this phase can still be detected in the constitution of one rather backward State, Aetolia. The Assembly met twice a year, before and after the campaigning season; at the first meeting they decided how they would spend the summer, and at the second, held in September, they stored the year's booty; this assumed that there would be

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booty to store, that is, that they would have fought with or raided somebody. It seems probable that in this kind of warfare the loss of life was not, to our idea, proportionate to the amount of fighting, and indeed it has been defended on the ground that it operated as a useful natural selection; in hand-to-hand warfare the best men usually survived, and the reverse selection exercised by modern war was uncommon, unless the front-rank men got killed when a defeated force fled. Natural selection however was not really necessary, for the custom of rearing certain children only gave all the selection required; putting aside men maimed or blinded, I believe that in the whole of Greek and Macedonian history there is only one case—Alexander's cousin Harpalus—of a man being described as unfit for military service. From this kind of warfare sprang the warfare of classical Greece. Normally, a battle meant that two lines of hoplites, well-armoured men

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1 The ἀδύνατος at Athens who got the dole had to be τὸ σῶμα πετρωμένοι, though not necessarily through war, and unable to work at a trade, Arist. Ath. Pol. 49, l. 25. The ἀδύνατος in Lysias walks with two sticks; he of Aeschines, Or. 1, 40, ll. 30-40 is blind. This is hardly what we mean by "unfit."
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with shield and spear, drawn up eight deep, met face to face and pushed. The square was known in the fifth century as a defensive formation, but otherwise there were really no tactics to speak of, and very strange it is when one considers how competent the Athenians were in naval warfare. Reserves were unknown; if anybody's flank ever got turned it was usually by accident, by the tendency of a line of hoplites to incline to the right so as to avoid exposing the unshielded right side, or by the men at the end of the line giving way, as happened when the Athenians outflanked and surrounded the Thespians at Delium. The use of the ambush was of course practised; Demosthenes in his campaign in Acarnania did once, by means of an ambush, turn his opponent's flank, and Brasidas at Amphipolis did in much the same way take Cleon in flank when his force was on the march; but I believe no case of an open attempt to turn the flank of the enemy in a battle is known. This may have been due partly to the fact that cavalry was hardly a serious force anywhere in Greece except in Thessaly, and Thessaly by language, history and customs belongs rather with Macedonia than with Greece, and will be noticed in
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the next lecture. All it came to, in most cities, was that a few wealthy men rode on horses; they were useful for scouting or raiding supplies, but they rarely played any serious part in battle; there is no case of Greek cavalry in Greece, putting Thessaly aside, either employing shock tactics or turning the enemy's flank. Certainly the cavalry of Syracuse was a more efficient arm; in 415 B.C. they saved the beaten Syracusans from the Athenian pursuit, and they were able to play a considerable part in compelling the Athenians to surrender in their final retreat from Syracuse; but Sicily was not Greece, and the pursuit of worn-out men was not a battle.

Much the same applies to the history of light-armed troops, who had to wait for Alexander to show what could be done with them. There were light-armed troops, usually armed with javelins, and a great city like Athens would possess some archers; but prior to the fourth century it seems that the light-armed were often only an unorganised force, and it was very rare for them to exert any serious influence on the course of a battle, except in Aetolia. That unconquerable country was always a law to itself; but, apart from the defeat of Demosthenes by its light-
armed levies in 426, the success of light-armed troops, in very unusual circumstances, against the Spartans marooned on Sphacteria is about the only exception of importance which occurs to me; for again the services of the Syracusan light-armed against the Athenians during their retreat from Syracuse had little to do with the use of such troops in battle. The bow in particular was not really a factor in Greek warfare, except in Crete, which lay rather outside the general stream of Greek history; the bow belongs to Asia, and will have to be considered together with cavalry. There seems to have been no case before Philip, unless Dionysius of Syracuse, of a general who really understood how to use a combination of various arms. But there was one development in armament before Philip, the invention of the peltast. The peltast, so called from his *pelta* or small round shield, was a lighter edition of the hoplite—smaller shield, lighter spear, less armour, greater freedom of movement; the later text-books treat peltasts as an intermediate arm between heavy and light infantry. They were known in the late fifth century, but they first became famous in the fourth century, when the Athenian Iphicrates and the
peltasts he had trained wore down and destroyed a small body of heavy-armed Spartans. But their importance really belongs to the rise of mercenary service.

Naturally there were generals who within their limitations were abler than their fellows, but perhaps the only one besides Xenophon who was of much importance for the history of land warfare was the Theban Epaminondas; Philip knew him, and he has been claimed as Philip’s forerunner. He did not indeed rise beyond the idea of two lines of heavy-armed spearmen meeting face to face, but by increasing the number of files of his left wing—he made it a column 50 deep—he made sure of breaking the opposing wing of the enemy and then taking the centre in flank. He chose the left wing, not the right, partly because there was no fear of the left wing edging away from the enemy line to save their unshielded side, and partly because at Leuctra the Spartiates themselves were on the right of their army. His deep column won a famous victory at Leuctra over the Spartans, but it had in fact been used by Thebans before him, and once the device was known it was tolerably easy to meet. The two real novelties at Leuctra were