Warrior
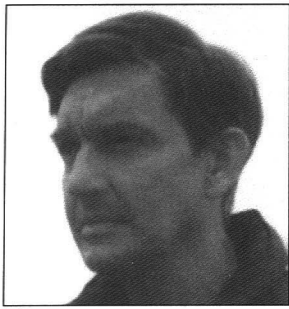
Ironsides

English Cavalry 1588–1688

John Tincey • Illustrated by Graham Turner

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Artist's note

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INTRODUCTION

Many types of cavalryman are established in the imagination of the British public, but the Ironside retains his place as a symbol of the one occasion when the army took an active role in British politics. One reason for this is that he represents a unique period when ordinary people displaced the established order to take political control into their own hands. In the 19th century a rash of historical publications, paintings and statues with a Civil War theme reflected the political divisions of Victorian society, and Royalist and Parliamentarian causes were argued over again, reflecting the sub-text of contemporary political struggles. Modern books reproduce W.F. Yeames's Victorian painting *When did you last see your father?* as an illustration of dour Parliamentarian Ironsides questioning the child of a Royalist. In fact Yeames based his scene on a factual incident in 1642 when Royalist troopers under Sir Thomas Byron despoiled Fawley Court, the home of the Parliamentarian Bulstrode Whitelocke.

This book attempts to take a wider view of the Ironside as a warrior that evolved from the experiments of the late 16th and early 17th centuries to combine firepower with the armoured cavalryman. It reflects his wider service in the Royalist as well as the Parliamentarian armies and beyond the Civil Wars.

THE EVOLUTION OF THE IRONSIDE

In 1956 Professor Michael Roberts identified a 'Military Revolution' that had occurred between 1560 and 1660. He suggested that it was only the rediscovery of Roman tactics, discipline and training methods in the Low Countries in the early 1600s that caused firearms to become effective weapons of war. Horsemen of the period also fell under the spell of ineffective firearms, and it was not until Gustavus Adolphus of Sweden rediscovered the charge to contact with sword in hand that horsemen recovered their effectiveness on the battlefield. Roberts's proposition sparked the discovery of other 'revolutionary' periods from 1660 to 1800 and as far back as the 14th century. As a result ideas of revolution have given way to evolution.

The growing offensive power of infantry

Even at the height of its battlefield dominance cavalry was not invincible. Nations that could not breed horses capable of carrying heavily armoured knights trained spearmen to form defensive 'hedgehogs' bristling with 12-foot spears capable of keeping armoured horsemen at bay. The

Flemish at Courtrai in 1302 and the Scots at Bannockburn in 1314 demonstrated that disciplined spearmen could not only defeat, but advance to attack armoured knights. The Swiss employed the halberd in mass formations to defeat horsemen at Morgarten in 1315. Spearmen and halberdiers had needed advantageous terrain to limit the mobility of horsemen, but at Laupen 1339 the Swiss won a victory on open ground favourable to cavalry.

In England the defeat at Bannockburn had taught the lesson that cavalry needed the support of other arms to defeat disciplined infantry. A flexible combination of archers and armoured cavalrymen was the basis of the English victories over the French, culminating in Agincourt in 1415 when knights dismounted to fight on foot.

The role of cavalry in sieges

In its early days gunpowder artillery smashed down walls and towers designed to resist medieval siege engines. Countermeasures developed, and low-angled bastions made of stone but protected by shot-absorbing earth banks enabled fortifications to withstand attack by artillery.

Cavalry had a limited role in siege warfare. The amount of forage demanded by horses made them a liability in a besieged town. Cavalry could also be a burden for the besiegers. An army on the march lived off the land, with its cavalry consuming fodder and moving on to fresh pastures. During a siege fodder had to be brought from ever greater distances. Defenders and attackers therefore kept cavalry numbers to the minimum, and with the prevalence of sieges in campaigns the proportion of cavalry in armies naturally diminished.

Bodies of 'hand gunners' began to appear on the battlefield in the 15th century, often in unusual geometric formations. At first their firepower was insufficient to drive off determined attacking cavalry.
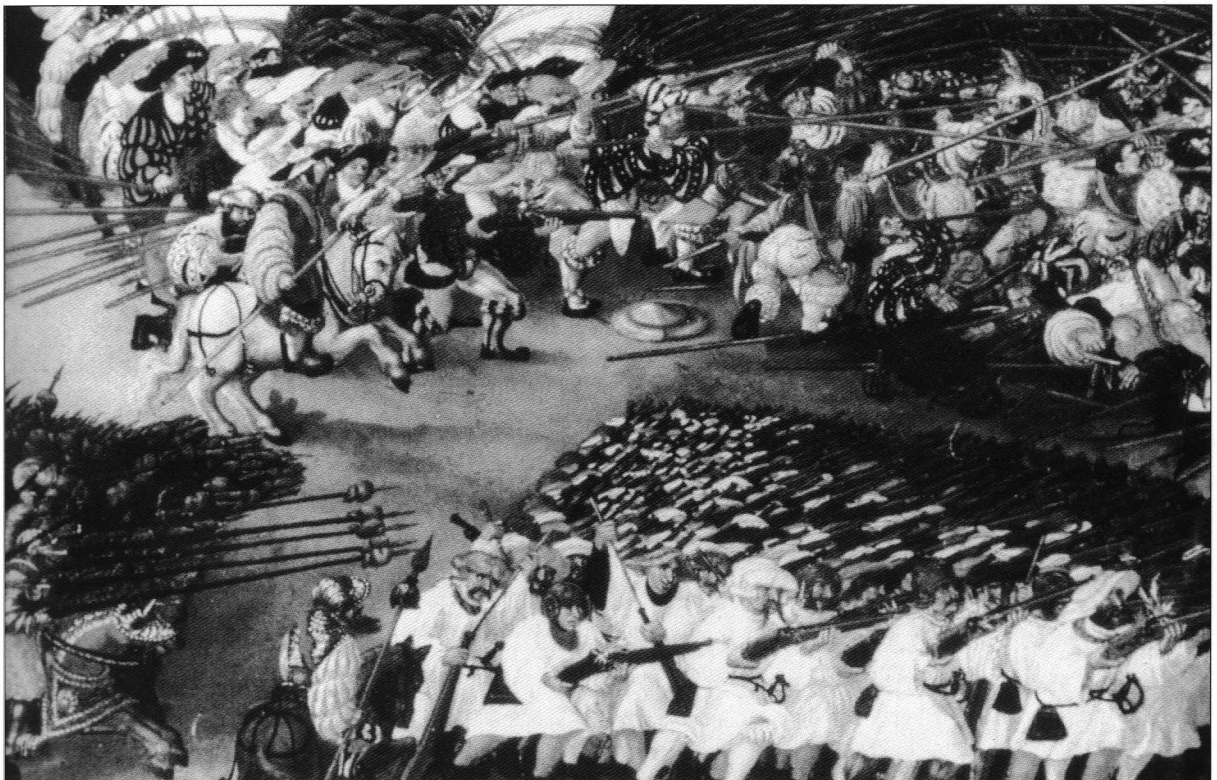
The rise of 'light horsemen'

Cavalry retained one important role in siege warfare, namely the escorting and intercepting of supply convoys and foraging parties. Sir Roger Williams, in his 1590 work *A Briefe discourse of Warre*, says:

> The service of all Light horsemen, consists chieflie in marching of great marches, (cavalgades the strangers terme it) I meane, to surprise Companies a farre off in their lodgins, or marches; likewise to defeat convoyes, & to conduct convoyes, as much to say, direct it to spoyle necessaries that come to furnish their enemies, & to conduct necessaries to furnish their own campe or service. Also to scout and discover, to spare the armed men, I meane the Launtiers, & the other horsemen; likewise both to conduct & spoile forragers, with the like services.

Heavily armoured cavalry were not suited to convoy escorting and ambushes, and new types of lightly armed and mobile horse appeared. In his 1548 work, *Discipline Militaire*, the French writer Martin du Bellay divided cavalrymen into the heavily armoured men-at-arms, the more lightly armoured chevaux legers (known as demi-lancers in England) and stradiots and genitors. Stradiots developed in Eastern Europe to counter lightly armed Turkish horsemen and were hired as mercenaries

Pike formations ended the dominance of the medieval knight and forced horsemen to experiment with firearms as their principal weapons. Foot harquebusier then accompanied the pikemen to ward off cavalry armed with shorter-range pistols. The classic pike and musket formation was the eventual result.
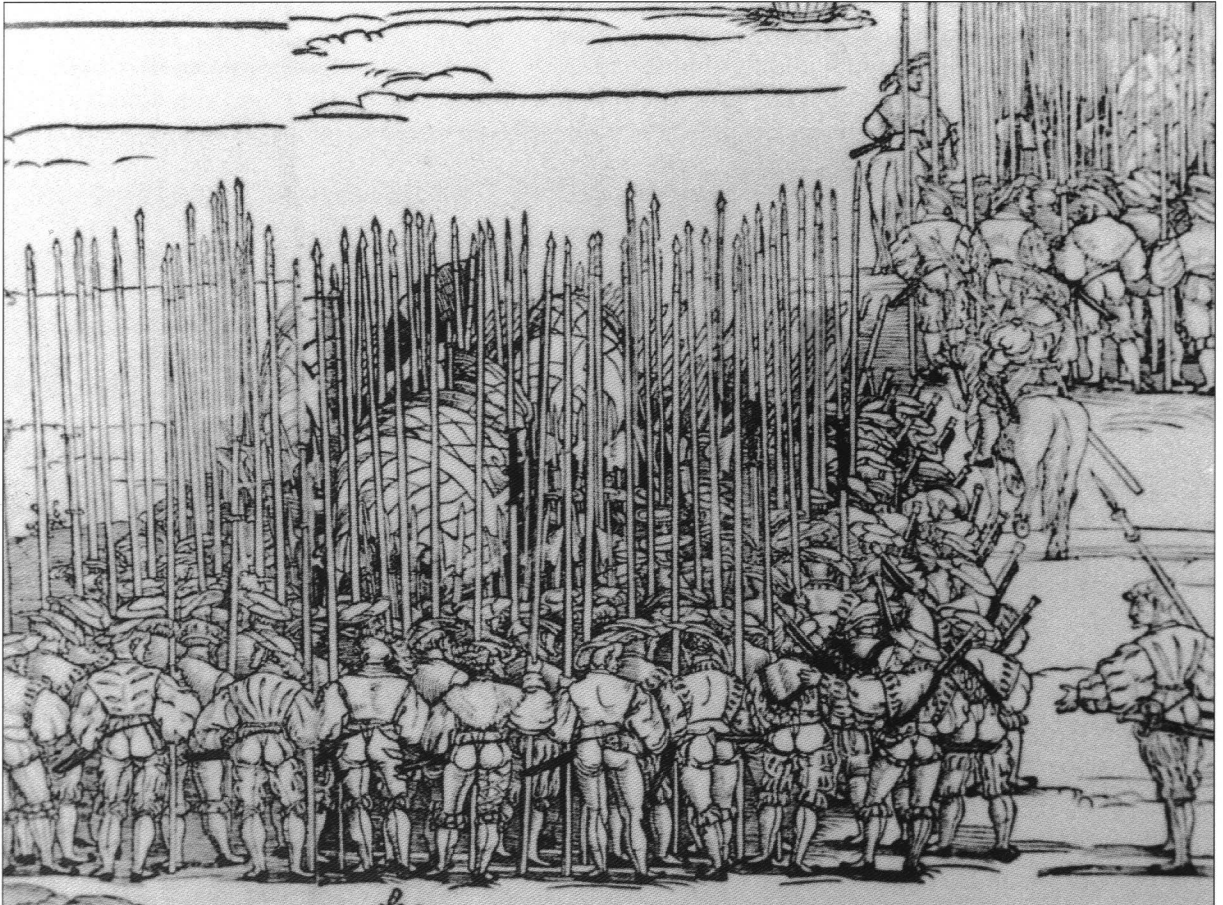
in the late 15th century. They carried javelins, swords and shields and wore light armour. Similarly light horse called genitors developed during the reconquest in Spain as a counter to Moorish horsemen. This kind of cavalry was used by both sides in England during the Wars of the Roses where they were known as 'prickers' and 'scourers'.

Mounted crossbowmen had been a feature of medieval warfare, and by 1496 mercenary 'condottiere' were making use of mounted harquebusiers, known as 'hackbutters on horseback' in England. The firearms carried were small calibre, and for some time the horseman braced his 'hackbutt' against his cheek. Had the weapon fired a large ball a broken jaw would have resulted from every shot.

Sir Roger Williams in *A Briefe discourse of Warre* describes the value of mounted 'shot' in ambush, and makes the point that if the enemy proved too strong to be successfully attacked, mounted shot could easily 'dislodge' (i.e. withdraw) where shot on foot could not. Williams calls mounted shot herguluiers or hargulatiers, and shot on foot hargabushers. He says:

> The assailant will address an ambush perhaps, in a passage or narrow streigh short of the Enemies quarter, where he will also cause all or most of those Herguluiers to light, then place & hide them in such sort, that 100. shot will spoile and defend ten times more than themselves, unles the enimies bring shot to displace them, if they doo, the Ambush may dislodge, if hee thinkes the partie unequall; the which he could not, were his Hargulatiers Hargabushers without horses, being ingagd to fight.

Although the principal work of light horsemen and mounted harquebusiers was convoy escort and raiding, they could play a part in major battles. At Pinkie in 1547 mercenary mounted harquebusiers led by Pedro de Gamboa were able to fire unchallenged into the static Scots pike formations, contributing to a major English victory.

The decline of heavily armoured cavalry

Heavily armoured cavalry did not disappear with the arrival of the new light horse. Sir Roger Williams says of light horse: 'They be never commanded to do any exploit on men of warre, without beeing accompanied with Launtiers, or armed Pistolers, I meane Curaces on horsebacke.'

The 'Pistolers' referred to by Williams were not another form of light horse. From the early 1300s the response to formations of spear or pikemen had been to bring forward archers to make gaps in the ranks so that armoured horsemen could break into the formation. From this came the idea of providing the horseman with his own missile weapon.

The 1558 rates for raising militia demi-lancers, light horse and foot soldiers. This table was given to justices of the peace who helped to enforce the contributions.

	Horses on geldings, Demilaunces with Armour for them, wherof the one halfe shalbe Horses at the least with furniture.	Light Horses with their furniture of harneis & weapon.	Corslets furnished.	Almain ryuets, Plate Coates, Brigandins or Corseletts furnished.	Pykes.	Long Bowes.	Sheafs of Arrowes.	Steele Cappes or Sculs.	Black Billes or Halbuts.	Harquebuts.	Morians or Sallets.
Euery person of personal goods, shall keepe &c. which hath estate of inheritance or freehold in landes &c. 1000.li.6.		10	40	40	40	30	30	30	20	20	20
1000. markes.4.	6	20	30	30	20	20	20	10	10	10
400.li. 2.	4	20	20	20	15	15	15		6	6
200.li. 1.	2	10	10	10	8	8	8		3	3
100.li.	2	3	3	3	3	3	3		2	2
100. markes	1	2	2	2	2	2	2		1	1
40.li.		2		2	2	1	1		2	1
20.li.		1			1	1	1		1	1
10.li.				1		1	1		1	1
5.li.				1		1	1	1		
Goodes. 1000.mar. 1.os.18. Corslets furnished.	1	2	2	2	4	4	4		3	3
400.li.	1.os.9 corsl.	1	2	1	2	2	2		1	
200.li.		1	2		2	2	2		1	1
100.li.		1	1	1	2	2	2			
40.li.			2		2	1	1	1		
20.li.			1		2	1	1	1		
10.li.					1	1	1	1		
Penalties Confined for not hauing in 3. monethes, to the Queene...	10.li. the Horse.3.li. the furniture.3.li. the Demi-launce, the furniture.	10.li. the furni-bing, the gri-ture.3.li. the Demi: 3.li. the furniture.	40.s.	10.s.		10.s.	10.s.	10.s.	10.s.	10.s.	10.s.

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A German manuscript of 1460 shows a knight brandishing a handgun, but methods of firing such weapons were too cumbersome for use on horseback. By the early 16th century the wheel-lock offered a clockwork wheel rotating against a piece of iron pyrites showering sparks into a 'touch pan' to set off the pistol. Wheel-lock pistols could have their clockwork mechanisms 'wound up' before battle and would operate when the trigger was pulled. The horseman could now draw his pistol from a holster, fire at his enemy and replace the weapon with one hand.

The Germans became famous across Europe for their 'reiter' – armoured cavalry armed with pistols (what Sir Roger Williams called 'Curaces' from their cuirass or back and breast plate armour). The tactic employed by the reiter was the caracole. Faced with a formed body of pikemen the reiter would ride into pistol range at a slow pace. The front rank would discharge their pistols into the ranks of pikemen, but then wheel off to the flanks to allow the next rank to approach and fire. A well-trained body of reiter could maintain their fire until the pike formation began to break up due to casualties. As gaps appeared in the wall of pikes the reiter would draw their swords and charge the helpless pikemen.

Armies that depended on pikemen developed a counter to the caracole of the reiter. Bodies of harquebusiers placed in support of the pike formations or mixed in with their ranks could shoot down the reiter before their pistols were in range.

The death knell for the armoured horseman came with the introduction of the musket in the 1570s. The skill of the armourer had proved equal to producing plate armour that could resist longbow arrow and crossbow bolt at all but short range. A good degree of protection could also be afforded against firearms employing small bullets with a weak gunpowder charge.

In 1988 tests carried out on original weapons at the 'Landeszeughaus', the regional arsenal at Graz in Austria, found that a heavy musket of 1570 was able to penetrate 2 to 4 millimetres of steel at 100 metres range. From this time the balance of protection offered by each piece of armour against its cost and the lack of manoeuvrability it imposed began to tilt against its use. The result was not immediate. The musket was difficult to use and heavy to carry, and for some years the arquebus or caliver (originally a type of arquebus of a common calibre, corrupted in English to 'caliver') remained the most common infantry firearm.

The arrival of the demi-lancer saw the abandonment of leg armour in favour of stout leather boots, and the omission of the armour that covered the rider's lower back when mounted. Sir Roger Williams (who uses the name 'Launtiers' for the demi-lancers as the English called them) says that a man-at-arms commonly received five times 'as much pay as a Launtier'. He therefore went on to compare the military value of 100 men-at-arms to 500 lancers and found the lancers of more value. He says of men-at-arms:

> When they do fight, lightlie [likely], it is a battle, then the Launtiers receive and give the first blowes. The first charge being well conducted, and directed, tryes the most of the fortune of a daies service, 100. men at Armes are as chargeable as 500. Launtiers, and do not the duetie, neither in fight nor guards a halfe so manie.

An Elizabethan cornet from 1586. He wears a peascod breast plate and a coat with wide skirts, not unlike the later patterns for buff coats.

Williams then goes on to debate the arming of the demi-lancer:

> Instead of Maces the Launtiers may carrie one Pistoll, the which is lighter and farre more terrible, had wee thrice the force wee have in these daies. True it is, it is necessarie, for the shocke of a horse to weare a little Cuisset to cover the knee, so ought all the Launtiers to be. We know it by experience; let a horseman bee armed, the forepart of his curaces of a light pistoll proofe, his head peece the like two lames of his pouldrons the like, two or three lames of his tases of the like proofe, the rest I mean his tases, cuisses, pouldrons, vambraces, and gauntlets, bee also so light as you can devise. With one pistoll these kinde of arming shall be found heavie for the most horses to carrie tenne houres together, and to doo any service.

The trained band horse

With the changes in the arming and tactics of cavalry came social change as the feudal duty to provide armed men to the Crown withered, and new ways were found to maintain horses and arm their riders. One response was an obligation to perform military service for a time each year. This echoed both the pre-Norman military arrangements and the policy of the Swiss Confederation whose citizen soldiers dominated military thinking after the success of their formidable pike formations.

In England in the 1570s the government of Queen Elizabeth built on previous militia obligations to create the trained bands. Many of those who responded to earlier calls to raise the militia had been poorly equipped and were unable to use their appointed weapons. The trained bands were to provide a smaller force, properly equipped and well trained. In 1569 measures were taken to enforce the laws made under Henry VIII to prevent the export of horses, and county commissioners were appointed to see that horses were produced according to the assessment. Each county was divided and a rendezvous was announced in the churches in each area, giving the date when horses and arms would be inspected. The penalty for failure to meet obligations within three months was a fine of £20. It was soon discovered that people living in different areas were swapping horses so that the same mount would appear at successive musters. The commissioners began a cat and mouse game of arranging simultaneous musters to catch out those who were not maintaining the required horse and equipment.

The burden was not universal. The nobility and clergy were exempt, as they remained liable to provide soldiers to the Crown under the old feudal system. Yeomen and merchants were not included until 1580, but under the 'sumptuary' clause in an Act of Parliament of 1558 a man

Dressed in high leather boots, a broad-brimmed hat and protected by back and breast plates, this is the classic mid-17th-century harquebusier, or Ironside. In fact the figure dates from the 1570s and shows that the lightly armed horseman was already in service.
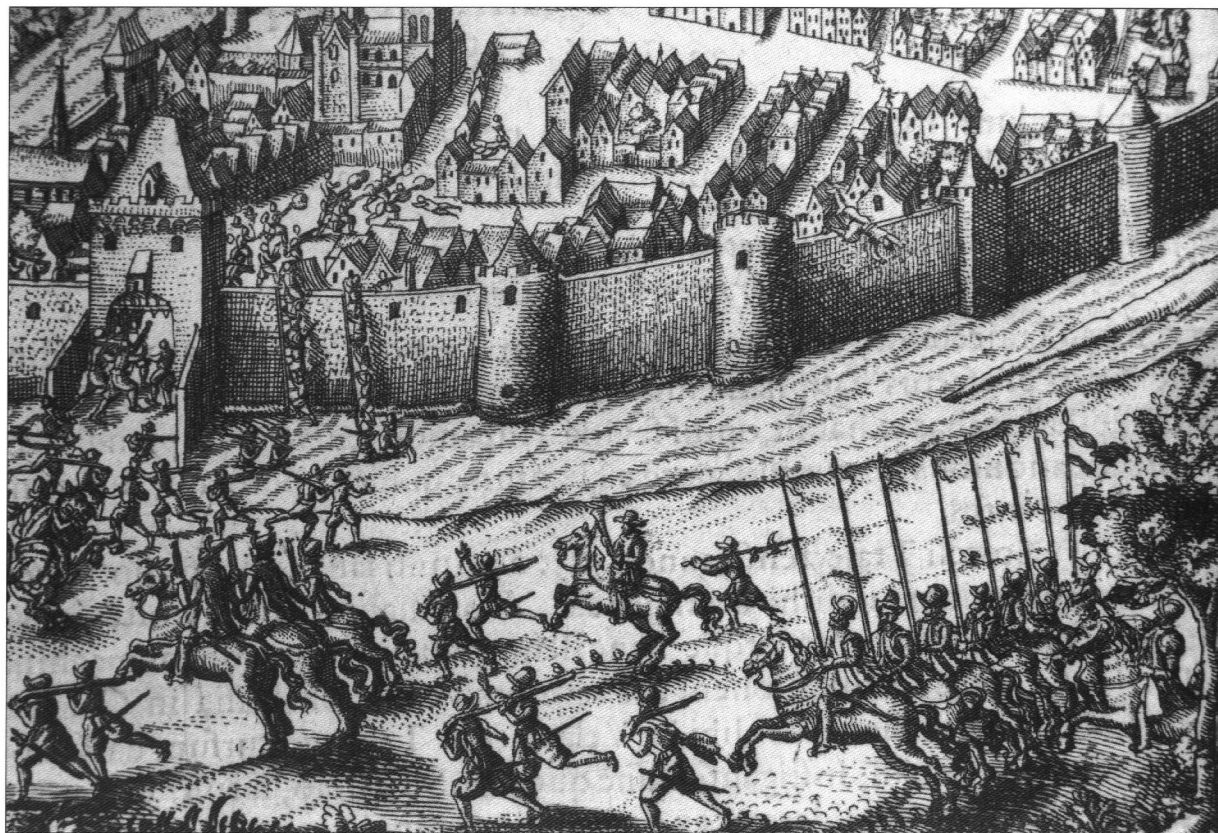
Three 'shot on horseback' and a trumpeter act as an advance guard for demi-lancers dressed in long cassocks over their armour.

whose wife dressed in clothing considered too grand for her social position was required to provide a light horseman. This may have become something of a status symbol in itself, for while Yorkshire listed 70 horses assessed on land ownership, 82 were listed for wives' apparel. The fact that another 172 horses were listed for 'good will' may indicate that the assessment for land was not as strict as it might have been.

As with much Elizabethan government, the problem was that the agents of the Crown were also local magnates, and the influence of friends and neighbours was greater than that of central government officials in London. In 1580 new commissioners were appointed in the hope that a firmer line would be taken. Freeholders who spent more than 40 shillings a year and those with parks, pastures and commons were assessed at a rate of two mares per mile of circumference. However, the local influence remained as strong as ever. In 1581 Sir Edmund Brudenell failed to send his two lancers and three light horse to the rendezvous, sending only one lancer. Despite this he was appointed a deputy commissioner for the horse three years later.

The Armada crisis of 1588

In 1588 England faced the first major invasion threat of Elizabeth's reign. Attempted foreign invasion was not the distant memory that might be thought. Henry VIII had fought off French invaders who attempted to seize the Isle of Wight in 1545, and Elizabeth had supported the Dutch rebellion against the Spanish as a way of delaying any threat to England.

The military preparations to meet the Armada had been focused by the visit of Elizabeth to the trained band encamped at Tilbury. This was a largely infantry force of 16,500 foot and only 1,050 horse, but was intended as a reserve formation. The defeat of the Armada occurred when the main army was still in the process of assembling around London. Many soldiers were turned back while on the march and remained the responsibility of the county authorities, whereas had they been allowed to arrive at their mustering point they would have become a charge on the royal purse.

	Demi-lancers	Light horse	Petronels	Arquebusier
Trained bands	1049	3078	1034	300
Nobility	1029	422	159	
Clergy	21	538		
Court officers	612	350	100	
TOTALS	2711 (31%)	4388 (50%)	1293 (15%)	300 (4%)

Horse raised to form an army to meet the Spanish Armada in 1588

The cavalry of the main force was drawn from the trained bands of selected counties and from the personal contributions of the nobility, clergy and royal officials under the 'feudal levy'. Although the quality of their equipment may have been variable we know that the horse was divided into three types: demi-lancers, as described by Sir Roger Williams, petronels, which were a form of harquebusiers on horseback armed with small-calibre weapons, and light horse armed with a light lance and single pistol. Instructions issued to the county of Surrey in 1586 give a description of the light horseman:

'Shot on horseback' from the Dutch Wars adopt the specified posture for riding in a town. The harquebus is held with the butt supported on the rider's thigh.

A lighthorseman must have a sufficient geldinge with a stronge sadle and lether harnis furnished, the man to be furnished with a coate of plate or brygandyne or the Curate of a corslett, sleves with Chaines of mayle, a northerne stafe, a case of pistols, sworde & dagger, a Cassock of redde clothe with twoe gardes of white clothe one ynche broade.

Of the surviving records of the trained band horse 3,078 (56 per cent) were light horse, 1,049 (19 per cent) demi-lancers and 1,034 (19 per cent) petronels, with 300 (6 per cent) mounted harquebusiers.

The nobility and clergy were exempt from trained band contributions on the basis that they contributed to the feudal levy when called on by the Crown. Their

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contribution of lancers exceeded that of the trained bands, reflecting the nobility's image of themselves as armoured knights.

THE MAKING OF AN IRONSIDE

Throughout most of the 100 years covered by this book England did not maintain a standing army and soldiers were recruited only when a campaign was under preparation. During the reigns of Charles II and James II, from 1660 to 1688, the standing army consisted of a small complement of Guards regiments, in imitation of the French king Louis XIV, and a handful of line regiments which often found themselves loaned to serve with Continental armies. Peacetime service was a concept that the 17th-century soldier would have all too often identified with disbandment, unemployment and poverty.

Recruitment

Although the scene of a number of bloody but short-lived rebellions, between the 1540s and the 1640s England was spared major war within its own borders. Military service with one of the expeditions dispatched by Elizabeth, James I and Charles I to support Protestant allies in Europe was popularly believed to be little better than a sentence of death. This was not

Demi-lancers wearing cassocks attack in support of infantry.

unrealistic, as disease and hardship commonly resulted in only half of those who left England returning home.

Ireland was a frequent destination for new recruits, and the damp climate, harsh conditions for campaigning and the interminable nature of the fighting made it one of the most daunting. When on 13 June 1595 Lord Cobham, Lord Lieutenant of Kent, wrote to instruct that five light horsemen be raised within the county he was keen to point out that the Queen's Council had originally demanded six, but that by his efforts he had 'procured the abatement of one'. Roger Twysden as captain of the light horsemen for the lathe of Aylesford (Kent had five administrative regions called lathes), was charged with raising one horseman, and it is from his surviving papers that we can trace the recruiting process. Twysden was summoned, with his muster roll and subsidy book, to a meeting at an inn called the Sign of the Star at Maidstone.

By 18 June, only five days after Lord Cobham's letter, Laurance Lee had been selected to serve as Aylesford's light horseman, with the enthusiastic support of his brother Brian. On 25 June it was recorded that:

> Wee have willed the said Brian Lee to ride to London taking his brother with him, so as he may be as rathe with yow on the said Thursday the xxvi the day of this present to take your advise that all these percells of furniture may be provided fitt and well suted that he may be with his Brother Laurance Lee with the said furniture at the Angell at Rochester the monday before vii of the clocke according to the order taken at Maidstone.

The parcels of furniture would have contained either armour and weapons or equipment for Laurance's horse, which was noted to be 'restive'. As horse trappings such as saddle and girth, stirrups, headstall and bridle would have been available in Aylesford it is likely that the journey to London was to collect armour and weapons from the workshops in the Minories district near their main customer, the Royal Armoury at the Tower of London. This is confirmed by a list, dated the following day, detailing the items that had been purchased:

> Sir wee have dellivered to My Bryan Lee to furnish his brother Laurence whom wee have chosen to be the Horseman for ye Lath of Aylesford [£]viij xiij [shillings].
> Viz: For a paire of Curasses blacke with an Headpeece - xxvj [shillings] viij [pennies];
> Item for a long french pistoll with a firelock - xxvj [shillings] viij [pennies];

Light horsemen armed with swords and carbines cut down running infantry. This was a classic tactical role for light horse in the 16th century and for the Ironside in the 17th.

As late as the 1620s the knightly lance retained an irresistible attraction for military writers. This demi-lancer has lost his thigh armour and may be less well armed than a cuirassier.

Item for a Light horseman's Staffe - ij [shillings] vi [pennies];
Item for a Sword Dagger & Girdle - x [shillings];
Item for a paire of Sleeves of Mayle - viij [shillings];
Item for a Saddle of Morocco Fashion of counterfeit Buff with girts, Stirrops headstall Bridle croper and a pilliane for ye pistoll - xxvi [shillings] viij [pennies];
Item for a millian fustian Dublet - xx [shillings];
Item for a paire of Shamweys Venetian - xx [shillings];
Item for two paire of Stockings - xiij [shillings];
Item for two Shirts with falling bands - xij [shillings];
Item for Bootes & Spurres - viij [shillings];
Item for a paire of shoes - ij [shillings];
Item for a Hat or Cap - ij [shillings] vj [pennies].

Laurance Lee found himself dressed in a shirt of linen with a detachable collar, or band. His doublet was of Fustian, a coarse thick cloth, and would reach to just below his waist. Venetians were breeches reaching from the waist to just below the knee and these were of chamois leather to stand the wear and tear of riding. His stockings would have been pulled up over his knees as would his long leather boots to protect his legs from undergrowth and other riders. The boots would have been unsuitable for dismounted wear, so shoes were provided. A hat or cap was provided as the headpiece, possibly a burgonet helmet which would have been heavy and confining on the march. Laurance Lee was later provided with a 'coate of bleu Cloath', possibly one of the 'Large Cassocks made of blew cloth with long sleeves' provided for Aylesford's trained band light horse that year. According to a manuscript of 1600, cassocks for troops in Ireland were made of 'three yards of broad clothe and three yards of bayes lining'.

For his weapons Laurance Lee was given sword and dagger worn on a girdle or waist belt. His 'Horseman's Staffe' was an old-fashioned light

lance but his long-barrelled French pistol was of modern design, as the 'firelock' would have been a wheel-lock mechanism. For defensive arms he had 'back and breast plates' (or cuirasses) with ring mail sleeves.

The cost of sending Laurance Lee to Ireland was £30 0s 4d of which arms and armour claimed £3 11s 8d. A 1600 list shows light horseman's weapons and armour costing £3 16s 10d, indicating that Lee was relatively well provided for. There is no mention of Laurance Lee in a 'Register of relief awarded disabled and aged soldiers from petitions 1595–1603', so we cannot say if he was fortunate enough to return from his service in Ireland.

Similar methods of raising horse provided troopers for the armies sent by Charles I to Europe, Ireland and Scotland. The outbreak of the Civil War disrupted the normal administration of the English counties, and the armies of 1642 were raised from volunteers. The nobility and gentry who led the armies in the first years of the Civil Wars were able to call on their servants, retainers and tenants to fill out their troops of horse. The King's Lifeguard of Horse, the noble troopers which were said to command a combined income of £100,000 per year, went so far as to form their personal servants into a separate troop under the command of Sir William Killigrew.

The unexpected continuation of the war into 1643 required the repair of the county-based recruiting systems. In May 1643 the Parliamentarians resorted to impressments and in July wrote to Sir Thomas Barrington and the deputy lieutenants of Essex demanding that

The arms of the cuirassier of 1632 retain the lance but also feature a reinforcing breast plate (lower left) to ward off pistol and carbine bullets.
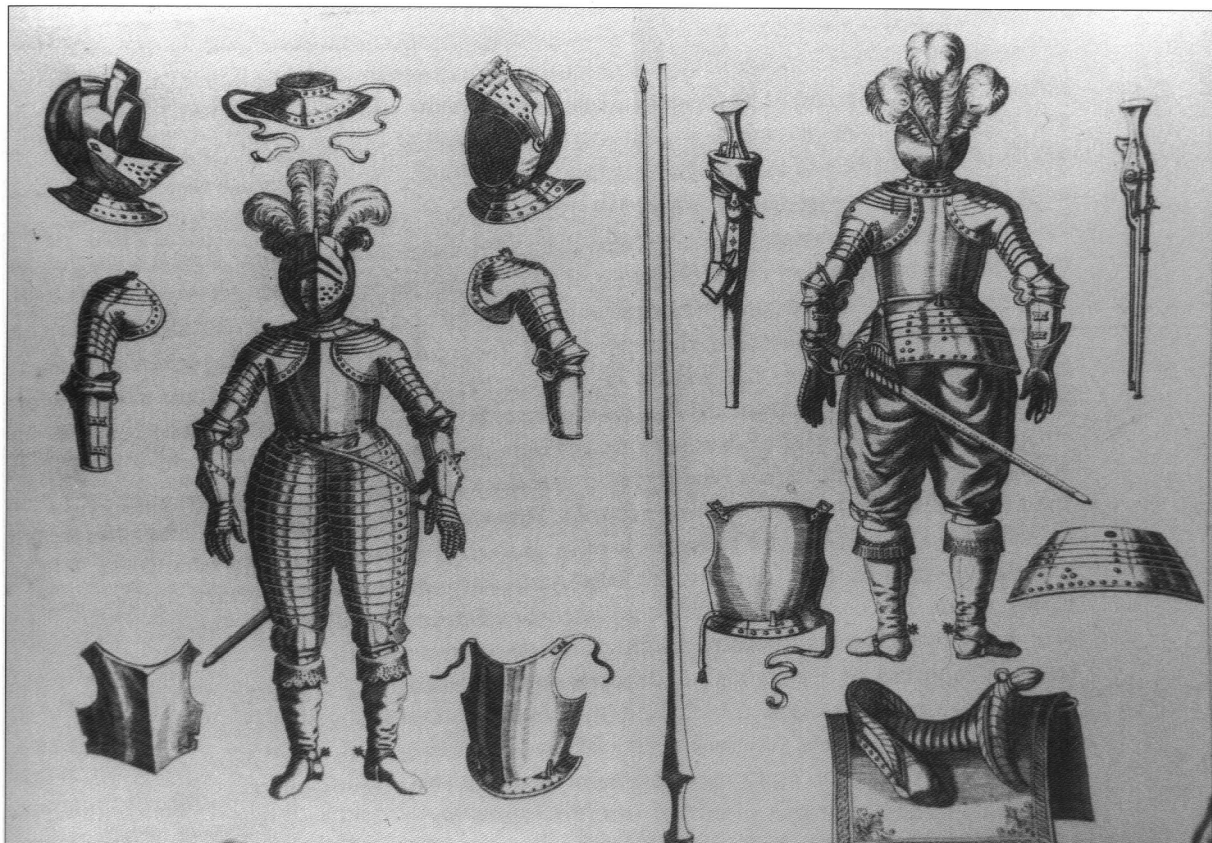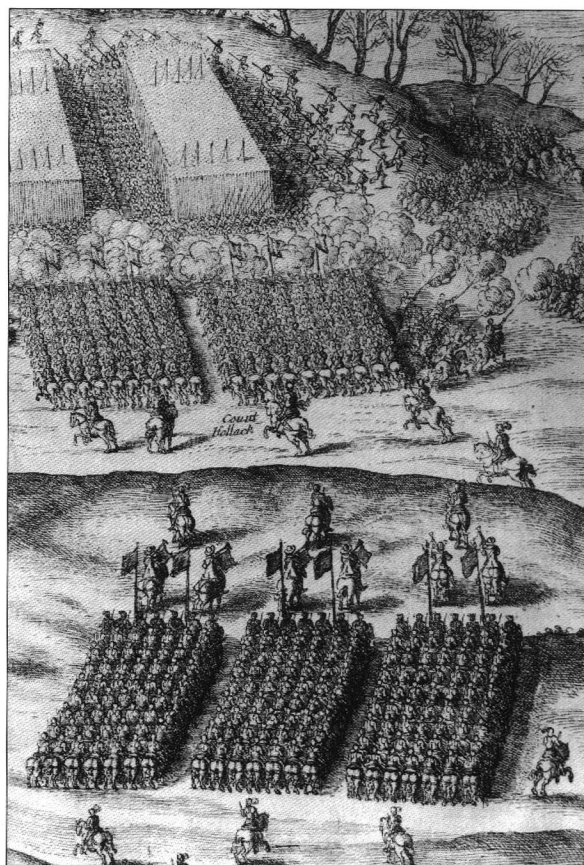
recruits be drawn 'out of the light horse of the County' for the army of Sir William Waller:

> Thes therefore to desire and require you forthwith in the name of the Earl of Oxford to rayse and send 4 Troopes of horse (of which Capt Riches troop to be one) well furnished with pistols and sufficient Riders and 1000 Musketteires on horse unto Romford on Tuesday next, the place appointed for theire Rondevous, to be Joyned with those of the City of London, to goe forth upon such duty as may conduct the safety of the Citty of London and other parts of the Kingdom.

A few cavalry officers outside the nobility achieved a prominence that enabled them to draw willing recruits into their regiments. Oliver Cromwell enjoyed a reputation as a Member of Parliament of high Puritan values and was able to select recruits for his regiment, which grew to 14 troops, from those who shared his religious views. After the rout of the Parliamentarian horse at Edgehill in 1642, Cromwell returned to East Anglia to help raise an army to defend the Eastern Association of Counties. He wrote to John Hampden MP:

> Your troopers are most of them old decayed serving-men, and tapsters, and such kind of fellows; and … their troopers are gentlemen's sons, younger sons and persons of quality: do you

ABOVE LEFT **John Cruso's** *Militarie Instructions for the Cavall'rie* **was published in 1632 and became the standard work on the subject. It was intended as a guide for militia officers who had no military experience. The book did its job so well that it remained the standard work for more than 50 years.**

ABOVE RIGHT **Dutch cuirassiers of the 1600s launch mass pistol volleys against blocks of pike and musket. Horse in ten ranks could keep up a steady fire but could not face musket shot, which could penetrate the thickest armour.**

think that the spirits of such base and mean fellows will be ever able to encounter gentlemen, that have honour and courage and resolution in them? … You must get men of a spirit … that is likely to go on as far as gentlemen will go:- or else … you will be beaten still.

Cromwell reported that Hampden thought the idea impracticable. Hampden's death during the cavalry skirmish at Chalgrove Field in 1643 prevented him seeing the realisation of the plan, for as Cromwell said, 'I raised such men as had the fear of God before them, and made some conscience of what they did; and from that day forward … they were never beaten.'

Training

Troopers of horse were recruited from a higher level of society than the average foot soldier. At a time when the ability to ride a horse was expected of every yeoman farmer and many 'outdoor' servants, it is unlikely that recruits required training in basic horsemanship.

English military books written for inexperienced militia officers give details of loading and firing carbine and pistols, and the drawing up and manoeuvring of bodies of horse. It is likely that some instruction in the use of the sword when mounted was given, although the manuals do not mention it.

Training of war horses proved essential, as was discovered by a party of Parliamentarian horse that approached Royalist-held Elizabeth Castle in Jersey to demand its surrender. At the sound of the first answering cannon shot the untrained troop horses bolted in all directions, throwing their riders and heartening the defenders to the extent that they held out longer than any other Royalist garrison.

THE ARMS OF THE IRONSIDE

The arms of the Ironside were divided into 'arms defensive' and 'arms offensive'. The greater penetration of armour offered by the musket led to its adoption as the firearm of the common foot soldier. By the outbreak of the wars of the late 1630s and the 1640s lighter weapons such as the caliver were considered obsolete.

The threat of the musket influenced the armour worn by the horse. Armour that offered some protection from a musket bullet fired at long range could be manufactured, but its cost and weight were burdens that most cavalrymen could not endure.

Tactics also changed. The caracole of close-range pistol shot was no longer a viable tactic

Cuirassiers with pistols drawn await the order to attack.
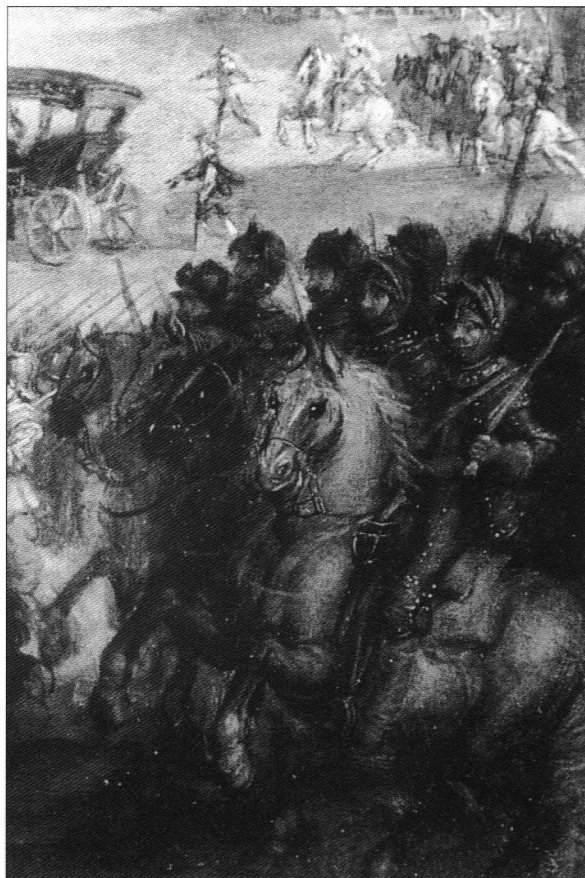
against a body of infantry, half or two thirds of which would be armed with muskets. The role of the horse thus became one of defeating the horse of the enemy before falling on the undefended flanks of helpless foot soldiers.

Cavalry versus cavalry combat also required a re-evaluation of the usefulness of armour. Horse pistols and carbines were much less powerful than the musket, and debate remained as to the value of armour that was pistol and carbine-proof into the early years of the Civil Wars. It was the practice of some armourers to fire a pistol at their plate armour as proof of its strength, but in many cases a good blow with a round-ended hammer may have had much the same effect.

Experience of the fighting during the early years of the Civil Wars led to the conclusion that the cuirassier did not provide value for money on the battlefield. This may have been because Parliament fielded the majority of cuirassier troops, whereas the Royalists employed aggressive cavalry tactics that swept their enemies from the field, however they were equipped.

Reasons of economy and effectiveness combined to make the harquebusier the standard cavalryman. The declining value of armour to horsemen resulted in the discarding of leg, hip, thigh, arm and shoulder armour. The helmet became 'open', with the face protected only by cheek pieces and metal bars over the nose – the tri-bar helmet.

Buff thigh boots and a sleeved buff coat with 'skirts' that reached down to the top of the boots when mounted, produced a degree of protection against sword cuts but were no less vulnerable to musket bullets than armour. The buff coat is often mentioned in pre-Civil War texts as intended to 'preserve their bodies from bruising' from the armour worn on top. The buff coat was therefore intended to be worn with armour. John Cruso, in *Militarie Instructions for the Cavall'rie*, criticised the wearing of 'calf skin' coats without armour in a note to his comments on the arming of the harquebusier:

> The Harquebusier was first invented in France … either not armed … or but slightly (onely with a head-piece & breast) and those but some few of the formost. But the printed edict of the States of the united provinces expresly commandeth, that every Harquebusier be (a) armed with an open cask, gorget, back and breast, of the horse-mans furniture: and Captain Bingham, in his Low-countrie exercise, appointeth him a cuirasse pistoll proof. Moreover, by the late orders resolved on by the councel of warre, the Harquebusier (besides a good buffe coat) is to have the back and breast of the Cuirassiers arming, more than pistoll proof, the head-piece, &c.

These cuirassiers stand ready with swords drawn except for the central figure. His powder flask can be seen hanging from a strap, and he may have been taking a last chance to load his pistols before battle.
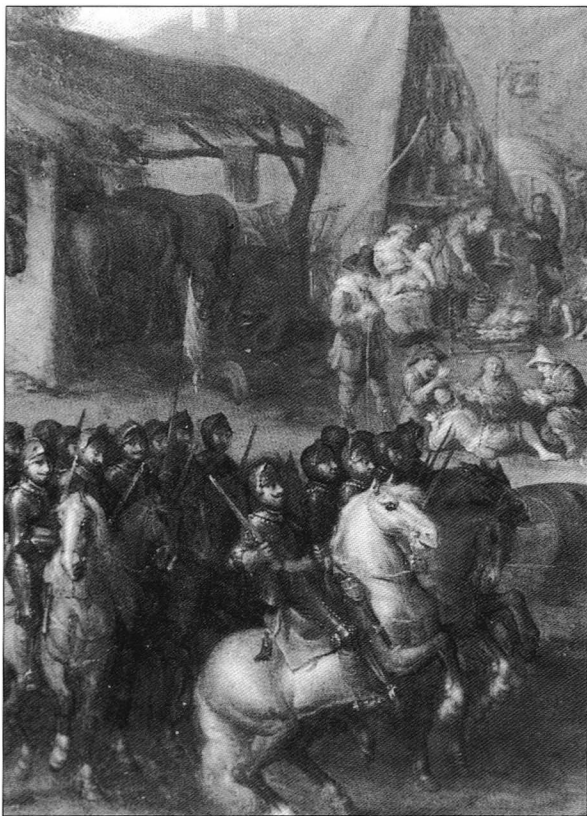
These figures decorating a French military manual of 1628 carry the three principal weapons of the horse: the lance, the sword and the pistol. However, none wears armour, making a bold statement that it was no longer the mark of the mounted warrior.

(a) Which condemneth the late practice of our trained Harquebusiers to be erroneous; which have wholly left off their arms, and think themselves safe enough in a calfs skin coat.

It has been argued that the expense of purchasing a buff coat would have made their general issue impossible. Commonly quoted as evidence of this is a letter written by John Turberville during the Second Bishop's War in 1640: 'For your buff-coat I have looked after, and the price: they are exceedingly dear, not a good one to be gotten under £10, a very poor one for five or six pounds.'

Compared to the cost of a full set of harquebus armour at £2 these prices were exorbitant, and it may be that the reason why Turberville mentioned them was that they were out of the ordinary. Evidence of the cost of buff coats during the Civil Wars is rare. In August 1642 Joseph Vaughan, a leather seller, provided 53 buff coats at £1 18s 0d each for a troop of the Parliamentary Army. In 1646 Lieutenant-Colonel Thorp received three buff coats for £4 10s 0d, or £1 10s 0d each. It appears then, that the buff coat may have been affordable for the ordinary trooper during the Civil Wars.

When citizens of London took up the request to provide horses and arms for the City troops of horse in 1642, the value of their donations for those 'armed complete' was around £25 (although they varied from £13 to as high as £36). The most expensive item was the horse, with the two donations of carbine, pistols, sword and buff coat, but no horse, valued at £10 and £12.

HORSES

The Civil Wars saw many casualties, but cavalry horses suffered a much greater death rate than their riders. The need to provide mounts and re-mounts, in addition to horses for drawing wagons and artillery, was thus a constant problem for all the warring parties.

No. 3.
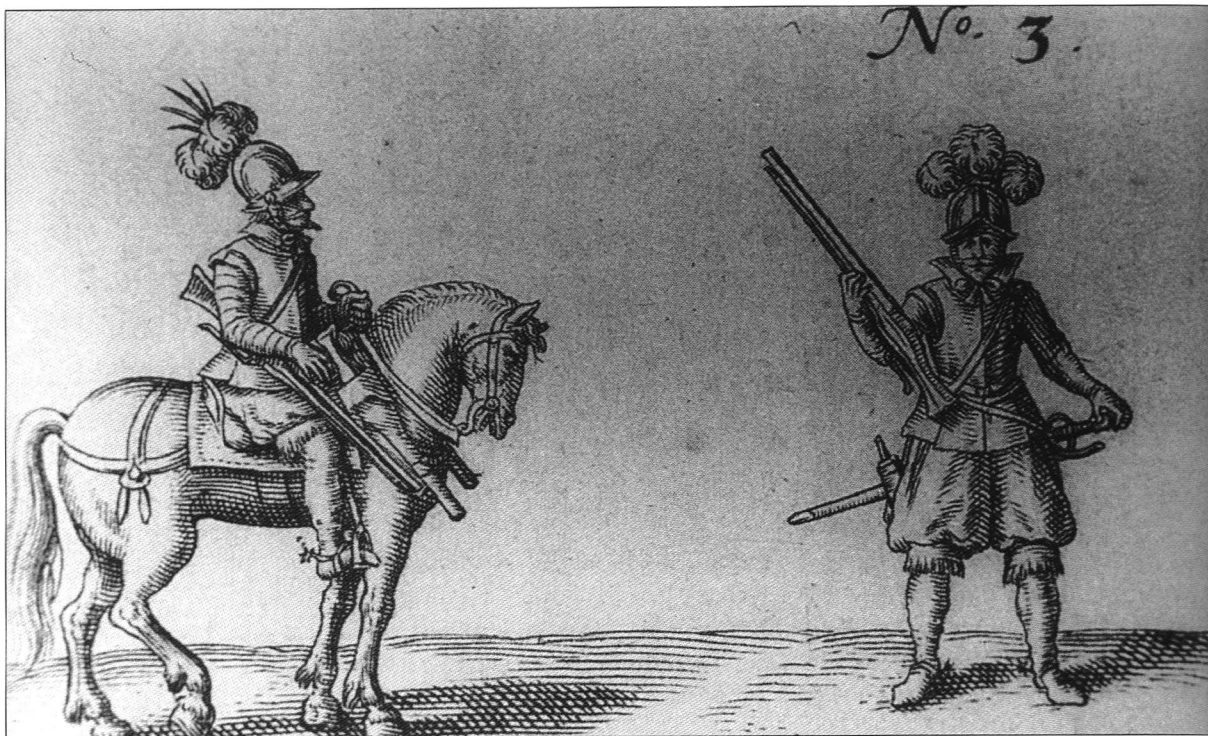
To be used as a cavalry mount a horse needed to be at least four years old. An increase in the breeding of horses was not able to produce a greater number of suitable ones until the first Civil War had ended. Fortunately, from the time of Henry VIII royal studs had begun the introduction of Spanish, Turk and Arab horses into the bloodline of the English war horse. The Royalists had an advantage at the outbreak of the first Civil War as for some years 44 lords and royal officials had agreed to support 2,015 horses for military use. In time London was to provide 6,704 mounts for Parliament, but the Royalists began the war with a ready supply of high quality war horses.

Parliament established a system of donations, known as the Propositions, which became compulsory seizure in May 1643. The Royalists operated a similar system for donations, known as the Engagement, and were able to delay compulsion a full year longer.

Parliament gave its captains £10 to purchase a mount for each trooper. Under the Propositions 1s 4d per day was paid for the hire of a donated horse, or 2s 6d if a trooper accompanied it. Each horse was valued as a loan at 8 per cent interest. County committees were directed to raise set numbers of horses, and confiscation from suspected opponents was quickly resorted to.

The muster master was required to keep a record of the 'State' horses, as opposed to those owned by their riders, and to examine them every four to six weeks. A trooper who lost his 'State' horse in battle would have his pay reduced to one shilling until a re-mount was provided. Horses owned by soldiers and lost in battle would be replaced by the state, but a horse which died from disease would not. Many troopers found it impossible to prove that they had begun service on their own horse after years of service and several re-mounts, and this became one of the

The harquebusier, shown mounted and dismounted, at first seemed unlikely to challenge the cuirassier for dominance on the battlefield.

The heavy firearm carried by this harquebusier, in addition to two pistols and a sword, indicates that he is considered to be 'shot on horseback' rather than a true cavalryman.

grievances that led to mutinous complaints and to the politicisation of the army.

The peacetime trade in horses continued as well as it could given the disruption caused by the marching of the armies and the limitations imposed on travel by the numerous hostile garrisons. Parliament benefited from maintaining the eastern counties as a secure area, never invaded by Royalist armies during the first Civil War. The Eastern Association was able to freely purchase horses for Cromwell's Ironsides in markets from Bury St Edmunds and Huntingdon to Bedford, Stamford and even as far west as Northampton. In April 1645 the New Model Army was granted a temporary monopoly on the purchase of horses, and its agents obtained 7,800 mounts over the next 17 months.

After horses the most pressing demand on the cavalry quartermaster was for replacement saddles. The issue of new saddles was often accompanied by a pair of pistols and holsters, which may reflect the fact that a dismounted cavalryman would lose all this equipment with his horse, but would be able to walk home with his armour, sword and carbine. Saddles and horse furniture were produced all over England and there was little difficulty in meeting demand. In June 1642 five saddlers were able to produce 100 saddles per week for £2 5s 0d a piece. Following the battle of Naseby in July 1645, it took only one month to produce 1,650 saddles for the New Model Army.

Quartermasters also faced the relentless problem of finding fodder for their horses. Every day each horse required 14 pounds of hay, seven pounds of straw, one peck of oats and half a peck of peas. It was intended that the cost of this feed be deducted from the cavalryman's pay or that he should pay the provider directly. The cost could amount to one shilling from his daily pay which at its maximum was 2s 6d. As soldiers' pay was always in arrears, payment to civilians was usually in the form of vouchers to be reclaimed later. However, Royalist vouchers proved worthless once the war was lost and Parliament proved unenthusiastic in repaying its debts as soon as the war was won.

This series of exercises for harquebusiers firing while mounted demonstrates that they were expected to fight as skirmishers, firing while approaching or passing across the front or flank of their enemies but not following up with a charge to fight hand-to-hand.
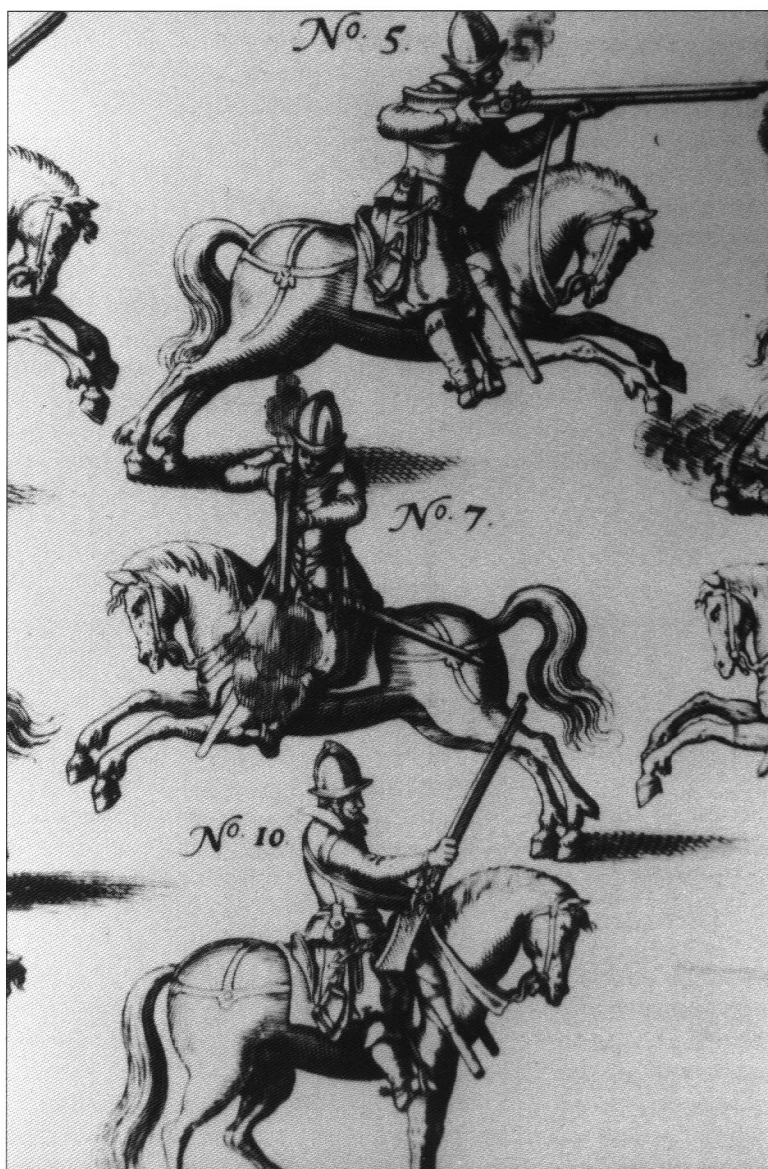
THE IRONSIDE IN BATTLE

Officers and organisation

Cavalry played a minor role in English military expeditions before the Civil Wars and organisation was usually at the level of the troop rather than the regiment. Senior officers were appointed to organise the horse of an expeditionary force and some English soldiers gained valuable experience serving as officers in Continental armies.

The early months of the Civil War saw the cavalry organised as a collection of individual troops, and even at the battle of Edgehill in October 1642 one wing of the Parliamentarian Army was composed of non-regimented troops of horse. This reflected the fact that early in the war both parties depended on the efforts of individuals to recruit the troops they commanded and often pay them from their own pockets. Political patronage came into play when commands were distributed and the colonel of a regiment of horse was more likely to be a political figurehead than an active soldier. As the war dragged on the establishment of conscription and formal taxation systems to support the armies meant that the influence of wealthy individuals declined, and professional soldiers who had proven their worth in battle gained command of regiments, many (at least on the Parliamentarian side) despite their humble origins. Royalist regiments of horse were more likely to retain an absent noble commander. To compensate for this, their muster strength included a lieutenant-colonel who may have taken on some of the duties of the colonel and some of the sergeant-major.

The sergeant-major was often the true commander of the regiment in the field. His responsibilities included sending out scouts to discover ambushes when on the march, or to locate the enemy and assess his strength when battle approached. He would draw up the regiment's battle formation and divide the regiment into fighting divisions of two or three troops each. When marching in the presence of enemy forces the sergeant-major would draw up some troops into battle formation in any place where the regiment might face attack so as to cover the march of the other troops through defiles or across bridges where they were vulnerable.

Each troop was commanded by a captain. The lieutenant was stationed at the rear of the troop in battle, and was charged with stopping and, according to some authors, killing any man who tried to flee. The cornet carried the standard of the troop (the flag was also called a cornet) when in battle, although on the march this was done by 'his man'. The quartermaster was responsible for organising the billeting of the troopers, but would command the troop in the absence of the other officers. The non-commissioned officers of a troop were the three corporals of horse who were employed to lead scouting parties, set sentries and maintain discipline in camp and on the field. On the march a troop would be formed into three squadrons with a corporal of horse attached to each. Two trumpeters were provided for each troop, and they often appear in illustrations stationed together but outside the main body of the troop. Their function was to sound a few selected orders, such as the 'boutezselle', meaning 'clap on your saddles', or the 'chevall' which was the order to mount on horseback. A clerk, a farrier, a surgeon and a saddler completed the troop.

This French harquebusier armed with pistol and carbine of small bore begins to look more like a cavalryman than mounted shot. His carbine is lighter and easier to carry on a belt, it no longer dominates his ability to fight and is now only one of several weapons he can fight with.

At the start of the war both sides aimed to raise troops of 60 men, but in reality this varied with the numbers available. For the opening campaign of the war the Parliamentarians ordered all troops that could muster more than 40 equipped and armed troopers to join the Earl of Essex's army, and the King sent out commissions to raise regiments of 500 volunteers. As the war progressed the numbers serving in individual troops rose and fell with casualties and sickness. The Eastern Association aimed at 100 men per troop and this was carried forward into the New Model Army.

Six troops per regiment was set as the standard at the start of the war but Cromwell commanded a 'double' regiment of 14 troops and Prince Rupert a regiment of ten troops in addition to his Life Guard of 150 troopers.

Cavalry drill books

Many English soldiers had chosen to serve in European armies as captains of foot and this is reflected in the fact that relatively few cavalry drill books were produced during the 17th century. At the outbreak of the Civil War the cavalry commander could turn to Robert Ward's *Animadversions of Warre*, published in London in 1639. This covered the whole range of contemporary warfare (the title means a critical analysis of war) and contained a large section on training and drill for cavalry. Gervase Markham was the author of two books containing details of

Although it depicts cuirassiers this illustration is from the cover of John Vernon's *Young Horse-man*, a cavalry manual dating from the middle of the first Civil War. Pistols, not swords, are still the weapons in use, but Vernon now describes the carbine and pistol as weapons for use in preparation to falling on with the sword.

A group of harquebusiers stand ready to support or exploit the attack of cuirassiers on a European battlefield of the 1630s. They wear back and breast plates and buff coats with wide-brimmed hats. Carbines hang on belts at their backs.

cavalry tactics and training, *The Souldier's Accidence*, published in London in 1625, and *The Souldier's Grammar*, published in London in 1626–27. These were reissued as a combined work under the title *The Souldier's Exercise* in 1639.

All these works, along with less well-known books, dealt with cavalry as part of the whole body of military knowledge. Only *Militarie Instructions for the Cavall'rie* by John Cruso, published in 1632, concentrated on the cavalry alone and its success was such that no other major work on cavalry appeared during the remainder of the 17th century.

Books on how the war was fought are rare. George Monk is thought to have written *Observations upon Military and Political Affairs* in the Tower of London following his capture in 1644, but the book was not published until 1671.

In 1644 the Parliamentarian cavalry officer John Vernon published a pamphlet called *The Young Horse-man, or honest plain-dealing Cavalier* ('Young' denotes inexperienced rather than youthful, and 'Cavalier' is used in its original meaning of a mounted warrior or knight). Vernon says in the introduction that his work is intended for the 'Ordinary soldier', meaning junior officers, and hopes that 'every ordinary souldier might easily purchase [it] with his money or weare [it] in his pocket.'

We know that Vernon had studied and copied from books on cavalry drill and tactics. He wrote not only from his own experience, 'having

some small service of my own', but also 'compared my own experience with the judgement of those that have lately written of this subject'. For example, it appears that Vernon had read Cruso's book:

> but to avoid the cariage of either Cartrage case or flaske, there is a new invented spanner which contains some sixe charges with priming powder, which is more many times then is used in one skirmiges.

Compare this with a note which appears on page 41 of Cruso's book:

> For the more speedy lading of the pistoll, and avoiding the trouble of carrying either flasque or touchbox, there is a late invented fashion of spanner or key … which contains six charges of powder.

Since 12 years separate the publication of the two works it appears that Vernon was not above borrowing some 'new invented' ideas for his book.

Oliver Cromwell during his leadership of his Regiment of 'Ironsides' during the first Civil War.

Formations

In the 1600s the Dutch drew up their cavalry ten ranks deep. In the English service this was reduced to eight ranks so that when 'doubling' the ranks to reduce the troop to half its former depth (but doubling its frontage) an even number resulted. If required a further doubling could take place.

Swedish and Imperialist tactics of the 1630s had an influence in England, and by the beginning of the Civil War six ranks was recognised as the standard depth for a cavalry formation. Under Prince Rupert's leadership the Royalists went one step further and fully adopted the three-deep formation employed by the Swedes. At some point in late 1643 or early 1644 the Parliamentarians also began to employ three ranks as the standard depth for cavalry formations.

The author of *Some brief Instructions for the exercising of the Horse-Troopes*, published in 1661, says of the drawing up of newly raised troops:

> In our late Civil Wars in England … the Chief Commanders … did Customarily draw them forth by Ranks, that they might place the best Men and Horse in the Front; the second sort in the Reer, and the third in the middle Rank; and so instead of 8, 6, or 5 in a File, they had but 3: and that for this reason. … Because their Front extended larger, and brought more hands to Fight: For a troop of 64 Horse of 8 in File, brought but 8 in Front; the same Number of 6 deep could not compleat 11 in the Front, there wanting 2: And that 5 deep did not afford 13 in Front, there wanting 1; Whereas this Number drawn up 3 deep, affords a front of 21, and one over; So that One Troop of 3 in File, was more serviceable, (in bringing hands to Fight) than two Troopes and an half was, that had 8 in File.

Cruso's book is noted for its fine illustrations of cuirassiers demonstrating the loading and firing of pistols on horseback. One illustration does show the cuirassier resorting to his sword after his pistol is fired, but the book contains no guide to the use of the sword in combat.

There was general agreement among writers of drill books that the ranks should be separated by one horse length, normally taken to be six feet and known as 'open order'. The question of the distance that should separate the troopers as they stood side by side in their ranks was more difficult. Some writers called 'close order' three feet between horses, but Monk called 'close order' one and a half feet, as no doubt he used the additional term of 'order' as three feet. To further confuse matters the troopers measured these distances as the space between horse and horse, whereas the infantry measured spacings of the same names and distances as from the centre of each foot soldier.

Motions of the cavalry

Infantry formations of the time consisted of a mix of musketeers and pikemen and this caused the employment of a variety of manoeuvres to change the direction that the formation faced while preserving the internal arrangement of pike and musket. As all horse troopers were armed alike, their manoeuvres were far simpler. It was also much more difficult for horses in a rank to individually face to the rear than for an infantryman to do so, and horse manoeuvres emphasised the wheeling of the whole body of horse as opposed to each individual turning left, right or to the rear.

There were four basic elements in cavalry motions. Facings involved the body of horse turning to the left, right or facing about by means of each trooper turning his horse. When the standard troop of 60 men had formed up eight ranks deep it presented a front of seven or eight towards the enemy. Turning each horse in this formation to the right or

Other drill books illustrated the training necessary for a cavalryman. The student progresses from mounting a wooden horse to mounting his steed with his weapons brandished. He then teaches his horse to step to the side and to rear on command.
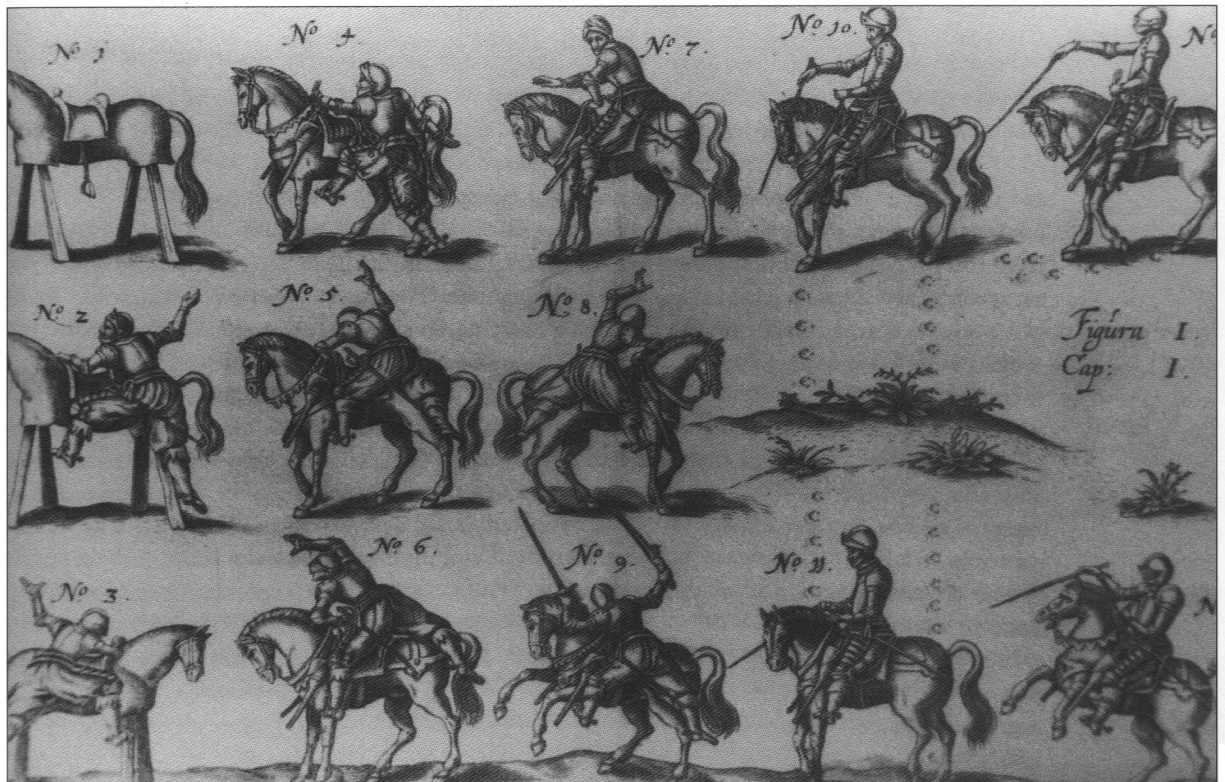
Blunt swords are used in mock combat, and targets set on poles are used to simulate sword thrusts against a horseman's head, his body and against a foot soldier.
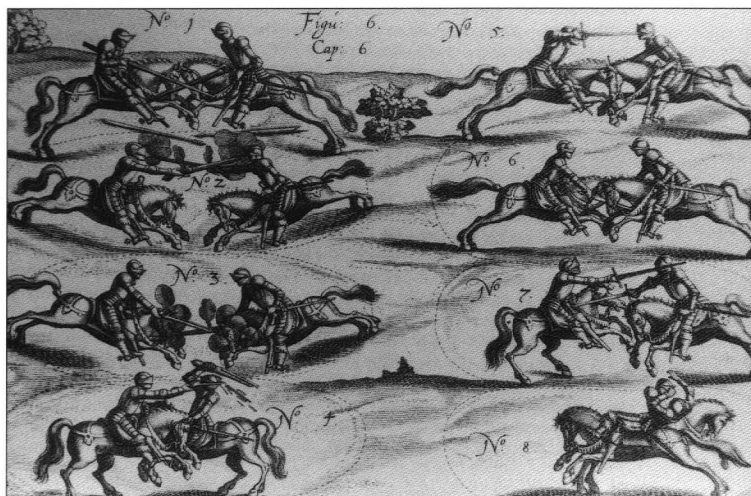
Real combat is now illustrated showing sword cuts, the use of a pistol as a club, and even hand-to-hand fighting. Attacking an opponent's horse with sword or pistol is demonstrated.
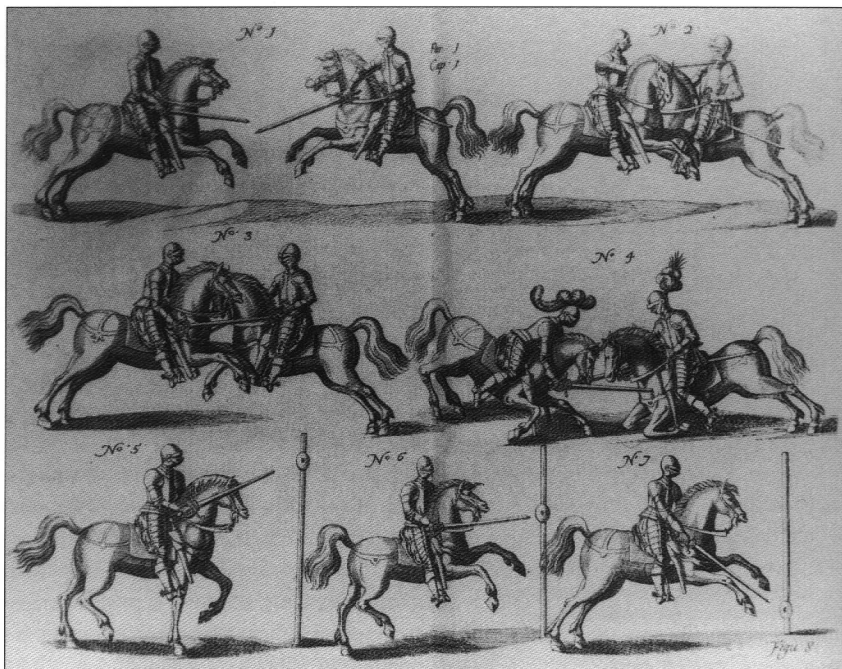
left produced a frontage of eight towards the enemy, and such turns were of some tactical value. When the number of ranks had been reduced to three, giving a frontage of 20, a turn produced only three men to face an enemy charge. Thus wheeling the body to right or left to face the enemy with the original frontage became the usual response. A body of horse that could execute a quick and tight wheel, while preserving its formation, could often catch less well-trained cavalry in the flank. The new shallow formations produced a wider front with which to overlap the enemy's formation, but it made the flanks of the formation extremely vulnerable to attack. This led commanders to reduce their ranks further to lengthen their frontage and reduce the risk of attack from the flanks. Thus both offensive and defensive formations were reduced to the three ranks considered to be the minimum fighting depth, although in extremis formations two deep were adopted.

Doublings were employed to turn a body of horse from column of march six deep into a body three deep. The half-file leader (the fourth man from the front) would lead the last three in a file of six up alongside the first three horsemen in his file.

In counter-marchings each file leader turned his horse and rode back down the gaps between the files, with each trooper following him in succession. This was a difficult manoeuvre at any time and

likely to lead to disorganisation with less than expert horsemen. It is unlikely that it was widely used and would only have been used in battle if the enemy were outside charging distance.

Tactics

In the early 1600s the Dutch set out tactics for cavalry versus cavalry fighting. Ranks of horsemen advanced at a slow trot or walk, fired their pistols and wheeled away to reload while another rank delivered its volley. These tactics were intended to be used against armoured lancers who could only respond by making a charge, which the less heavily armoured Dutch would easily evade. As the lancers re-formed from their fruitless charge the Dutch would return to their harassing fire until the lancers were so disordered or weakened by casualties that the Dutch could charge home against an already broken formation.

With the disappearance of the lancer, cavalry were left to fire their pistols and carbines at each other, both sides causing casualties and both becoming disordered with little prospect of either gaining a decisive advantage. The Swedish king, Gustavus Adolphus, adapted the Dutch tactics by reducing the number of ranks from ten to three and employing a faster charge with firepower reserved until the last moment.

Prince Rupert, King Charles I's German nephew, was given command of the Royalist horse at the very start of the Civil War. While a prisoner at the Imperial Court, Rupert had spent his time studying military theory. He introduced Gustavus's tactics, drawing up the Royalist horse in three ranks from the first. Sir Richard Bulstrode recorded Prince Rupert's instructions to the Royalist horse at Edgehill:

The exchange of pistol fire in passing and on retiring is followed by suggestions of grabbing an enemy's sash or his horse's reigns. Training the horse to kick out on command is featured, as is the grizzly business of finishing off a dismounted opponent with a knife.
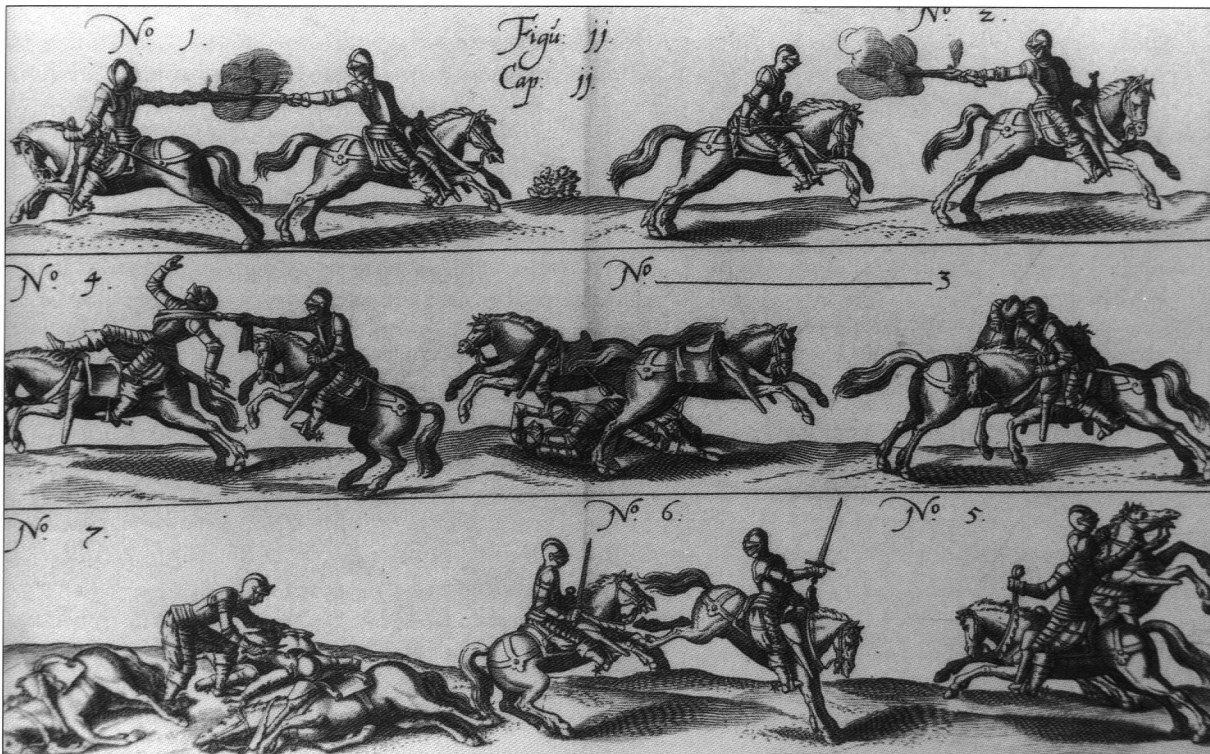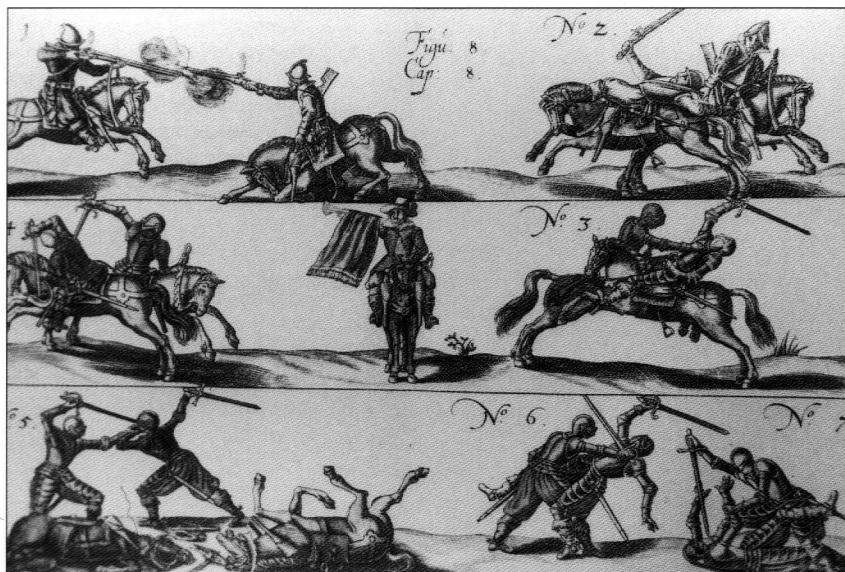
Sword in Hand, to receive the Enemy's shot, without firing either Carbin or Pistol, till we broke in amongst the Enemy, and then to make use of our Fire-Arms as need should require.

The Royalists found it difficult to equip their army but made efforts to provide their troopers with firepower, and carbines were issued when possible. Clarendon described the Royalist horse at the start of the first Civil War, and in saying that only the first three ranks could be provided with firearms, implies that they were drawn up six deep:

The officers had their full desire if they were able to procure old backs and breasts and pots, with pistols or carbines for their two or three first ranks, and swords for the rest.

Rupert's orders to form three deep and charge home without a pause partially overcame this lack of firepower.

The Parliamentarians began the war employing Dutch-style formations six ranks deep and used tactics reliant on firepower. It does not appear that they used the caracole tactic in which ranks fired and retired to the rear of the body. The tactics of the Parliamentarian horse intended to use firepower delivered at a halt to disrupt their enemy before counter-charging with the sword. *A Letter Purporting the true Relation of the Skirmish at Worcester* relates the experiences of Nathaniel Fiennes's Parliamentarian troop of horse at Powick Bridge:

We let them come up very near that their horses' noses almost touched those of our front rank before ours gave fire, and then gave fire … with their carbines, after fell in with good hope to have broken them (being pretty well shattered with the first charge of carbines).

Prince Rupert's tactics did not guarantee success. Sir John Byron recorded the Royalist orders for their charge at Roundway Down:

A

English Civil War Horse

B

Graham Turner '01

Restoration Trooper of 'Oxford Blues'

Buff Coats

3

3

3

9

3

2

10

3

7

11

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4

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8

8

5

6

4

5

Graham Turner '01

E

Roundway Down

Marston Moor

Tangier, 1680

J

Not a man should discharge his pistol till the enemy had spent all his shot, which was punctually observed, so that first they gave us a volly of their carbines, then of their pistols, and then we fell in with them, and gave them ours in their teeth, yet they would not quit their ground, but stood pushing for it a pretty space.

Fire from the Parliamentarians' carbines and pistols failed to halt the Royalist advance. The Royalists fired their pistols and charged into the stationary Parliamentarians, but did not break their formation. The eventual Royalist victory over a Parliamentarian force that included the only full regiment of cuirassiers to take part in the Civil Wars may have been due to the fact that being drawn up only three deep they were able to outflank their six-deep opponents.

The Royalist account, *His Highnesse Prince Ruperts late beating up the Rebels Quarters at Postcomb and Chinner in Oxfordshire and his victory in Chalgrove Field on Sunday Morning, June 18 1643*, says of the Parliamentarian cavalry: 'They being first in order gave us their first vollie of carbines and pistols at a distance, as ours were advancing: yea they had time for their second pistols, ere ours could charge them.'

At Chalgrove Field in June and at Roundway Down in July 1643 the Parliamentarians were still drawn up six deep and depending on firepower. Writing perhaps in the winter of 1643 to 1644 John Vernon says of the cavalry battle:

Illustrations of ordinary soldiers of the Civil War period are extremely rare. Detail from a tract published in London in 1643 purports to show the King's Army. It includes musketeers wearing helmets identical to those of the cavalry.

All the Troops are to be drawn up into battalia, each being not above three deepe, likewise each troop must be at least a hundred paces distance behind each other for the better avoiding of disorder, those troops that are to give the first charge being drawn up into battail as before, are to be at their close order, every left hand mans right knee must be close locked under his right hand mans left ham, as hath been shown before. In this order they are to advance toward the Enemy with an easy pace, firing their Carbines at a convenient distance, always aiming at their enemies brest or lower, because the powder is of an elevating nature, then drawing near the Enemy, they are with their right hands to take forth one of their pistols out of their houlsters, and holding the lock uppermost firing as before, always reserving one Pistol ready charged, spann'd and primed in your houlsters, in case of a retreat as I have shown before, having thus fired the troops are to charge the Enemy in full career, but in good order with their swords fastned with a Riband or the like unto their wrists, for fear of losing out of their hand, if they should chance to

misse their blow, placing the pomel on their thigh, keeping still in their close order, locked as before.

Vernon assumes that the Parliamentarians will charge the enemy and he makes no comment on how to receive an enemy charge despite the fact that until 1644 the Royalists had almost always taken the initiative. Vernon advocates a close-ordered body, locked together knee to knee, advancing at an easy pace before charging at full speed to hit the enemy as a solid block. Firepower remained a part of disrupting the enemy formation but the charge with the sword was now the primary attack. The Parliamentarian officer Ludlow says in his memoirs that, 'The horse on both sides behaved with the greatest bravery, for having discharged their pistols and flung them at each others heads they fell to it with the sword.'

Oliver Cromwell was among the first Parliamentarian cavalry commanders to advocate adoption of the aggressive tactics introduced by Prince Rupert. Cromwell's victories in the cavalry actions at Gainsborough in July and Winceby in October 1643 were due to his aggressive tactics and also to the discipline of his troopers, which allowed him to keep an effective reserve force with which to turn success into victory or to prevent a defeat from turning into a rout. In this he improved on the leadership of Rupert. The discipline of the Ironsides was to prove decisive when Cromwell commanded the victorious Parliamentarian cavalry wings at Marston Moor and Naseby.

However, compare the previous illustration with this picture of soldiers in Amsterdam in 1642. It appears that the London artist has copied the Amsterdam print and has carelessly transposed the helmets of the cavalry on to some of his musketeers.
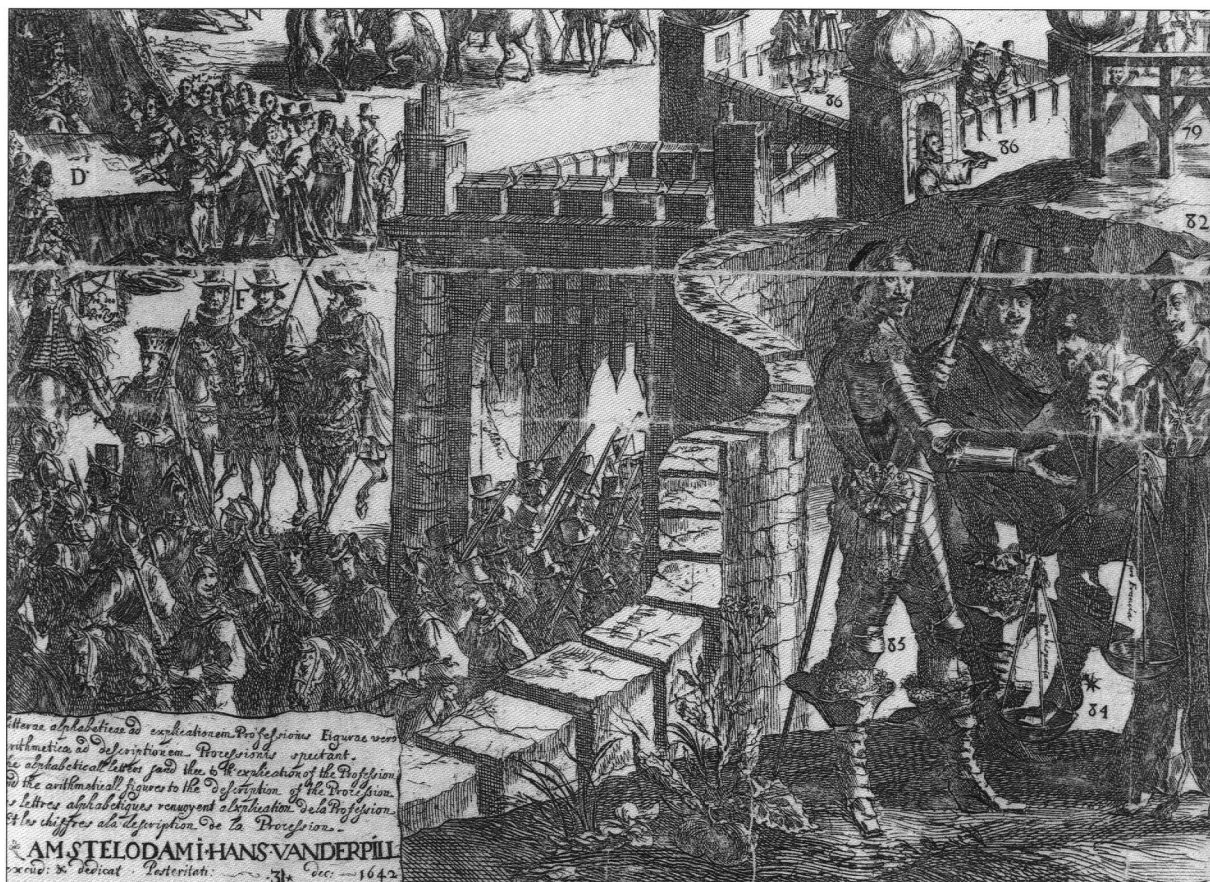
A detail of the Amsterdam print shows a rare view of the wearing of cavalry helmets fitted with a central bar to protect the nose (see central figure for the clearest view).

CAMPAIGN LIFE

Food and fodder

In his book *Decades of War*, published in 1622, Francis Markham set out a variety of foods which made up the soldiers' daily rations:

> According to the experience of those wars which I have seen, half a pound of biscuit and half a pound of butter hath been a fit day's proportion for one man, or a pound of bread and half a pound of beef or else bacon a full day's proportion; or otherwise half a pound of biscuit and a pound of cheese; likewise a pound of biscuit and a poor John between two men for one day, or two pounds of biscuit and a haberdine between four men for one day is a great proportion; half a pound of biscuit and four herrings is one man's allowance for one day, and so is a quart of peas boiled, or a pint of rice with the ordinary allowance of biscuit.

According to the French author Du Praissac, in his book *Art of War* of 1625, 'to every soldier is given usually two loaves of bread a day, of ten ounce weight apiece, and one pint of wine Paris measure'.

The committee that drew up an estimate for the provision of an army to mount an expedition to the Palatinate in Germany in 1620 dealt with the provision of food for 30,000 men by saying, 'ffor victualls his Ma'tie is not to be att any charge more then for such wagons as in some causes of necessitye shalbe requisite, for all mens dietes must bee defrayed by their owne payes and entertaynements.'

In theory most of the expeditionary forces that left England during the reigns of Elizabeth, James I and Charles I were to be supplied by independent contractors who undertook to support a given number of

soldiers for a specified period and to charge a set price. These contractors were out to make as much profit as possible, and the quality and quantity of food provided were reduced to the lowest possible level. In reality soldiers were often left to fend for themselves, buying their food from the camp followers who set up their stalls at every garrison or camp.

Many of these expeditions involved garrison duties or service in a siege camp where all types of soldiers fared much the same. The Civil Wars in Britain saw much more mobile campaigning and here the horseman had a great advantage over the foot soldier in that he could cover a wider area and depart from the main line of the army's march to search for food and forage in villages that others could not reach.

A trail of complaints followed the marching of armies, but the authorities were not above some financial scheming of their own. The main system of supporting armies was 'free quarter' whereby a householder would be told to feed and accommodate a suitable number of soldiers and in exchange would be given a ticket to be redeemed for money at a later date. Each trooper was deducted one shilling per day to pay for his upkeep. This system was extremely popular with the treasuries of both sides in the Civil War, as civilians found it very difficult to exchange their tickets for the promised cash and at the same time a handy saving was made from the soldiers' pay.

Royalist horsemen accompany King Charles as he escapes from Oxford at the end of the Civil War. This may be civilian rather than military dress, as the men appear to be carrying riding whips in their left hands.

Troopers of the New Model Army cut down the 'Royal Oak'. The symbol of the felling of the 'tree of state' is used to attack the political involvement of the Army, and particularly of the cavalry troopers, in national politics.

Pay

During our period a regiment was the property of its colonel, and his junior partners in this business were the captains of the troops of horse. Under the Elizabethan government a soldier was given part of his pay in a daily subsistence rate, from which he was expected to feed and accommodate himself, with the balance paid as a lump sum every six months. Serving in Ireland in 1600 a foot soldier received eight pence per day, paid as three shillings and four pennies per week in subsistence, with a further one shilling and four pence withheld. Suggestions were put forward that the soldiers should be given their full pay given the difficulties they faced in finding good food and lodgings, but these met strong opposition from the officers who held the money on their soldiers' behalf and made deductions for replacement clothing and equipment, thereby profiting considerably.

At the start of the Civil War in 1642 the pay of a foot soldier remained at eight pence per day. When Oliver Cromwell raised his troop of horse in that year he received £204 13s as two weeks' pay for 80 men. This is equivalent to three shillings and eight pence per day, which seems to have been a generous rate given that by 1645 a trooper received only two shillings per day. Allowance was also made for the increase in food prices that occurred during the Republic and Protectorate of Oliver Cromwell, with an additional three pence per day being provided to troopers in 1649, rising to two shillings and six pence in 1655 and then falling to two shillings and three pence as prices fell.

In addition to his pay the trooper could hope to benefit from 'lawful plunder'. This occurred when a commander authorised his soldiers to plunder a town or fortified house that had been captured by storm. A lucky soldier could make his fortune in this way and was one reason why cavalry troopers were prepared to lead storming parties. A more organised and civilised way of sharing out potential plunder and preventing wanton destruction and outrages against the civilian population was for a town to agree to pay a sum of money to be shared among the soldiers. In July 1645 Bridgewater in Somerset paid the New Model Army six shillings per man and was accordingly left relatively unharmed.

The Restoration trooper of horse was paid at a rate of two shillings and six pence per day, equalling the most generous rate under the Republic and perhaps reflecting the desire of the returned king to keep the much reduced army content.

Cromwell as Lord Protector in 1658. A crown, half-crown and shilling. (By Permission of Dolphin Coins and Medals, Leighton Buzzard.)

A Troop of 100 (96 troopers and four corporals of horse) in column of march. The captain leads and the lieutenant brings up the rear to prevent straggling or desertion.
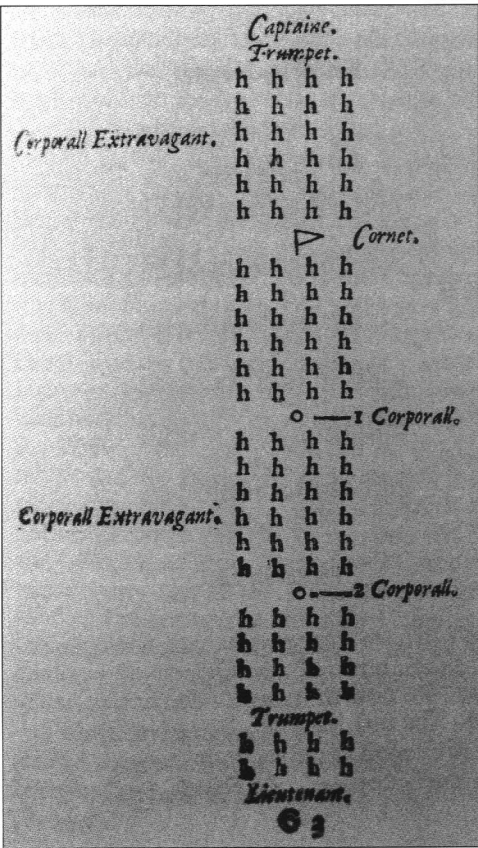
THE IRONSIDE AND RELIGION

During our period Protestant English soldiers found themselves sent abroad to fight foreign Catholics. It was only with the outbreak of Civil War that religion became a contentious issue. Both King and Parliament claimed to fight in the name of God and both required basic religious observance from their soldiers. The King's Articles of War directed:

> That the service of Almighty God be not neglected; it is ordained, That there be a Chaplain appointed for every Regiment, who shall read Prayers orderly, and duly once every day whil'st they are in Leaguer, and shall Preach, or expound some place of Scripture, or Catechisme once at least on every Sunday, and Holiday, in some such convenient place as the Colonell of the Regiment shall appoint, and by the sound of a Trumpet or Drumme notice shall be given of the time, in such manner as the whole Regiment may take notice thereof.

On the Parliamentarian side a number of religious tracts were published aimed directly at the soldier including *The Christian Soldier, or a Preparation for Battle*, published in 1642. Major-General Skippon supported a number of publications between 1643 and 1645 including *The Christian Centurion's Observations*.

John Vicars recorded that at the battle of Edgehill the Parliamentarian Army had the support of a number of preachers:

> Divers others eminently pious and learned pastors rode up and down the army through the thickest dangers, and in much personal hazard, most faithfully and courageously exhorting, and
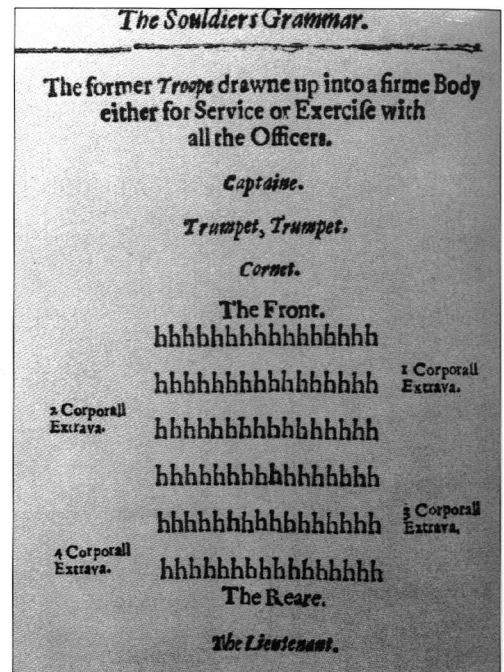
The four 'divisions' used in column of march are now drawn up abreast to give 16 troopers in a rank. Note that the troop has closed from the open order used on the march to draw up with no gaps between troopers in each rank.
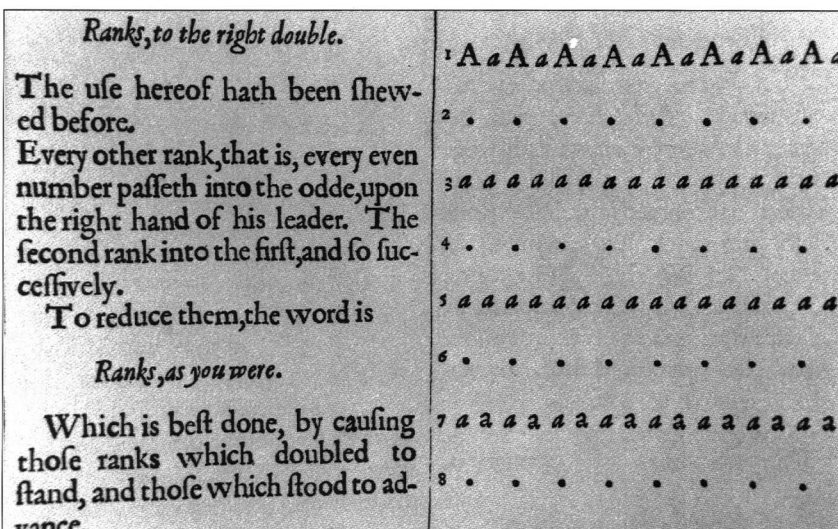
Cruso demonstrates how a troop at open order may reduce its ranks from six to three by the troopers in the even-numbered ranks riding into the spaces in the odd-numbered rank in front of them.

encouraging the soldiers to fight valiantly and not to fly, but now if ever, to stand to it and fight for their religion and laws!

However, many of these ministers returned home when the first campaign of the war ended and proved reluctant to take part in what began to look like a prolonged war.

The first religious contention was that the Royalists included Catholics among their ranks and that King Charles I was under the influence of evil 'Papist' counsellors. Another area of dispute grew up within the ranks of the Parliamentarians when their Scots allies insisted that England conform to Presbyterian forms of Church government and worship. In response the Independents grew in number, opposing the authoritarian notions of Presbyterianism and promoting the role of the individual in church worship. The Independents were particularly strong among the horse troopers raised in the eastern counties of England, who were generally better educated than the foot soldiers.

By 1644 the colonels of the eight foot regiments of the Eastern Association were evenly split between those with Presbyterian sympathies and those who favoured the Independents. However, all the colonels of the horse regiments were Independents. When the New Model Army was formed the Eastern Association horse made up half the cavalry.

One of the beliefs of the Independents was that the right to preach should not be confined to the clergy, and many officers and some common soldiers took on the role of chaplain to their regiments.

Richard Baxter, in *Reliquiae Baxterianae*, complained of the influence that the Independents came to exert in the army:

Abundance of the common troopers and many of the officers I found to be honest, sober, orthodox men, and others tractable to hear the truth and of upright intentions. But a few proud, self-conceited, hot-headed sectaries had got into the highest places, and were Cromwell's chief favourites, and by their very heat and activity bore down the rest.

Cromwell was a strong supporter of the Independents and gave his views thus:

For I must say to you on behalf of our Army – in the next place to their fighting they have been very good preachers, and I should be sorry they should be excluded from serving the Commonwealth, because they have been accustomed to preach to their troops, companies, and regiments – which I think has been one of the blessings upon them to the carrying on of the great work.

· CAVALRY DEPLOYMENTS ·

DUTCH STYLE CAVALRY DEPLOYMENT ·

THE FORM OF THE DUKE OF BRUNSWYCKS HORSE BATTAILE IN THE PLAINE OF ELTON. THE 5TH OF SEPTEMBER 1623 ·

Right wing cavalry of the Swedish Army at the Battle of Lutzen. 16 November 1632 . Note the musketeer blocks between the cavalry squadrons in the first line ·

Alternate deployments for cavalry squadrons after the Imperialist Raimondo Montecuccoli's 'Sulle Battaglie' circa 1642 · The arrows show the line of retreat of first line cavalry squadrons ·

Unlike a body of infantry, it is difficult for a body of horsemen to face about or to individually face left or right. Tactical formations for cavalry addressed problems of supporting bodies of horse and of using groups of musketeers interlaced with squadrons of horse. The bottom illustration shows one of the problems of supporting horse. Retreating infantry would run straight back through the gaps in the second line, but horses wheel and then retire, and may collide with their supports causing both to rout. This is avoided by placing supports directly behind first-line horse.

THE IRONSIDE AND POLITICS

The Independents' belief that all men were equal before God inevitably led to the more radical among them developing political views favouring equal rights for all men. The senior officers of the army, who came to be known as 'the Grandees', did not share this philosophy, nor did the House of Commons of the Long Parliament, which had been elected from and by the pre-war land-owning classes.

In 1647 Parliament attempted a large-scale disbandment of the army without the money to settle the soldiers' arrears of pay. The result was that in April 1647 200 officers gathered at Saffron Walden in Essex to form a Council of War to press their own demands. As in much else the troopers of the horse regiments proved more politically aware than the foot soldiers, and later that month 'agents' of eight regiments of horse formed a committee which met at Bury St Edmunds in Suffolk. They were joined by representatives of the foot regiments, with each soldier giving four pence (half a day's pay) to meet the costs. In June this combined body representing the common soldiers drew up the 'Solemn Engagement of the Army' and chose new agents called 'Agitators'.

The army refused to disband, and Cornet Joyce with a troop of horse seized the King from his captors and placed him under the protection of the army. A General Council of the Army was called, made up of

BELOW LEFT **Illustrations of English cavalry of the 1660s are rare. This detail is taken from a portrait of George Monk included in his *Observations*, published in 1671. Apart from the plumed helmet, the classic Ironside back and breast plates with skirted buff coat are still in evidence. Other figures exchange pistol shots, and the figure on the ground wears a broad-brimmed hat and back and breast plates.**

BELOW RIGHT **Figures from playing cards depicting events from Monmouth's rebellion show horse troopers of 1685 in long coats and broad-brimmed hats. They fire pistols (with their left hands due to an error by the artist) and wear cross belts indicating that a carbine may also have been carried.**

Two troopes of ye Rebells horse cut of att Caußham Bridge by Coll Ogilthorpe
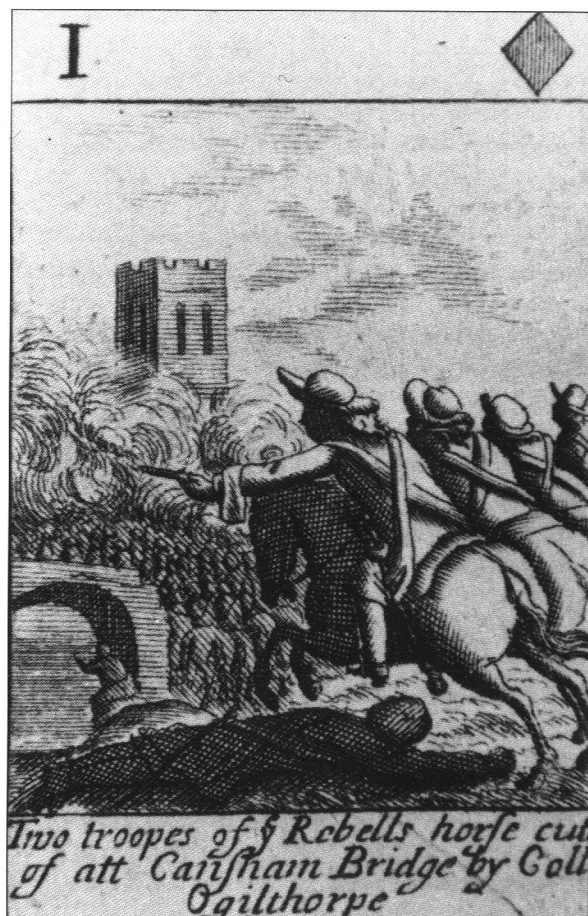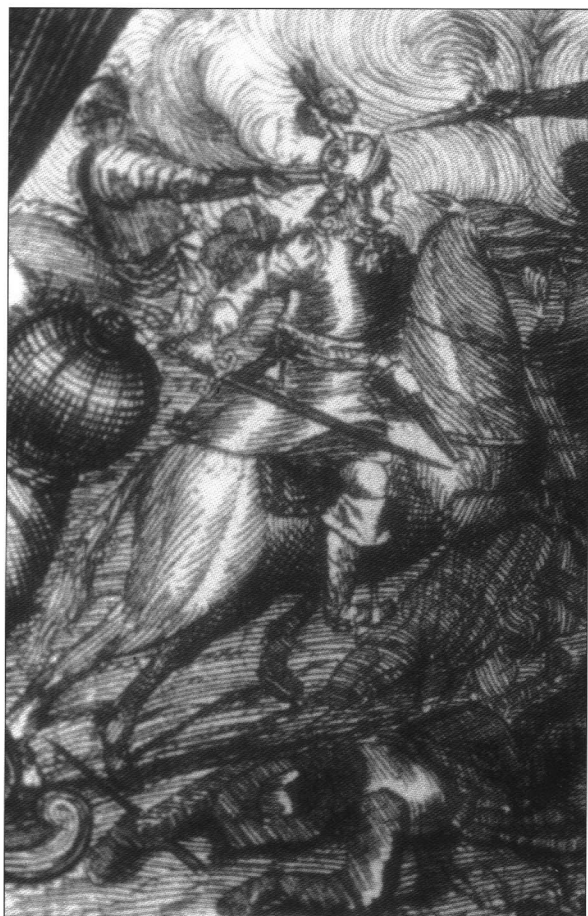
officers and two soldiers selected from each regiment. On 10 June 1647 a pamphlet in the form of a letter to the City of London, possibly written by Cromwell, declared:

> As Englishmen and surely our being soldiers hath not stript us of that interest, though our malicious enemies would have it so, we desire a settlement of the peace of the kingdom and the liberties of the subject, according to the votes and declarations of Parliament; which, before we took up arms, were by the Parliament used as arguments and inducements to invite us and divers of our dear friends out; some of which have lost their lives in this war; which being by God's blessing finished, we think we have as much right to demand and desire to see a happy settlement, as we have to our money and the other common interest of soldiers, which we have insisted upon.

On 1 August 1647 the army occupied London. The 167 officers who had left the army to support Parliament faded away and the London trained bands stayed by their firesides rather than face a veteran army. In October five regiments of horse elected 'new agents' and published *The Case of the Army Truly Stated*, which called for votes for all men rather than only those owning property. Senior officers became concerned at the growing militancy of the soldiers, and Fairfax as Lord General called for a return to military discipline. After a small show of resistance the rank and file submitted.

The outbreak of the second Civil War ended divisions among the army, and political radicalism moved out of the army to civilian movements such as the Levellers. The support these movements attracted in the army was limited. In March 1649 five troopers presented a complaint to Fairfax and the Council of Officers against his order that protests would only be considered from individual regiments, but not from the lower ranks as a whole. The five troopers lacked mass support within the army and the senior officers took the opportunity to make an example of them.

Although the army remained under discipline it retained its influence in national politics. When in 1657 Cromwell was pressed to take the title of king a petition of 100 officers requested that, 'his Highness would not harken to the title, because it was not pleasing to his army.'

The death of Cromwell and the failure of his son Richard to win the support of the army created a crisis. In the end it was public hostility that led the army to accept the return of the Stuarts. A letter written from London in December 1659 said:

The Late Duke of M: taken near the L.ᵈ Grey

Another playing card from 1685 shows horse from the front view. These may be local militia but they wear military cross belts and bucket-top boots.

A French drill book illustrated the firearms and costume of the cavalryman of the 1670s and 1680s. The mousqueton, like the English blunderbuss, fired a heavy ball or a charge of small shot. At this period the French resumed the use of tactics based on firepower rather than the sword.

The soldiers here are so vilified, scorned, and hissed that they are ashamed to march; and many officers when they go into the City dare not even wear their swords for fear of affronts; and this God hath blasted them and they are become vile in the eyes of the people.

THE RESTORATION OF THE MONARCHY

The death of Oliver Cromwell and the failure of his son Richard and the senior officers of the army to form a workable system of government made the return of Charles II inevitable. With the return of support for the monarchy came a 'Royalist' Parliament which had little sympathy with, or cash to waste on, a standing army.

The intention was that the New Model Army be disbanded and only a handful of royal household guards, formed from returning Royalist exiles, be allowed to continue under arms. These formed the three Troops of Life Guards and the Regiment of Foot Guards. However, events took a hand and regiments of horse and foot were added piecemeal to meet political and military needs. As General Monk had played a crucial part in the Restoration, his regiment was retained as the Second Regiment of Foot Guards (the Coldstream Guards) and Unton Crook's Regiment of Horse, from the New Model Army, became the Earl of Oxford's Horse (known as the Royal Horse Guards) when the militia proved unable to maintain order in London without the assistance of experienced regular soldiers. Two more regiments of foot were created as the Lord High Admiral's, which served as marines, and the Holland Regiment, which formed the first contingent of an English brigade in the Dutch Army. As Scotland and Ireland remained kingdoms in their own right they had their own troops of guards.

Other regiments were added when military expeditions were planned. Horse and foot regiments were raised and disbanded for service in Portugal from 1662 to 1668, in France from 1672 to 1678, and with the Dutch, as Charles II's alliances with neighbouring countries changed and changed again. With the addition of garrisons in Tangier and Barbados, and home forces occasionally raised during invasion scares and raids by the Dutch, the opportunity for military experience was not lacking.

The death of Charles II in 1685 and the succession of his openly Catholic brother James II brought a military enthusiast to the throne. An attempt by Charles II's natural son, the Duke of Monmouth, to seize the throne as a Protestant claimant ended in a bloody defeat at Sedgemoor in Somerset, but it gave James the excuse to raise more regiments of

horse and foot and some found their way on to the permanent establishment. By 1688 James had alienated his army to the extent that its senior officers betrayed him and joined the Dutch army of invasion led by William of Orange, husband of James's daughter Mary.

In terms of equipment and tactics the horse of this period differed little from the Ironside of the late Civil War. The three troops of Life Guards appeared in broad-brimmed hats and fine clothes decorated with ribbons for the coronation of Charles II, but back and breast armour with a buff coat still featured even on this ceremonial occasion. Oxford's horse retained their armour and pot helmets up until their marching to face the Dutch invaders in 1688, when for reasons unexplained they were returned to storage. A good stiff sword, two pistols and a carbine were still the standard arms, although high-quality French-style flintlocks were introduced under the more generous military budget of James II.

During the reign of William and Mary, Dutch military thinking and Dutch senior officers dominated the English army and the Ironside as a recognisable type of cavalryman fell into disuse. Under Queen Anne a truly British Army led by British officers such as John Churchill, the Duke of Marlborough achieved stunning victories at Blenheim, Ramillies, Oudenarde and Malplaquet. Faced by French cavalry tactics based on the static use of firearms, British horse regiments once again proved the superiority of the charge to contact, sword in hand, as the Ironsides had done before them.

The Scottish Troop of Horse Guards from 1685. The coat appears to be worn over a cloth waistcoat which may have metal buttons. The buff coat had begun to disappear by this time, although buff waistcoats are recorded. Increased ceremonial and civilian policing duties led to the wearing of uniforms less well adapted to the battlefield.
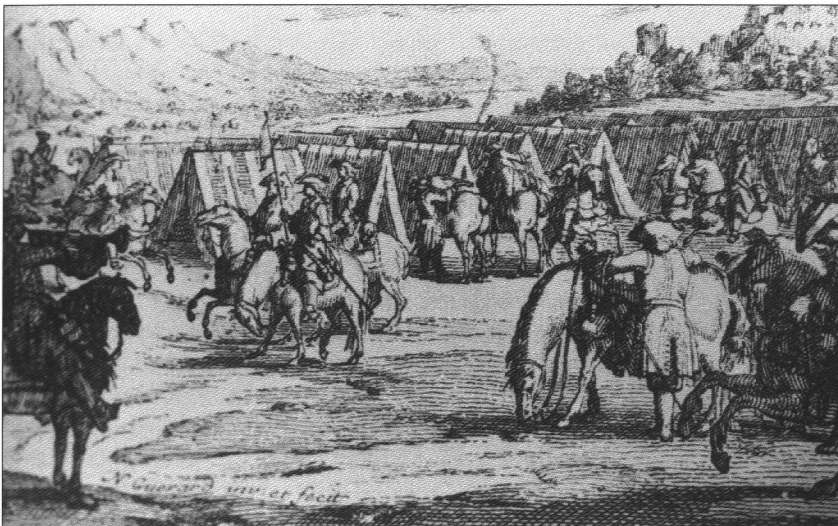
At the sound of the trumpet call 'boutezselle', corrupted to 'boots and saddles' by the English, the horsemen leave their ordered lines of tents and mount up ready to draw up in ranks on the marker of their cornet.

Games of skittles and the smoking of pipes were some of the more restrained pastimes of the cavalry in camp. Drinking and fighting were common but less welcome diversions from the boredom of camp life.
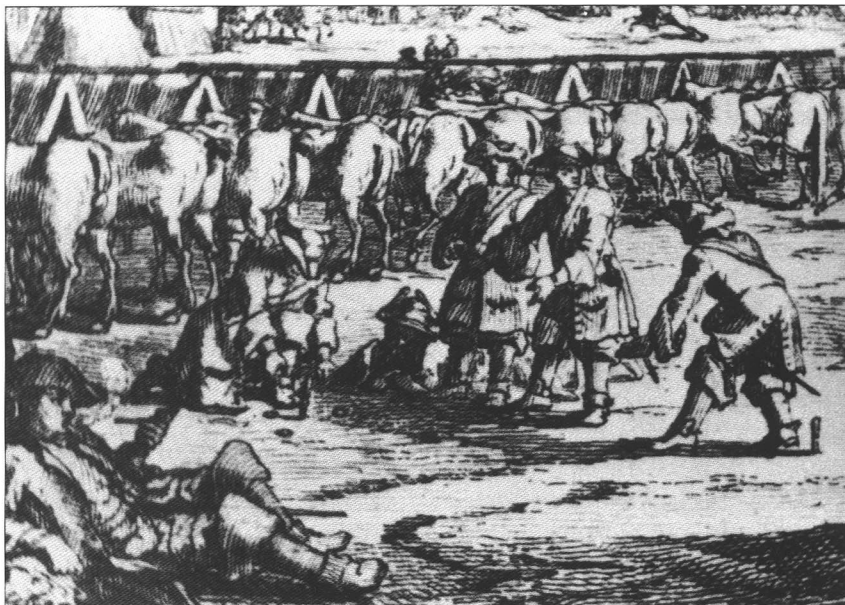
DISBANDMENT AND LIFE AFTER SERVICE

During the reign of Elizabeth the adoption of the life of a soldier was generally held to be the certain road to death, particularly where service overseas was concerned. Family and friends assumed that they would never see the departing recruit again, and farewells could take on the status of a wake for the living. If the recruit was fortunate enough to escape the dangers of battle and the more deadly threats of illness and deprivation, civilian life held out few prospects.

As in many other areas the cavalryman had some advantages over the foot soldier in that he was given higher status and received higher rates of pay. The fact that horses became unfit for service much sooner than foot soldiers also provided commanders with a reason to ensure that their horsemen received regular pay. Despite this it is a reliable assumption that a trooper reaching the end of his service would be owed arrears of pay. However, there were deductions to be considered, both for the provisions he had received and for the cost of his clothing and weapons. The soldier was required to repay his captain for lost items of equipment and for broken or damaged weapons. As the cavalryman and his horse required much more equipment, there was greater possibility for deductions, but the greatest loss that could be suffered was that of the horse itself.

In 1647 Parliament sought to disband many of its troops of horse. Many regiments complained that the usual practice of allowing disbanded soldiers to keep their arms and horses was not being followed:

The military saddle of the 1630s retains the rear support aimed at keeping the rider in place should he be hit by a blow from a lance.

The Spanner

52
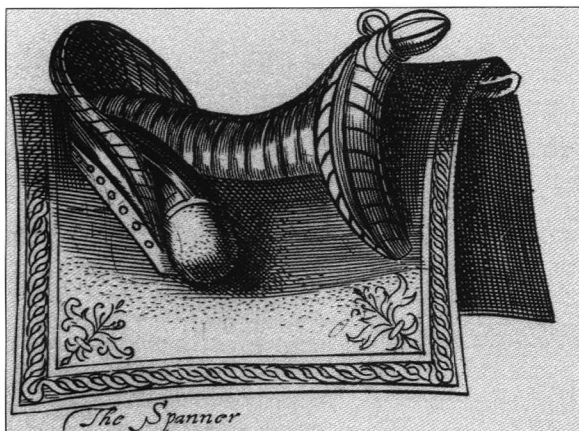
We find it provided that no trooper is capable of allowance or debenture for arrears, unless he deliver in such horse and arms with which he hath served, or a certificate that such horse and arms did not appertain to the State, or else was lost in actual service: which extends to the total taking away from them those horse and arms of the state's which they have used and preserved in the service, contrary to the favour allowed, and never (that we know of) denied in the disbanding of any other army … yet it seems hard, that such as cannot deliver in those state's horses and arms, which at disbanding they understood to be their own, and so perhaps have sold or otherwise disposed of, should for that lose their whole arrears, or be incapable of account or debenture for any part thereof. (Rushworth, vi, 506)

The saddle from the 1680s is designed to offer less support but greater comfort. A saddle bag is attached for personal items.

In response the Protectorate government of Oliver Cromwell adopted a system whereby a soldier was allowed to keep his state horse on payment of the fixed sum of 40 shillings. This was satisfactory where it was certain that the horse had been supplied by the state. Where it was known that the soldier had furnished his mount and kept it throughout his service there was also no problem. However, questions could still arise as to who had provided the soldier's mount on enlistment and who had replaced it if it had died or been lost. Ireton's own regiment petitioned against their terms of disbandment, pointing out that in many cases they had replaced their state-issued horses at their own expense: 'Many of us have furnished ourselves with horses at our own costs and charges, when the state's horses miscarried, such were our affections to the service.'

The soldiers who served in the Civil Wars had the advantages that their service was short, it took place in their own country and there was some opportunity to keep in contact with family, friends and perhaps a previous employer at home. It was possible for a soldier on campaign to write to and receive letters from home, particularly if he came from a city such as London. This made his re-entry into civilian life relatively easy and once again the horseman had some advantages over the humble foot soldier.

Estate owners who had encouraged or demanded that their tenants or servants enlist in their troops of horse would find it difficult to cast them aside once the fighting was over. Those who had enlisted without such encouragement were likely to be of a financial independence above that of the common man, as the horse were drawn from those who could ride, and, often in the early stages of the wars, from those who could provide their own mount or equipment. Many sons would have returned to the family farm or business, and memories of military
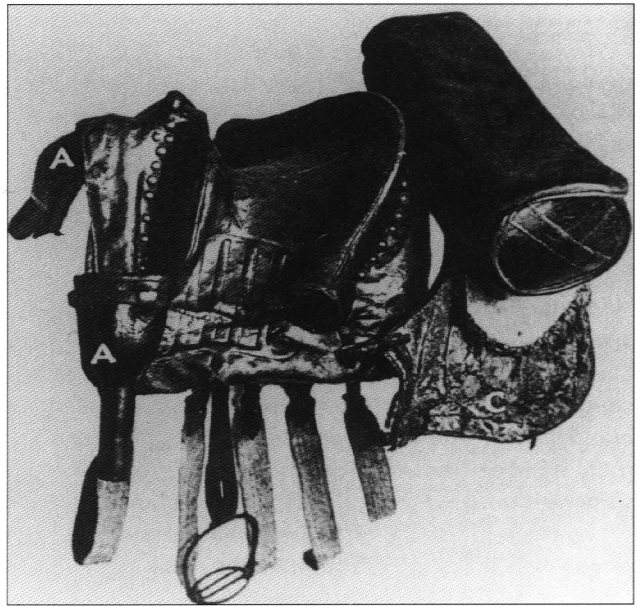
life would soon have faded when crowded out by more pressing matters of business, marriage and family life.

For those who served in the latter campaigns of the Civil Wars and the Protectorate, the end of military service presented a more serious problem. Long hours of hard physical labour might hold little attraction for a veteran cavalryman who had learned to live by his wits and forage for what he needed, and the unexpected return of a son or brother seeking his share of a meagre inheritance might not be welcome to smallholders or yeomen farmers.

Some horsemen simply moved on to serve as mercenaries in another army. Some did this before disbandment by desertion, which was easier among European armies with their mixed nationalities than it was when campaigning in England. Those disbanded in England in time of peace could take to the roads with their military horse and weapons and try their hand as highwaymen, indirectly forcing the government to retain some of their former comrades in arms for police duties.

One of the most common reasons for a soldier to leave military service was sickness or injury. The more fortunate (although it could be said that those who died outright were the most fortunate) would find themselves given over to the care of a military surgeon. Barnaby Rich in *Pathway to Military Practise*, written in 1587, says:

A good and skilful chyrurgeon … should work according to arte, not practisinge newe experiments upon a poore souldier, by meanes whereof many have been utterly maymed by a chyrurgeon's practice that otherwise might have doon very well.

As a servant of the state or the king the military surgeon was required to treat wounds resulting from campaigning for free, but could charge for the treatment of accidents or wounds resulting from private quarrels or duels. Many wounded soldiers found themselves left in the care of people who lived near a battlefield or where a troop had been quartered. Hester Whyte petitioned Parliament that after the battle of Edgehill in 1642 she had cared for wounded Parliamentarian soldiers, 'who continued at her house in great misery by reason of their wounds for three months. She often sat up night and day with them, and, in respect of her tenderness to the Parliament's friends, laid out her own money in supply of their wants.'

As such care would be provided against a promissory note to pay for the soldiers' keep and medicines at some time in the future, the quality of nursing might be

The early death of Prince Henry left his younger brother to succeed to the thrones of England, Ireland and Scotland as Charles I. Henry is depicted training with the pike: in England fighting on foot was seen as perfectly honourable even for a future king.

The frontispiece of William Barrife's *Military Discipline* depicts Charles I in full armour as a British champion ready to conquer foreign enemies.

lacking. Some soldiers repaid their unwilling benefactors by stealing what they could carry as soon as they were fit enough to leave.

An Elizabethan Act of Parliament of 1601 had made the care of disabled soldiers the duty of the parish in which they had lived when they were first recruited. This task was not taken up with any enthusiasm, and during the first Civil War Parliament organised voluntary collections to support its disabled soldiers and the widows and orphans of the wars. Cromwell introduced a system of pension for soldiers with four and then two-years' service, and grants were made to the disabled and their dependants. Hospitals were established during the Civil Wars to provide short- and long-term care for a limited number of wounded soldiers. All this came to an end with the Stuart Restoration of 1660, and it was not until the founding of Kilmainham Hospital in Dublin in 1680 and of Chelsea Hospital in 1681 that the Crown recognised its responsibilities to its soldiers.

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COLOUR PLATE COMMENTARY

A: TUDOR LIGHT HORSEMAN, 1588

1 The central figure in this plate is based on the light horseman's armour of Sir John Smythe, an enthusiastic but conservative Elizabethan military writer. Smythe favoured the retention of armour and opposed the adoption of firearms at the expense of the longbow, but he was not out of touch with new military ideas. His armour is a good deal lighter than that of the demi-lancer, having done away with the arm and shoulder defences to rely on a coat of ring mail. The burgonet helmet has a detachable face guard, which would have been discarded in battle as visibility was considered more important than total protection.

2 Long-barrelled pistols began to be imported from France towards the end of Elizabeth's reign. They had greater effective range and were more accurate. Horse pistols were rarely reloaded in battle as this was a difficult, though not impossible, task on horseback.

Prince Rupert is here depicted by Parliamentarian propagandists as a bloodthirsty European mercenary. He his armed with a pollaxe and a pistol. Rupert owned a pair of pistols with rifled barrels and won a wager by twice hitting a weathervane mounted on a church steeple.

3 A short-barrelled pistol called a 'dag' in England. This was a close-range weapon to be used in hand-to-hand fighting.

4 Use of a cartridge box holding five or six paper charges helped to ensure that the correct amount of gunpowder was loaded. However, Cruso complained that the motion of a horse could shake the powder out of a cartridge and he recommended the use of a powder horn. The cartridge box could be worn on the belt but was more usually attached to the holsters or saddle.

5 Burgonet with bever open.

6 Burgonet with bever closed.

7 Burgonet viewed from the front.

8 Burgonet viewed from the side.

9 Almain Rivett. A basic set of armour worn by both foot and horse in the mid- to late 16th century.

10 Peascod breastplate, front-on view. The peascod design reflected the fashion in civilian clothing and had no military value.

11 Peascod breastplate, side view.

12 Armoured gauntlets showing construction of flexible fingers.

13 Leg armour with knee pieces.

14 Leg armour, side view, showing knee pieces bent for riding.

15 Leg armour in the form of moulded plates.

B: CIVIL WAR 'IRONSIDE', 1645

1 By the end of the first Civil War the harquebusier had become the standard cavalryman. The cuirassier had proven too expensive to equip and had disappeared from the battlefield by 1644.

Both Parliamentarians and Royalists adopted the same type of harquebusier armour, based on a metal 'pott' helmet, back and breast plates, a buff coat and thick leather riding boots. Where horsemen did not conform to this standard the reason lay more in variations of manufacture and the inability of their commanders to supply all the required equipment rather than in a tactical choice.

The domination of the battlefield by the harquebusier, or 'Ironside', was due to the balance offered by protection against the weapons then in use, the cost and availability of equipment and the ease of use to the cavalryman. The equipment of the Ironside did not make him invincible or invulnerable, but it offered a reasonable chance of survival in combat and, under the right commander, the chance of victory.

2 Pappenheimer broadsword, Dutch, 1620–40.

3 Practice sword, with blunt blade and square-cut tip, Dutch, 1650.

4 Mortuary sword.

5 Basket-hilt sword.

6 Hanger.

7 'Pattern' sword with a blade marked 'For the tower'.

8 Pollaxe.

9 Dutch Pot, 1640–1700, front.

10 Dutch Pot, 1640–1700, back.

11 Tri-bar helmet converted from a 15th-century Italian 'sallet' helmet.

12 Wheel-lock pistol.

13 Flintlock pistol.

14 English lock carbine.

15 Blunderbuss.

16 Carbine/blunderbuss attachment to belt, method one.

17 Carbine/blunderbuss attachment to belt, method two.

C: RESTORATION TROOPER, OXFORD'S BLUES, 1685–88

1 After the return of Charles II to the throne the new Royalist Parliament had intended to disband all of the Commonwealth regiments, leaving only the Foot and Horse Guards. In 1661, before disbandment had been completed, an outbreak of rioting by religious dissenters frightened Parliament into retaining the Cromwellian regiment of Unton Crook under the title of the Earl of Oxford's Horse. It was to consist of seven troops of 60 common soldiers and a king's troop of 80 men. By 1684 each troop consisted of 45 troopers with three corporals and two trumpeters. To distinguish it from the Horse Guards the regiment wore their colours reversed, having blue coats with red turn-backs and facings. Grey hats with black feathers were an unusual feature of this regiment. In 1678 new recruits were issued with back and breast plates, pot helmets and carbines, and these appear to have remained in service until 1688 when the

This 1644 illustration depicts Charles I at the height of his military success. The full armour is shown as an artistic convention and it is unlikely that Charles ever wore such armour in battle.

Robert Earle of Essex his Excellence, Generall of ye Army
Raised for the Preservation of Religion defence of King Parliment & Kingdom

Parliament's leading general of the early years of the Civil War, the Earl of Essex, is shown in more realistic garb of sleeveless buff coat worn with a gorget covering his throat and upper chest.

regiment was ordered to put its armour into store before marching to confront William III's army.

2 Flintlock pistol. Pistols and carbines were now fitted with the superior 'French' flintlock, which had greater interchangeability of parts and higher standards of manufacture.

3 Carbine showing the bar used to attach the carbine to a ring on the carbine belt.

4 & 5 Pistol holsters were now made with decorative housings carrying the regimental facing colour and Royal cyper or other decoration.

6 & 7 As the wearing of pot helmets declined, the use of 'secrets' became popular. These metal caps were sown into broad brimmed hats to give protection from sword cuts and falls.

8 Buff leather gauntlets remained a necessity to protect the hands of the trooper both when riding and fighting.

9 Bridle gauntlet with flexible fingers.

D: RIDING THE RING

Robert Ward's 1639 book, *Animadversions of Warre*, dealt with the training of horses for war:

It is a thing of great consequence for souldiers to understand how to order themselves, toward their horses, to make them the apter to understand the

Riders meaning, and to be fitted for exercise, for an Officer shall finde it a thing impossible to exercise a troope of horses, unless they be first prepared for that service.

Gervase Markham, in his 1635 work, *The Souldiers Accidence*, says:

> For the mannage and government of the Horse, though it be supposed that the Horse is ridden and made perfect before hee came into the Souldiers hands, yet if the Souldier cannot (after an orderly manner) make the Horse doe what hee hath beene taught, and likewise correct, or helpe him (in due time) when the Horse shall either doe amisse, or not doe with so comely a grace and dexteritie as hee ought. The motion without all question will be full of disorder and confusion.

Part of the training was riding the ring. A horse would first be accustomed to having a soldier and his equipment mounted on its back as in our illustration. When the rider was in command the horse could move on to a training ring where he would be ridden around linked circular tracks, turning to the left and right on his rider's commands.

Robert Ward described how a horse could be made used to the distractions of the battlefield:

After this, cause halfe a dozen footemen or more to stand in his way, making a great shouting and noyse, threatning him with their loude voyces, against whom you must incorage him to goe forwards; first with a soft pace, secondly with a trot, thirdly with a gallop; at which time let the footmen retreate, fayning to runne away.

E: THE BUFF COAT

Buff leather combined flexibility, not offered by metal armour, with durability, as it did not harden with time, stretch with wear or rot in damp weather as would untreated leather.

In the 17th century buff leather was produced from bovine hides by a finishing process known as 'oil tannage'. The hide was first washed and soaked in a lime solution to remove any flesh and hair. The clean hide was then scraped to remove the outer 'grain' layer, thus exposing the middle layer called the 'corium'. Cod oil was worked into the leather by a process known as 'kicking', as it was often performed by the bare footed in a large tub of oil. The hides were then placed on racks to dry, although the oiling process could be repeated several times until the leather achieved its pale yellow colour, together with the durability and flexibility required of buff coats.

1 & 2 This buff coat is based on a group of 34 coats from Littlecote House. Harquebusier armour linked to the coats carries armourers' marks of the Commonwealth

Trumpeters in classic battle pose. They are formed up alongside the main body of their Troop, clear of the fighting and ready to sound the charge.
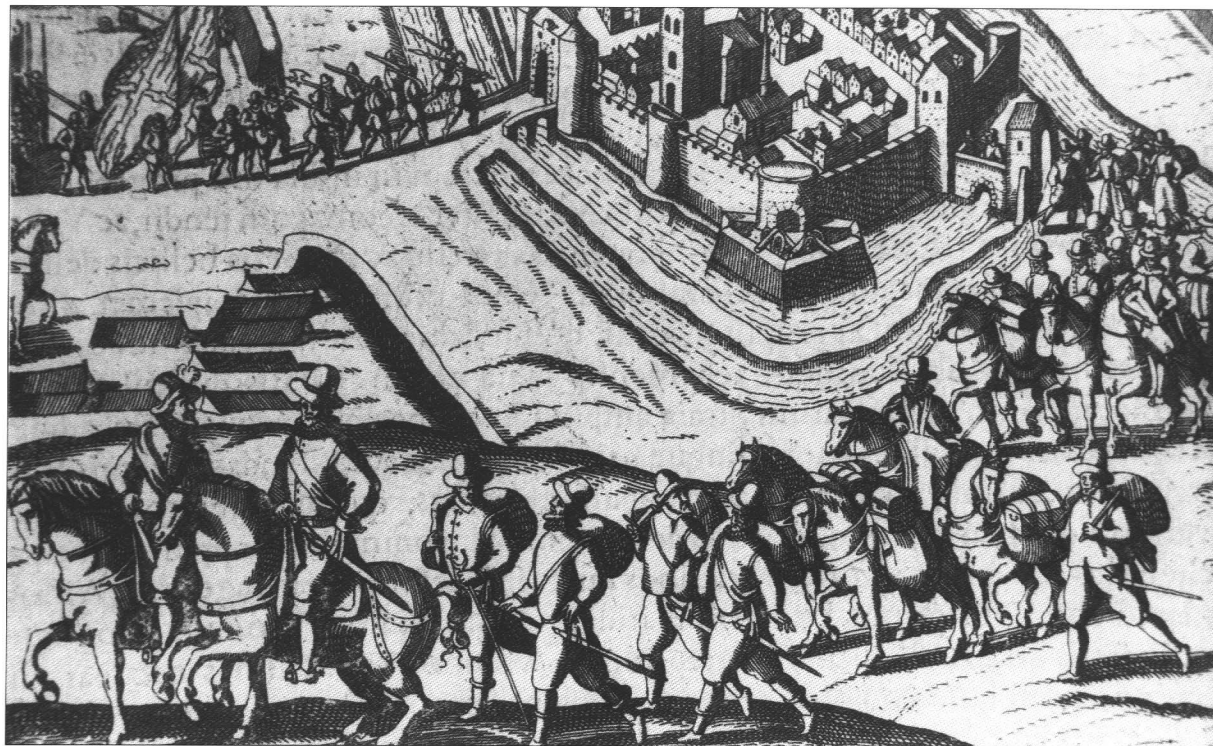
period of 1649 to 1660, and it is likely that the coats date from the same period. This group of coats is made up of four full-length panels with broad overlapping skirts or basques. The thickness of the buff leather varies from 0.06 inches to 0.22 inches and the coats weigh from 4lb 4oz to 7lb 8oz.

The small stand-up collar is pierced with holes to allow the fitting of loops and buttons on cords to use as fastenings. The fronts of the coats are pierced with between 14 and 34 eyelet holes, with the average being 16. However, these holes were not used to lace up the front of the coat. The laces were spiral threaded down each side and tied at top and bottom to produce a decorative effect. In practice the coats were fastened by eight pairs of hooks and eyes.

The body of the coat was lined with fine linen and an inter-lining of coarse canvas. Chest measurements range from 30.8 inches to 40.2 inches. The coats appear to have been made-to-measure as several carry initials marked inside the linings.

All the coats are stained yellow ochre on the outside and inside except under the lining which remains natural leather colour. This indicates that the stain was first applied after the coats were assembled and finished, although fresh stain would have been applied from time to time.

3, 4 & 5 Several patterns for buff coats survive. 3 is that for the Littlecote House buff coats, a simple four-piece pattern providing for long skirts in keeping with the civilian fashion of the time. Pattern 4 dates from the 1640s and is broadly similar. Other buff-coat patterns were much more complex and involved the assembly of a large number of pieces cut from a hide for thickness in areas requiring

European warfare in the late 16th and early 17th centuries was dominated by sieges. Protecting the convoys of supplies to besiegers and besieged became a major task for the light horse.

most protection and suppleness for those areas requiring easy movement such as the shoulders and arms.

6 & 7 Buff coats were stitched with the pieces of leather butted end-on to one another, not overlapped. A curved needle was used so that it entered the outer surface of the leather at one side of the seam and emerged half way through the edge of the leather. The needle was then pushed into the opposite edge and out through the top. When the stitching was pulled tight, no ridge was formed on the inside of the coat. This protected the stitching from wear and tear when the coat was worn. A raised seam appeared on the outside of the coat, giving a distinctive join to each part of the buff coat.

8 Colonel Hacker's buff coat is made up of a number of panels with full overlapping skirts. From the rear view, the sleeves can be seen to 'bunch' at the shoulders, showing that the sleeves of the coat were cut for a man with his arms forward as when riding.

9 Colonel Brooke's buff coat has double sleeves and an 'apron' skirt. This may have been a double coat with a thinner coat with its own collar and full-length sleeves. This inner coat would have reached down to the waist where it would have been sown into the outer coat. The outer coat, of thicker leather, would have had its own small collar, half sleeves and full skirts.

10 Major Sanders' buff coat shows finely scalloped edges to the upper sleeves and an inset, high-standing collar.

11 The buff coat worn by the Swedish King Gustavus Adolphus at the time of his death at the battle of Lutzen in 1632. Of the highest quality, the body of this coat is of thick buff leather with thinner sleeves for flexibility. The front and cuffs are fastened in an unusual manner with buttons and button holes cut in the leather itself.

F: THE USE OF THE SWORD

The late 16th and early 17th centuries saw revolutionary changes in cavalry weapons, but the sword continued as the symbol of a soldier and as a dependable close-quarter weapon. John Cruso, in his 1632 book *Militarie Instructions for the Cavall'rie*, advised that the cavalryman be armed with 'a good sword (which was to be very stiffe, cutting, and sharp pointed) with girdle and hangers'.

Memoirs of the period rarely dwell on training, but we know that the advice given in the drill books was observed, and that troops of Parliamentarian horse regularly 'exercised' in the fields around London during the Civil War.

For most recruits, wielding a sword on horseback was a new experience. Drawing the sword from its scabbard had to be re-learned. On foot, a right-handed swordsman would draw his sword under his left arm. The mounted swordsman had to reach over his left arm to draw his sword so that his bridle arm could keep control of his horse. In combat most cavalrymen drew their swords before the start of the action and attached them to their wrist by a cord.

Charging with the sword extended was relatively simple, but training was required to wield the sword either side of the horse. The mark of a cavalry horse was that often a part of an ear was missing.

Cruso commented on the use of the sword in battle. When faced with an opponent wearing a closed helmet or casque, he advocated a thrust under the edge of the helmet:

Having spent both his pistols, and wanting time to lode again, his next refuge is his sword, whereof the best manner of using is to place the pummel of it upon his right thigh, and so with his right hand to direct or raise the point to his mark, higher or lower as occasion serveth: either at the bellie of the adverse horse-man (about the pummel of the saddle) or at his arm pits, or his throat, where if it pierce not, (as it is very like it will not fail, by slipping under the casque) yet meeting with a stay in that part of the bodie, where a man is very weak, and having a sword of very stiffe blade, (as afore-said) it will doubtlesse unhorse him.

G: POWICK BRIDGE

Robert Ward, in his 1639 book *Animadversions of Warre*, gave a description of the way cavalry were expected to fight:

Note the Harquebuziers are to give fire by rankes; the first ranke having given fire, is to wheele off to the left hand unlesse the ground will not permit it, (but that of necessity you must performe it to the right) making ready and falling into the Reare: the second ranke is to give fire upon the wheeling away of the first, and so the rest successively.

The harquebuziers and carabines, must … strive to get the left side of their Enemies, because that in presenting hee is to rest his Carbine upon his Bridle hand, placing the Butt end upon the right side of his brest neere his shoulder.

Note the left hand is onely to be held up so high to rest your Harquebus or Carbine, upon when you discharge, and not otherwise.

Cavalry was employed to ambush supply convoys but was also used to make sudden attacks to enable relief supplies to break through siege lines and re-victual starving garrisons.

Being upon service in the field against your enemy, the bearing of your hand so high, would be a trouble unto your defence, and a commodity to your enemy, for thereby he may easily cut your Raynes in sunder.

At the start of the first Civil War the Parliamentarian and Royalist horse were trained in the two opposing styles of cavalry combat. Prince Rupert favoured the charge to contact, sword in hand, with pistols reserved for the pursuit. This he had learned from his studies of European military tactics while a prisoner at the Imperial Court in Vienna. The Parliamentarians relied on the Dutch tactics that their aged commanders had learned in their youth. This involved receiving the enemy's charge at the halt, then a well-disciplined volley of carbine and pistol shot to disorder their opponents before falling on them with the sword. The latter tactic could work when properly executed, as is related by Nathaniel Fiennes in the pamphlet *A Letter Purporting the True Relation of the Skirmish at Worcester*, which described his experiences at Powick Bridge:

> We let them come up very near that their horses' noses almost touched those of our front rank before ours gave fire, and then [we] gave fire, and very well to my thinking, with their carbines, after [we] fell in with good hope to have broken them (being pretty well shattered with the first charge of carbines). But of a sudden we found all the troops on both sides of us melted away, and our rear being carried with them.

The Parliamentarians continued with these tactics for the first full year of the war, but by 1644 they had begun to adopt Rupert's methods and were to use them against him to great effect at Marston Moor and Naseby.

H: ROUNDWAY DOWN

On 13 June 1643 at Roundway Down, Captain Richard Atkyns of Prince Maurice's Regiment of Horse found himself facing a Parliamentarian dressed in full cuirassier armour, whom he believed to be Sir Arthur Haslerigge. Haslerigge commanded the only full regiment of cuirassiers to fight in the Civil War. Atkyns's relation of their encounter indicates the protection from pistol shot offered by high-quality armour, but also reflects the lack of speed and manoeuvrability that it imposed on its wearer. Atkyns marked his enemy and charged towards him:

> He discharged his carbine first, but at a distance not to hurt us, and afterwards one of his pistols, before I came up to him, and missed with both: I then immediately struck into him, and touched him before I discharged mine; and I'm sure I hit him, for he staggered, and presently wheeled off from his party and ran. … Follow him I did, and in six score yards I came up to him, and discharged the other pistol at him, and I'm sure I hit his head, for I touched it before I gave fire, and it amazed him at that present, but he was too well armed all over for a pistol bullet to do him any hurt, having a coat of mail over his arms and a headpiece (I am confident) musket proof.

In the end Haslerigge's horse gave up the struggle and he surrendered to Atkyns, only to be rescued by a troop of his own men. Hearing the story Charles I said of Haslerigge, 'Had he been victualled as well as fortified, he might have endured a siege of seven years'. This was a fitting epitaph for a type of cavalryman defeated by lack of mobility.

The large armies that took part in the wars of the 1670s to 1720s produced an insatiable demand for fodder to feed both troop horses and draught horses. Foraging and protecting foragers again became a major occupation of the cavalry of all armies.

In addition to normal foraging, cavalry was expected to gather items to assist siege works. Here cavalry cut and transport 'faggots' of brushwood used to fill in ditches during the assault on a fortress.

I: MARSTON MOOR

Late on 2 July 1644 Prince Rupert offered battle to the Parliamentarians and their Scots allies on Marston Moor. As his soldiers sat eating their rations and preparing to spend a night on the battlefield, it became clear that the allied armies were moving forward to attack.

On the allies' right the cavalry under Sir Thomas Fairfax was defeated by the Royalists and was driven back in confusion. The Royalist cavalry repeated their error of Edgehill and rode on to plunder the allied baggage. Fairfax removed the field sign from his hat and passed unchallenged to the allied left wing where Cromwell's cavalry were making little headway. Cromwell was wounded in the face and left the field for his wound to be dressed. Seeing the pressure that his troopers were under, Rupert led his regiment to their support and for some time his horse fought Cromwell's Ironsides hand-to-hand with neither side willing to yield.

Scoutmaster-General Watson described the fighting:

Our front divisions of Horse charged their front, Lieutenant Generall Cromwels division of three hundred Horse, in which himselfe was in person, charged the first division of Prince Ruperts, in which himselfe was in person. The rest of ours charged other divisions of theirs, but with such admirable valour, as it was to the astonishment of all the old Souldiers of the Army. Cromwels own division had a hard pull of it: for they were charged by Ruperts bravest men, both in Front and Flank: they stood at the swords point a pretty while, hacking one another: but at last (it so pleased God) he brake through them, scattering them before him like a little dust.

Rupert was forced to hide in a bean field to escape capture. The arrival of Cromwell's victorious cavalry on their flank and rear was more than the Royalist infantry could stand and Rupert's army, lacking its leader, fell back in defeat.

J: TANGIER, 1680

Post-Restoration cavalry rarely engaged in full-scale battle, but opportunities for active service arose in unusual locations.

When Charles II married Catherine of Braganza her dowry included the Portuguese colony of Tangier near the Straits of Gibraltar on the North African coast. English merchants hoped that Tangier would become a gateway to the riches of Africa. A garrison of one troop of horse and 3,000 infantry took possession on 29 January 1662.

It became clear that the hostility of the local Moorish people was one reason why the Portuguese had been willing to give up the town. The Portuguese inhabitants returned to their own country with the departing fleet, and the colony became a military outpost.

The English found themselves in a constant state of siege. Isolated outworks were surrounded and overrun, and attempts to mount expeditions into the interior were ambushed and harried back to the town. At times the state of siege became more determined after the Moors had been instructed by deserters in the use of explosives and 'stink pots' which gave out a foul-smelling thick smoke that blinded the defenders of the ring of forts surrounding the town.

Evidence of the appearance of the garrison comes from engravings and watercolours made by Wenceslaus Hollar during his visits to the town. In the hot and arid climate officers provided themselves with tropical uniforms in light grey linen, but common soldiers wore the same style of uniform as in England, although they may have discarded some items of clothing. It is unlikely that buff coats were worn under uniform coats for peacetime duty even in England, and there is evidence that coarse grey coats were provided for 'undress' wear. In action the protection offered by buff coats and armour against local weapons such as javelins made them of great value to horse troopers.

The Tangier garrison proved too expensive to maintain and was abandoned in 1684.

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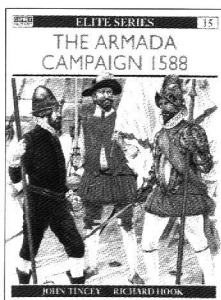
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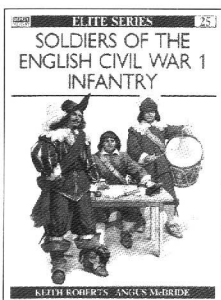
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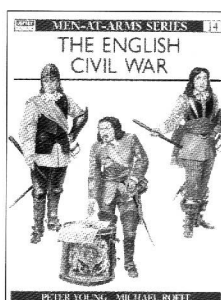
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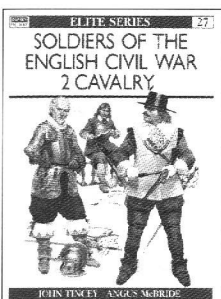
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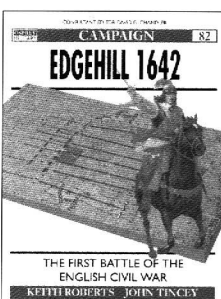
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