

ENGLISH LONGBOWMAN

1330-1515



WEAPONS ■ ARMOUR ■ TACTICS

CLIVE BARTLETT GERRY EMBLETON

First published in Great Britain in 1995 by
Osprey, an imprint of Reed Consumer Books Ltd.
Michelin House, 81 Fulham Road,
London SW3 6RB
and Auckland, Melbourne, Singapore and Toronto

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ISBN 1 85532 491 1

filmset in Great Britain by Keyspools Ltd.
Printed through Bookbuilders Ltd., Hong Kong

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THE ENGLISH ARCHER 1330–1515

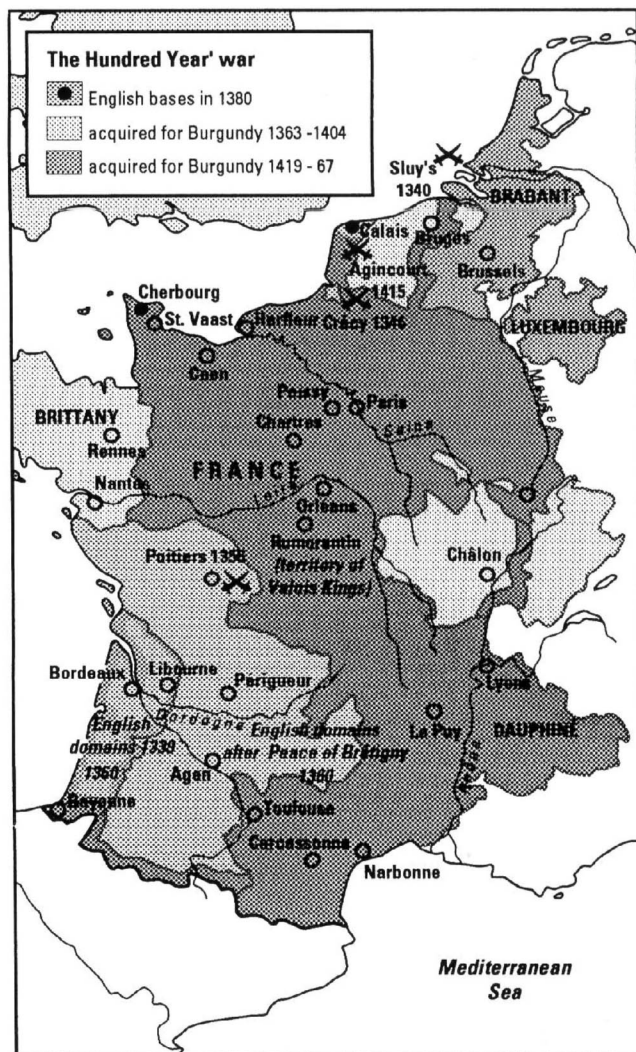
INTRODUCTION

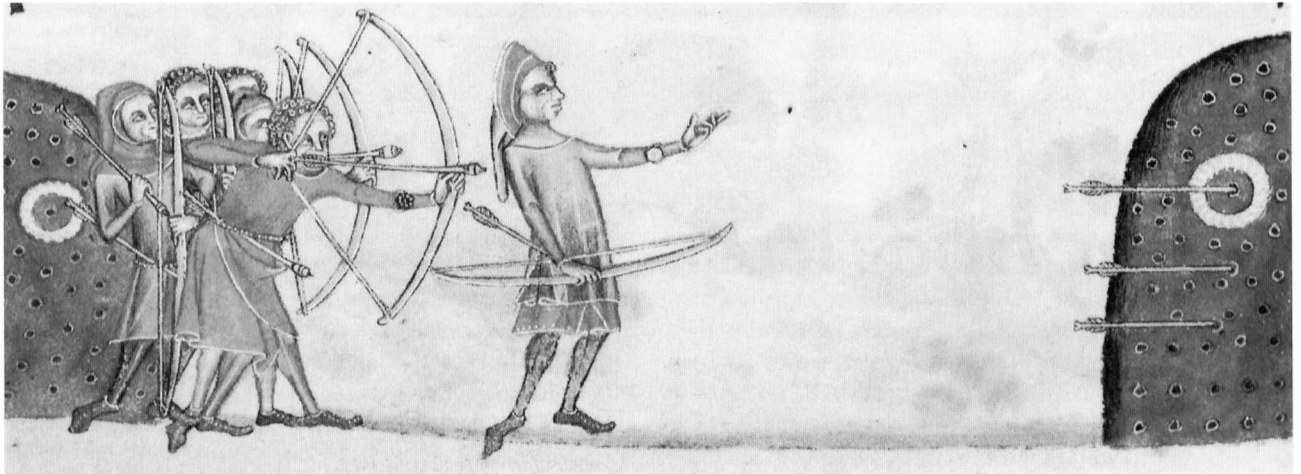
The period covered by this text has been chosen for two reasons: firstly because it was the great age of English archery and secondly, because the method of raising the armies differed from that of before and after. The end of the 13th century and the beginning of the 14th had been a period of experimentation and development which by the 1330s had established the 'identity' of the army that was to last for the next two hundred years. From the early 16th century the centralisation and increasing authoritarianism of Royal government, coupled with the problem of obtaining sufficient manpower for the ever-increasing size of armies diminished the military power and influence of the aristocracy and led to the recruitment of substantial numbers of foreign mercenaries. This dearth of native bowmen (accounted for in part by a series of historically less well documented, but still vicious, plagues) and use of mercenaries also accelerated the introduction of firearms and subsequent demise of the bow. While this early Tudor period has been considered a time of modernisation of the English army, it was also the start of a military decline that was to last for some 125 years.

A more accurate title for this book might be 'Archers of the English armies 1330–1515', for these armies usually included considerable numbers of Welshmen and, what may come as something of a surprise, some Frenchmen. It is often overlooked that England owned large areas of France legitimately, through inheritance and marriage. It was a dispute between Edward III of England and Philip VI of France over feudal overlordship that was the root cause of the Hundred Years War. This war was not continuous but had two distinct phases. What can be called the 'first French war' (1337–80) was always planned as a series of great raids of plunder and destruction (*'chevauchees'*) by the English to keep the French occupied and ensure the sovereignty of the English possessions, whereas the 'second French war' (1415–53) began as one of planned conquest. Those Frenchmen who were part of the Plantagenet empire, particularly the Gascons, fought alongside their English allies and a few, like the Captal de Buch, achieved great fame. The annexation of Aquitaine by the French in 1453 was certainly not welcomed by its inhabitants. Similarly, muster rolls and garrison lists from

Normandy after the English conquest include French names among the archers and men-at-arms, and many must have faced a difficult choice after French liberation in 1450.

Unfortunately, throughout the Hundred Years War no Englishman thought it necessary to write a treatise on archery. The first such work was penned in 1544 but by a scholar, Roger Ascham, not a soldier. It was not until 1590 that a soldier, John Smythe, wrote a book discussing military archery, as an argument against the official removal of the bow from the army's weapons list.





There are numerous contemporary illustrations of archers, but practically every one of them done by a foreign artist or in a foreign workshop. Only in the Luttrell Psalter and the Beauchamp Pageant are there English depictions of comparable quality, though in the latter we have, perhaps, the most accurately observed of them all. Until the excavation of the *Mary Rose*, the Tudor warship that sank in 1545, the only surviving examples of medieval English archery equipment were a handful of bows, most of dubious authenticity, and a single arrow, found in Westminster Abbey in 1878. But despite it being some 15 years since the first *Mary Rose* artifacts were raised, we still await detailed reports of the 138 bows and some 2,500 arrows recovered, and can only draw upon one or two detailed archeological drawings, a few reports by privileged visitors, and the exhibits on display. In consequence of the above, the author hopes he will be forgiven for the frequency of ‘apparently’, ‘appears to’ and ‘could be’ in the text. However, he has been able to draw upon the knowledge of some highly skilled bowyers and fletchers, notably Richard Galloway, and groups of ‘practical archeologists’, and much of the practical information in the text comes from the research done by these individuals and groups.

RECRUITMENT

Until the 17th century there was no such thing as a standing army in England. Consequently, the armies for campaigns of the 14th and 15th centuries were raised when needed and disbanded on completion of operations. An archer would either have been ‘conscripted’ into the ‘levy’, raised by ‘Commission of Array’ or recruited into a ‘retinue’, great or small, of a member of the nobility or gentry in a force raised by ‘Contract of Indenture’.

Civilian archers at practice in the 1330s. The ‘butts’ shown here (distance not to scale!) were constructed of earth and turf and these have a

simple white circlet, a ‘garland’, made of some material for the target. (The ‘Luttrell Psalter’. British Library Add MS 42130 f147v)

The Commission of Array

The Commission of Array was a legacy of the feudal obligation whereby every man between the ages of 16 and 60 (the *posse comitatus*) had to serve his county in time of need. This blanket obligation was refined so that ‘. . . a selected force of the county was supported by the rest . . .’.¹ According to the Statute of Winchester of 1258, which remained in force until 1558, those with lands or rents worth between £2 and £5 a year were to serve as (or later to serve as *or* ‘find’ – i.e. provide) an archer.

Counties were assessed (as to) the number of men they were to supply, and ‘arrayers’, men of considerable standing, appointed under Royal authority, toured their respective counties selecting from the manpower assembled at various designated muster points. They were to choose ‘whole and hable’ men and had to test every archer listed on the roll. They were also to supply the men with clothing and equipment, and sometimes horses, to pay them (or give the money to the assigned captain) and either send them to a further muster point or hold them in readiness.

For the unwilling conscript it was possible, particularly after 1343, to escape service by paying a fine, though this was not always accepted. Corruption was not unknown, especially in the raising of armies for the unpopular Scottish campaigns, but was nothing like as serious as in the 16th century. It is highly unlikely that an assessed archer could afford to bribe someone of the status of an

¹M. Powicke, *Military Obligation in Medieval England*.

arrayer, but local officials responsible for the mustering of the men and for drawing up the roll of names were occasionally 'encouraged' to remove or change a name or, having assembled good men before the arrayers, to substitute poor ones later on. On the other hand, there would have been volunteers, especially for the French campaigns of the 14th century when from the pulpits of local churches came news of the great victories won and returning soldiers laden with booty showed the material gains possible.

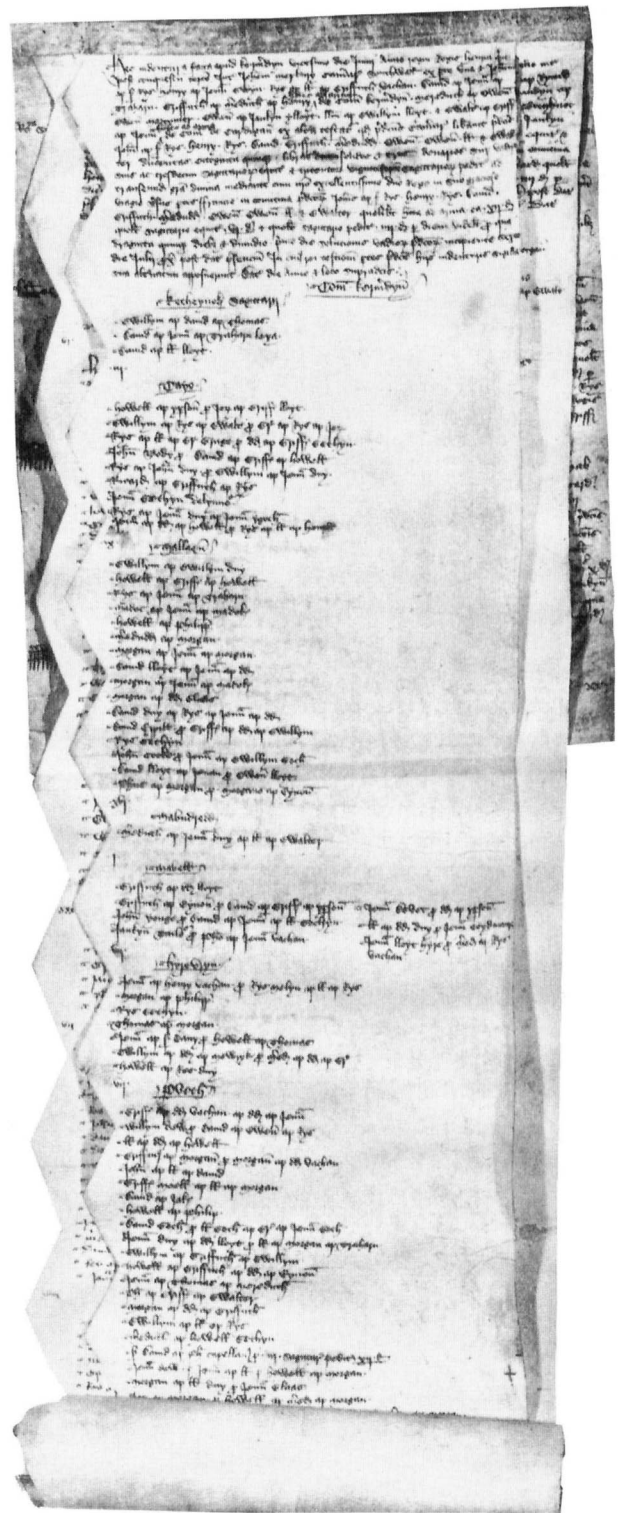
Cities also supplied archers under the Array system. Usually the Mayor and Aldermen would 'find' men, and they were often permitted self-assessment regarding the number to be raised. For example, the City of York's offer of 120 mounted archers for the Scottish campaigns of 1480/81 was accepted by the King, but when called upon again, in 1482, the city successfully appealed for a reduction to 100 mounted archers because of the financial burden of its past contribution. Counties were also allowed to appeal if they felt their assessment was too high.

During the sporadic Wars of the Roses (1455–87) the levy was sometimes in the difficult position of being called out by both claimants to the throne. However, the strength of the feudal tie ensured that they served on whichever side their local lord's or city's allegiance lay.

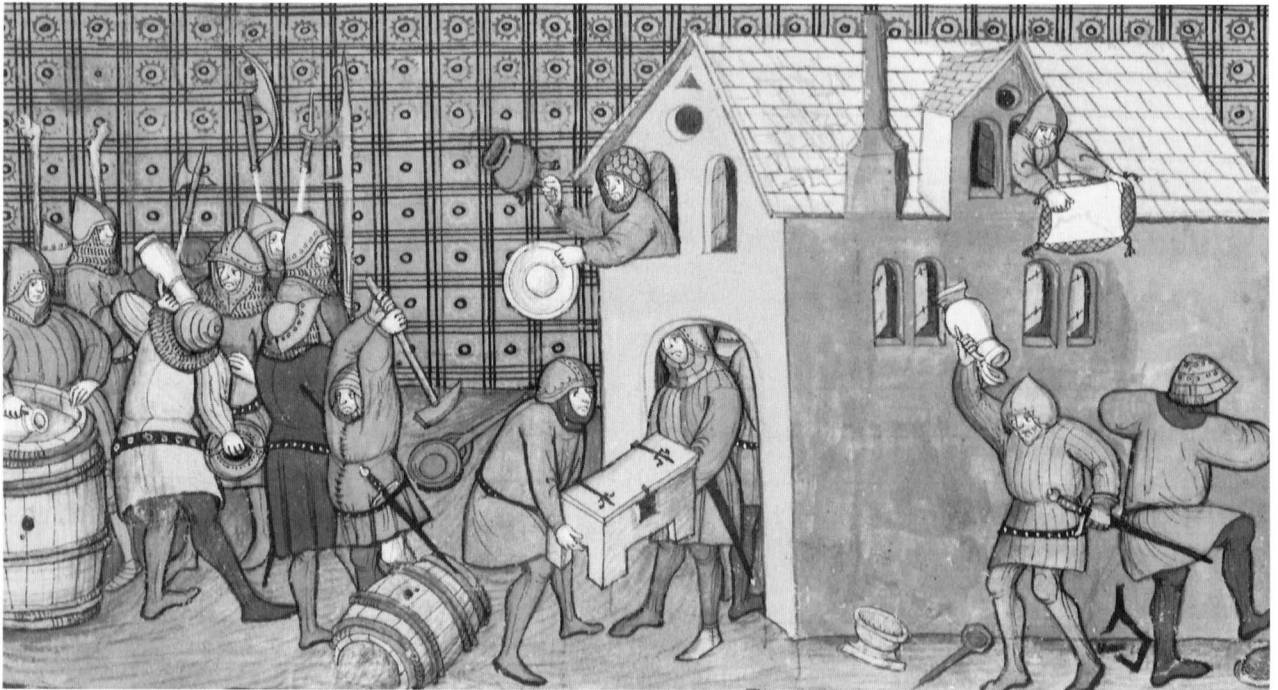
The Contract of Indenture

The 'Contract of Indenture', instigated by Edward I at the end of the 13th century, eventually superseded the obligatory 40 days feudal service for the nobility and was simply the adaptation of their existing arrangement to establish a part of their own personal following. 'Contracts' were drawn up between the King and his chief commanders which stipulated the size of the army required, its purpose and the terms and length of service. Depending on the numbers needed, the commander would supplement the men of his own 'indentured retinue' by sub-contracting with members of the nobility and gentry who had their own retainers. At the lowest level, this might mean only a single man-at-arms (the contractor himself) accompanied by two or three archers. If the King was to lead the expedition, he would bring his own retinue as well. To ensure 'fair play', the contract, written on parchment, was often duplicated on the same sheet and the sheet was then torn or cut in two to leave each half with a serrated edge; both halves were then counter-sealed.

An indentured retinue could consist of any or all of three types of personnel: . . . first, resident household attendants; secondly, men who are bound by written indenture to serve their lord for life in peace and war; and thirdly, those whose attachment to the lord is shown simply by the acceptance of his fees and the wearing of his



An Indenture of 1415 in the name of John Merbury, Chamberlain of South Wales, recruiting archers for the forthcoming campaign. (Crown copyright. Public Records Office E101/46/20)



badge and livery . . .² An indentured archer could come from any of these groups.

The Retainers

The household archer was considered an elite; Warwick the Kingmaker once commented that they were worth two ordinary archers – even English ones. The top of this class were the King’s ‘Yeomen of the Crown’ who, according to the household regulations (the ‘Black Book’) of Edward IV, were to be ‘most semely persons, clenely and strongest archers’ and were selected by being ‘chosen and tried out of every lordes house in Ynglond’.

The ‘domestically’ indentured retainer, who signed the same type of contract as the military one, came from the tenantry and neighbourhood of his lord’s estates and, though not as good an archer, only really differed from his household counterpart in not being a permanent resident; he was usually required to perform many of the same duties and received many of the same benefits.

The hired retainer was, basically, an itinerant soldier who might serve in a retinue for a considerable time, especially in garrisons in France. It is perhaps unfair to judge them purely as mercenaries, but these soldiers were almost always temporarily employed and it is they who often resorted to banditry when ‘gainful’ employment could not be found (such as after the Treaty of Bretigny, in 1360, and the English eviction from Normandy, in 1450)

Looting 14th century style. Many of the soldiers are wearing the padded gambesons – and

note the helmets of laminated construction. (British Library. Royal MS 20 C VII f41v)

and against whom civil complaints about lawlessness were usually directed. They were nevertheless professional soldiers and archers of great skill.

The King or commander could also employ companies of archers through direct contract and through criminals serving in exchange for ‘Charter of Pardon’. The latter arrangement was quite prevalent during the 14th century (e.g. the company of 200 serving in the Scottish campaign of the winter of 1334/35). Indeed, it has been stated: ‘It seems probably that from two to twelve per cent of most of the armies of the period consisted of outlaws.’³ The Charter of Pardon could only be granted by the King, and in nearly all cases was given *after* the service had been performed and witnessed. Other conditions were also often stipulated, but wages were paid at normal rates

The Levy

In the 14th century Commissions of Array and Contracts of Indenture were used in combination to raise armies for service in Wales, Scotland, Flanders and France. However, complaints were made by Parliament, the cities and the counties about the legality of some of the terms of service and about the continuing costs of the arrayed levy.

²N.B. Lewis, *Indentured Retinues in Fourteenth Century England*.

³J.J. Hewitt, *The Organization of War under Edward III*.

After a series of legalistic bargainings between a succession of kings and parliaments it was re-affirmed that soldiers raised under Commissions of Array would only serve 'domestically' – though, importantly, a concession was granted by Parliament that this included service in Scotland and Wales. Consequently, throughout the 15th century every army that left England to serve abroad was raised entirely by Contracts of Indenture.

However, it should be noted that in the 15th century the system of Commission of Array extended to captured French lands, and any English 'colonist' or Frenchman who held lands or fees by English authority was obliged to serve as a levied soldier when called upon by the King or the King's Lieutenant. Indeed, in 1429 it was ordered that 'all men-at-arms and bowmen . . . holding fiefs and arrierefiefs . . . as well English as Normans' were to assemble at Rouen to join the Duke of Bedford in his defence of Paris. Furthermore, because Calais was an English possession populated almost exclusively by Englishmen (the indigenous population had been evicted at its capture in 1347) and considered as much a part of England as, say, the Isle of Wight, it was quite legal for levied troops raised at an English Array to be posted there.

The most noticeable difference in the 15th century between an army raised for overseas service and one raised for domestic service was size. For example, for the 1475 French expedition the combined indentured contingents of the brothers Lord Thomas and Sir William Stanley totalled 42 men-at-arms and 320 archers, but for Henry Tudor's invasion of England in 1485 they mustered some 3,000 household and retained men. Other notable families, such as Percy and Howard, could raise as large or larger 'private armies', and if one includes levied troops raised from the whole country, it is apparent that in England very

large armies could be assembled. However, it is worth noting that contemporary accounts relate how the quality of household and retained men was always more valuable than the quantity of the levy.

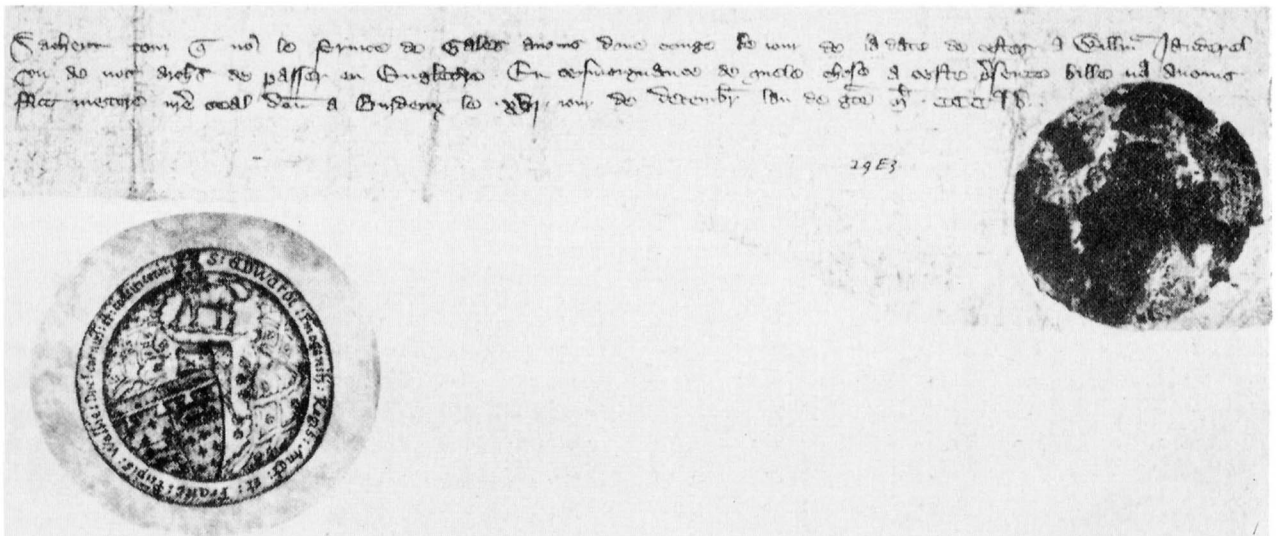
SERVICE

Not every levied archer was mobilised to serve in a field force. The duty of arrayed archers north of the River Trent was to remain on standby, ready to repel any Scottish incursions (particularly likely when the King of England was in France with the main army, as at Flodden in 1513).

Similarly, men of the coastal counties, especially those facing the English Channel, who lived within a six-league margin of the shore were arrayed and placed on standby to serve in the 'Garde de la Mer'. Their role was purely to defend their areas and repel any invasion. During the 14th century both they and the men north of the Trent were exempt from service overseas. These 'home defence' levies were strengthened by designated members of the nobility and their retainers. In 1415 Henry V entrusted the Earl of Westmoreland and the lords Mauley and Dacre with 200 lances (i.e. men-at-arms) and 400 archers to guard the East and West Marches facing Scot-

An early soldier's pass. It reads: 'Know all that we, the Prince of Wales, have given leave, on the day of the date of this instrument, to William Jauderel, one of our archers, to go to England. In witness of this we have

caused our seal to be placed on this bill. Given at Bordeaux, 16th. December in the year of Grace 1355'. (Courtesy of the Mostyn-Owen-Jodrell family and the John Rylands Library, Manchester)



land; a further 100 lances and 200 archers were allocated to north and south Wales, 150 lances and 300 archers to Calais and 150 lances and 300 archers 'for the sea'.

The indenture system was also used to garrison castles and strongholds on the borders and coasts of England and between English- and French-held territory in France. The King signed contracts either with the lord in whose domain the fortification lay or directly with the castle captain. These contracts were identical to those raised for

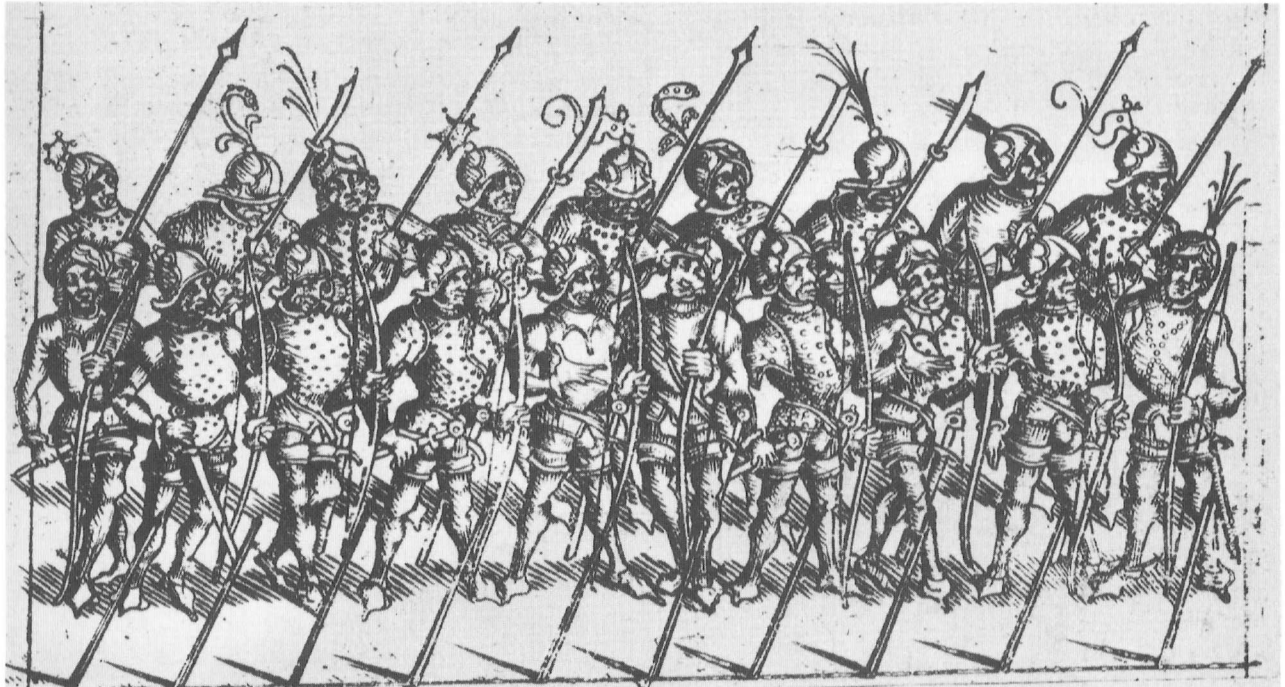
field forces, agreeing the number of men and the payment terms. They often contained a clause stating that if a garrison came under siege, the King was obliged to relieve them within a given time; if that time elapsed, the captain was free to make his own terms with the besiegers or simply abandon the position.

Of course, not all English archers served English masters. Many sought employment elsewhere, and the best example is those who joined Charles the Bold of



Comment six mille compaignons partirent de la ville de gaud durant le siege et alerent par assault gaigner piller z ardoir les villes de Aloust redremond z grantmont. Et puis sen retournerent a gaud. Le siege durant et estant deuant gaud par la maniere que le conte lanout asiegeie vult fait plusieurs escarmouches autour de la ville. Car le seigneur de huyne et le seigneur de huyne et le seigneur de flandres en trouuoient a la fois a descomert dont ilz ne venoient nulles racons. Et auscunes foies ilz estoient reboutes si dur quez nauoient mie loisir de re garder derriere eulx. Adonc se reueillirent en la ville de gaud six mille compaignons molt aidables et curtes rasse

Looting 15th century style. The clothing and general appearance of these soldiers differs completely from those of the 14th century in the preceding illustration. (The sack of Alost. Bibliotheque Nationale, Paris)



Burgundy's army in the 1470s. The majority of them enlisted after the bloodless French expedition of 1475 when Charles remarked that they might as well fight for him as go back to England and kill each other.

Burgundian archers in the defensive formation common throughout the period, i.e. backed by billmen and fronted by

obstacles – which in this 15th century example are stakes. (Master Wa, active 1465–85. Private collection. Chateau de Grandson)

shortage immediately after the Black Death was set at (though usually exceeded) 10 shillings a year by the Statute of Labourers in 1331.

EARNINGS

Standard military rates of pay stayed remarkably consistent over the two centuries; indeed, the only major change was to the pay of archers. Both the levied and retained archers were paid at the same rates. In the 14th century this was generally 6d a day in England and France and 4d a day in Scotland for a mounted archer, and 3d a day in England and France, 2d a day in Scotland for a foot archer.⁴ There were variations: sometimes ordinary foot archers in England and Wales only got 2d a day, whereas selected men, usually those from Flint and Cheshire who often formed part of the King's personal guard, received 6d a day in all theatres of war.

The change came at the beginning of the 15th century, when the rates were standardised to 6d a day for both mounted and foot archers at home and abroad – except for garrison archers in England, who got 4d a day.

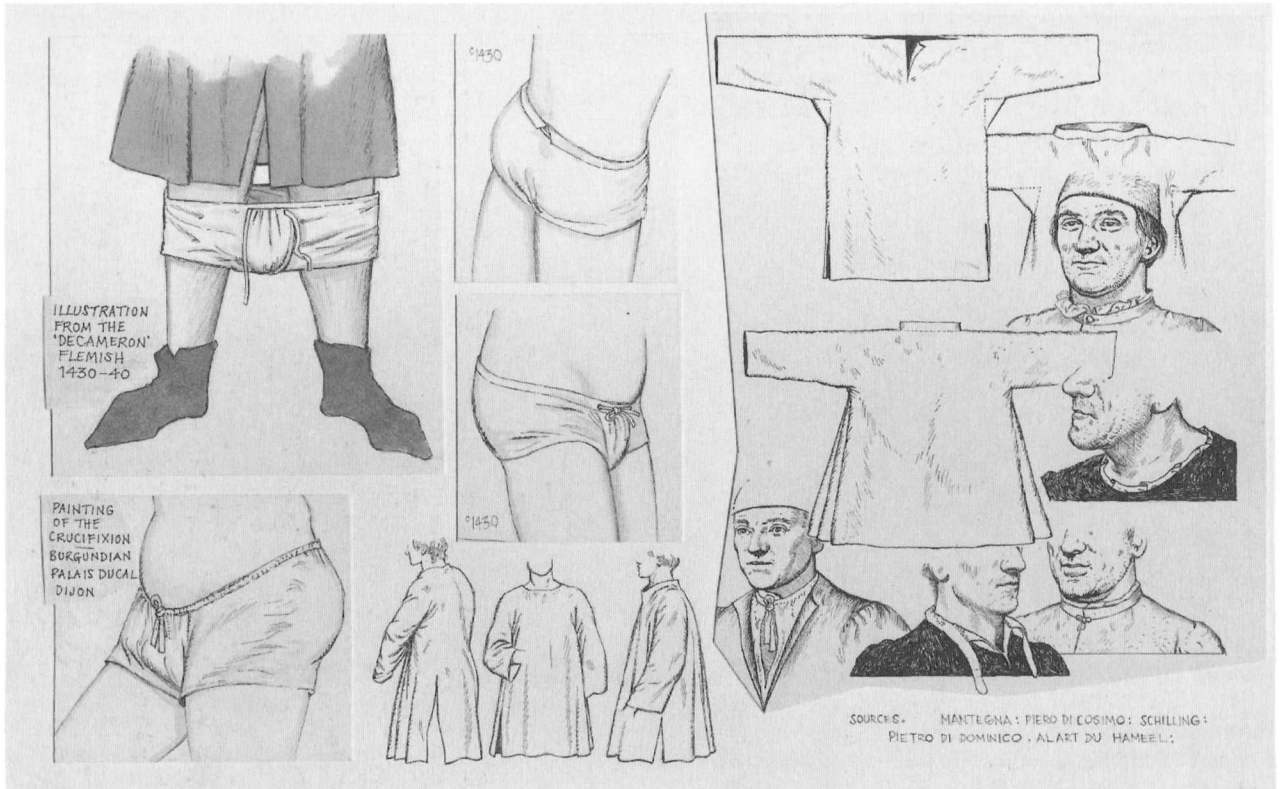
It is virtually impossible to translate these rates into modern values, though it can be noted that the pay for a skilled, much-needed ploughman during the manpower

Payment of Wages

Indentured soldiers were paid quarterly in advance, though this 'quarter' appears to relate more to the stipulated length of service than a quarter-year, and there is some evidence that payment on a six-week cycle was quite common. Contracts often specified that if payment fell into arrears (some contracts specifying as little as a week), the agreement was annulled and the contracting party was free to depart without blame. Inevitably, in the real world, soldiers sometimes went unpaid for long periods, particularly in Normandy in the 1440s.

It was common practice for retainers to be paid from their doorstep. For example, for a contract between Edward III and Sir Robert Knolles in 1370, the sheriffs were to proclaim that all who would freely set out with Knolles would be 'contented of their wages from the time they should leave their homes'. Therefore, although the army commander sometimes received the first quarter payment at the signing of the contract with the King or King's Lieutenant, he usually paid the men, via the contingent captains, before receiving any money himself.

⁴This is the pre-decimal English currency of 12d (pence) to 1s (shilling) and 20s to £1 = 240d to the £1.



Braies (underpants) and shirts are pictured as being of the same style no matter the class of the wearer (as is true today) and always white. Invariably of linen, though variations in quality would

reflect the status of the wearer. It is not known to what extent braies were worn but pictorial evidence indicates they were a common item. (Drawing © G.A. Embleton)

This is clearly illustrated in an Indenture of 1424 between the King and the Earl of Salisbury which stipulates that if a soldier had been killed or died in service, provided the Earl supplied a certificate to that effect, the soldier's wages would not be withheld.

Generally, the first payment made by the King's commissioners to the army commander was at the first muster that was made in their presence, obviously to ensure that the number and quality of the men matched up to what was promised. Likewise, for all subsequent quarterly payments, the troops were mustered and inspected. This meant that the commissioners had to travel to wherever the men were serving. Furthermore, if a soldier was absent because of illness, the commissioners had to travel to wherever that soldier was and verify his condition before payment was made. If the commissioners refused to make the journey, payment could still be made in exchange for a certificate. In all contracts, absence from military duty other than for sickness, even

if authorised, meant a reduction in payment.

Of course, the daily wage was not the only income for the indentured archer. If he was a household man or retainer, he was also paid an annuity – an amount that varied according to the wealth and generosity of his employer. In 1467 Daniel, a household archer of Sir John Howard, received an annuity of £10 (a considerable sum) as well as gifts of clothing and a 'house for his wife to dwell in at Stoke'. Even hired retainers were paid bonuses, as illustrated by a letter from Roger L'Estrange to Sir John Paston in 1492 requesting help in obtaining two or three archers who would be paid 'the Kings wages and some what else, so that I trust they shall be pleased'.

Commanders were well aware of the dangers of the less scrupulous soldier enlisting in one retinue, receiving payment and then deserting, perhaps later to appear in another retinue for a different campaign. As far as possible, steps were taken to prevent this.

Levied archers raised by Commission of Array were expected to serve unpaid within their own county. During the 14th century, when eligible for service overseas, they were paid by the authorities from the time they left the county until they reached the main army and the first muster. At that point they went onto the King's payroll. In practice the county usually paid them in advance to cover the whole journey and, depending on the generosity of the

authorities, could also grant extra travelling money.

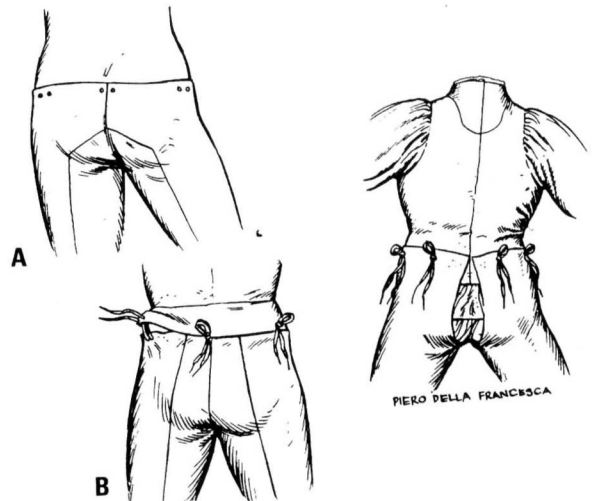
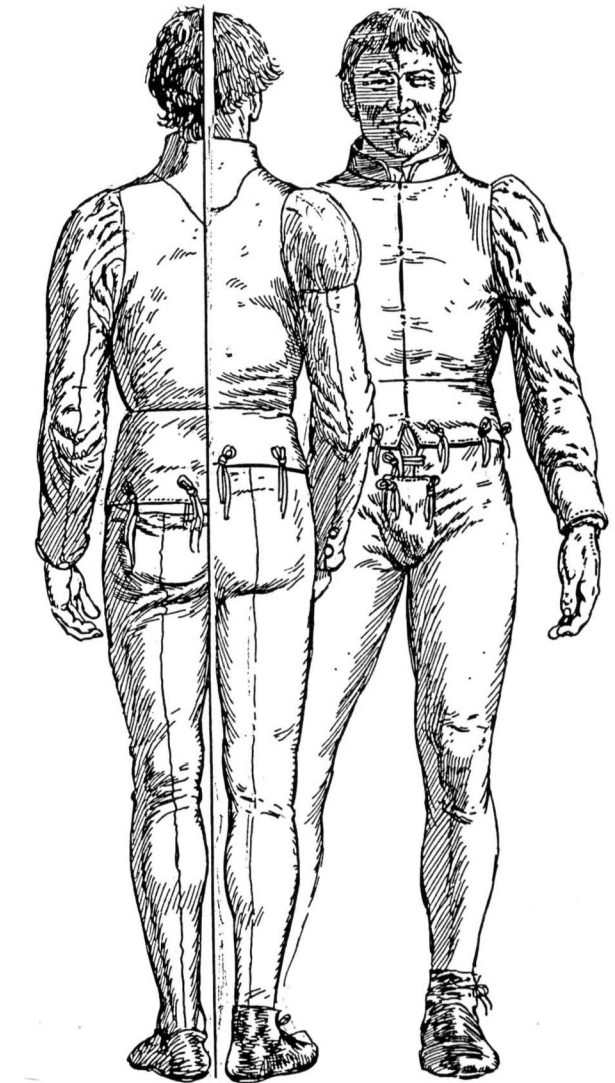
In the 15th century, though no longer obliged to raise men for foreign service, the county had to pay their soldiers' wages for the duration of any domestic campaign outside of the boundary. (It should be noted that this only applied to the number of men agreed with the King. The King could, if he required, instruct a county or city to find extra men for whom he would pay the wages.) This meant that they were raised and disbanded very quickly, so payment intervals were different. In the case of the archers from the City of York sent for service in Scotland in 1482, the men were enlisted for one month and were to receive 14 days money at the muster on the day of departure; two appointed captains were to pay the remaining money at their discretion. Come the muster, the archers refused to ride unless they received the whole month's money. The authorities had no option but to acquiesce. Three weeks later the city had to send extra wages to Scotland since their archers were reported to be 'deselet of money'.

A 1424 Indenture between the King and the Earl of Salisbury identifies another ploy by the unscrupulous soldier, that of a resident in France, and therefore liable for unpaid service in his area under the Array system, who chose, when a campaign was imminent, to enlist in a retinue. If this was discovered to have happened, the guilty party was to repay all wages he had received. If he no longer had the money, he was to be put in gaol until restitution was made.

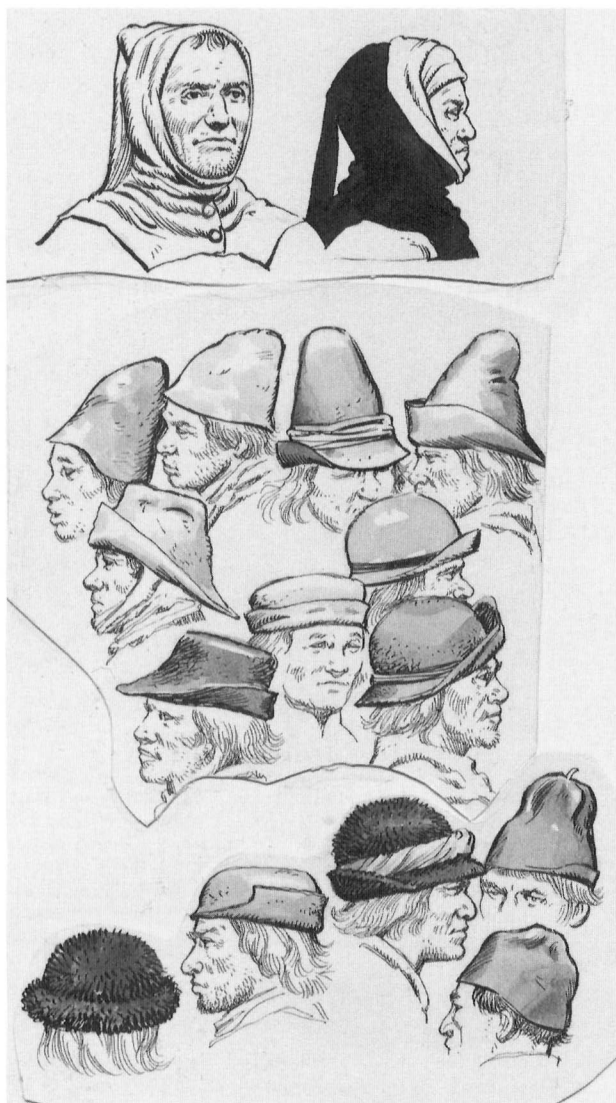
PLUNDER

Both retained and levied archers also profited by ransom and plunder. The rules regarding the spoils were plainly laid out. Certain people, if captured, were to be handed over to the King or his lieutenant immediately. This applied to the enemy king, prince or captain of the blood royal, and to their lieutenants, marshals and constables. The captor was then granted a suitable reward. All other persons and possessions could be ransomed and sold by their captor, but the rewards were to be divided as follows: of the sum raised, one third was to go to the captor's

These drawings illustrate the basic changes in hose from the 14th to the 16th centuries, i.e. from 'single-leg' to 'joined' and the gradual lifting of the top edge from the hips – reaching the natural waist by the end of the 15th century. (Drawing © G.A. Embleton)



PIERO DELLA FRANCESCA



Above: Hats were worn by all classes of society and considered a necessary part of man's clothing. When he was not wearing a helmet, an archer would invariably have put on a hat. There was such a variety of styles that it is almost impossible to outline every possibility, but shown here are some of the most common types. (Drawing © G.A. Embleton)

Right: There does not appear to have been any military regulations covering hairstyles. Generally hair was medium length, though as in all periods, some soldiers preferred the convenience of short 'crew-cuts'. English soldiers are virtually always portrayed as clean shaven but how often they shaved and whether there was any military stipulation is simply not known. (Drawing © G.A. Embleton)

immediate captain; of that third, one third was to go to the overall commander; and of that third, one third was to go to the King. This system extended into the frontier garrisons even during relatively peaceful times. In his quarterly report on the garrison of Tomberlaine between December 1443 and March 1444, the clerk to the controller of the garrison recorded the arrivals, departures and periods of absence of the men-at-arms and archers and listed the ransom of a prisoner and the sale of a captured horse and sword. The prize money totalled £28 17s 6d and of this money £9 12s 6d was allocated to the lances (as captains); of that money, £3 4s 2d was allocated to the garrison commander and of that money £1 1s 5d was allocated to the King.

Of course, not all plunder was reported by the soldiers. Froissart records how in 1346 the men on campaign in Normandy dutifully reported to their officers the amount of corn, the number of houses, horses, cattle and other beasts but 'made no count to the King nor to none of his officers of the gold and silver they did get, they kept that to themselves'. Froissart's chronicle is full of reports of returning armies laden with 'gold, silver and prisoners', and a chronicler wrote that in 1348 in England 'there were few women who did not possess something from Caen, Calais or other overseas towns, such as clothing, furs, cushions. Table cloths and linen were seen in everybody's houses'. One of the lesser known logistic achievements of the Hundred Years War is how all this captured wealth was successfully transported back to England.

VICTUALLING

The English were renowned for their great appetites; so much so that in about 1500 a Venetian diplomat reported: 'But I have it on the best information that when war is raging most furiously they will seek for good eating and all their other comforts without thinking of what harm might



Edward I seems to have been the first king to issue the Cross of St. George to his soldiers as the identifying badge of the English. This was of varying sizes and sewn directly onto top garments or glued or painted onto breastplates. Campaign regulations made this compulsory, and decreed the death penalty for any of the enemy caught wearing it. One of Henry V's regulations for the 1415 campaign stated that if an Englishman mistakenly killed another Englishman because the latter had neglected to wear the Cross, he would have no charge to answer – a rule which probably followed earlier precedents. From about the middle of the 15th century English archers are increasingly pictured wearing white jackets with a large St. George Cross both front and back. For the Scottish campaign of 1481 Edward IV decreed that *all* soldiers were to 'have upon hym a white Jaket with a crosse of Seynt George sweed theruppon' but permitted any individual to also wear the badge of the captain with whom he had enlisted. The Teller's Roll for the 1475 expedition lists the badges of the individual captains, so it is almost certain that the same arrangement was laid down for that campaign. These badges would have been worn on the left breast.



Sword of the mid 14th to early 16th century. Contrary to popular belief, the development of extra hand guards did not originate in the 16th century. The earliest features, datable to the mid 14th century, are a ring below the cross or a simple 'knuckle-bow'. (A12/976 IX 2639. Board of Trustees of the Royal Armouries)

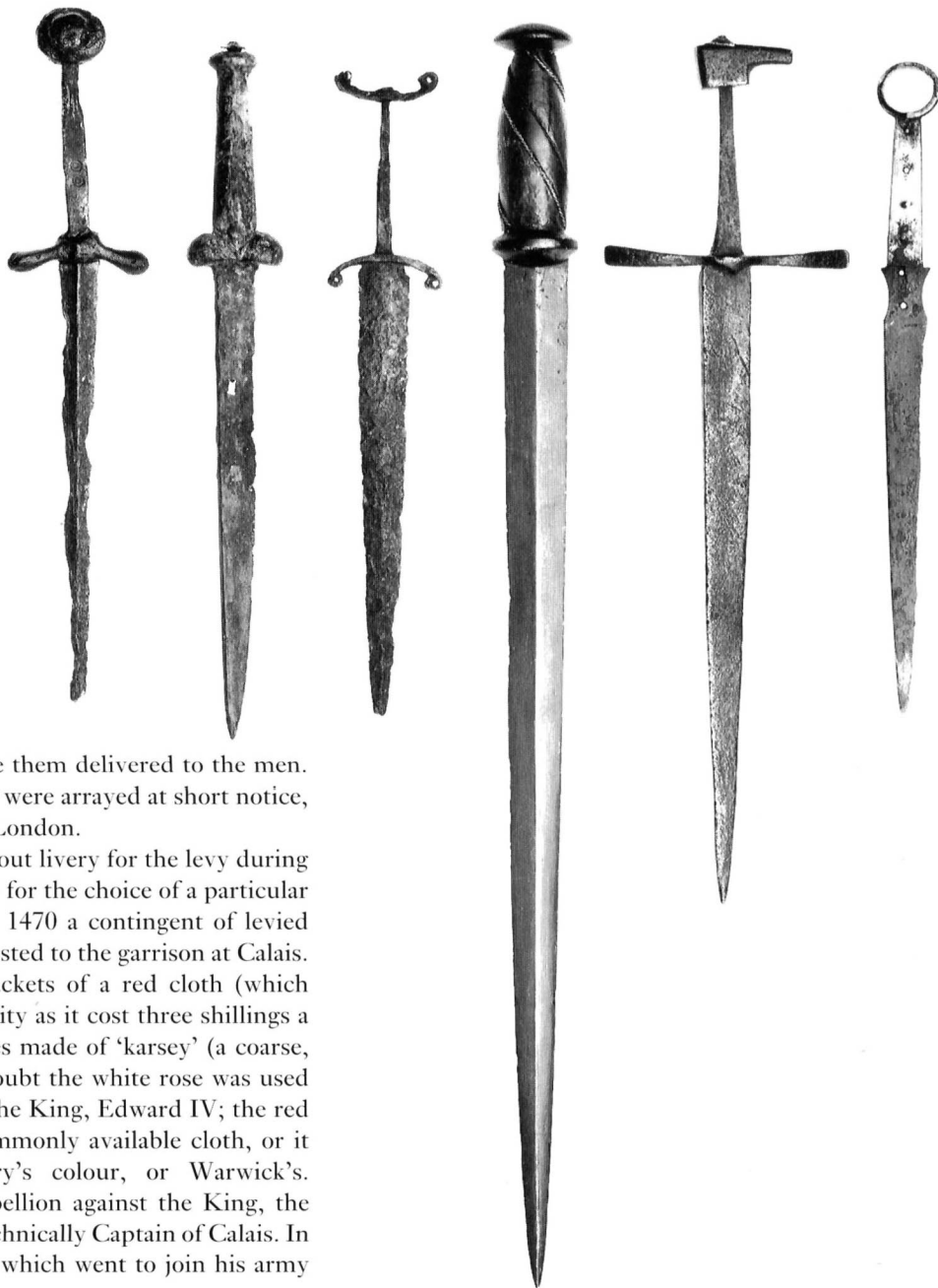
We can only guess at how well the average soldier could identify individual badges, something made more difficult by many lords adopting more than one through marriage into and inheritance of different estates. For example, Richard, Duke of York, father of Edward IV, had badges of the white rose, the falcon and fetterlock, a white lion, a black bull and a black dragon. The soldiers of an assembled force of his retainers may have displayed all the different badges of their respective estates. It was because of this that a single, common emblem was sometimes adopted. The White Rose of York became the symbol of the Yorkist faction and was used by all its leaders, and at the second battle of St. Albans, in 1461, besides wearing their own lords' livery, 'every man and lorde bore the Prynceys leverye that was a bende of crymesyn and blacke with eterygeys [ostrich] fetherys' – the Prince being Henry VI's son. It was also the case that because of the fame of an individual or the longevity of use, some badges became very well known, like the Bear and Ragged Staff of Warwick the Kingmaker, and the Crescent Moon of the Percies.

Supply of Equipment

Arms, armour, equipment and livery were supplied to the household man and the retainer by his employer. This supplemented or replaced whatever he owned personally. The household account books of Sir John Howard for the proposed Scottish campaign in 1480 have numerous entries for the issuing to his archers of the following equipment: 'a peir brigandines [probably the simpler type, described above], a peir splentes [splints – simple arm defences], a salate, a cheff of arowes, a standart [standard – a neck defence of mail], his jaket [livery], a gusset [unknown] . . .'. It seems that Howard kept the equipment and livery in stock and issued them as needed – probably a standard practice for senior commanders. When rebellion broke out in England in 1469, Edward IV, in Norwich, sent to the office of the 'Wardrobe' in London for 1,000 jackets of blue and murray with white roses. Household men, of course, would have been in permanent possession of their equipment and livery.

The levy was supplied with arms, armour, equipment and livery at their county's or city's expense. The equipment provided for archers consisted of bows, one sheaf of arrows per man and 'competent arms' – usually swords and knives. Details of 14th century livery are extremely scarce; the only known example of colour is that of the soldiers of the adjoining counties of Flint and Cheshire. Levied men there were each given a short coat and a hood, both of wool, and green on the right side and white on the left. There is no record of a badge. It was the task of the Chamberlain of Chester to buy the cloth, have the coats

Selection of daggers of the 14th and 15th centuries. The 'ballock' or 'bollock' knife, second from the left, is probably the most common soldier's knife of the 15th to mid-16th century, the hilts varying in quality from the highly finished to crude and home-made. (A13/699 AL116/308, X 798/599/1302/1300/4. Board of Trustees of the Royal Armouries)



and hoods made up and have them delivered to the men. Once, when the men of Flint were arrayed at short notice, they received their livery in London.

Much more is known about livery for the levy during the 15th century, but reasons for the choice of a particular colour are often obscure. In 1470 a contingent of levied men from Canterbury was posted to the garrison at Calais. They were supplied with jackets of a red cloth (which must have been of good quality as it cost three shillings a yard) and bearing white roses made of 'karsey' (a coarse, ribbed woollen cloth). No doubt the white rose was used because it was the badge of the King, Edward IV; the red may have been the most commonly available cloth, or it may have been Canterbury's colour, or Warwick's. (Though at that time in rebellion against the King, the Duke of Warwick was still technically Captain of Calais. In 1461 a contingent from Rye which went to join his army also wore red.)

WEAPONS

The Bow

The 'longbow' has now become so entrenched in history it is usually overlooked that it did not represent the only design of bow in use in medieval Europe. Retained and levied archers would have their own bows when enlisted

but would be re-equipped by the army (contemporary records show the 'wastage' rate to have been enormous).

As the English army changed from one raised by feudal obligation to one of indentured and paid service under central government control, the office of the 'Ordnance' (the war department) became increasingly responsible for supplying equipment. Then, as today, much of that equipment was made to a prescribed government standard.

The longbow was chosen for military service because, though not technically the most efficient bow of the period, it was the most suitable: a relatively cheap, though well made, robust weapon that could be mass produced and that was capable of projecting a man-stopping missile over a good distance at a fast 'rate of fire' – the exact same criteria laid down for every infantry weapon up to the present day.

It is unlikely that the archer would have called his weapon a 'longbow'. The earliest reference, to the word are from the 15th century, and used in listings of equipment to differentiate them from crossbows; on their own they are simply called 'bowes'. It was not until later in the 16th century that 'longbow' (written as one word or two) became common and was identified with a particular type.

The contemporary title for it was 'livery bow' as the issuing of weapons to the soldiers by the 'Ordnance' office was simply seen as an extension to that system. It is a matter for argument as to whether the military adopted a bow already in common usage in civilian England or vice-versa, but this bow became so widespread in English society it was also known in Europe as the 'English bow'.

The War Bow

The war bow was what we today call a 'self-bow', i.e. a bow made from one piece of wood. The best timber for it is yew and this has been known since prehistoric times, though for reasons of availability, other timbers have always been used. Alternatives in the Middle Ages were ash, elm and wych (wych elm, also then called – confusingly – wych



The elite Scottish archer guard of Charles VII (shown here as one of the three Kings). A product of the strong Franco-Scottish alliance existing throughout the medieval period, they were formed in 1418 under the captainship of John Stewart of Darnley. The illustration is used to demonstrate the quality and uniformity of clothing and equipment of wealthy household archers. (The Adoration of the Magi by Jean Fouquet, from Les Heures d'Etienne Chevalier. Musée Condé, Chantilly. Photographie Giraudon)

Right: The Duke of Burgundy entering a town led by trumpeters and archers of his guard wearing his livery. Note the waist quivers. (Flemish 1460–1480. British Library Royal MS E1 f12)

hazel) and from the 15th century brazil, imported from the East. There is also a 15th century reference to 'auburne' (laburnum). The principal timber for English war bows was yew with wych elm a poor second.

The bowstaves were taken from the trunk of the tree, the primary branches or the sapling. Contemporary accounts value the trunk highest but such was the demand that the principal source was the primary branches and staves can only have come from carefully tended, polarded trees in purpose-grown and maintained plantations. England imported yew bowstaves from throughout Europe. Native timber was also used, but it was never highly regarded. The best yew originally came from Spain, but following the destruction of the country's stocks by its king during the Anglo-Spanish war of the late 14th century, the best obtainable was from Italy; by the middle of the 15th century Venice had become the main export centre for bowstaves, and they were usually bought, stored and shipped by resident English merchants.

A later description records bowstaves as being 'three fingers thick and squared and seven feet long, to be well got up, polished and without knots'. (Richard Galloway could fashion a bow from such a stave in just 1¾ hours, which gives some idea of the possible production rate.) Whatever their origin, staves were always examined by English officials, sorted for quality and marked accord-

ingly. The *Mary Rose* bows show that everybody, from growers through to examiners, did their job well, as these bows are made from a quality of yew simply unobtainable today.

Self-bows consist of both the heartwood and a thinner layer of sapwood. The heartwood becomes the 'belly' of the bow and the sapwood the 'back', so-called because of the direction of bend, i.e. the same as the human body. The optimum length for a finished bow is between 5 ft 7 in. and 6 ft 2 in. but the *Mary Rose* bows are some 3–4 in. longer. A statute of 1465 dictates that Englishmen living in Ireland 'betwixt sixty and sixteen in age shall have an English bow of his own length and one fistmele at the least between the nyckes'.* This appears to have been done for safety, since Sir John Smythe was later to write: '... in times past ... there was special care had that all Liveray or warre bows being of the wood of Yewgh were longer than they now use them ... that they seldome or never brake ...'.

The optimum cross-section of the limbs is of a rounded 'D' and the draw-weight (the amount of pulling power needed) anywhere between 80 lbs and 120 lbs. Modern tests have shown that with this type of bow there is no real advantage in increasing the draw-weight over 120 lbs, but that's not to say this was never done. (Note that modern target bows have a draw-weight of around 45 lbs; modern longbows of 40–60 lbs.)

Contrary to popular belief, the bow is not always made from a straight stave. New yew bows often have a forward curve, like a shallow 'C' (the modern term is 'reflexed'), because of the natural tendency of the stave's heartwood grain to expand. While this feature is disguised when the bow is strung, it works to the benefit of the bow's performance. This feature gradually disappears with use until on well-used bows the curve is reversed, and the bow is said to have 'followed the string'. Bowyers sometimes used a heat treatment to put an increased curve into the ends of the bow limbs, which Ascham called 'whipping' (the modern term is 'recurved'). This increases the allowable draw-length (the distance the bow can be pulled back) and noticeably improves the bow's performance. Many of the recovered *Mary Rose* bows have reflexed, recurved and 'string-follow' characteristics.

It is clear from medieval illustrations and from the *Mary Rose* that war bows were tipped with horn nocks on which the string loops fitted. This was done primarily to protect the limb tips, though it also assists the stringing of



*A 'fistmele' equals about 4 in. We can take this opportunity to dispel the notion that medieval man was considerably shorter than his descendants. Excavated skeletons have shown that the average height was 5 ft 6 in. – and this same average lasted up to the 1940s. It is only the improved social and dietary conditions of the last 50 years that have caused a marked difference. However, many archers, especially household ones, would have been picked for their size. The skeletons recovered from the *Mary Rose* average 5 ft 8 in. and include one archer who was at least 6 ft tall.



*The siege of Berwick. (The Lambeth Palace Library
St. Albans Chronicle. MS 6 f174)*

the bow by allowing for a larger string loop, enabling it to slide up and down the bow limb.

It is also clear that no handle bindings were used. The earliest reference the author has seen showing *any* European bow with such a binding is Flemish and dates from circa 1565. Ascham recommended the waxing of the centre of the bow to stop the heat and moisture from the hand spoiling the wood. The *Mary Rose* bows have stamped marks at the bow centre – no doubt a common practice – which, as well as being the bowyers’ mark, may have indicated where the arrow should be shot from. Consistency here was important for both accuracy and safety. Unlike modern bows there was no distinct top or bottom limb: these bows were designed to be shot either way up.

Finished bows were supplied as ‘painted’ or ‘white’, i.e. with or without a waxed or polished finish. During times of military preparation the government not only bought up all the available stocks of bows and bowstaves, but also conscripted the bowyers. For example, in 1359 one William de Rothwell was ordered to ‘take in London and elsewhere as many armourers, fletchers, smiths and other artificers and workmen as are required for the making of armour, bows, bowstrings, arrows, arrowheads . . . and put them to work at the King’s wages’.

Along with armourers and other artificers, bowyers accompanied the army on the march, though surprisingly

for such a skilled job, they were only paid at the same rate as the archers.

Arrows

Many people have heard of the famous ‘clothyard’ arrow. Unfortunately, this term is a literary invention. The description is a misquotation from a ballad of circa 1465 spread into literature by 17th century balladeers and poets. There is no historical justification for it, and much erroneous research has been done into the length of the clothyard in order to establish a length for the war arrow.

War arrows were known as ‘Livery’, ‘Sheaf’ or ‘Standard’. Livery because they were issued; Sheaf from the Anglo-Saxon word for a bundle, or perhaps because 24 or 30 arrows tied together look like a sheaf of grain; Standard either because they were made to the length of the legal standard yard or, more probably, because the whole design was subject to a government specification.

War arrows had a large diameter so they could carry a large head to do maximum damage. To keep their weight to a minimum, light timber was preferred, and they are described in contemporary documents and by Ascham as made of ‘aspe’ (aspen – *populus tremula*) which is indeed ideal for mass-produced arrows. The trees, grown in wet conditions, are easily propagated from cuttings, extremely fast growing and produce a timber both light and strong. However, medieval herbals are contradictory in their definition of ‘aspe’ and it may have been used as a generic word for all the native poplars.

Ash arrows also appear on medieval inventories, and Ascham actually recommended ash for war arrows on the supposition that, being heavier, they would give a ‘greater stripe’, i.e. hit harder. But as he specified *some* ash, it must have been as true then as it is now that suitable ash is difficult to obtain, and producing arrowshafts involves a lot of wastage. And on large diameter arrows the weight of ash does make a considerable difference to performance. Perhaps heavy shafts were for use at short range. Ascham lists fifteen timbers, including aspen, alder, elder, birch, willow and the heavier ash and hornbeam – all of which have been recovered from the *Mary Rose*. It is surprising, however, that he does not mention the most popular of native trees of 19th and 20th century archery, the Scots Pine (*pinus sylvestris*).

All the available information on the *Mary Rose* arrows is included in the caption to the accompanying drawing, and this can be taken as a description of the typical war arrow of the period under discussion. However, the author wishes to add a few further points. There are 15th century references to fletching lengths of up to 12 in. One 1475 supply list has 350 ‘sheffes of arrowes of ix ynches [9 in.] fethir’, 1,750 ‘sheffes of arrowes of viii ynches [8 in.]

fethir' and 7,960 sheafs of 'vii Ynches [7 in.] fethir'. The reason for the different lengths of feathers, and whether they related to different heads, is not yet known. Fletchings were glued *and* tied on. The thread lay in a thickly applied glue compound which also covered the base of the feather to give good waterproof protection.

Spare ammunition for the archers was carried in the wagons, either in chests which were sometimes covered in leather or in that universal container of the Middle Ages, the barrel – often fitted with locks.

A few contemporary illustrations show boxes of arrows without heads next to barrels of heads. It is possible that heads were 'jammed' on or just held on with wax. The advantage of this would be the ease with which an arrow could be recovered from where it was embedded, fitted with a new head and re-used.

Sir John Smythe, writing in 1590, stated that in every sheaf of 24 arrows, 8 should be lighter 'flight' arrows to

'gall' the enemy at longer distances, but there is no evidence that this was ever practised.

Strings

Strings were made of hemp (fibres from plants of the genus *canabis*). Sir John Smythe wrote '... and the strings being made of verie good hemp, with a kind of water glewe to resist wet and moisture, and the same strings being by the Archers themselves with fine threed well whipt did also verie seldom breake. But if anie such

The battle of Agincourt. Following contemporary practice, the clothing and equipment depicted were the ones in fashion at the time of the painting. They illustrate the adoption by the English from the mid 15th century of the

national livery jacket. Note the one archer's woollen hat which, if worn, would have been over a metal skull cap. (The St. Albans Chronicle. Lambeth Palace Library MS 6 f243)





Breaking camp. A scene familiar to all armies, this one being Italian of the mid 15th century. Note the pack asses and the men rolling up the tent walls. Battens are clearly

outlined in the material. ('An Army breaking camp' by Giovanni Bettini c. 1460. MS Canon. Class. Lat.81 f49v. Bodleian Library, Oxford)

strings in time of service did happen to breake, the soldiers archers had alwaies in readiness a couple of strings more readie whipt and fitted to their bows [i.e. made-to-measure] to clappe on in an instant. And this I have heard of divers Yeoman that have served as soldiers Archers in the field'.

'Well whipt' in the above context is to whip, or wind, some thread around the centre section of the string to protect it from wear caused by the arrow nock and the archer's fingers.

Like all strings and ropes, bowstrings are made from individual strands, though in this case twisted, not plaited, together. The string loops that fitted on the bow necks were strengthened by doubling the number of strands in that area. Bowstrings are either made 'double-looped', i.e. one loop for each bow nock, or 'single-looped', though here the 'loose end' is also strengthened by double-stranding. In this latter case the archer makes his own loop using a simple timber-hitch known as the 'bowyers knot'. The advantage of the single loop is that while double-looped strings can only be made for bows when the exact length of limbs is known, on a single-loop string the archer can adjust the position of the lower loop

to allow for any bow length. Therefore it is likely that all mass-produced strings for war bows would have been single-looped.

In manufacture the strings were laid in a glue which helped to hold the strands together and, as Smythe noted, made them more moisture resistant – though care had to be taken that these 'laid-in' strings were not allowed to dry out overmuch as this would cause the glue to stiffen and crack.

Hempen strings made properly are very strong, and though the number of strands is in relation to the strength of the bow, there was no need for even the more powerful bows to have had very thick strings. Unfortunately no strings appear to have survived from the *Mary Rose*, but the arrow nocks to which they fitted show they were 1/8 in. in diameter.

There are medieval references, including Ascham, to bowstrings of flax and silk – and the latter carried a surprisingly high reputation. To what extent these alternatives were used is unclear. Flax, also laid in glue, certainly became common in the 18th century, and from then until the Second World War the best of them were made in Belgium. Whatever the efficacy of silk strings, they are unlikely to have been available to most military archers.

Bracers, Shooting Gloves and Quivers

The bracer serves two purposes: to protect the forearm from the string and to ensure that any loose sleeve fabric is kept away from the path of the string. Ideally the string should not hit the arm at all, and some archers achieve this by bending the elbow, though this reduces the draw-length. Ascham recommended increasing the 'bracing height' (the distance between bow and string when the bow is strung but not drawn) to a length whereby the string would not reach the forearm on its travels. However, as the bracing height can noticeably affect the shooting characteristics of a bow, this is not a rule that can always be followed.

Bracers were made of leather and horn, occasionally of ivory (medieval ivory was often walrus tooth). Eleven bracers of leather and one of horn were recovered from the *Mary Rose*. Those of leather were basically rectangular, slightly longer than wider, many with the corners rounded off, and like the Tudor bracer exhibited in the British Museum, were all decorated. The latter and three of the *Mary Rose* examples are engraved with elaborate coats of arms, but the others have simply been punched. The punch marks are randomly placed but always either side of the presumed string path. The marks depict simple heraldic badges – often recognisable as badges of guilds, cities or members of the nobility – which may be purely conven-

tional or may indicate in whose service the archer was employed or recruited. The bracers all fasten by a single strap and buckle (though some straps may just have been tied); most have both tongue and buckle straps in a 'Y' shape, with the two arms attached, often by small rivets, to the main piece. It is safe to assume these represent a common medieval type. Horn bracers are almost identical to the above except that the elbow end is often more rounded than the wrist end and they are, of course, rigidly set in a 'gutter' shape.

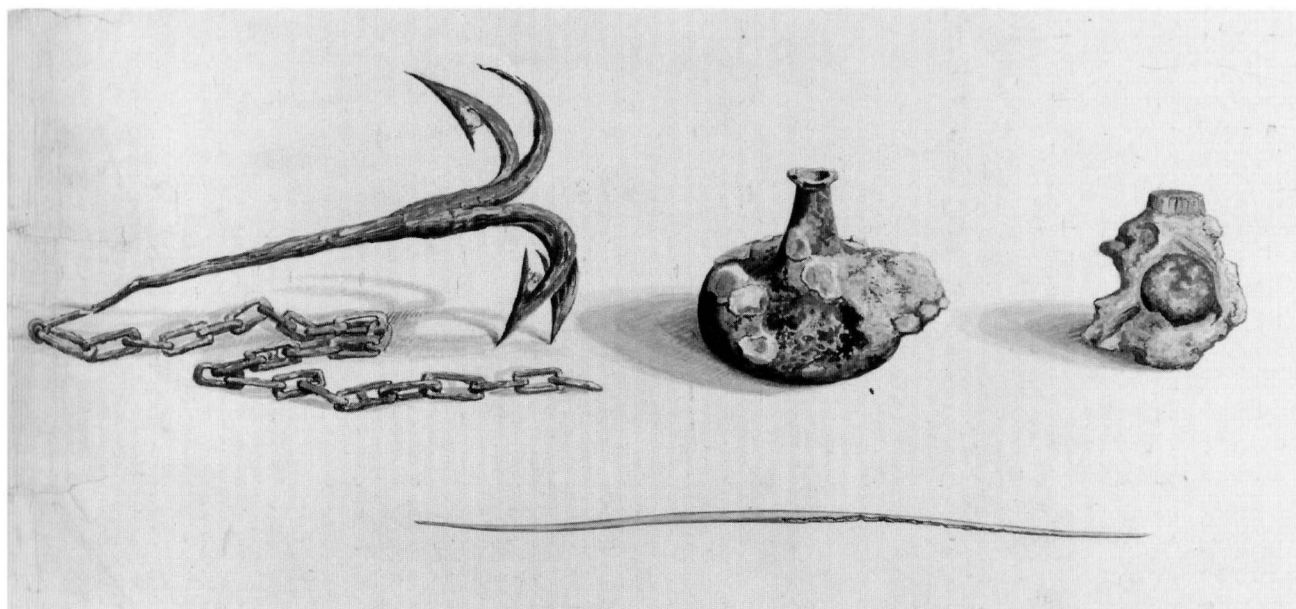
Strangely, given the number of other leather artifacts salvaged from the *Mary Rose*, no shooting gloves were found. Because of this and because they rarely appear in illustrations, it is assumed that most medieval archers did not use them because their fingers had become so hardened through constant usage. However, there are a few pictorial and written references, including one for John Howard's household archer, Daniel. Modern archers use either a 'full' glove, a 'skeleton' glove or a 'tab'. The full glove is, as its name implies, very similar to an ordinary glove but with extra leather pads sewn to the tips. To ensure a tight fit some also have loops that fit over the base of the fingers and are attached to thongs which are connected to a wrist strap. The full glove is the type almost always seen in medieval illustrations. The skeleton glove consists simply of pouches covering the drawing fingers, often only from the tips to the second joint and also attached to thongs or thin straps connected to a wrist strap. The Zamorra Tapestry is the only known medieval illustration of anything resembling this type. The tab is just a flat piece of leather lying on the inside of the hand with either one or two holes into which the drawing fingers

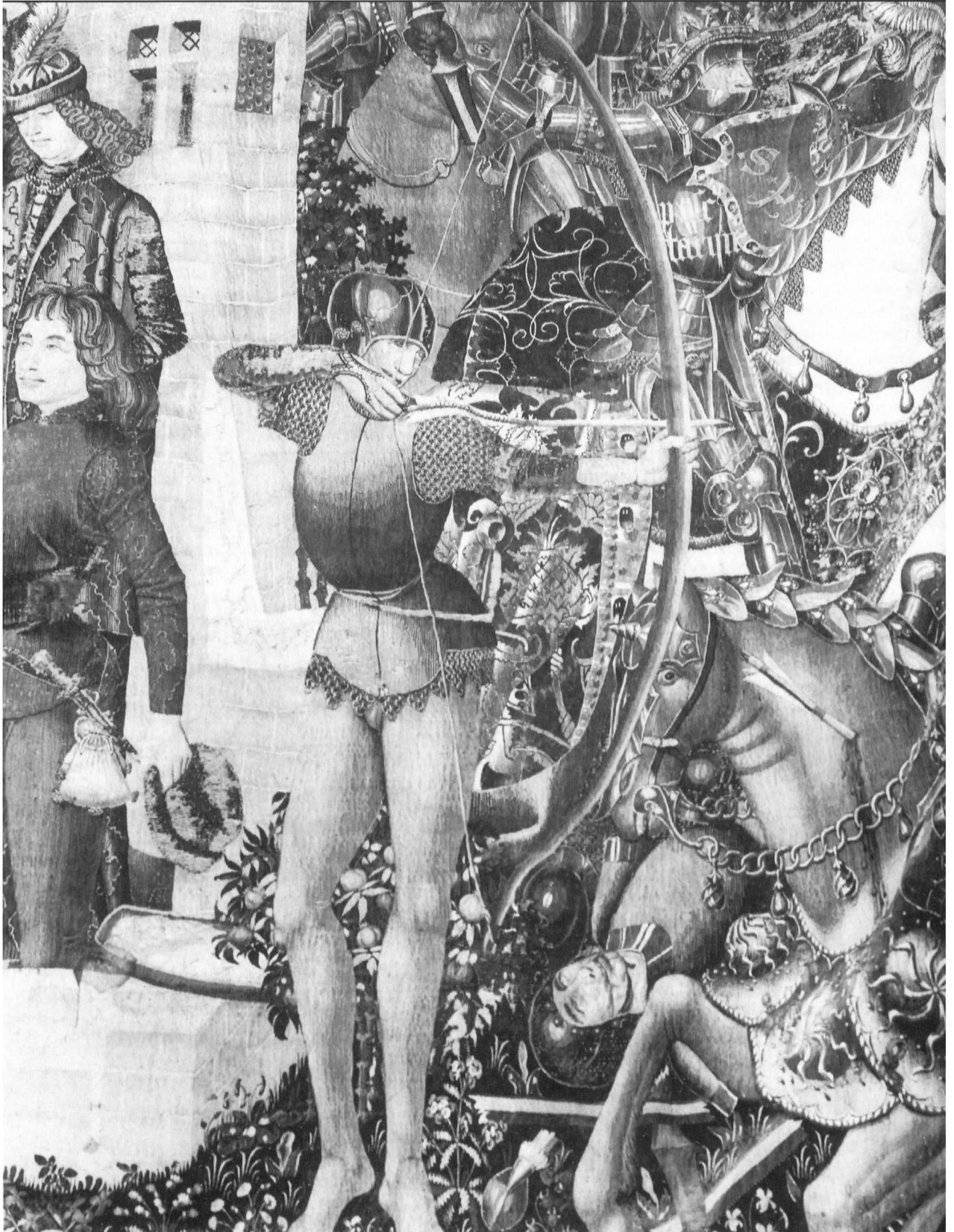
are let. There is no evidence at all for dating the tab before the end of the 18th century – surprising given its simplicity.

The back-quiver, so beloved of television and film makers, is *never* seen in medieval illustrations. In fact, until the 16th century, quivers, as we understand them, are not seen at all in illustrations of English archers. The most common methods adopted by the English and most other north-west European archers for carrying arrows were either to simply tuck them under their waist belt or to use what can best be described as 'arrow bags'. There are three basic recognisable types of bags used in this period. The first is simply the linen or canvas bag, of varying size, containing loose arrows and seen lying on the ground in the illustrations to Froissart's *Chronicles*. The second is unique to the Schilling *Chronicle* illustrations showing archers in Charles the Bold's army of the 1470s and is described in the caption to one of those illustrations. The third, and most common type, appears as a tube of soft material, perhaps leather, canvas or linen and perhaps with a small rigid centre section, fastened at each end by a drawstring and attached to the waist-belt. In action, both ends were opened and folded back to expose the feathers and heads.

War bow c. 1545. One of the eight Mary Rose bows recovered by the Deane brothers in 1840. Watercolours were made of all the artifacts at the time of recovery but most of the items, including the bows, were sold at auction

and, though the Royal Armouries has three, this one has long since disappeared. Note its reflex and recurve characteristics. (Courtesy of the City Museum and Art Gallery, Portsmouth)





Shooting Technique

The requirements of archery in medieval warfare were completely different to those of the modern recreational archer; consequently there are marked differences in stance and technique. For the English archers great emphasis was put on 'strong shooting' and long range (Henry VIII made practice at long range compulsory), which meant using powerful bows, but the ability to shoot such bows is not something that can be achieved easily. (An archer always 'shoots' or 'looses' his bow. The only time it is 'fired' is when someone puts a match to it.) Medieval Englishmen were aware of the training required and emphasised the importance of starting young (boys traditionally began their training at the age of seven) and 'growing up' with the bow. Bishop Latimer's sermon to the young Edward VI in 1549 illustrates this: 'In my time my poor father was diligent to teach me to shoot as to learn any other thing, and so I think other men did teach their children. He taught me how to draw, how to lay my body in the bow and not to draw with the strength of my arms as other nations do, but with the strength of my body. I had by bows brought to me according to my age and strength and as I increase in them so my bows were made bigger, for men shall never shoot well except they be brought up in it.'

The most noticeable difference between the present-day archer and his ancestor is in the aiming method reflected by the point to which the arrow is 'drawn back'. There are four basic methods of aiming which can be categorised as follows: purely instinctive; semi-instinctive; point-of-aim (POA); and using a bowsight or mark on the bow.

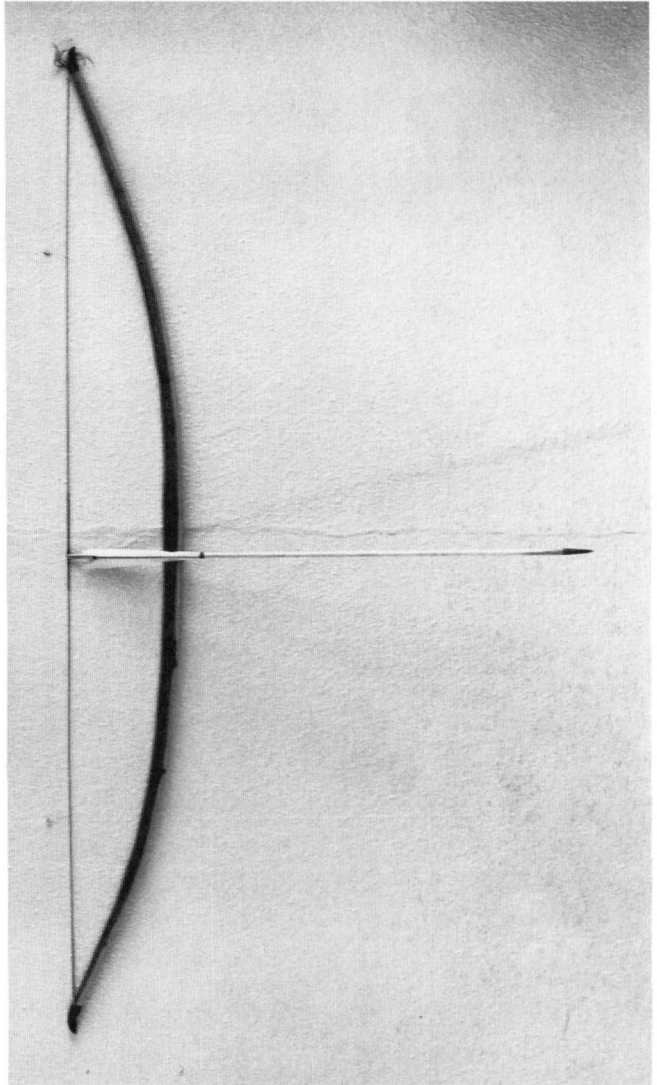
Purely instinctive is how we throw stones and darts. The brain receives information from the eye, makes all the necessary calculations about weight and distance and passes this data to the arm. To be truly instinctive in archery the actual mechanics of shooting should be an almost unconscious act, with all concentration centred on the eye – rather like changing gear when driving a car.

Semi-instinctive is as instinctive, above, but is also to see the tip of the arrow in the periphery of vision and use it as a reference point.

Arrows, unlike bullets, only fly in a straight line for very short distances and, like artillery shells, they travel in

Left: Although Flemish, and ignoring the unfortunate distortion, this tapestry is an important reference which clearly shows the appearance of the typical war bow and arrow. The bow – and its diameter

indicates a powerful one – has horn nocks at the tips and is without any handle binding. Note the diameter of the arrow, the length and height of the feathers and that they are tied down with thread. (Photo: Wim Swaan)



War bow c. 1993.

a parabolic curve. The POA archer establishes a 'point-blank' range, i.e. the distance at which, when sighting on the tip of the arrow, it flies to exactly where his eye is looking. For shorter and longer distances the aim is not at the target at all but at a point below or above it. Use of a sight or mark on the bow is self-explanatory, but there is no evidence at all for their use in the medieval period.

Although Ascham does not detail aiming methods, he is clearly writing of POA when he describes archers who have 'invented some ways to espy a tree or a hill beyond the marks, or else have some notable thing betwixt the marks' and, perhaps, of semi-instinctive with '... others, and those very good archers, in drawing look at the mark until they come almost to the head, then they look at their shaft but, at the very loose, with a second sight, they find their mark again'. However, he disdains these methods as



Note the archer 'stringing' his bow and the bracers, these are identical to those recovered from the Mary Rose. (Sabastian's alter

c. 1493 by the Master der Hi. Sippe (1480–1520). Wallraf Richartz Museum, Cologne)

'. . . but shifts, and not to be followed in shooting straight. For having a man's eye always on his mark is the only way to shoot straight', i.e. instinctively, which, he says, is 'so ready and easy a way, if it be learned in youth and confirmed with use, that a man shall never miss therein'.

Modern archers draw their arrows back to an 'anchor' point on their face or chin, under the aiming eye. It is considered important to have this fixed reference point to ensure consistency of aim. While there are countless medieval illustrations depicting archers shooting with such a style, these are, as outlined in the introduction to this book, practically all of non-English origin. It is the author's belief that what distinguished the best English military archers from their contemporaries was their ability to shoot powerfully and accurately at both long and short ranges by drawing 'to the ear' and aiming instinctively. In fact, the phrase 'to the ear' is a generalisation and might be to any point between the ear and the breast (the latter being a natural 'locking' point for the shoulder). To

lower the drawing hand is, in effect, to raise the bow hand, but it is a difficult technique with heavy bows. Ascham describes the difference between strong 'forehand archers', who could reach long distances while still being able to view the target *over* the bow hand, and 'underhand archers', who had to elevate their bow arm and view the target *under* the bow hand to reach the same mark.

It is commonly assumed that drawing 'to the ear' means shooting a very long arrow – up to 36 in. according to some writers – on the premise that modern archers only have a draw-length of 28–30 in. This completely overlooks the practicalities of the method and the restrictions caused by the wearing of defensive apparel. If a right-handed archer stands as a modern archer does and simply extends his draw from chin to ear, the off-centre line of the arrow is greatly exaggerated and the arrow flies to the left. This angle is further increased if the archer is wearing a helmet, for then it is necessary for the drawing hand to be further away from the side of the head. To shoot straight the archer has to bring his bow arm round to be in line with his drawing hand; this immediately shortens the draw-length. Another difference is in the position of the leading foot. Modern archers stand sideways-on with both feet at 90 degrees to the target. Medieval illustrations show the

leading foot pointed towards the target. The effect of this is to bring the shoulder round and 'squarer-on' to the target thereby increasing the clearance of the string path from the chest, especially important if the archer is wearing padded clothing or a breastplate. It also contributes to the reduction in draw-length.

Also overlooked is the effect of compression on the human frame caused by shooting heavy bows. It was discovered during shooting sessions by Richard Gallo-way's group (average height 5 ft 10 in.) that with heavy bows and the finger draw, the maximum draw-length by the strongest archers was 32 in. Generally the draw-lengths were between 29 and 31 in. The vast majority of war arrows recovered from the *Mary Rose* are, reputedly, some 30½ in. long.

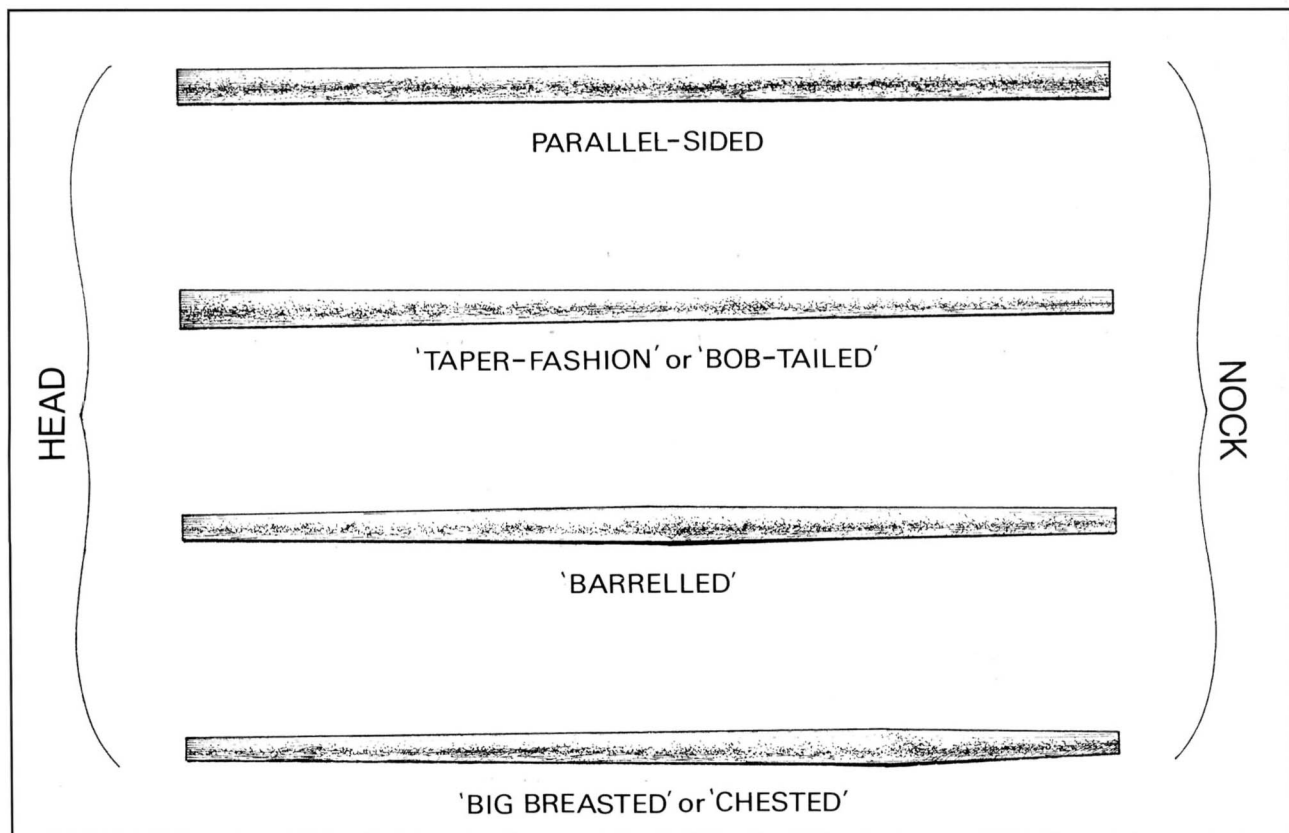
While a three-finger draw was certainly used and Ascham instructs on that style (though he was writing for the more genteel classes), the great majority of medieval illustrations show a two-finger hold. This gives a 'sharper' release as there is less friction on the string when loosed, but its use is determined by the strength of the archer. It was the origin of the Englishman's (still used) two-finger 'salute', adopted by archers in the face of French threats to cut off the drawing fingers of any archer they captured.

TRAINING

It is usually stated that English soldiers of the medieval period received no military training and simply learned through experience. It is therefore claimed that after their exclusion from France in 1453, their 'battle-worthiness' decreased. A statement from the contemporary Burgundian chronicler Philip de Commines about the English army in 1475 is often used to substantiate this: 'Yet these were not the Englishmen of his [Charles the Bold's] father's day and the former wars with France. They were inexperienced and raw soldiers, ignorant of the French ways.' However, this overlooks the precedent of 1415 when, despite a 35-year absence from major campaigning in France, the army of Harfleur and Agincourt did not perform too badly. It is also interesting to compare two other statements from the same chronicle. An earlier remark about Burgundian archers says: 'Further, those who had never had a day's experience of their job are more valuable than those who are well trained, this is the opinion of the English who are the world's best archers.'

The four possible shapes for arrow shafts, exaggerated here for

clarity. Drawing by Christa Hook





Retained archers of the mid-14th to early 15th centuries

Battle of Agincourt, 1415



English archers assault French defences, Castillon 1453



Off duty archers practice their craft, c.1450-80



GAE



A household archer spreadsheet, c.1490
(see plate commentary)



Archery equipment, (see plate commentary)



H Bowyer discovered working after dark, Calais c. 1465



The tent of Antoine, Grand Bastard of Burgundy, 1475



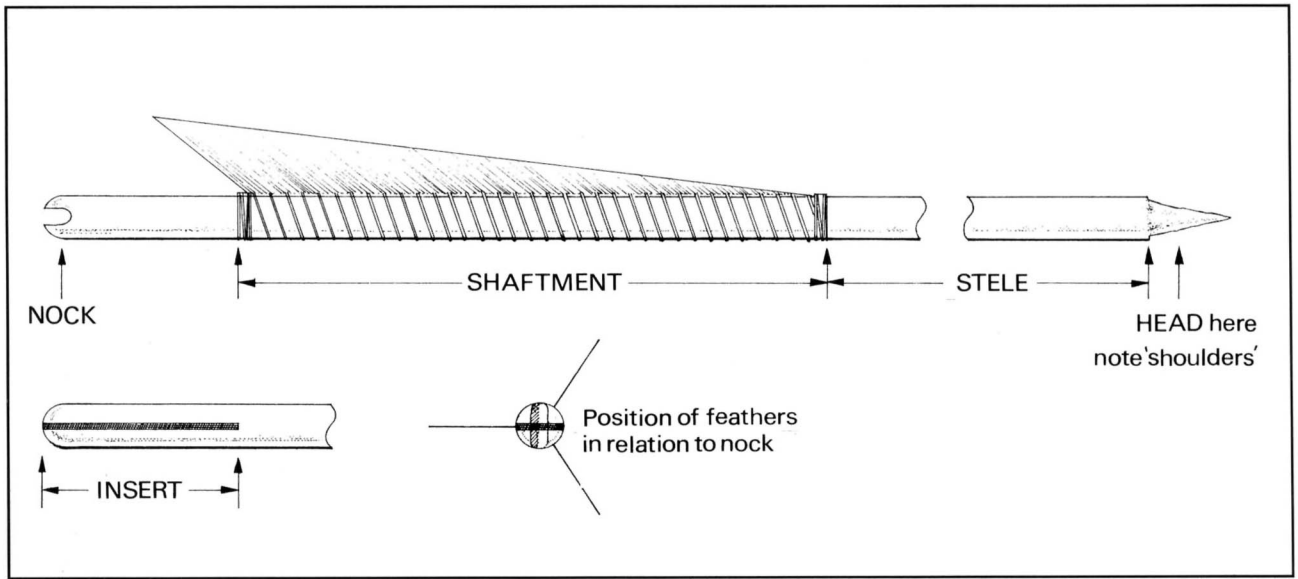
J Dying english archer, Burgundian campsite, 1475

Levied archers of York, 1482



Pub brawl between German and English troops, Therouanne 1513





This reflects a theory still heard today that it is better for officers to have recruits they are able to direct and mould to their own liking than veterans, who usually have ways and opinions of their own. In a later reference to the 1475 army, Commynes wrote: ‘. . . for if he [Charles the Bold] had ever wanted to use them it would have been necessary not to let them out of his sight for one full season in order to help them to train and instruct their army in our most important methods of warfare. When the English first come over no one is more stupid and clumsy but in a very short time they become very good, clever and brave soldiers’.

There would, of course, have been no need for any instruction in the shooting of the bow. Regardless of the statutes passed to encourage archery, English archers were proud of their reputation and had plenty of practice through recreation and hunting. After all, both retainers and levies were employed *because* of their skills. There was also no requirement to train them in any equivalent to the musketry ‘firing by rank and file’ for, though archers shot ‘wholly together’, it was not practical to expect them, especially with heavy bows, to draw, hold and loose them at exactly the same time, and there is no evidence that they ever did so.

Records from the 14th century are particularly reticent about training for the ordinary soldier, while the best 15th century example is the training ordered by Charles the Bold for his standing army, where the archers were to practise working in conjunction with the pikemen. Among the many manoeuvres described, it was outlined how, during an advance, pikemen were to march in front of the archers and to kneel on command so the latter could shoot over their heads. The archers were also to practise shoot-

The great majority of Mary Rose shafts are reputedly of poplar and tapered from 1/2 in.

diameter at the head to 3/8 in. at the nock. (Drawing by Christa Hook)

ing while standing back to back or in other formations, always protected by pikemen. It is possible that Charles gained the inspiration for many of the manoeuvres, as he did with most things connected with archery, from English precedents – though one needs to substitute ‘pole-axe’ and ‘bill’ for ‘pike’.

There were various treatises written in medieval Europe recommending such things as how to conduct a siege, but probably the closest equivalent to a full training manual is *De Rei Militari*, written in the 4th century AD by Flavius Vegetius Renuus. This was reproduced fully or in paraphrase quite frequently from the second half of the 13th to the late 16th century – often translated into the vernacular. One English edition, *Knyghthode and Bataile*, was written in verse form in around 1458. Though sometimes making anachronistic references to the formations and make-up of the Roman legions, the fact that the text was continually modified to incorporate the latest military developments (and occasionally included comments on a current political situation) shows that this lengthy work was not simply regarded as a history. It recommends, for instance, how footmen should be taken out on route marches, in full kit, three times a month, and how they should learn to march at a set pace to ensure good order – suggesting a speed of 20,000 paces in five hours (approximately 2 1/4 miles per hour). It commends running as good training, and that all men, regardless of status, should be able to swim.

Many commanders certainly had this book in their

library, and it is not too fanciful to suggest that for household and retained men in long-term employment, military training formed some part of their daily life.

LOGISTICS

The image of the English soldier fighting on foot has disguised the substantial number of horses used in their armies: with the allowances for attendants and spares, an Earl usually took six horses, a knight-banneret five, a knight four, a man-at-arms three and a mounted archer one – though in 1361 Sir John Chandos allowed two horses for each mounted archer. The horses for household men and retainers were supplied or paid for by their employers, and for the levy by their county or city. The York archers of 1481 received 2d a day towards their horse hire, on top of their 6d a day wages.

The shipping of horses overseas and back was paid for by the King. And when in 1352 the Earl of Stafford had to leave without his horses due to shortage of ships, the cost of purchasing remounts was also shouldered by the King. Compensation was paid for the loss of horses, and because of this officials were appointed to make an inventory with a brief description of each horse's colour and features.

Though it is generally understood that archers rode to battle and then fought on foot, the author has seen four medieval illustrations of a longbow being shot from horseback and knows of one recent occasion when a modern 'longbowman' shot from the back of a galloping horse (John Waller at the Tower of London in July 1993.) A reference in Henry VII's regulations for the Stoke campaign in 1487 explains how mounted soldiers were '... at

This arrow shaft was found in 1878 in one of the turrets of Henry V's Chantry at Westminster Abbey and has since been on display at the Undercroft Museum. A report on the shaft by P.L.

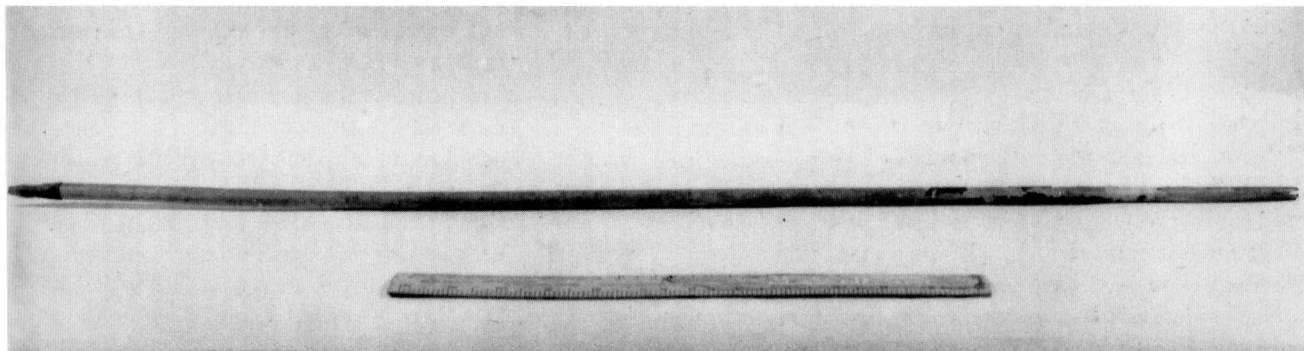
Pratt PhD and Robert Hardy was published in the 1978 Journal of the Society of Archer Antiquarians Vol. 21. (Courtesy of the Dean and Chapter of Westminster)

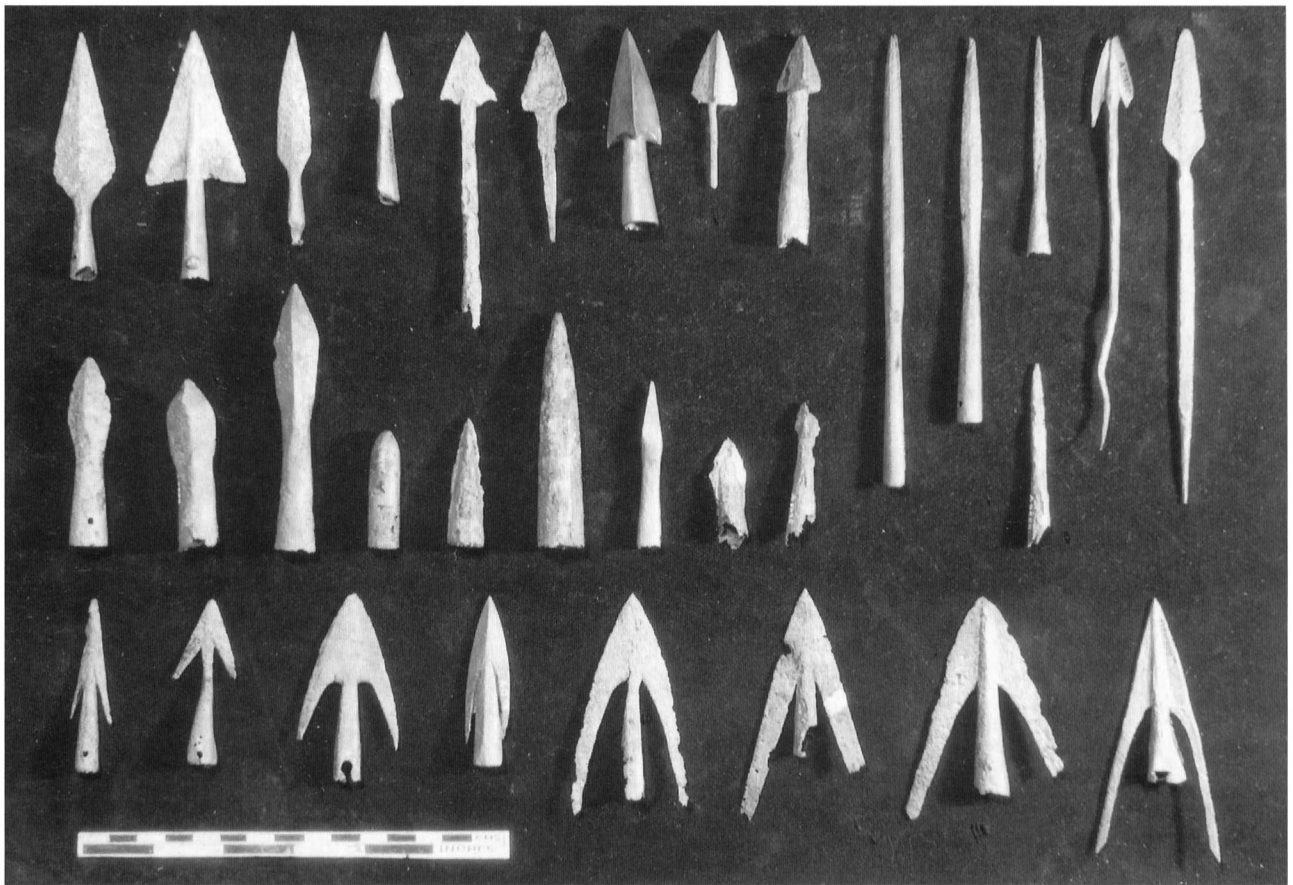
the furste sounde or blaste of the trumpet to saddil hys hors, at the 2d doo brydell, and at the 3d be redy on horsebake to wayte upon his highnesse, upon peyne of imprisonment'.

Though there are plenty of contemporary illustrations of water bottles and haversacks, there is not one showing a soldier in 'marching order'. It would seem the men put practically everything in wagons or on pack horses, and each retained or levied contingent travelled as a sort of self-contained unit of personnel and equipment. The contemporary French chronicler Jean le Bel records that for the 1359 invasion, Edward III's army contained 6,000 carts all brought over from England. Later he wrote of '10,000 to 12,000 wagons with three good horses each brought from England', though whether as an increase to his previous estimate or different vehicles is not clear. The figures are no doubt exaggerated, but the impression must have been of a vast number of wagons and carts. For the planned 1481 Scottish expedition, Edward IV ordered that 'besides the Kynge's carriage and provisicians, provisician be made for carriage of carts aboute Newcastle as shall move therine such of the Kings host as will by them and also other carts to the number of Vc [500] goyng after the host with vitall'.

The size of these wagon parks was such that in order to locate a particular wagon, some form of identification must have been necessary – probably the system as recorded being used during the earlier Scottish campaigns of Edward I, whereby each wagon carried a small flag or pennon bearing the 'owner's' badge. For the march from Harfleur to Calais, which led to the battle of Agincourt, when speed was of the essence, all the baggage was carried on pack horses, and the heavy equipment and wagons left at Harfleur.

The medieval English army was also capable of fast marches when necessary. In the closing stages of the retreat to Tewkesbury in 1471, the Lancastrians travelled almost 50 miles in 36 hours while the pursuing Yorkists covered 36 miles in under 24 hours, even though both armies consisted primarily of footmen and were accompanied by artillery and some wagons.





A variety of medieval arrowheads from the collection in the Museum

of London. (Courtesy of the Museum of London)

Accommodation

Archers on campaign resided in garrisons, billets or tents. We can tell from surviving records that household archers in England enjoyed a fair degree of comfort, but there is no way of knowing how far these standards applied to the garrisons (though castles were not, in general, the draughty, cold and cheerless places popular history makes them out to have been).

Arranging soldiers' billets was one of the duties of the 'harbingers' who travelled ahead of the army and commandeered the rooms. Lodgings were allocated according to status, and rules were laid down to prevent damage to the premises and the inhabitants. While these rules were usually enforced in England, the same niceties were not always observed in France. A similar system was used in peacetime for the escorting soldiery of any lord or commander 'on tour'.

Harbingers were also responsible for finding suitable campsites. These needed to be on high ground, dry and

with water and wood available. In hostile areas the men fortified the camp. Even during Jack Cade's rebellion in 1450 the mob, which obviously included ex-soldiers, fortified their camp at Blackheath, outside London, 'dyked and staked well about, as it [have] been in the land of war'.

A great number of tents were normally transported, though how far this was the aristocracy being greedy and how many were allocated to the common soldiers is not known. Tents were commonly made of canvas and constructed, as today, with main poles and guy ropes, and came in all shapes and sizes – except square. Walls and roofs of the larger tents were sometimes braced with vertical timber batons sewn into sleeves in the canvas. These larger tents often had double walls for extra warmth, and servants slept in the passageway in between. It is very likely that household archers and long-term retainers were allocated similar space in their employer's tent or were given tents of their own.

Soldiers not given tent space constructed 'hovels' – simple shelters made of any available material. Occasionally men went without any shelter, as on the night before Barnet in 1471 when they had to simply lie on the damp ground in what they had on.

Though lacking the ordered tent lines of later armies, the camp layout was regulated. Two main roadways, kept free of obstructions and guy ropes, dissected the camp into quarters, and the commander's tent was usually placed at or near the crossroads. Near to his tent a large watch-fire was kept permanently alight and guarded, and it was here that the sentries were advised of the night's passwords.

Other main features were the artillery park (which included large projectile 'engines'), the horse lines and the market-place.

It is not clear how many 'camp followers' accompanied the armies. The nature of much of the warfare may have restricted their presence. They are unlikely to have been with the mounted *chevauchees* of the 14th century or in any great number with the very temporary armies of the Wars of the Roses. On the other hand, the breakdown in

morale in France in the 1440s and 1450s may have given rise to a more *laissez-faire* attitude. For the high quality armies of Henry V, of 1475 and 1513, measures were taken to ensure no camp followers or unnecessary servants were present.

A set of regulations drawn up by the Earl of Shrewsbury during the post-Agincourt campaigns dictates how if a man was found with a 'common woman' (a whore) in his lodging he was to lose a month's wages. Further, if anybody found such a woman, or group of them, in 'lodging' he had permission to take any money found and

Liveried archers and crossbowmen shooting into a besieged city. Women and children are bringing up refreshments for the men. Note the men

recovering arrows shot out by the defenders. (The siege of Jerusalem. 'Les Passages faits Outremer' c. 1490 Bibliotheque Nationale, Paris)





This archer's bracer is of 'cuir bouilli' (hardened leather) and decorated with a crowned rose, acorns and oak leaves and the words 'ihc helpe' (Jesus help). Because of the

design of the wording and the rose & crown the bracer has been dated to the early 16th century. (British Museum. Catalogue reference BM MLA 1922, 1-10, 1)

to drive her out of camp and 'breke her arme'. On return to England of the 1513 army, the Venetian observer Nicolo di Favri wrote: 'They did not take wenches with them.'

Comyns does not mention camp followers in 1475 but observed that the English, in addition to their soldiers, had 'others who both looked after all their tents, of which they had a great quantity, and attended their artillery and enclosed the camp. In the whole army there was not a single page . . .'

MEDICAL SERVICES

Like many other aspects of medieval life, their knowledge of medicine has been underrated – though it was still primitive by modern standards. Anatomical dissection was practised in some European universities, and there were numerous books – 'herbals' – on plants and their medicinal values. Some describe plants whose extracts could be used for anaesthetics. One 14th century source gives the recipe 'for to maken a drynke that men calle dwale to make a man slep-en whyles men kerve him' (i.e. perform surgery). Chaucer's Knight relates in his Tale how a gaoler was drugged by 'a certyn wyn with nercotikes and opie' (opium). Later in the same Tale, the Knight describes how, in treating 'other wounds and to broken armes', some men 'hadden salves and some hadden charmes, fermancies of herbes'.

On the down side, much emphasis was placed on the 'contents' of the body and its 'humours', and there was universal recognition that bleeding was needed as a palliative. Until Parre's revelations in the 16th century, serious wounds were often cauterised with hot pitch or similar unsuitable material.

There was no central medical department in the armies; each contingent probably catered for its own needs, so the provision would have depended on the generosity and knowledge of the 'employer', whether city, county or individual. As with most things, the household archer had the advantage. The King's Household was always accompanied by physicians and surgeons who signed Contracts of Indenture and came with their own small retinues of servants and archers.

It is clear from the records that provision was made for garrison troops in the event of illness. They were still entitled to their daily pay (see *Earnings*) and as the commissioners were obliged to travel to them if they were not in the garrison, they must have been treated somewhere. Consideration was also given to prisoners. Froissart writes that after the English defeat at Cocherel in 1364, every man 'took heed to his prisoners and dressing them that were hurt' – though the cynical might suggest this was because a live, ransomable, prisoner was worth considerably more than a dead one. A more humane face of war is at least evident in the surrender conditions between the victorious French under the Count of Dunois and the defeated English under Matthew Gough at the siege of Bayeux in 1450: '... all persons who are wounded or ill, being soldiers, may remain in the said town for one month in order that they

may be cured and, if they wish to depart, their safe conduct shall be given them which shall be good and available for their journey into England’.

Wounds could be horrific but being predominantly of the cutting and stabbing type were at least straightforward and lacked the trauma associated with gunshot wounds of later centuries. Many men recovered from sword cuts, even if this removed all or part of a limb, and even stab wounds. There is a vivid description written by Gerhard von Wessel, a German merchant in London in 1471 who witnessed the army marching out to Barnet field and saw them return: ‘... and many of their followers were wounded, mostly in the face or the lower half of the body, a very pitiable sight . . . those who had set out with good horses and sound bodies returned home with sorry nags and bandaged faces, some without noses etc. and preferred to stay indoors’.

The great danger here is from complications such as peritonitis, which would inevitably have proved fatal – particularly when the arrowhead was left in the wound after the shaft had been removed. It was because of this that some Frenchmen thought the English poisoned their arrows.

The short, fast campaigns also kept the casualty rate low – certainly nothing like the horrific numbers of the 19th and 20th centuries – and in the majority of battles, the English were the givers of death, not the receivers. During the Wars of the Roses it was the policy of both sides, particularly of Edward IV, to ‘spare the commons’ to ensure public support. The exception here was Towton in 1461 (probably the largest battle ever fought on British soil), which was long and hard and fought in appalling weather. (A ruder shock awaited those archers who volunteered to serve in Charles the Bold’s army, for his enemy, the Swiss, took no prisoners and butchered all indiscriminately.)

Though the average upper and middle class Englishman was personally more hygienic in the 14th and 15th centuries than he was to be in the following two, there is no reason to suppose his armies were any less vermin-ridden than any other in history; the greatest potential cause of death in an assembled army, especially during a siege, was disease and dysentery. The latter took a heavy toll of the English at Harfleur in 1415, despite the dangers being known. Shrewsbury’s post-Agincourt campaign regulations ordered ‘every lorde, capitaynes or governor of people do compell ther servnts and menye to berye ther careyn and bowelles abowte [away from] ther lodginges and within earth that no stynch be in ther lodginges wher through that any pestelence or mortalite myght fall within the oste, upon payne to make a mendes at the Kinges wille’.

The English were fortunate in that nearly all of their campaigns were of a short duration, particularly those of the 14th century *chevauchees* – which were also highly mobile. And anyway, disease was the greatest killer in contemporary civilian life as well.

BELIEFS AND BEHAVIOUR

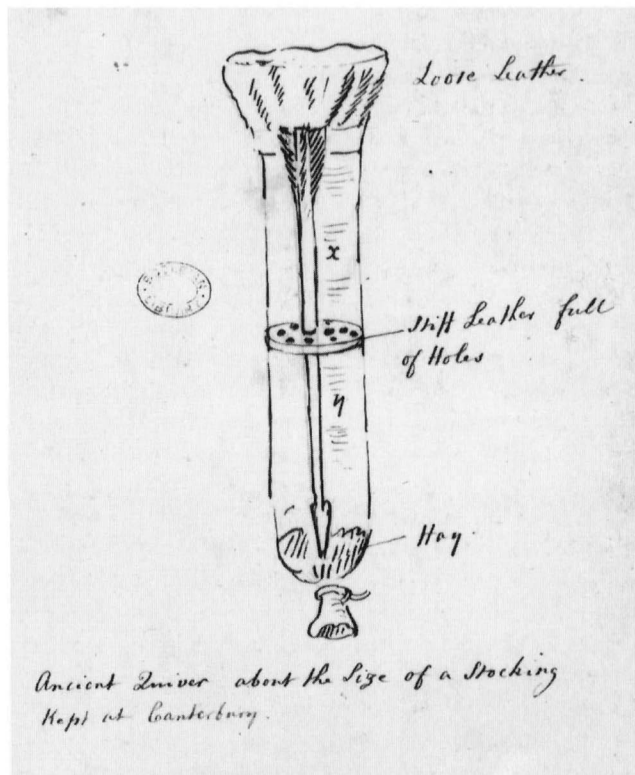
Although the King was always accompanied by deans and chaplains, there is little evidence of organised church services for the whole army. As with most other things, religious needs were catered for within the contingents, and friars or chaplains almost always accompanied the retinues and levy. How devout the average soldier was is impossible to say. Medieval Englishmen maintained a healthy disrespect for the Pope and many of the bishops

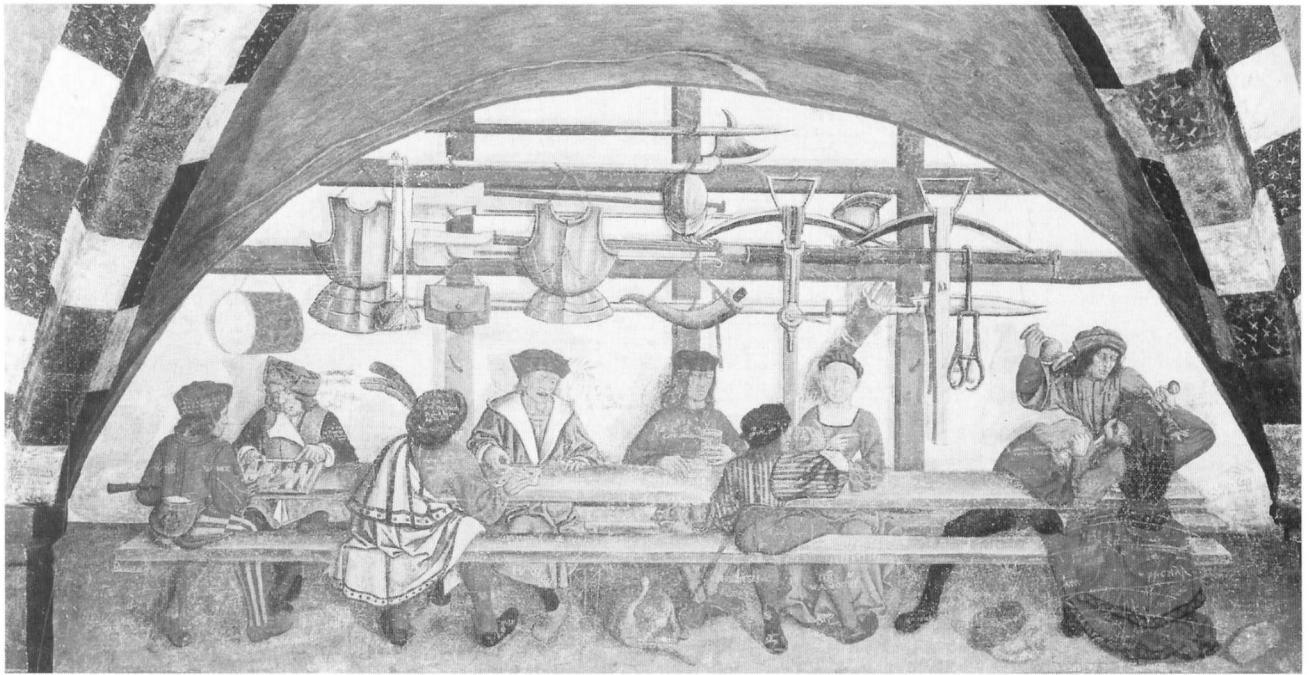
Several leather discs of about 5 in. diameter were recovered from the upper decks of the Mary Rose.

The illustration dates from 1777 and comes from the notebook of the famous 18th

century antiquarian, Francis Grose. (MS Top. Gen. c. 70. f24. The Bodleian Library, Oxford)

The author is grateful to Mr Graeme Rimer of the Royal Armouries for drawing his attention to this reference.





An Italian reference from the late 15th century but included as it shows a rarely depicted guard-room scene. A woman is present and, while a game of backgammon is

underway at one end of the table, a brawl has broken out at the other. ('Guard Room'. Anonymous. c. 1500. Castello di Issogne)

(England was still a Catholic country in this period), and the fact that military regulations were required to stop the pillage and robbings of churches and churchmen suggests that soldiers did not much respect the trappings of religion either. Murder and rape were not always restricted to secular members of the population either.

The soldier would certainly have believed in God in his heaven and the Devil in hell and been concerned about his final destination. The friars would have performed the necessary daily services and conducted confessionals. Foreign observers remarked on the custom of English soldiers, just before an attack, to kneel, make the sign of the cross upon the ground and kiss it, taking a small piece of earth into their mouths – a symbol of man's mortality and eventual return to dust.

Soldiers probably also observed feast days and holy days. Superstitions still played a large part in men's lives, and charms and good-luck tokens were carried to prevent or cure illness and protect the wearer against misfortune. At Flodden in 1513 the English commander Thomas Howard, Earl of Surrey, even carried a good-luck token for the whole army in the shape of the banner of St. Cuthbert. It was reputed to contain a relic of the Saint and

to have been the same banner carried at the victorious battle of Neville's Cross in 1346.

The best-known example of superstition in the period is the effect that Joan of Arc was supposed to have had on the English soldiers during 1429/30. Known as the *Pucelle de Dieu*, she is credited with having caused the relief of the siege of Orleans, the English defeat at Patay and the fall in English fortunes. Many ordinary English soldiers were undoubtedly frightened of her, and considered her capable of conjuring up supernatural powers. The Duke of Bedford, in a confidential report to the King and his council in 1434, claimed that everything had been going well in France until the relief of Orleans when 'the Pucelle that used fals enchantment and sorcerie' had 'not oonly lessened in greet partie the nombre of youre people there but aswel withdrawe the courage of the remenant'.

But Joan's influence has been greatly exaggerated. Despite his report, Bedford had not considered it necessary to transmit or advertise the result of her trial or execution in 1431. There is no doubt that she inspired the commanders and soldiers of the army she was with, but outside of that circle she was relatively unknown.

Discipline on Campaign

All soldiers were subject to the 'Statutes and Ordinances of War' – military regulations that were laid down or reaffirmed at the start of every campaign. The earliest extant full set are those issued by Richard II in 1386, but much would have been adopted from earlier codes. Henry V's 1415 regulations closely followed those of 1386, and those

of Edward IV and Henry VIII also follow their precedents. If the King was not accompanying the army, the statutes could be issued by the commander in his own name and might vary from their royal contemporary.

It appears that, rather than the regulations being read out to the assembled army, copies were issued to contingent captains, who then had to ensure their men were familiar with them.

Punishments ranged from fines up to death by hanging or beheading. Not surprisingly, the most severe punishments were ordained for crimes which might seriously endanger the safety of the army. In particular, any man who, during any action, cried 'Havoc' without due authority was to 'die therfor' – 'Havoc' being the signal that the enemy was decisively beaten and looting could begin. Any sentry who deserted his watch without permission was to be beheaded, and any man who set himself up as a captain and withdrew men from the army was to be hanged and the men that followed him beheaded. However, many of the punishments were lenient, and simple fines were

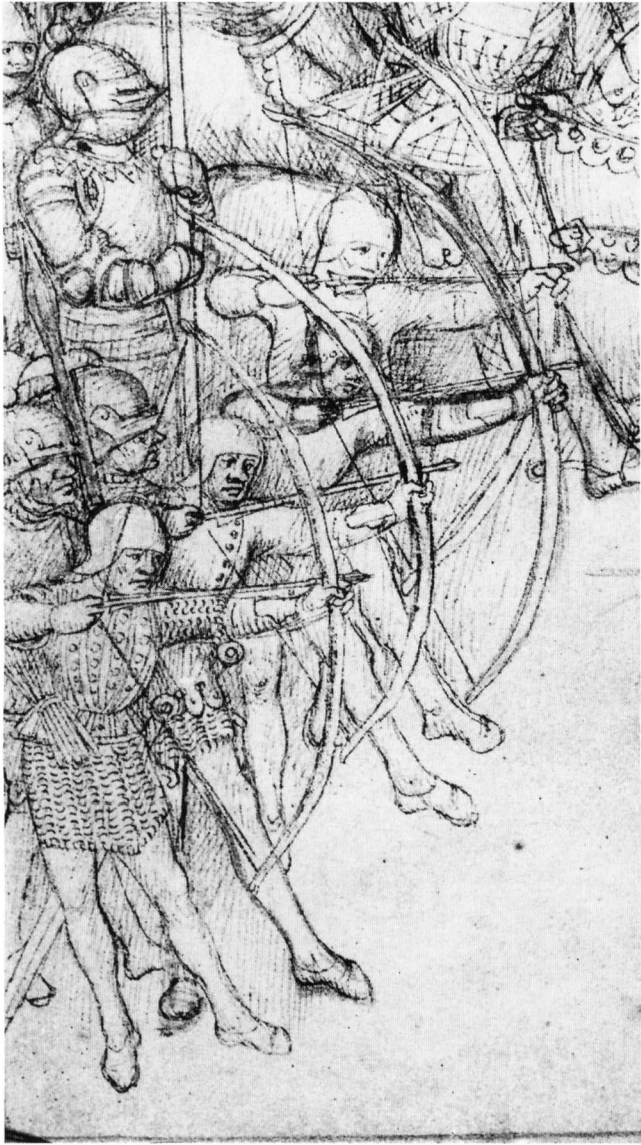
common. The 1415 statutes are even more lenient than those of 1386, and also recognise that some soldiers might be innocently duped into an offence. For instance, in 1386 the originator and other 'beginners' of the cry 'havoc' were beheaded (and their bodies hung up by the arms as examples) but in 1415, while the originator was still executed, the others were just to be imprisoned. Many of the statutes include the stipulation that horse and harness is to be confiscated until the offender has '... made fyne with the Constable and Marshall' (i.e. paid a fine) and then his body is to be at 'the Kings will'.

There are no known descriptions of court-martials and perhaps a common archer did not warrant one, though the phrase 'the Kings will' seems also to have been valid even if the King did not accompany the army, so it would appear that punishments were not arbitrary and the accused got some form of hearing, even if only by correspondence.

It is unlikely we will ever discover just how many soldiers were executed, but it is worth reflecting that



Liveried Burgundian archers of Charles the Bold. Their style of shooting, with its high, short draw, is one instantly recognisable to modern archers. (Bern Historical Museum)



The archer on land. A detail from a battle scene in the Beauchamp Pageant. This manuscript, dating from the 1480s–90s, contains superb detailed drawings of clothing, armour and equipment of the period. Note that the

foreground archer wears, over his mail shirt, a brigandine or plated jack with large, single rivets. Note also the sheaf of arrows held at the waist. (British Library Cotton MS Julius E IV f20v)

Henry V's hanging of a soldier who stole from a church, a sacrilege and in direct contravention to one of the statutes, was an event notable enough for the chroniclers to record and for Shakespeare to make use of later on. Henry VIII, not famous for his kindness, only had two soldiers – brothers – hanged during the 1513 expedition but another two, who were also involved, went unpunished.

In general, unruly behaviour or indiscipline, often caused either by the English soldiers' penchant for ale and wine or by long periods of enforced idleness through delays in embarkation, were effectively dealt with by the captains.

All the statutes included clauses forbidding crimes against the civilian population; the 1415 statutes even dictate death for anybody who burnt property without authorisation. Nevertheless, there were occasions when atrocities were committed – as at Limoges in 1370.

When reading of the burning, plundering, rape and slaughter that took place in 14th century France two things should be taken into account. Firstly, the accepted laws of medieval warfare dictated that if a stronghold or town was called upon to surrender after its defences had become untenable but refused, thereby causing unnecessary casualties, then no mercy need to be shown to the inhabitants. One chronicler claims this was the situation at Limoges. Secondly, all these events took place against the background of the terrible desolation and destruction caused by the *chevauchee* – a policy ordained by the English King.

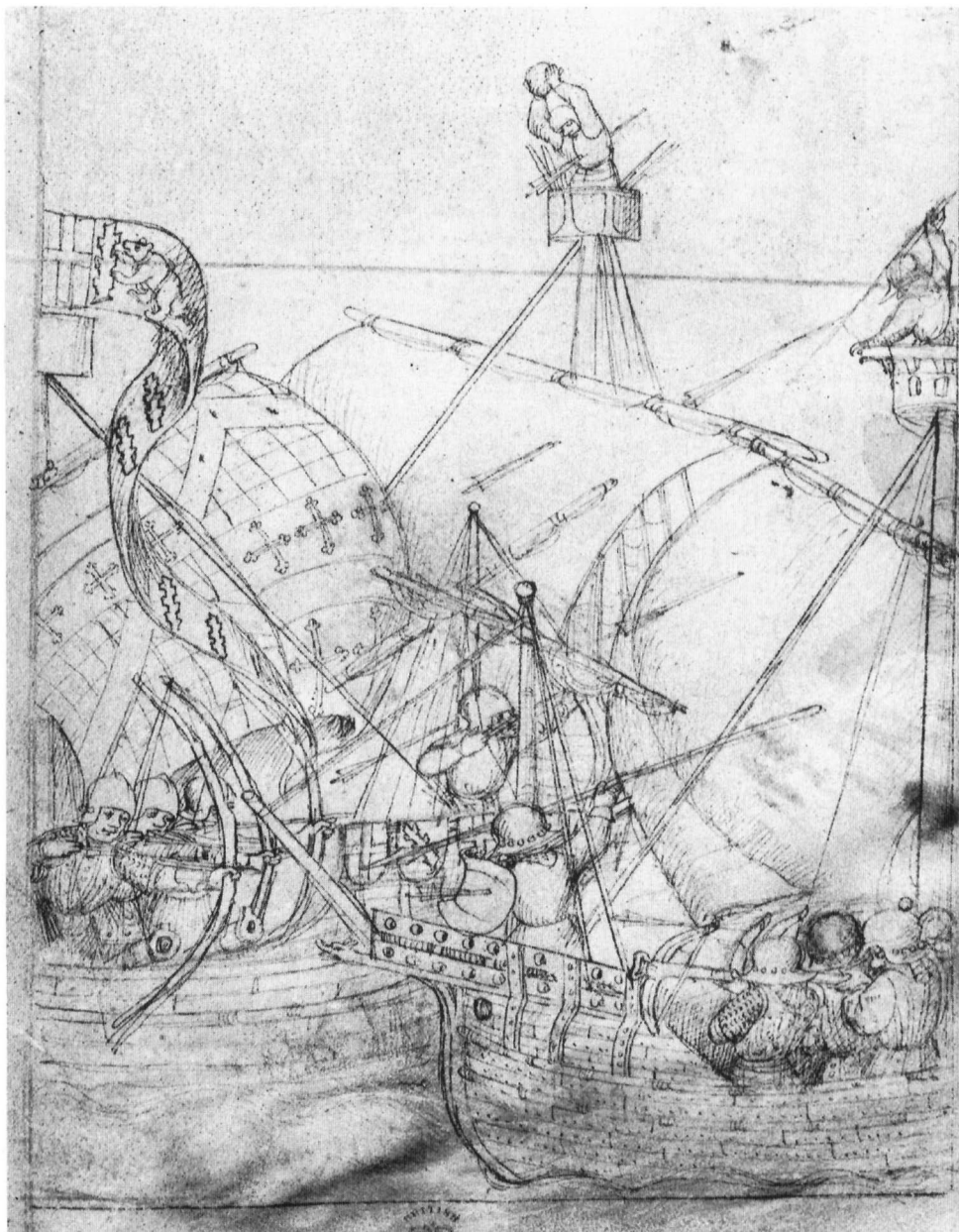
It is often suggested that the military reputation of the British soldier over the last three centuries owes much to strict, ingrained discipline and to the loyalty and esprit-de-corps generated by the Regimental system (and to personal loyalty among soldiers). The archer had neither to subject himself to rigid drill nor had he the benefits of the Regimental tradition, yet his armies were, in the main, surprisingly well ordered and obedient. Surely it is something more than just a threat of punishment that made soldiers endure a winter siege of Calais in 1346/7, harsh winter campaigns in Scotland, that held a dysentery-ridden army together on the march to (and at) Agincourt, and inspired a band of archers to refuse to surrender and die to a man by the brook in the garden at Formigny in 1450. For the archer the 'X-factor' was probably threefold. Firstly, the loyalty given to a particular family or leader by the household soldier or retainer – especially with a charismatic leader such as John Talbot, Earl of Shrewsbury. Secondly, the loyalty and obedience given by the ordinary Englishman to the authority of the King. Thirdly, the rising nationalism, bordering on xenophobia, that arose during the French wars; it was, for instance, during Edward III's reign that English replaced French as the language of the court.

Perhaps the best description we have of English archers is from a Spanish chronicle from the end of the 15th century, especially important as it was written by an impartial foreign observer. It is valuable because it illustrates the attitude of the English soldier, and his behaviour in battle, and proves the exceptions to the normally

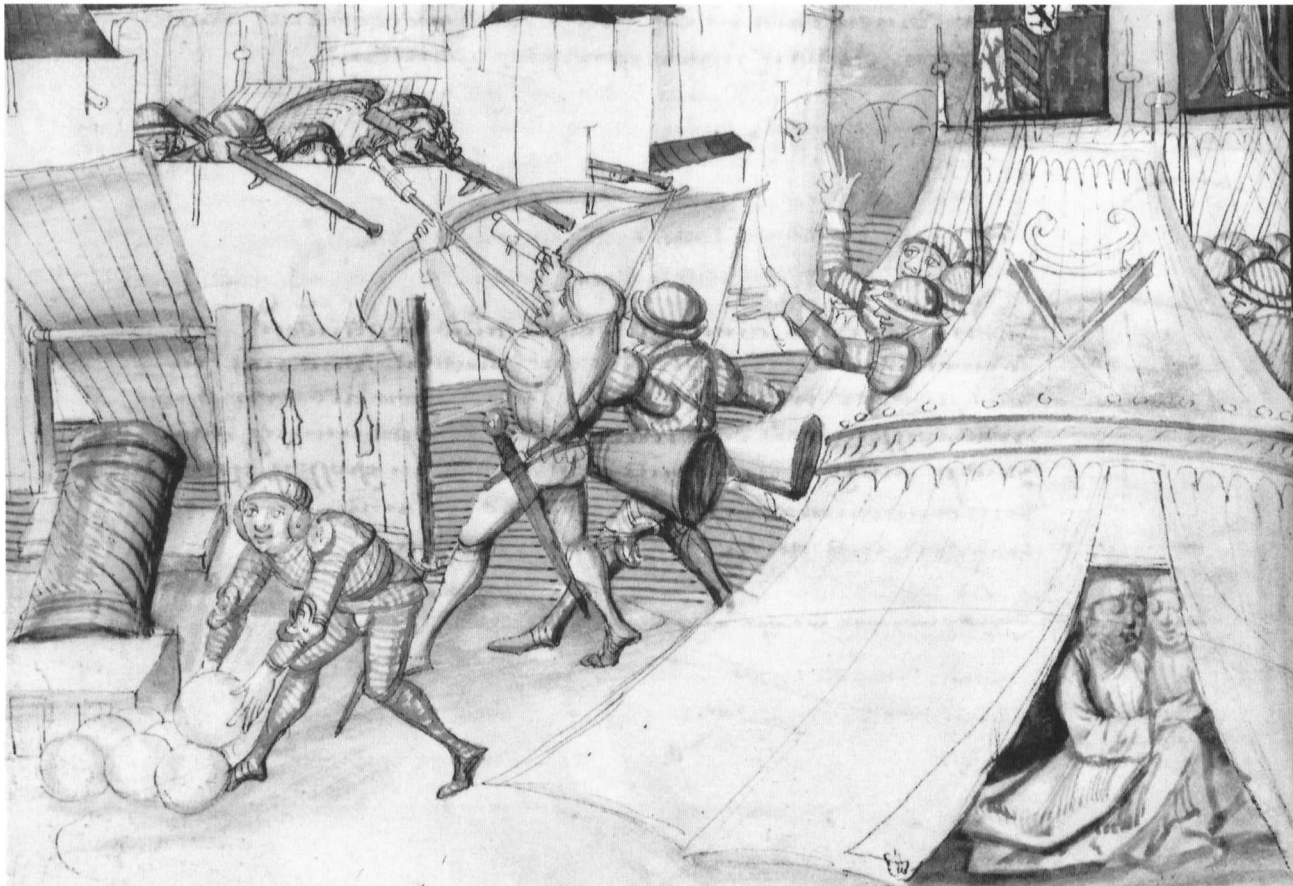
accepted ratio of men-at-arms to archers and the tactical way of fighting. (What follows is taken almost verbatim from the booklet: *The Battle of Bosworth* by Dr. Williams.) In 1486 Sir Edward Woodville took a retinue of 200 men-at-arms and 100 archers to Spain to help fight the Moors in the conquest of Granada. Friar Antonio Agapida, when writing his *Chronicle of the Conquest of Granada*, described the Englishmen thus:

‘This cavalier was from the island of England and brought with him a train of his vassals, men who had been hardened in certain civil wars which had raged in their country. They were a comely race of men but too fair and

fresh for [the appearance] of warriors. They were huge feeders also and deep carousers and could not accommodate themselves to the sober diet of our troops, but must fain eat and drink after the manner of their own country. They were often noisy and unruly, also, in their wassail, and their quarter of the camp was prone to be a scene of loud revel and sudden brawl. They were withal of great pride, yet it was not like our inflammable Spanish pride . . . their pride was silent and contumelious. Though from a remote and somewhat barbarous island, they yet believed themselves the most perfect men on earth . . . With all this, it must be said of them that they were marvellous



The archer at sea. The archer on the right is clearly drawing 'to the ear'. (British Library Cotton MS Julius E IV f18v)



The archer in foreign service. English archers of Charles the Bold's army. This Chronicle consistently identifies these archers as wearing

distinctive short jacks with high collars. (Chronicle of Diebold Schilling. Bibliothek de la Bourgeoisie de Berne)

good men in the field, dexterous archers and powerful with the battle axe. In their great pride and self will, they always sought to press in their advantage and take the post of danger . . . They did not rush forward fiercely, or make a brilliant onset, like the Moorish and Spanish troops, but went into the fight deliberately and persisted obstinately and were slow to find out when they were beaten.'

And later, in recording an action during the siege of the Moorish city of Loja, the friar continued: 'He [Woodville] was followed by a body of his yeomen armed in a like manner (that is, with swords and battle axes) and by a band of archers with bows made of the tough English yew tree. [The bows were unlikely to have been of *English* yew, but an understandable mistake by the friar.] The earl turned to his troops and addressed them bluntly according to the manner of the country. "Remember my merry men all" he said, "the eyes of strangers are upon you. You are

in a foreign land, fighting for the glory of God and the honour of Merry Old England!" A loud shout was the reply. The earl waved his battle axe over his head. "St. George for England" he cried. They soon made their way into the midst of the enemy but when engaged in the hottest of the fight they made no shouts or outcries. They pressed steadily forward dealing blows right and left, hewing down Moors, and cutting their way with their battle axes like woodmen in the forest, while the archers, pressing into the opening they made, plied their bows vigorously and spread death on every side.'

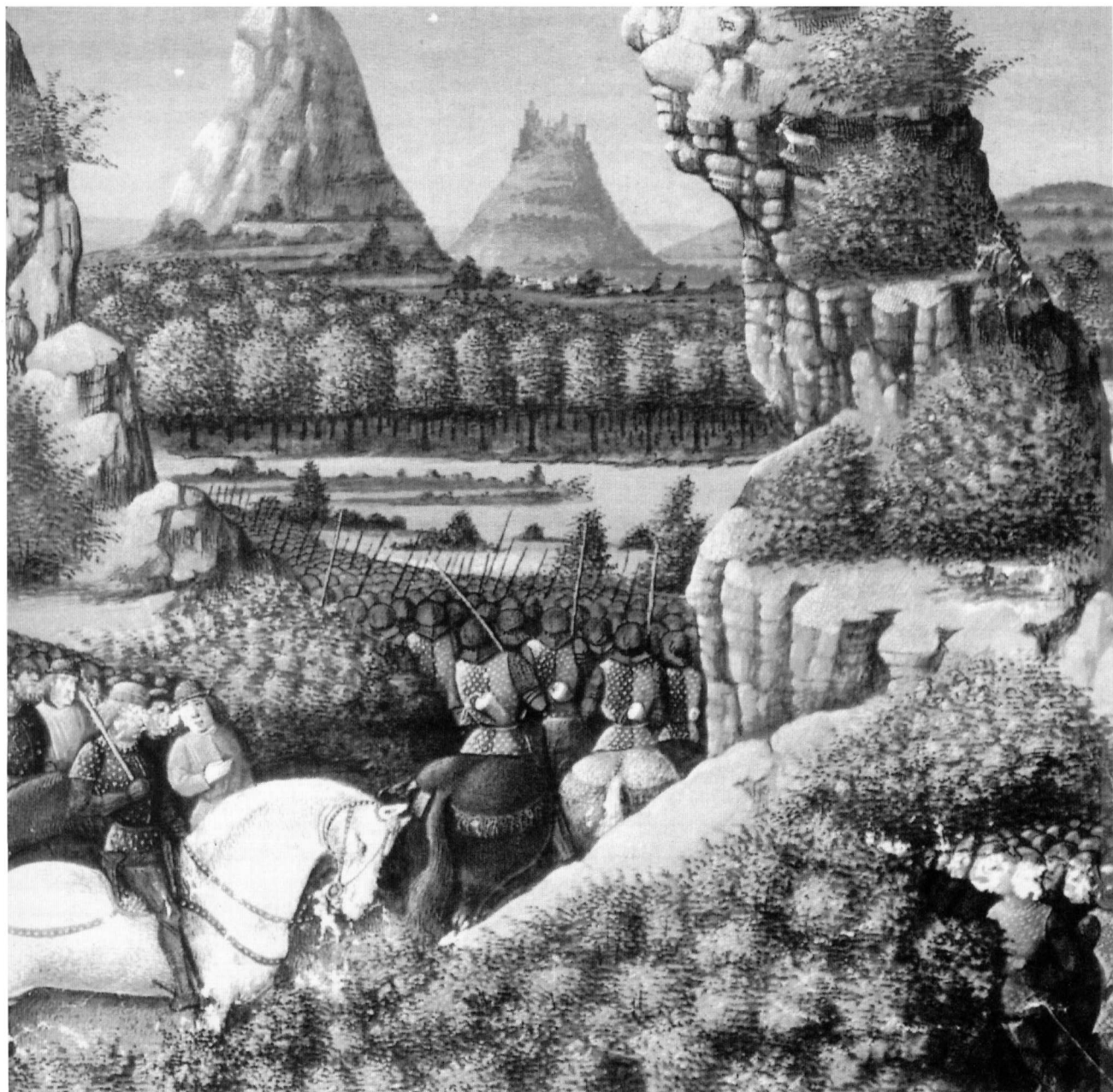
THE PLATES

A: Levied archers of Cheshire and Flint in the 1330s
One wears a coat over his livery and has a second pair of single-leg hose over the first for extra warmth. The bows, swords and bucklers are their own, but, as well as the livery, they have been issued with arrows – though no defensive wear.



Left: A dead archer from the Schilling Chronicle. This view of the arrow bag shows the heads protruding from the opening. In all the illustrations the bags retain their shape, indicating that they had an internal framework – perhaps of wicker. (Bibliothèque de la Bourgeoisie de Berne)

Below: A rare illustration of a company of mounted archers. These are wearing liveried brigandines of blue and red. Of great importance is the view of the closed waist quivers clearly showing the drawcord fastening arrangement. (Les Passages faits Outremer. Bibliothèque Nationale, Paris)



A 15th century army on the march against a background of ruined townships and castles. The two-wheeled cart, drawn by one horse, and the four-wheeled cart, drawn by three horses, were used in their hundreds throughout the medieval period. (Chronique de Hainaut. Bibliotheque Royale Albert 1er, Brussels)



B: Retained archers of the mid-fourteenth to early fifteenth centuries

The quality of their equipment denotes household men and most of it would have been issued to them. Both are wearing bascinet helmets, fitted with mail aventails, and padded *gambesons*. The left-hand figure has the aventail secured to the *gambeson* by 'arming points'. The right-hand figure, a mounted archer, has leg armour. Both have the English national sign of the red St. George's cross stitched to the *gambesons*. They demonstrate the two medieval methods of 'stringing' the bows, the one on the right depicted more often. Nearly all modern representations of archers show another technique. That of placing a leg between the bow and string, resting the lower bow tip on the instep of the other foot and 'bending' the bow around the back of the thigh. This is a style born through not having the strength for the above two methods, is bad for the bow and has yet to be seen in a medieval illustration (and, yes, the author has been guilty of it).

C: Agincourt

The foreground archer in the act of drawing to the ear – all attention centred on his intended target. The loosened hosen was probably necessity owing to the varying degrees of dysentery with which many of the men were afflicted. The chroniclers do not tell us how the stakes were arranged. It would have been more effective, and easier to place, for them to have been staggered to give defence in depth with the archers in amongst them – and it should be remembered that the men were moved forward from their original position and the stakes had to be relocated. On the other hand, the English were greatly outnumbered and the length of the line may have meant they were spread thinly.

D: Castillon 1453

The French invaded and captured Aquitaine in 1451. The English put together a small army in 1452 under the leadership of John Talbot, Earl of Shrewsbury, which, when it landed, caused the French garrisons to flee.



Charles VII then sent, in 1453, an army back again. This was too powerful for Talbot to take on, but when the French commander split his forces with one division Talbot decided to attack it. Bureau had had constructed a ditched, palisaded enclosure, strongly fortified with artillery. Unfortunately, English scouts wrongly identified it as a simple camp and, when a large dust cloud was thrown up when the French relocated their horses, wrongly assumed they were retiring. Acting on this news, Talbot set off in 'pursuit' with the mounted element of his army, leaving the footmen to follow on. On discovering his mistake, and despite strong objections from his senior commanders, Talbot nevertheless decided on immediate attack.

The English were held by the defences and mown down by artillery fire. Talbot, traditionally in civilian clothes and mounted on a small white pony (having sworn an oath when captured some years previously never to bear arms against the French again), was wounded and his pony

killed by a culverin shot while on the earthworks. A French soldier then jumped down, crossed the ditch and killed him while he lay pinned by his pony's body. A sally by French mounted men-at-arms finally broke the English. The retreating English met the advancing footmen who immediately retired back to Bordeaux, which surrendered after two days. Castillon was one of England's most significant defeats and, despite later optimistic plans, the end of her ambitions in France.

Our picture shows the dismounted archers during their futile assault on the French position. They wear the English national livery jacket, with Talbot's badge of a hunting dog (the Talbot), over various types of defensive wear.

E: Castle [Anywhere] c.1450–80

Off-duty archers, one accompanied by his son, indulging in friendly, informal recreational competition, watched by a soldier about to go on duty. The archer sitting with a girl,

perhaps his wife or perhaps just another employee of the castle staff, is shirtless but wears a pourpoint to hold his hose in place. The other archers have kept their livery coats on. The hose is all of a uniform colour and part of the livery issue. The target is a simple board on a pole, a typical target even for very long distances.

Archery competitions were very common and wagers usually placed – employers often taking a keen interest, both professionally and financially.

F: A household archer's spreadsheet from the latter half of our period

Clothing and equipment ready for wearing or packing for campaign service. Included are a travelling cloak and hoods, washing items (note the sponge), candles and a flint & steel, money, eating utensils with some 'emergency rations' and a canteen and haversack – the latter referred to in a Paston letter of 1492 as a 'gardvyvan'. This man was probably a junior officer as he can obviously read and write and carries parchment, a travelling set of ink pot and quill-pen container, spare quills and a 'pen-knife'.

G: Archery equipment

A recurved and a straight limbed bow, the latter beginning to follow the string. Various shapes of feathers seen on target arrows, some completely or partially dyed. Note the bulbous nock of the arrow with red and black feathers, this was probably done to strengthen this area and as an alternative to inserting a strip of harder material (cf., for example, the Luttrell Psalter illustration). The 'full' and 'skeleton' shooting glove, various bracers, the one on its own with the brown leather strap a copy of one found on the *Mary Rose*. Differing arrangements of the waist quivers with, below, examples of arrow bags. The feathers of the war arrow are all tied down but only one set shows the green (because it is mixed with verdigris) gluing compound. Some medieval illustrations show this area red and some, plain. So either some other medium was used with the glue, or, perhaps just the glue on its own, though this is unlikely. The practice of first gluing the feathers on, tying them down and then applying a thick compound over the thread and base of the feathers was a long-lived one. The Saxons had done it, using pitch.

At bottom right are shown half-, three-quarter- and full-nocks. The first used on war arrows, the other two, though not common, on 'best' target arrows.

H: Calais c. 1465

The 'Scout Watch' discover a bowyer working at night. To ensure product quality various laws were passed throughout the period to ensure bowyers did not do this – craftsmen not having the advantage of modern artificial light.

Bows in varying stages of completion fill the workshop, some already fitted with the horn nocks brought in from outside suppliers and ready for the strings stacked in coils. The bowyer holds a small 'flote' (float), a tool consisting of a series of blades set in a wooden handle. Because we have no actual example of a woodworker's bench or vice (though there are some of metalworkers, i.e. armourers), the one depicted in conjectural, though based on known working practices. The archers, armed with pole and side arms, are wearing livery coats in the colour, and with the badge, of Warwick the 'Kingmaker', a popular Captain of Calais from 1455–71. The relationship between the permanent soldiers of Calais paid for by the town and those bought in by an appointed Captain is not yet fully understood, but these archers represent Warwick's household men.

Watches were divided in both garrisons and armies into the 'Stand Watch', stationary guards, 'Scout Watch', those on patrol, and the 'Search Watch' who policed the others.

I: Burgundian Campsite 1475 (1)

Hand-picked archers of the guard of Antoine, Grand Bastard of Burgundy, a commander of Charles the Bold's army, and one of his messengers. Antoine's badge of a 'barbican', the castle defensive equivalent of a ship's gunport, is visible on the messenger's doublet. The scene is set inside Antoine's tent, which is fitted out to a luxurious degree – a richly woven tapestry is on the wall behind two waiting attendants.

English archers were second in numbers to the Italians as foreign servicemen in Charles the Bold's armies and, from their first major action at the siege of Nijmegen in 1473, where they distinguished themselves, they remained a trusted and important component. In 1476 there were 780 mounted archers in the Duke's household guard. Unfortunately, they therefore suffered the consequences and very few returned home to England after Charles's defeat and death at Nancy in 1477.

J: Burgundian Campsite 1475 (2)

The same location as above, but the other end of the scale. Antoine's tent is visible in the background, in the foreground an archer, dying of illness far from home, lies on a mattress in a hovel attended by a friar, a camp follower and

Right: The meeting of Henry VII of England and Philip of Spain from an engraving by Hans Burgkmeir, dated 1516, in the fictionalised autobiography of the Emperor Maximilian. The

archers of the King's guard are in full armour and carrying tall, reflexed bows. (From a reprint of 'Der Weisskunig' published in Vienna in 1891. Board of Trustees of the Royal Armouries)



a friend. Other hovels of straw and timber are behind his simple shelter of canvas.

The standing archer wears a travelling garment known as a 'huke' and carries a straw hat. Another such hat rests on the tools in the right foreground. Straw hats were produced in their thousands and worn by all classes of men. On this man's upper sleeve is stitched the red St. Andrew's Cross, the identifying sign for all Charles's soldiers.

In the middle distance, archers and pikemen can be seen practising one of the tactical formations laid down in Charles's Ordinances.

K: Levied archers of York, 1482

The levied archers of York on their way to join the main army for the campaign in Scotland. The men left York, after a minor mutiny, in July. There were 100 of them, all

An early war memorial. Among the stained glass windows installed during his enlargement of the church at Middleton, near Manchester, Sir Ralph Assheton included one commemorating sixteen of his archers who had fought for him at

Flodden. All are dressed in blue livery coats and each carries a yew bow and a sheaf of war arrows. Their names are inscribed alongside their bows. (Courtesy of the Parochial Parish Council of St. Leonards and the Reverend Nicholas Feist)

mounted, led by two captains, John Brackenbury and Thomas Davyson (who each had a servant), and accompanied by a standard bearer and a friar. They had one, or perhaps two, carts as two carters also travelled. The men are depicted wearing the national livery jacket, as all the army was ordered to do, though some are also wearing or carrying a coat – as one of the carters is. They were entitled to wear the livery badge of their city, but the badge shown here is conjectural (taken from York's coat of arms) as the actual one is not recorded.

These men should have been at the siege of Berwick, the occupation of Edinburgh or the battle of Hatton field which, contrary to earlier belief, may have been a major action.

L: France, disturbances, 1513

A brawl has erupted in a beer tent between English archers and their German 'allies' during the campaigning before Théroutanne. Disturbances such as this were not unknown during the campaign, owing to the Germans' refusal to take orders from any but their own officers – despite instructions to the contrary from the Emperor Maximilian. The most severe incident happened on 15 August when numbers of English, and Germans fought each other resulting in fatalities. At one point German



gunners trained their artillery on the English, and German pikemen and English archers actually faced each other in confrontation.

Maximilian, who was a witness to the event, was impressed by the way the English officers were able to restore order amongst their men. This indicates a high level of discipline.

However, despite the occasional disturbance, the army of 1513 was the finest one to leave England during the 16th century.

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Notes sur les planches en couleur

A Archers réquisitionnés de Cheshire et Flint vers 1330. L'un porte un manteau par dessus sa livrée et une seconde paire de chausses par dessus la première pour se protéger du froid. Les arcs, épées et boucliers leur appartiennent. On leur a distribué des flèches et une livrée mais pas de vêtements de défense.

B Archers engagés au milieu du quatorzième et début du quinzième siècle. La qualité de leur matériel prouve qu'il s'agit d'une Garde. La majorité de leur équipement leur a été distribuée. Ils ont tous les deux le signe anglais national de la croix rouge de saint Georges cousue sur les gambessons. Ils démontrent les deux méthodes médiévales de 'cordage' des arcs, la méthode de droite est plus souvent représentée.

C Agincourt. L'archer du premier plan en train de bander son arc, concentré sur sa cible. Le haut-de-chausses desserré était sans doute une nécessité vu la dysenterie qui affligait à divers degrés un grand nombre de soldats.

D Castillon, 1453. La défaite des forces anglaises menées par John Talbot, Comte de Shrewsbury, face à l'armée de Charles VII, venaît plus d'une mauvaise connaissance du nombre des forces opposées et de leurs intentions que de ruses des Français.

E Un château en Angleterre, c. 1450–80. Des archers au repos, un d'entre eux accompagné par son fils, s'amusent à une compétition amicale et informelle, observés par un soldat qui va prendre son service. Les chausses sont de couleur uniforme et font partie de la livrée.

F Le baluchon d'un archer de la Garde durant la dernière partie de la période qui nous intéresse. Vêtements et matériel prêts à être portés ou emballés pour un départ en campagne.

G Matériel de tir à l'arc. Un arc recourbé et un arc droit, ce dernier commençant à suivre la corde. Diverses formes de plumes observées sur les flèches d'entraînement, un gant d'archer 'complet' et un protège-doigts, divers bracclets, celui présenté seul avec une lanière en cuir marron est une copie de celui retrouvé sur l'épave du *Mary Rose*. Carquois portés à la taille, sacs à flèches et diverses plumes utilisées sur les flèches 'de guerre'.

H Calais, vers 1465. Les archers de la 'Scout Watch' découvrent un fabricant d'arcs qui travaille de nuit. Pour garantir la qualité de la production, diverses lois furent adoptées durant la période médiévale pour interdire aux fabricants d'arcs de travailler de nuit car les artisans ne bénéficiaient pas des avantages de la lumière artificielle.

Farbtafeln

A Einberufene Bogenschützen in Cheshire und Flint in den 30er Jahren des 14. Jahrhunderts. Einer trägt über seiner Livree einen Mantel sowie ein zweites Paar Hosen über dem ersten Paar, um sich warm zu halten. Die Bogen, Schwerter und runden Schilde gehören den Männern selbst, es wurden ihnen jedoch außer der Livree auch Pfeile ausgegeben, jedoch keine Schutzkleidung.

B In Diensten gehaltene Bogenschützen Mitte des vierzehnten bis Anfang des fünfzehnten Jahrhunderts. Die Qualität ihrer Ausrüstung deutet darauf hin, daß es sich bei ihnen um Mitglieder der Garde handelt, und der Großteil der Ausrüstung wurde ihnen gestellt. Bei beiden Männern ist das englische Nationalembem des roten St. George-Kreuzes auf das Wams gestickt. Sie führen die beiden im Mittelalter gängigen Methoden der Bespannung des Bogens vor. Die rechts abgebildete erscheint häufiger.

C Agincourt. Der Bogenschütze im Vordergrund ist dabei, den Bogen bis zum Ohr hin zu spannen – seine ganze Aufmerksamkeit ist auf das vorgesehene Ziel gerichtet. Die geöffneten Hosen waren wahrscheinlich notwendig, da viele der Männer in unterschiedlichem Maß an der Ruhr litten.

D Castillon, 1453. Die Niederlage der englischen Streitmacht, die von John Talbot, dem Earl von Shrewsbury, angeführt wurde, durch die Armee von Charles VII. ist wahrscheinlich eher auf die schlechte Nachrichtenlage hinsichtlich der Stärke und des Vorhabens des Gegners zurückzuführen als auf die List der Franzosen.

E Eine Burg in England um 1450–80. Bogenschützen außer Dienst – einer von ihnen befindet sich in Begleitung seines Sohnes – halten ein zwangloses Wetschießen zur Freizeitgestaltung ab. Ein Soldat, der gerade seinen Dienst antritt, schaut ihnen zu. Die Hosen haben die gleiche Farbe wie die Uniform und stellen Teil der ausgegebenen Livree dar.

F Das ausgebreitete Zubehör eines Garde-Bogenschützen aus der späteren Hälfte des betrachteten Zeitraums. Die Kleidung und die Ausrüstung liegt zum Tragen beziehungsweise Packen zum Aufbruch ins Feld bereit.

G Ausrüstung der Bogenschützen. Ein zurückgebogener und ein geradgliebriger Bogen, letzterer weist bereits ein Folgen der Bogensehne auf. Unterschiedliche Federformen, wie sie auf den Zielpfeilen auftauchen, "vollständiger" und "behelfsmäßiger" Schuhhandschuh, Handgelenkschutz verschiedener Art, der einzeln dargestellt mit dem braunen Lederriemen ist eine Kopie eines Schutzes, der auf der *Mary Rose* gefunden wurde. Leibriemen-Köcher; Pfeiltaschen und verschiedene Federn, die für "Kriegs"-Pfeile verwendet wurden.

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Avec annotations en français sur les planches en couleur.
Mit Aufzeichnungen auf Deutsch über den Farbtafeln