

THE LANDSKNECHTS



DOUGLAS MILLER G A EMBLETON

EDITOR: MARTIN WINDROW

OSPREY
MILITARY

MEN-AT-ARMS SERIES

58

THE LANDSKNECHTS

Introduction

Text by
DOUGLAS MILLER
Colour plates by
G A EMBLETON

First published in Great Britain in 1976 by
Osprey, an imprint of Reed Consumer Books Ltd.
Michelin House, 81 Fulham Road,
London SW3 6RB
and Auckland, Melbourne, Singapore and Toronto

© Copyright 1976 Reed International Books Ltd.
Reprinted 1980, 1981, 1982, 1984, 1985, 1986, 1987, 1988,
1990, 1991, 1992, 1993, 1995, 1996

All rights reserved. Apart from any fair dealing for the
purpose of private study, research, criticism or review, as
permitted under the Copyright Designs and Patents Act,
1988, no part of this publication may be reproduced,
stored in a retrieval system, or transmitted in any form or
by any means, electronic, electrical, chemical, mechanical,
optical, photocopying, recording or otherwise, without the
prior permission of the copyright owner. Enquiries should
be addressed to the Publishers.

ISBN 0 85045 258 9

The author would like to thank Messrs O. & M. Hausser, J. Tonn,
P. Kaus and Mr A. V. S. de Reuck for their most valuable assistance
in providing research material.

If you would like to receive more information about
Osprey Military books, The Osprey Messenger is a
regular newsletter which contains articles, new title
information and special offers. To join free of charge
please write to:

**Osprey Military Messenger,
PO Box 5, Rushden,
Northants NN10 6YX**

Introduction

The word 'Landsknecht' first appeared in the German language around 1470. It is said to have been coined by Peter von Hagenbach, who records having commissioned such troops for the service of Charles the Bold of Burgundy. Landsknecht literally means 'servant of the country' yet as early as 1500 the word had already transformed into *Lanzknecht* as the pike became the trademark of the footsoldier. Nowadays, however, the term Landsknecht is usually associated with the type of German mercenary originating from what is today Alsace, Baden Württemberg and the Austrian Tyrol and who served during the reigns of Maximilian I (1493–1519) and his grandson Charles V (1519–56).

When these troops were first employed, warfare was in a state of transition. The Burgundian Wars (1476–7) had shown that cavalry was virtually helpless against well drilled pike formations and the new handgun. The fifteen Burgundian 'Compagnies d'Ordonnances' had outlived their usefulness and were considered as nothing more than an army of redundant knights. Moreover the cost of raising such a force of mounted troops had increased considerably due to the rise in the economic and political status of the European nobility. Those who stood to gain therefore were those 'gentlemen of war' or *Kriegsherren*, as they were called in Germany, who could supply large bodies of mobile infantry, usually pikemen, able to follow in the tradition of the now famous and feared Swiss.

It was against this background that Maximilian, heir to the Holy Roman Empire, had to raise a force capable of upholding his claim to the Burgundian legacy of the Netherlands and of controlling his future territories in the east. To this latter end the

Swabian alliance was formed in 1487–8, which set up an army to keep the powerful princes of Bohemia and Bavaria at bay. This initial force of 12,000 foot and 1,200 horse is described by many as the first army of Landsknechts to be recruited on German soil. In 1487, in the same year that the last national joust took place in Germany at Worms, the first units of German Landsknechts were being trained in the streets of Bruges by Maximilian's commander Graf Eitel Fritz von Hohenzollern. However, the campaigns in the Netherlands and



Maximilian I (1459–1519) known as the 'last of the knights', succeeded to the throne in 1493 and by virtue of the marriages of himself, his son, and his grandson, gained the Netherlands and Spain, Hungary and Bohemia, thus creating a vast Empire for his successor Charles V and further members of the Habsburg dynasty. His march into Cologne in 1505, armed with a halberd at the head of a column of Landsknechts heralded a new era in Germany. Apart from the creation of the Landsknechts he is also credited with the development of the first advanced system of ordnance. Both were to prove vital in his somewhat rigorously conducted foreign policy.

(Portrait by Dürer, Kunsthistorisches Museum, Vienna)



The muster parade (*Musterung*) was adopted from the Swiss and was essential in determining the efficiency of the unit to be raised. The precondition for acceptance into the ranks was that soldiers should possess their own weapons. It was the task of the paymaster, who normally stood at the foot of the arch, to ensure that those recruits passing through were of sound mind and body. It often occurred that the paymaster assigned to counting the recruits 'double-counted' for the sake of financing, i.e. to swindle the *Kriegsherr*.

(Woodcut by Jost Amman from 'Der deutsche Landsknecht', by Friedrich Blau, Götting 1882)

later in Bohemia, although successful, were to prove that the nucleus of the 'German' army consisted of nothing more than bands of ill-organised mercenaries.

It was not until after the storming of the fortress of Stuhlweissenberg in Bohemia in 1490, whereupon Maximilian ordered his men to swear an oath of allegiance, that the 'father of the Landsknechts' succeeded in instilling his troops with a sense of discipline and esprit de corps. Only by emulating the Swiss, however, by adopting their customs and tactics, would the German Landsknecht be able to hold his own and to this end Maximilian modelled his whole military system on the armies of the Swiss Confederation.

The Muster

According to Swiss tradition, if a lord required an army to settle a dispute he normally contracted a gentleman of war by means of the *Bestallungsbrief* or letter of appointment. This contained a recruiting commission and the letter of articles, *Artikelsbriefe*,

which set out the legal conditions under which the Landsknechts were to serve. Having accepted the appointment and secured the means of finance, the colonel, or *Obrist* as he was called, then began appointing in turn his second-in-command and the captains in charge of the *Fähnlein* or companies which were to make up the regiment. This done, drummers would be sent out to beat for recruits. The muster was seldom a difficult task; colonels with great reputations such as Frundsberg and von Sickingen were capable of raising armies of 20,000 foot in a matter of weeks. The problem in fact often lay in rejecting those who were either incapable or too ill-equipped to be accepted into the ranks. In spite of the selection process, which depended on whether the recruit brought his own weapons or not, the regiment must have been a motley crew of journeymen, peasants and students all inspired by the chance of adventure and, of course, pay and loot, and the sons of wealthy patricians, there for the sake of family honour.

Having signed up, the recruits were instructed to meet at a certain time and place for the muster-parade. Here they were ordered into two columns facing each other and at the end of the gap between them an arch consisting of two halberds and a pike was erected. It was through this that each man had to pass before being accepted into the ranks. It was the task of the recruiting officer to stand at the arch and check that those men who passed through were of sound mind and body. At this stage the regiment was divided up into *Fähnlein* of 400 men, each *Fähnlein* having 100 experienced soldiers, or *Doppelsöldner* as they were called, since they received double the pay of the ordinary footsoldier.

As soon as the Landsknechts had been paid one month's wage they assembled in a circle surrounding the *Obrist* whose duty it then was to read them their rights, duties and restrictions in the form of the 'Letter of Articles'. The articles consisted of a very detailed code of conduct laying out all the punishable offences such as mutiny, unwarranted plunder, drunkenness on duty, having more than one woman following in the baggage train, and so forth. This was followed by an oath-taking ceremony in which every Landsknecht swore his allegiance to his cause, his Emperor and his officers, and promised to abide by the laws set out in the 'Letter of Articles'.

For the enforcement and administration of these laws the *Obrist* appointed a *Provost* and a *Schultheiss* respectively. During this ceremony the standards were handed over to the ensigns who were obliged to swear an oath never to allow the standards to leave their hands in battle. The ensigns in turn joined their *Fähnlein* where the captain would be introducing the appointed adjutant, chaplain, doctor and quartermaster to his men. The remaining formality was the formation of the *Rotten* or platoons, each being responsible for electing its own *Rottmeister*.

Organisation

Each Regiment normally consisted of ten *Fähnlein* or companies—*Fähnlein* is the German word for a small flag or standard carried within the unit. The *Fähnlein*, as already stated, was divided up into *Rotten* or platoons. Each *Rotte* had ten common *Landsknechts* or six *Doppelsöldner*. A regiment therefore, usually numbering about 4,000 men, was divided into ten units of 400, each unit having forty platoons of ten men. It must be noted here that this 4,000 was by no means a standard number—the complement often depending on the number of men who presented themselves at the muster

parade. Commanding the regiment was of course the *Feldobrist* or colonel. Sometimes the *Obrist* was in command of several regiments at a time, in which case he received the rank of *Oberster Feldhauptmann*. The task of leading the *Feldobrist's* regiment in this case would fall to the *Locotenent*—(lieutenant-colonel)—the second in command who only held the rank of captain while the *Obrist* was present.

The colonel, as laid down in the Imperial Diet at Worms in 1507, was entitled to a staff or *Staat* of twenty-two officials. This included a chaplain, a scribe, a doctor, a scout, a quartermaster, an ensign, drummer and fifer, and a bodyguard of eight trustworthy men. (See *Table A.*)

Each *Fähnlein* had in turn its own complement of officials. The captain had the privilege of his own personal cook and servant and a bodyguard of two *Doppelsöldner*. There were also an interpreter, a chaplain, a scout, a fourier, and the usual colour party with musicians. The sergeant majors, *Feldweibel*, were given the responsibility of carrying out drill and formation. There was normally a regimental sergeant major—the *Oberster Feldweibel*—who was responsible for battle formation. General discipline and liaison between officers and men was largely the task of the *Weibel* (sergeants) and the *Gemeinweibel*, the latter being elected on a monthly basis as spokesmen for the *Landsknechts*. (See *Table B.*)

In addition to the above there was an independent group of officials who were responsible for maintaining discipline and ensuring that the *Landsknechts* conformed with the Articles. The most feared official of all was the *Provost* who remained unimpeachable during his period of office. His retinue consisted of a jailer, a bailiff and an executioner called the *Freimann*, recognisable by his blood-red cloak. The red feather in his beret and the tools of his trade, namely the executioner's sword and the hangman's rope which hung from his belt, acted as suitable deterrents for the *Landsknechts*, who generally regarded him as an untrustworthy character.

Each Regiment had a full complement of military police and judges, including the *Schultheiss*, the *Profoss* (Provost) and the *Gemeinweibel*. The total pay for these officials came to 236 guilders per month.



The muster parade was followed by the reading of the letter of articles (*Verlesung*). Hereupon the *Landsknechts* were ordered to form a ring and the colonel (*Obrist*) informed them of their rights and legal restraints. The letter of articles which always accompanied the letter of commission was read every six months and was invoked immediately hostilities began.

(Woodcut by Jost Amman)

Table A

Rank		Pay
<i>Regiments Staat (Colonel's Staff)</i>		
<i>Feldobrist</i>	Colonel	400 <i>Guilders</i>
<i>Locotenent</i>	Lieutenant-Colonel	100 "
<i>Kaplan</i>	Chaplain	12 "
<i>Schreiber</i>	Adjutant	24 "
<i>Wachtmeister</i>	Officer of the Watch.	40 "
<i>Quartiermeister</i>	Quartermaster	40 "
<i>Proviandmeister</i>	Storekeeper	40 "
<i>Feldscher</i>	Doctor	40 "
<i>Feldarzt</i>	Field Doctor	40 "
<i>Trommelschläger</i>	Drummer	8 "
<i>Pfeifer</i>	Fifer	8 "
<i>Dolmetscher</i>	Interpreter.	8 "
<i>Koch</i>	Cook	8 "
<i>Trabant (8)</i>	Bodyguard.	4 " each
<i>Hurenweibel</i>	Sgt of the Train	12 "
<i>Fuhrknecht</i>	Scout	4 "

Table B

Rank		Pay
<i>Each Foot Fähnlein</i>		
1 <i>Hauptmann</i>	Captain	40 <i>Guilders</i>
1 <i>Leutnant</i>	Subaltern	20 "
1 <i>Fähndrich</i>	Ensign	20 "
1 <i>Chaplain</i>	Chaplain	8 "
1 <i>Feldweibel</i>	Sgt Major	12 "
1 <i>Führer</i>	Scout	4 "
1 <i>Fourier</i>	Fourier	4 "
2 <i>Weibel</i>	Sergeants	4 " each
2 <i>Trommelschläger</i>	Drummers.	4 " each
2 <i>Pfeifer</i>	Fifers	4 " each
2 <i>Trabanten</i>	Bodyguards	4 " each
1 <i>Dolmetscher</i>	Interpreter.	4 "
1 <i>Hauptmanns Junge</i>	Captain's boy	4 "
1 <i>Fähndrichs Junge</i>	Ensign's boy	4 "
1 <i>Hauptmanns Koch</i>	Captain's cook	4 "
1 <i>Reisiger Knecht</i>	Horseman	4 "

(From: *Kriegsbilder der deutschen Landsknechte* by von Zwiedeneck-Südenhorst.)

The pay for the whole force of foot-soldiers numbering 4,000 (10 × 400) amounted to 32,000 guilders per month, *Doppelsöldner* receiving 8 guilders per month as opposed to 4 guilders for the ordinary Landsknecht. Thus the total cost of a

regiment for a month was 34,624 guilders. Each Landsknecht was normally contracted to serve for a minimum period of six months.

At the Imperial Diet at Worms in 1521 the reforms of the military brought about a re-

organisation of the war finance system, to assist Charles in his Italian campaigns. The Imperial army was set initially at 20,000 foot-soldiers and 4,000 mounted, each *Reichstand* being obliged to offer a contingent. This force cost 128,000 guilders per month and although a new tax unit was invented—the *Simplum*, equalling the above amount—the problem of financing a lengthy campaign could never be resolved.

In 1526, Frundsberg, for example, was obliged to pawn his estate and treasures (*Mindelheim*) for 30,000 guilders in order to finance a campaign in Italy for Charles V. This sum, however, only covered half a month's pay and his troops mutinied on him. Similarly, the Spanish general Leyva had to melt down the chalices from the church in Pavia and even the gold chain from around his neck to prevent his garrison of German *Landsknechts* from defecting to the French.

Tactics and Formation

In the Burgundian Wars the Swiss had shown the



The oath-taking ceremony (*Ver eidigung*) followed the reading of the articles and was an attempt to instil discipline and allegiance into an otherwise unknown band of ruffians intent on money and adventure. The ceremony, which was held by the *Schultheiss* as the official responsible for administering justice, bound the *Landsknecht* to the articles by forcing him to swear an oath of allegiance to the Emperor, or war-lord as the case might be. At the same time the ensigns were awarded their standards, on which they too had to give an oath.

(*Jost Amman*)

tactical superiority that could be achieved by a well trained body of pikemen. This superiority was soon to be challenged by the arquebus (although in the first quarter of the sixteenth century it was still used with some restraint). Despite the 'miracle of Creazzo' where Frundsberg's arquebusiers, withdrawing from earthwork to earthwork, wreaked havoc on the oncoming Venetian foot, skirmishers in open order were considered to be too vulnerable. The upshot of this was that different generals tended to adopt various sets of tactics at these times largely depending on the composition of their forces and the type of terrain. The Swiss, for instance, anxious to shorten their campaigns as much as possible and being largely dependent on the strength of their pikemen and halberdiers, preferred a short swift encounter and were therefore inclined towards a pike charge in echelon formation of *Vorhut* (van), *Gewalthut* (centre), and *Nachhut* (rear). This of course was in turn determined by the lay of the land. The Germans and Spanish, later relying heavily on the strength of their arquebusiers, tended towards a more defensive position, if possible on uneven ground to upset the impetus of a pike charge. As a result of these diverse tactics the general of the day was always at pains to outmanoeuvre his enemy so that when it finally came to a confrontation his forces would have the advantage of terrain.

The German *Landsknechts* who often adopted defensive positions required a new formation which would ensure maximum tactical efficiency from both pike and arquebus. This formation adopted from the Swiss system was called the *gevierte Ordnung* and is the forerunner of the infantry square. In this formation the pikemen and the halberdiers formed a solid square in the centre with the two-handed swordsmen in the front and rear ranks. Behind the first two ranks of *Doppelsöldner* stood the ensigns in the centre of the first three *Fähnlein*. Then came a virtual forest of pikes, in the middle of which were to be found the ensigns of the four centre companies. At the rear came the final three ensigns amongst the most experienced troops in the regiment. These were positioned at the back to add impetus to the attack and also to discourage the faint hearted from deserting the ranks in front. Around this block stood a wall of arquebusiers affording protection from the pikemen and occupying the most effective



The oberster Feldhauptmann (supreme commander) was directly responsible to the Emperor or prince who had commissioned him. Despite this he had a free hand in the composition of his army and the selection of his officers. The Obrist who commanded the regiment was in turn responsible to the oberster Feldhauptmann. The degree of responsibility was rewarded accordingly with one hundredfold the pay of a common Landsknecht. The pay was fixed in multiples of 4 guilders per month at the Imperial Diet at Constance in 1507. The Obrist thus received 400 guilders per month plus an additional 600 guilders for the upkeep of his 'Staat'.

(Woodcut by Hans Döring, 'Kriegsbuch of Graf Reinhard of Solms 1545', Bayerische Staatsbibliothek, Munich)

position in attack. Towards the middle of the sixteenth century the arquebus became more important and it was customary for a regiment in squared formation to have four wings of arquebusiers who were trained to advance and fire and then drop back to the rear to reload, so that the momentum of the advance could be maintained. To complete the defensive position the artillery pieces were drawn up in front of the square where they commanded a good sweep of the battlefield.

Because of this it was necessary to position experienced troops in the front ranks of the square to protect the artillery.

If the order was given to advance, a line of foot was normally strung out in front of the square. Known as the *verlorene Haufe* (forlorn hope) it was composed of either volunteers, prisoners hoping to redeem themselves or those unfortunates who had been picked by lot. It was their task to advance in front of the square with their pikes and two-handed swords to stave off the oncoming enemy and hack his pike to pieces so that their comrades would be able to penetrate the gaps they had made. To remind these *enfants perdus* of the perilous life and death situation they were in, the plain red 'blood flag' was always carried in this somewhat thin rank. The *verlorene Haufe*, often distinguished by the white feathers which the Landsknechts wore in their berets, was sometimes used as a decoy to lure the enemy into thinking that they were being charged, whereupon their countercharge would be met with a hail of bullets from the arquebusiers placed behind them.

In defensive situations the order was given for the regiment to form an *Igel* or 'hedgehog'. This was carried out in either square or circle. In this ploy the arquebusiers moved to the third rank while the pikemen moved to the front, levelling their weapons at an angle to take the oncoming cavalry. The *Doppelsöldner* with halberds and two-handers plugged the gaps in the front and second ranks at the same time, allowing space for the arquebusiers to fire.

Before the battle commenced the commanding officer, who usually stood in the front rank, would call for his Landsknechts to kneel down and give grace to God. This custom was completely misconstrued by the Italian historian Paul Jovius who claims that it was out of fear of the cannonballs which were flying around during the early stages of the battle that the Landsknechts 'took to the ground'. Whatever the case a virtue was made of necessity.

Sir Charles Oman refers to battles in the renaissance era as 'games of chess in which checkmate was accepted with little acrimony and still less bloodshed'. It came therefore as a shock to the Italians when the French, Swiss and Germans crossed the Alps with the intention of taking towns

and slaughtering prisoners. In fact gentlemanly conduct soon began to disappear from the battlefield as devious tactics were introduced. Fronsberger in his masterly work of 1556 lists fifteen ploys which the *Obrist* of the day considered when drawing up his army for battle:

1. The strength of the enemy, his number of horse, and his type of armour should be determined in advance and the lay of the land, the weather, the time of day, all taken into consideration before deciding on the type of battle formation to be adopted.
2. Prisoners should be taken before the battle and subjected to torture to extract the desired information.

3. A suitable body of men should be picked to form the 'forlorn hope'. This should advance in column at the side of the square, veering off and firing before dropping back to reload.
4. The regiment should always be organised in such a way that the heavily armed men are drawn up on the plain while those not so well equipped should be placed at the rear or drawn up on the slopes of a hill. The weakest troops should be facing the left flank of the enemy.
5. The infantry should keep together and avoid extending into a thin line.
6. Advantage should be taken of both the sun and the wind and the Landsknecht should be reminded of the more subtle ways of render-



It was generally the quartermaster's task to advance ahead of the army and take care of the accommodation for the troops. The woodcut, again by Döring, depicts a quartermaster in full armour which by this time—1550—was fully articulated, with the 'lobster' tassets and haute piece. The helmet, similar to that worn by Frundsberg, shows a distinct Roman influence. RIGHT: Since it was customary for the Landsknecht to take his wife and children with him on campaign there often



resulted a train of considerable size and disarray. It was therefore necessary to have some form of police to keep the 'whores', as they were called, in check. The sergeant of the train (above) was assisted in this somewhat demanding task by the Rumormeister, whose duty it was to separate quarrelling women by means of a truncheon known as the 'Verg-leicher' (settler).

(Woodcuts by Döring, 'Kriegsbuch, Bayerische Staatsbibliothek, Munich')

ing the enemy pike ineffective by using sand or dust to blind them. (At Bicocca, for instance, the Swiss used stones to disable the German pikemen at a distance.)

7. The light horse should be used to create a dust screen thus enabling a well ordered troop to get behind the enemy lines. Alternatively other *Fähnlein* can be employed to draw the enemy out of his position by faking a rout. As the enemy breaks his ranks in charging after this *Fähnlein* the opening gaps can be penetrated by a well-timed cavalry charge.
8. A further ploy should be the drawing up of several squads of horse, foot and members of the train at some concealed spot at the rear of the army. These are to hide until a crucial stage in the battle whereupon they are to

9. appear seemingly as reinforcements.
9. In close combat situations shorter weapons were to be used at all times, i.e. halberds, *Katzbalger*, two-handed swords and axes.
10. The use of nets to trap the fleeing enemy was also effective on occasion.
11. Disguising oneself as the enemy (which was never a difficult task) was a practice which also was to be exploited. By sending impostors into the enemy camp rumours could be quickly spread that the *Obrist* had been murdered by his subordinate officers.
12. The rear of the *gevierte Ordnung* was always to be composed of sturdy experienced fighters to 'discourage' those cowards wishing to retreat, and to give impetus to the attack.
13. *Rotten* were always to be placed at the disposal of the commander to replace the wounded.
14. Above all it should be the duty of the *Obrist* to maintain morale. Those contemplating desertion from the field of battle, for instance, were to be warned that to do so would be tantamount to killing their comrades standing next to them. It was, however, the punishment of immediate death which deterred such cowards.
15. Before the order was given for a pike charge the *Obrist* was to call up a squad of lancers to advance in front of the pikemen and charge at the right moment with the aim of 'jousting' the pikes out of the enemy's hands.

Towards the middle of the sixteenth century, as the arquebusier and mounted pistolier grew in importance, some of the more daring ploys began to disappear as movement became restricted by firepower.

Weapons

The major weapon of the Landsknecht was of course initially the pike. The ash stave was one and a half inches thick and usually between 14 feet and 18 feet in length. The steel head was 10 inches long and the tip had the shape of a 'frog's mouth'. Adopting the customs of the mounted knight, the Landsknecht would sometimes tie a fox's brush or animal's tail to the top of the pike,



It was essential for the captain (above) to wear armour as he normally fought in the front rank alongside the *Doppelsöldner* and was often challenged to a duel by his counterpart in the enemy ranks. It is interesting to note that the dagger was fastened to the right leg by means of a thin sash—almost in 'gunslinger' fashion. The weapon he is carrying is a boarspear.
(Woodcut by Hans Döring)



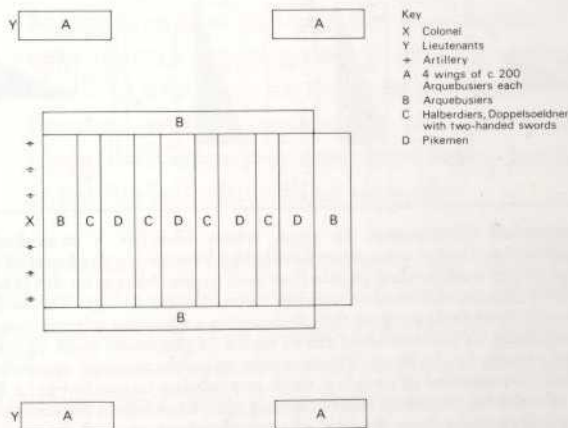
Receiving twice the pay of the common soldier, the *Doppelsöldner* normally held the front and rear positions in the 'gevierte Ordnung'. It was their task to advance in front of the company swinging their two-handed swords, to cut down the pike shafts of the oncoming enemy and establish a lodgement by penetrating the front ranks of the enemy's line of battle while the remaining Landsknechts followed them up, consolidating their position in the gap. Their garish dress soon became a bone of contention with the nobility, who demanded the introduction of uniform so that rank would be distinguishable. Maximilian, however, overruled their demands on the grounds that the Landsknecht deserved at least one luxury in his miserable life. Thus freedom of dress was granted at the Imperial Diet at Augsburg in 1503.

because of an alleged magic healing property and the power of protection.

The halberd, which was relegated to a 'secondary' position, was carried by the nco's and *Doppelsöldner* and used to dress the ranks. It too had a shaft one and a half inches thick but was only six to seven and a half feet in length. There were of course variations of the halberd, notably the Voulge, the Glaive, the Partisan, the Spetum, and a type of Fouchard which was used by Charles V's bodyguards and bore the emblem of the two pillars of Hercules and the Burgundian cross on the blade.

There were two main types of sword designed for different types of combat. In the case of the *Doppelsöldner* both were carried. The smaller 'Roman' styled thrusting sword, known as the *Katzbalger* or 'mangler' had a short metal hilt which joined a broad double-edged blade about 28 inches long and had a guard of two S-curved quillons forming rings. It was carried in a leather or metal scabbard, and the weapon was usually worn horizontally over the stomach at the belt. The *Zweihänder*, the enormous battle sword about 66 inches long, also had a double-edged blade, sometimes undulating in design with a long grip covered in leather or cloth. The hilt was reinforced with two curved quillons and two ring-guards on each side. The lugs at the heel of the blade served as a second guard, to parry blows as well as to enable the user to grasp the weapon at a lower point, as prescribed in the drill movements. This was facilitated by a leather ricasso between the ring guards and the lugs. On the march it was sometimes slung over the back crosswise by means of a strap.

The other weapon brandished by the *Doppelsöldner* was of course the arquebus. This was a hand gun fitted with the matchlock, which consisted of a lighted fuse or match attached to an S-shaped hook trigger which swung over to ignite the touch powder when the trigger was pulled. This



Formation (Gevierte Ordnung) of 4,000 men, c.1540. If the squared formation was attacked by cavalry, the formation was easily adaptable to a defensive ploy. The pikemen facing in the respective directions with the ends of their pikes dug into the earth would still form the main wall while the arquebusiers surrounding them would advance out in line to face the oncoming horse. After their first volleys they would return to the front ranks of pike to reload.

(From von Zwienedeck-Südenhorst)

had a range of up to 400 yards but was inaccurate and often rendered useless by a shower of rain. Although these guns must have had a considerable weight there is little evidence from contemporary prints that the arquebusiers used a rest to support their weapons. The arrival of the longer-barrelled musket around 1520 necessitated the use of a rest. It was not until the middle of the sixteenth century that the first major development was made in firing mechanisms. The wheel-lock pistol made its first appearance at the Battle of Mühlberg in 1547. Invented by the gunsmiths of Nuremberg, this gun worked like a cigarette lighter. When the trigger was pulled, a milled wheel driven by a spring struck a spark from a piece of pyrites or flint which in turn lit the touch powder. Although used mainly by the famous *Schwarze Reiter* these pistols also found their way into the belts of officers and *Doppelsöldner*.

The crossbow, which had originally been the forerunner of the hand gun, gradually became obsolete as the arquebus became accepted as the standard weapon. Yet at Marignano there were still 200 mounted crossbowmen in Francis' royal guard, and Gascon foot brandishing crossbows. The later crossbows were fitted with a cranequin, which consisted of a small iron drum filled with hooks which were actuated by a crank handle thus drawing the bowstring back and setting it in

position. The quarrel or bolt usually had a wooden flight which created a rotary action in flight thereby increasing its penetrating effect. The crossbowmen normally carried a shield which in defensive situations was propped up with a stake or sword so that a wall could be formed.

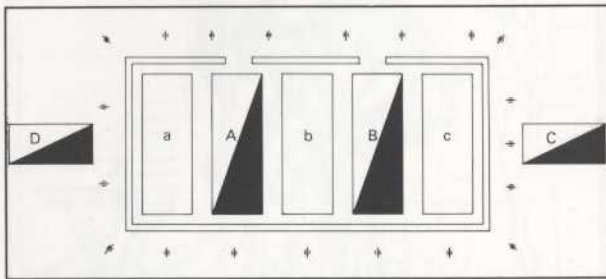
The *Fähnlein* were normally subdivided according to the type of weapon. Since the main weapon was the pike, the core of the unit was formed from pikemen. This nucleus numbered 300, the remaining 100 comprising *Doppelsöldner*, 50 of whom were armed with arquebuses and a further 50 with two-handed swords and/or halberds. Later records show that the number of pikemen began to diminish as the firearm became more popular. Thus, according to Wilhelm Fronsberger, by 1596 only 200–220 pikemen were required.

Artillery and Equipment

In Emperor Maximilian's biography, *Weiss Kunig*, mention is made of the talented young prince who was capable of handling artillery pieces with greater precision than any of the more experienced master gunners of the day. *Weiss Kunig* also records how the young Emperor achieved a new technical superiority in one of the first-ever organised systems of ordnance.

The new pieces which Maximilian ordered to be made at the factories of Beck at Augsburg, and of Sattler at Nuremberg incorporated several new developments. Firstly they were lighter, being cast in bronze, their calibres being bored out. For the first time the barrels were carried on carriages whereas earlier they had been carried on separate wagons. Trunnions and elevating mechanisms began to appear and there were also developments in the type of shot, which incidentally was now iron instead of stone. Freysleben, the keeper of the Imperial arsenal, records the major types of cannon which the Emperor had constructed:

1. The *Hauptbüchsen* or heavy siege-guns were nothing more than huge gun barrels mounted at an angle on wooden supports with numerous rows of shoring behind the barrel to take the shock from the recoil. Often such cannon were so cumbersome that they took days to set up



Hungarian Ordinance. In 1532, when Charles V marched against the Turks, who were besieging Vienna, at the head of a huge army numbering 90,000 foot and 30,000 horse, he devised a new battle formation which would resist any Turkish assault. Jovius describes this formation as having a front 1,000 paces long. It consisted of three units of pikemen each 24,000 men strong (a, b, & c). These were suitably spaced apart to allow two masses of cavalry, each containing 10,000 horse (A & B), to take up position. Surrounding this enormous formation was a five man deep 'hedge' of arquebusiers spaced 30 yards from the pike and the horse. There were two gaps in this 'hedge' to allow the horse to charge through at the enemy. Outside this bloc the artillery was spaced at suitable intervals and the whole formation was flanked by two wings of Hungarian horse—(D & C). Known as the Hungarian Ordinance, this square was far from cumbersome and the Turks were eventually repulsed by effective charges of the Imperial horse and foot.

(From Rüstow, 'Geschichte der Infanterie' 1884)



First used as a tactical ploy in the Hussite Wars, the 'wagon fort' only proved really effective if the army was accompanied by a considerable artillery train. To add strength and fire power to the outward 'walls', large arquebuses were often

loaded on to wagons with sliding doors. The commander's tent was invariably found in the centre of the camp and each standard stood at the head of every group of tents or shelters belonging to the *Fähnlein*. (Amman, Courtesy of the British Museum)

- and hours to load. As a result a protective shield pivoted on a frame would be placed in front of the cannon and only raised on firing. The greatest example of such a monster was 'Mad Meg of Ghent'. Her barrel was eighteen feet long, had a 33 inch bore and a weight of fifteen tons and required a span of 30 horses to pull it.
2. The heavy artillery, comprising the *Scharfmetze*, *Nachtigall*, the long and short *Kartaune* (cannon royale) and the *Rothbüchse*, were longer pieces and had a smaller calibre than the *Hauptbüchsen*. As a rule the barrels had a length five to eight and a half times their calibre, and a reinforcement above the firing chamber.
3. The more mobile medium artillery was composed largely of *Schlangen*—culverins—both long and short, and *Basilisks*. The length of the

- barrel was usually twenty to forty times its width.
4. Maximilian also ordered the construction of siege mortars, organ guns and grape guns, the details of which are for the most part unknown because artillery makers of the day were pledged to secrecy in case the enemy should equip himself with similar weapons.

Concerning the colour schemes of the artillery, the carriage was invariably painted black and the metal fittings red. The wheels were left in natural colours. A wooden box was often placed over the firing chamber to keep it dry during transport and a small flag or pennant denoting the colours of the regiment was attached to the trail leg, usually on the left hand side. Because of the extraordinary size of some cannon, notably the siege pieces, a considerably large train was required. Fronsberger (1566) estimates that a train of 130 artillery pieces

including 100 field guns needed the following complement:

- 2,675 Horses
- 891 Carters
- 5 *Geshirmeister* (Officers in charge of the transport of the pieces).
- 124 Master gunners (*Büchsenmeister*).
- 63 Ammunition carriers.
- 4 *Fähnlein* sappers (often taken from the train, i.e. women and children).
- 200 *Schneller* (loaders), usually artisans.

Apart from this a further 100 wagons were required for ammunition and equipment, with an additional 400 horses and 150 men. If one could keep running costs down to a quarter of a guilder per man and horse one still had to scrape together some 42,839 guilders a month to prevent a mutiny!

Added to this came the costs for the actual construction of the cannon. Fronsberger gives an example of such a bill:

NACHTIGALL

60 hundredweight of metal including wage for the caster	. . . 1,080 fl
The cradle inclusive of wood, metal attachments and wage for the construction	80 fl
The carriage	150 fl
The limber	24 fl
The limber spike	5 fl
Chains	5 fl
Two sets of wheels for the limber and the carriage	10 fl
Ladle, sponge, matchlock, etc	2 fl
	1,356 fl

Because of the enormous running costs the artillery always had first preference when it came to plundering besieged cities. The *Oberster Zeugmeister* (Master General of the Ordnance), who had the same rank as a field marshal, had the sole right to all the artillery and ammunition that was still intact and was also allowed to appropriate any remaining arms and armour. He was, however, obliged to hand over one third of the booty to the *Kriegsherr*. The master gunners were entitled to all the powder and shot. It was customary to seize the church bells since they provided a valuable source of metal for



A scene taken from Maximilian's biography 'der Weiss Kunig' depicting the battle of Utrecht. The main battle standards displayed are the 'Haingemahl', incorporating the Cross of St Andrew, and the normal battle flag bearing a white cross on a red background.

(Courtesy of the British Museum)

gun barrels. The *Schanzmeister* or engineers who held the equivalent rank of a captain were in command of the sappers or *Schanzbauer*, whose task it was to strip the houses of wood for future earthworks. The remaining important offices belonged to the *Geschirmeister* responsible for transporting the artillery, and the *Zeugwart* who commanded the train and the arsenal.

The artillerymen, being regarded as a special breed of Landsknechts, were paid accordingly. The fully skilled master gunner usually received between eight and sixteen guilders; his services were, however, only demanded when a battle was imminent. Even the *Schneller*—the loaders—were paid six guilders per month (two more than the normal Landsknechts). Fronsberger writes that the artillerymen were rewarded with both extra pay and privileges because they had to keep their positions during the battle and consequently were not allowed to take part in the ensuing plunder. Such privileges included immunity from the *Provost*, the cannon as a place of asylum for fugitives from justice, and the freedom of gunners' wives to form their own train. Due to their immobility on the battlefield artillerymen were normally clad in

greens and browns, otherwise they would have been obvious targets for enemy sharpshooters. The artillerymen were subject to their own Articles and

normally came under the jurisdiction of the master general of the ordnance.

Table of Ordnance under Maximilian

Type	Weight (tons)	Shot (kg.)	Wagons	Horses	Artillerymen
<i>Scharfmetze</i>	5	50	32	163	48
<i>Basilicus</i>	3 $\frac{3}{4}$	35	17	119	30
<i>Nachtigall</i>	3	25	13	88	26
<i>Singerin</i>	2	10	7	41	12
<i>Large Kartaune</i>	1 $\frac{1}{2}$	8	6	27	8
<i>Small Kartaune</i>	1 $\frac{1}{4}$	5	2	16	5
<i>Rothschlange</i>	2 $\frac{1}{2}$			21	
<i>Demi Rothschlange</i>	1	3·5	2	13	
<i>Sau (Bauer, Ochse)</i>	1	10	2	17	
<i>Falkaune</i>	1 $\frac{1}{4}$	2·5		5	
<i>Falkonet</i>	$\frac{3}{4}$	1		3	
<i>Scharffettinle</i>	1 $\frac{1}{2}$	$\frac{1}{4}$		1	

Hauptbüchsen, Scharfmetzen, Basilisks, Singerinnen and Kartaunen were the larger siege pieces, the remaining types made up the field artillery. There seems to have been a rationalisation of the artillery under Charles V:

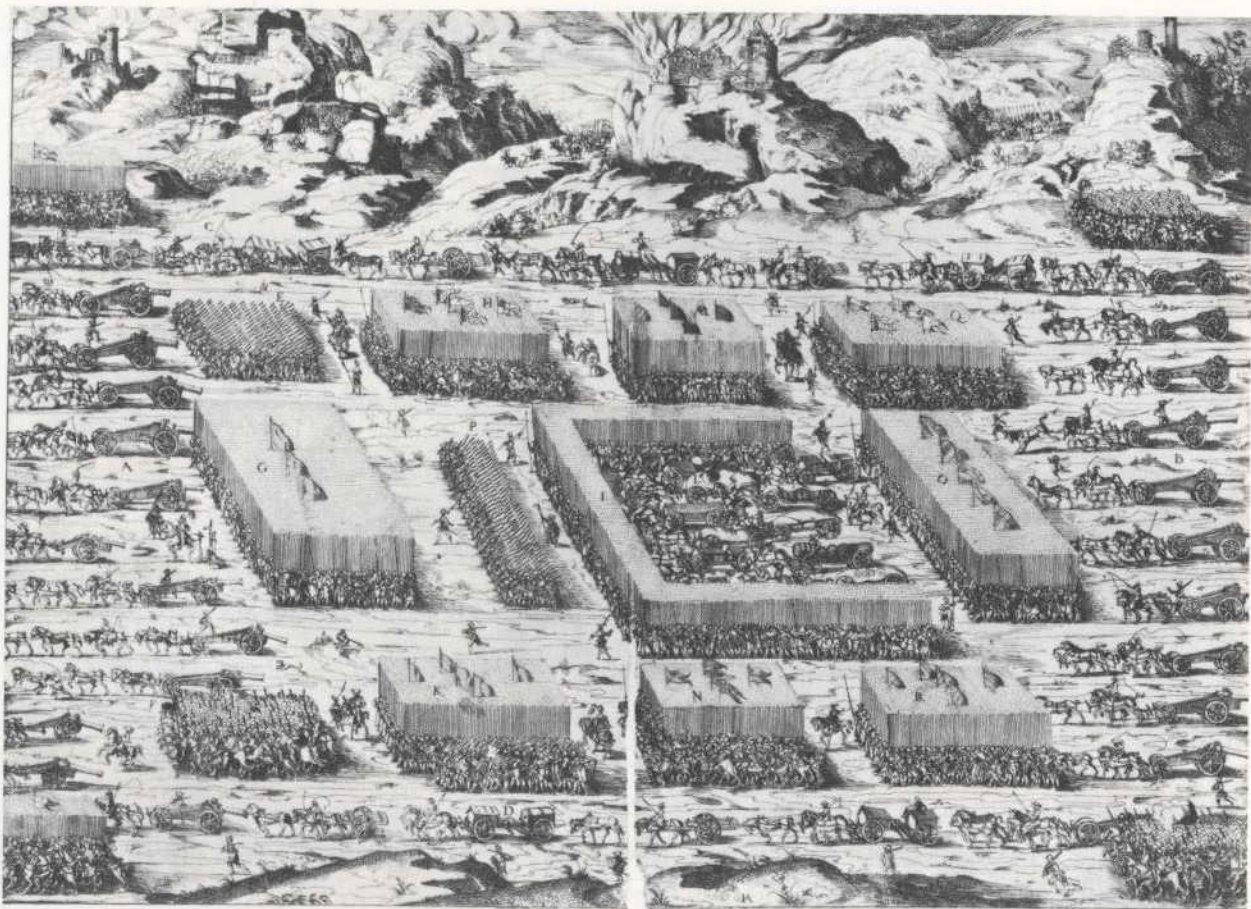
Table of Ordnance under Charles V

Type	Weight/Shot (kg.)	Weight/Barrel (kg.)	Calibre (cm.)	Length of Barrel (metres)
Cannon Royale	18·7	2,900	18	3·5
Medium Piece	11·2	2,300	15	3·4
Culverin	5·6	1,380	12	3·9
Demi Culverin	2·8	1,230	9·1	3·5
Saker	3·0	1,235	10	2·9
Falconet	1·4	795	7	2·8
Mortar	46·7	2,600	35·5	1·5

The Campaigns

Upon the death of Charles the Bold of Burgundy on the battlefield of Nancy, the French King, Louis XI, laid claim to the Burgundian legacy, which included the Netherlands. Maximilian, by virtue of

his marriage in the same year to Mary, the daughter of the Duke of Burgundy, regarded these territories as his rightful inheritance. At the ensuing Battle of Guingate in 1479 Maximilian's foot registered their first success in defeating Louis. In 1493 when Maximilian became Holy Roman Emperor, this somewhat personal conflict between the French court and himself over Burgundy was



The army on the march normally adopted a formation which would be easily adaptable should it suddenly come under attack. Thus the musketeers were placed on the flanks for protection, alongside the horse and the artillery at the front

and rear. The ammunition and provisions were protected by a screen of pike in the centre. It is interesting to see the method of transport employed for the huge arquebuses in the immediate foreground. (*Anman, Courtesy of the British Museum*)

now raised to an international level, thus destroying the hundred-years' peace that had existed between Germany and France.

Although he had secured the Netherlands and Austria, Maximilian soon found himself threatened in the southern reaches of his Empire. In 1494 Charles VIII, the successor to Louis XI, crossed the Alps and invaded Italy with the intention of conquering the Kingdom of Naples to which France had a century-old claim. Facing no resistance whatsoever, Charles VIII entered Naples in May 1495 with Maximilian standing helplessly in the wings. Yet this bold move by the French set loose a counterreaction throughout Europe. When Charles finally reached Naples he found that a great coalition had been formed behind his back. The League of Venice, concluded in March 1495, had brought Spain, the Pope,

Milan, Venice, and the Holy Roman Emperor together in a military alliance against France.

Maximilian immediately despatched a force of several thousand Landsknechts to halt the retreat of the French over the Alps, but they could not prevent the withdrawal at Fornuovo. The Emperor's plan was for the League to launch a concentric attack on France with the aim of splitting the French territory into pieces. The plan was never realised. The League, which had been concluded on a 25 year basis, began to crumble as signatory after signatory abandoned the agreement when France withdrew from their territory. There were, however, two important developments in the wake of this. Firstly, Maximilian struck an everlasting alliance with Spain through the marriages of his daughter Margarete to Don Juan, the heir to the Spanish throne, and his son, the Archduke Philip,

to Donna Juana, the daughter of Ferdinand and Isabella. Secondly, he summoned the princes of Germany to the Imperial Diet at Worms in April 1495 in which he laid out plans for (amongst other things) a general war levy. The scheme remained on paper, Maximilian having to rely on the rich Venetian and Milanese families for financing his campaigns.

In 1499 hostilities were resumed when a French army crossed the Alps again in a second attempt to take Milan. The new King of France, Louis XII, succeeded in holding the city until the spring of 1500, the Duke of Milan, Lodovico Sforza, having been betrayed by his own Swiss mercenaries. The next prize was Naples and an alliance with Spain soon made its capture a formality. However the allies then began to quarrel and at the battle of Garigliano (October 1503) the Spanish sword-and-buckler troops won a resounding victory over the French, who were forced to withdraw from the Kingdom of Naples.

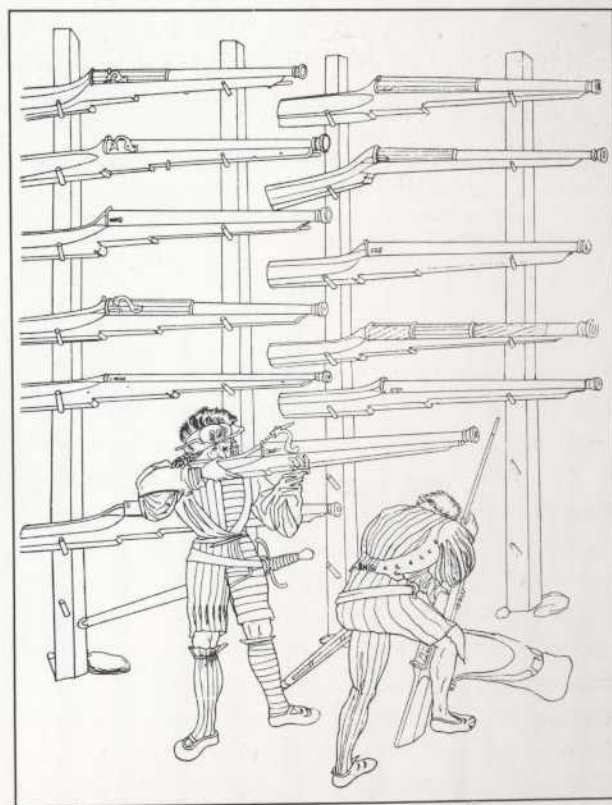
Maximilian now called for a new Imperial Diet which met in Augsburg. The invasion of Milan was the pretext the Emperor had needed to convince his princes of the imminence of the French threat. Yet he was still unable to stir his nobility into providing him with the financial support necessary to mount a campaign against France. Maximilian was so desperate that he allowed the formation of a *Reichsregiment*—a council of the leading princes who were prepared to buy their share in the running of the Empire.

In the following years Maximilian transformed his strategy and adopted a more peaceful policy towards France, hoping to preserve his prize so that he might inherit her at a later date. In 1504 and 1505 respectively, the Treaties of Blois and Hagenau were signed, in which the daughter of the French king was betrothed to the Archduke Charles. The accord lasted only a year. In 1506 Louis proclaimed that his daughter Claudia would marry the crown prince, Francis of Angoulême. This was felt as a great political blow against Maximilian. However, due to domestic conflict he was obliged to postpone any plans for revenge.

After the death of the Duke of Landshut, George 'the Rich', in 1504, the Wittelsbach family began to quarrel over the legacy. The Palatinate Ruprecht allied with Vladislav, King of Bohemia, while

Albrecht IV of Bavaria-Munich turned to his brother-in-law Maximilian and the Swabian Alliance for assistance. The Swabian Alliance was a political and military organisation which had been formed in 1488 between the Emperor and the leading princes, among them Duke Sigmund of Tirol and Eberhard, Duke of Württemberg with the main aim of preserving peace in Bavaria.

The opposing forces met at the village of Wenzensbach near Regensburg. This was the first major test for Georg von Frundsberg (later to be nicknamed the 'father of the Landsknechts') in command of a regiment from Memmingen. Maximilian commanded the army of his brother-in-law, Albrecht, which outnumbered the enemy quite considerably. Ruprecht's men had taken up a defensive position on a hillock behind a wall of shields. The battle was decided, however, by the devious tactics of Maximilian's Landsknechts who advanced to meet Ruprecht's horse. The latter



Early woodcuts suggest that the arquebus was used without the aid of a rest. They were rather primitive and cumbersome affairs, inaccurate and with a range of approximately 400 yards. The main development towards the musket took place in the 1520s when the rest was introduced, as handguns became longer and had a wider calibre.

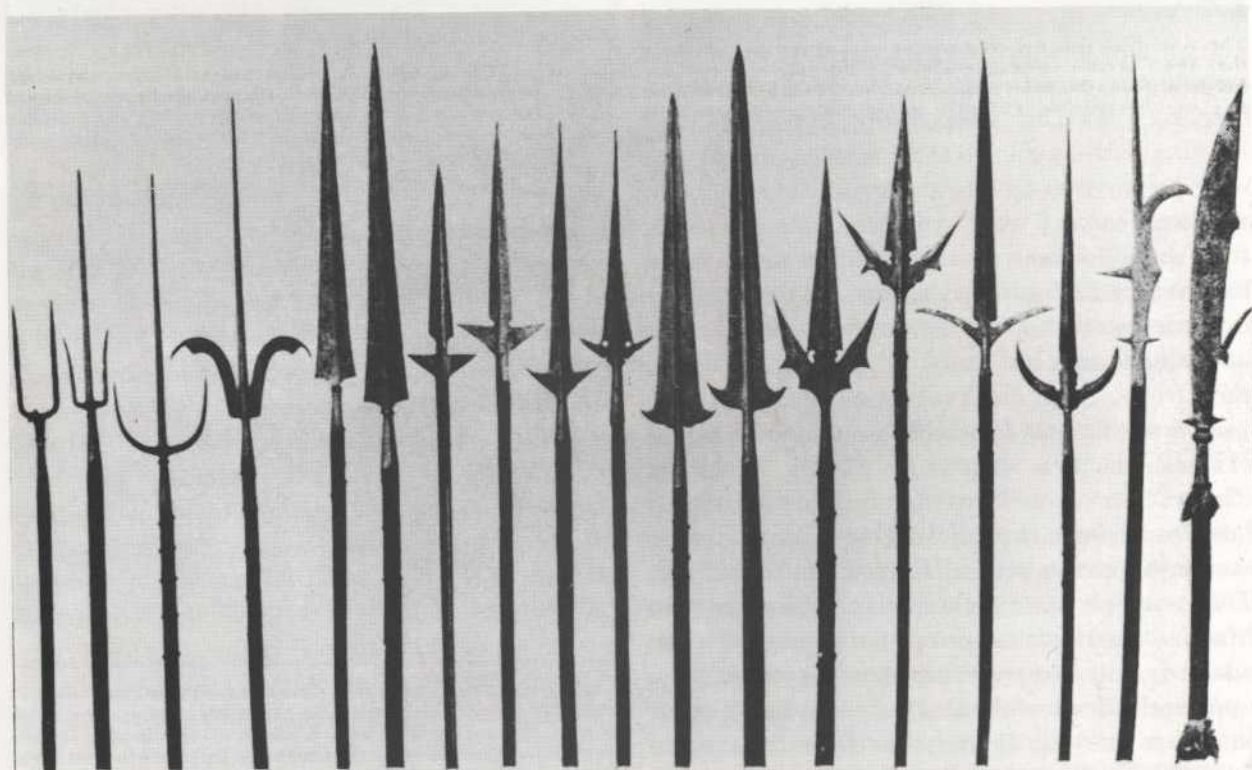
(From: 'Zeugbuch Maximilians I., Bayerische Staatsbibliothek, Munich)

charged the Imperial 'forlorn hope' only to be lured into a thick wall of pike behind them. Some 1,600 men were slaughtered. The victory at Regensburg and subsequent successful siege of the fortress of Kufstein did much to enhance the military reputation of the Emperor and at the Imperial Diet at Constance which was held in 1505 all his demands, particularly for his military budget, were met. It was at this Diet that an organised system of payment was established for the Landsknechts.

In 1508 Maximilian drew up plans to renew imperial control in Italy. At the Imperial Diet at Constance he had demanded financial support for his Rome campaign, promising knighthoods for those princes who would follow. His desired army of 20,000 Landsknechts was never realised. Of the 12,000 men that were placed at his disposal only a fraction eventually took the field. It was obvious that Maximilian was intent on war with Venice and not the French. The Venetian Republic barred the way to Rome. This barrier proved to be too strong, for in February that year the Emperor's army ground to a halt at Trient. Without adequate military support Maximilian was obliged to sign a

three year truce with the Venetian Republic.

The Pope, who had meanwhile become fearful of the growing power of Venice, now sought a protective alliance with Maximilian. The resulting League of Cambrai formed in 1508 included Spain and France. In the following year Maximilian commissioned Frundsberg to march down the River Etsch via Trient and recruit a regiment for the Alliance which was now preparing to attack the Venetian positions. Realising that their strength lay in their diplomatic rather than their military cunning the Venetians tried to manoeuvre each member of the League into a position whereby quarrel and ultimate dissolution would become inevitable. Thus Pope Julius II and the Spanish King Ferdinand the Catholic were persuaded that their interests did not lie in the Habsburg camp. The League was dissolved, Germany finding itself on the same front as France. Frundsberg, who had meanwhile held the fortress city of Verona, was relieved and joined the French force commanded by Alessandro Trivulzio. In May 1511 they succeeded in defeating the Papal-Venetian forces between Imola and Bologna and then pushed



Staff weapons of the fifteenth and sixteenth centuries: 1) Military fork; 2) Ahlforsch; 3) Ranseur or Runka; 4) Corseque; 5 & 6) Italian langues de boeuf; 7-12) Partisans; 13-15) Corseques; 16) Runka; 17) Italian Bill; 18) Glaive.



The basic difference between Swiss and German pike drill was that the German Landsknechts held the pike at shoulder height whereas the Swiss preferred to hold their weapons at an angle or above the head. This photograph shows the essential

positions of the drill, many of which were adopted by the Germans. The armour shown is typical Maximilian style, characterised by the numerous flutings on the breast plate and the cuisses. (Courtesy of the Swiss National Museum, Zürich)

north-east, thus forcing the Venetians to withdraw from their fortresses in the Friuli district. It is said that with only 1,800 men Frundsberg succeeded in defeating 9,000 Venetians and taking the fortresses of Scala, Covelò and the 'impregnable' Cadore in the Dolomites. The strategic importance of this victory was that it secured the main crossing points in north-eastern Italy for future Imperial armies. This was to be the only gain from Frundsberg's victory, for new political developments had upset the international scene once again.

In 1511 the Pope formed a Holy League with Spain and Venice and Henry VIII of England against France. Maximilian, seeing this as a great opportunity to seal the fate of France and at the same time secure Italy once and for all, joined the League.

It was at this stage that a new power began to make itself felt—Switzerland. The enmity between the Swiss Confederation and Germany had arisen largely due to the desire on the part of Maximilian to bring the Swiss under his political wing. The result had been a succession of border clashes—the 'Swabian Wars'—in 1499 in which a three pronged Imperial assault from Alsace, Constance and the Tyrol had failed miserably at the Battle of Dornach on 22 July. From that day onwards the Swiss Confederation became an independent political entity. This break with Germany had strengthened Swiss sympathy for the French. Yet surprisingly the finest troops in Europe had now entered the service of Pope Julius II, thus helping to strengthen the Holy League which was now intent on driving France out of Italy.

The Battle of Ravenna

At Ravenna in 1512 the opportunity arose for the new allies to show their strength. The Papal-Spanish army under the command of Raimund Cardona made a stand three miles from the city, which the French commander Gaston de Foix had deliberately besieged in an effort to draw the army of the League into a confrontation with his own force, which numbered 22,000 and included a contingent of 5,000 German Landsknechts. Drawing up his forces barely 30 yards away from the banks of the River Ronco, Cardona ordered earthworks to be erected across his front. With his horse on both flanks and his infantry arranged in echelon formation similar to the Swiss tactic, the Spanish commander ordered wagons to be drawn up in front of the forward infantry square. On these wagons were placed large arquebuses, while the heavy artillery was positioned in front of the left wing of cavalry.

As the French advanced towards Cardona's front a heavy cannonade began. De Foix, noticing that the enemy had placed most of his strength on the left flank, ordered his artillery to be drawn up and for two hours bombarded Cardona's weak right flank. The effort proved successful, for he brought the enemy out of a strong defensive position on to the field. Colonna, the commander of the Italian horse, threw his troops against the French right wing. Outnumbered two to one the French were forced back, but the advance of the League was soon checked by a counter-charge from the French lancers in the rearguard and, thrown into confusion, the League was put to rout.

In the centre the Spanish and Italian infantry began their advance towards the German Landsknechts who stood in typical squared formation. At this point the latter, breaking into a great charge, swooped into the ranks of the Spanish and precipitated bitter hand-to-hand fighting. Seeing that the Spanish were gaining the upper hand Gaston ordered his horse to attack the Spanish foot, causing the latter to take up a defensive instead of an offensive formation. Surrounded on all sides, the Spaniards tried to keep together and reach the banks of the Ronco where they could make a retreat between the earthworks and the river. Furious that the Spaniards were retreating, Gaston ordered a final charge which cost the French



Medium artillery pieces, probably Kartaunen. In general the rate of firing was slow. This was in part due to the necessity to cool and clean the bore each time to prevent premature explosions when reloading; vinegar was used to cool the barrels.

commander his life. Ravenna was one of the bloodiest battles of that era. Over 10,000 bodies lay strewn on the battlefield with double losses for the League. According to Machiavelli the French victory was gained solely due to the stubborn resistance and fierce close-quarter fighting of the German Landsknechts.

Several days after Ravenna Maximilian ordered all the German Landsknechts in the pay of the French to return home. All except 800 obeyed their Emperor; and these 800 were to form the nucleus of the infamous 'Black Legion'. In the following year the Holy League broke up on the death of the Pope Julius II. The Venetian Republic, seeing that its real enemies were the Germans and the Spanish, struck an alliance with France; and the Pope, a Medici, had other interests.

Creazzo and Novara

In the summer of 1513 a new army 7,000 strong commanded by Frundsberg and Ulrich von Hutten crossed the Alps and was joined by the veterans of Ravenna. Uncertain of the political situation, which was in a state of perpetual flux, the Imperial army marched on Padua where a large Venetian army was reported to be assembling. Reinforced with Spanish and Italian contingents, Frundsberg, after several minor skirmishes with local units, turned north-west towards Creazzo where the commander of the Venetian forces, d'Alviano, had confidently invited the gentry of Padua to observe the resounding victory which he was about to



A. HOFFMANN. MÜNCHEN.

The culverin was often characterised by the short barrel and the long trail piece. The barrel was elevated by means of a

simple mechanism at the rear of the trail piece. The length of the barrel was normally 20 to 40 times its width. (Deiss)

register against the Imperial forces. Yet Frundsberg and his *Locotenent* Jakob von Landau, setting their men up in squared formation, converted what seemed a certain victory for the Venetians into a humiliating defeat. Some 8,000 mercenaries of the Republic met their death against only minor losses for Frundsberg's men.

Meanwhile the French had been forced to withdraw from Italian soil after suffering defeat at the hands of the Swiss at the Battle of Novara, June 1513. The French army, encamped some 28 miles west of Milan were taken by surprise by a 13,000-strong Swiss force. In the deadly battle which ensued, the German Landsknechts of the Black Legion and the French Gascon foot were thrown back and hacked to pieces by the Swiss halberdiers. Out of 10,000 men the French suffered 50 per cent losses. Those Landsknechts in the pay of the French who surrendered were executed without mercy by the Swiss. Novara was the highwatermark of Swiss military achievement.

By the end of 1514 most of north-eastern Italy was controlled by Imperial troops until in 1515 the curtain began to rise on a new act in the Italian tragedy.

Marignano

Maximilian, who had juggled about with France and the Venetian Republic in an attempt to secure

his imperial claim on Italy, was faced with a new problem. The young and impetuous successor to the French throne, Francis I, was intent on recovering the lost Dukedom of Milan. In August 1515 a French army, 30,000 strong with a train of 72 guns crossed the Alps and surprised their enemies in the rear, pitching camp at Marignano ten miles south-east of Milan.

Francis had taken the trouble to recruit 9,000 German Landsknechts under the command of the Duke of Gueldres, having little regard for his own Gascon infantry. It is said that many of the Landsknechts belonged to the infamous Black Bands, so-called because of the black uniform and armour which they wore. The Swiss, 25,000 strong, had withdrawn to Milan where they received a considerable bribe from Francis to turn against their hosts. However, careful persuasion by their leaders made them realise that the French meant to destroy them.

The opposing forces met at Marignano on September 13. While the Swiss hesitated over the bribe from Francis, the French king took up a defensive position, making effective use of the ditches which broke up the terrain in front of his ranks. Having ordered some of these to be built up into earthworks Francis placed his artillery, arquebusiers and Gascon crossbowmen in the front line. Behind this came the German Landsknechts in



Reißwagen des 16. Jahrhunderts,
in Brüssel, mit Schrotladung, Rückwärtiger mit Räder.

Here we see a further example of a culverin with an ornate twisted barrel and wheel struts to add stability to the whole carriage during transport.

(Deiss: 'Das deutsche Soldatenbuch')

squared formation, flanked by the French horse.

Somewhat confused but anxious to get at their treacherous enemy, the Swiss had meanwhile left Milan and drawn themselves up in typical echelon formation with a forlorn hope well ahead of the main *Gewalthut*. Pressing forward, the 'forlorn hope' reached a small farmhouse where, under cover from enemy fire, the Swiss were able to set up the four culverins which they had taken from the Milan arsenal. Francis immediately ordered a troop of horse to approach the farmhouse with the intention of setting it on fire. This they succeeded in doing, rendering the cannon useless.

Pressing on, the 'forlorn hope' crossed the ditches, wading through water in some places, and traversed the walls built by the French engineers. Completely overpowering the Gascon archers and arquebusiers the Swiss van, now closely followed by the main body of foot, reached the last ditch protecting the French position and crashed into the German Landsknechts. In the ensuing *mélée* the Swiss captured several guns and for a while the two forces were locked together 'at push of pike'. Fortunately the Germans rallied and at their second assault the Swiss were checked by a flanking charge from the French horse and salvos from the French artillery, which ripped holes in their ranks. By midnight the battle had reached stalemate. It is said that both Swiss and Germans slept together on the battlefield until fighting was resumed the following morning. Finally, after 28 hours of

fighting, the Swiss withdrew from the field with only 3,000 men left. The French were thus able to recover Milan, while Maximilian could only offer token opposition.

When in 1516 the Emperor organised a campaign from the Tyrol against Venice and Milan, his military bankruptcy was exposed. One half of his troops were Swiss mercenaries in the pay of the English, many of whose comrades were still in the pay of the French (the Confederation had been divided). Moreover Maximilian was not even commander of the whole army. In spite of this his army had managed to reach the gates of Milan, yet when he hesitated over the assault of the city in favour of a more strategic manoeuvre, his troops grew impatient and demanded their *Sturmsold*. When this money was not forthcoming they mutinied, some defecting, some returning home, leaving the Emperor with no choice but to abandon his campaign and make a hasty retreat to the Tyrol. This marked the end of Maximilian's military engagements. Forced to adopt a more peaceful policy towards France, he concluded the Peace of Brussels with France in December 1516, by which he delivered up his last prize of the Venetian



The *Saw* or *Sow* was a light field piece with a greater trajectory than the culverins. The equipment required to maintain the artillery in good order was quite considerable: sickles and scythes for clearing the undergrowth, shovels and scoops for the earthworks, balances and weights for measuring out the charges of gunpowder, leather buckets for carrying the powder from the dump to the guns, ladles for charging them, axle grease for the wheels, plus barrels of nails, soap, candles, lanterns and the necessary tools.



If a Landsknecht had committed a crime and succeeded in evading the Provost by reaching one of the guns in the artillery park, he automatically had the right of sanctuary for three days. As long as the fugitive remained within a radius of 24

paces from the gun the Provost could not arrest him. If this law was broken then the master-general of the ordnance had the right to withdraw his artillery train from the army. (Deiss: 'Das deutsche Soldatenbuch')

Wars—the City of Verona—to Francis. In the same year Charles, Duke of Burgundy, the grandson of Maximilian, inherited the Kingdom of Spain from Ferdinand. This suddenly posed a military threat not only for France but for the Pope too, for the whole of southern Italy belonged to Spain. Thus when Maximilian died in 1519 Pope Leo X allied with Francis I, seeing this as the only move capable of countering a possible pincer movement which any future German emperor could mount.

The election of Charles as Holy Roman Emperor was no clear cut matter. Francis I, with considerable financial resources at his disposal, set about wooing the German princes who were responsible for the election. His challenge was shortlived. Charles succeeded in securing the necessary financial support from the rich Fugger and Welser families of Augsburg, thus enabling him to influence several of the more important princes. At the same time Maximilian's grandson arranged for an army to be despatched to Frankfurt (the venue for the election). This show of force commanded by Frundsberg and Franz von Sickingen was a sufficient deterrent for Francis and his prospective voters amongst the German Electors. This confrontation meant a revival of the Habsburg-Valois struggle which was to be intensified by Charles's

pronounced aim of a '*Monarchia Universalis*' which posed a great threat to France.

After several minor engagements in northern Spain (Villalar, 1521) and the Netherlands (Bouchain) hostilities resumed in northern Italy. Francis had renewed his alliance with the Venetian Republic and Genoa and had recruited an army of 16,000 Swiss mercenaries under the command of Albrecht von Stein and his *Locotenent* Arnold von Winkelried. The French forces under the supreme command of Lautrec had occupied most of the kingdom of Lombardy.

Frundsberg, commander of the Imperial forces, was approached by several Italian princes to raise an army and halt the French advance. With the help of hundreds of peasants he cleared a way for his Landsknechts through the snowed-up Bergamaskian Alps and joined the Imperial-Papal forces under the command of Prospero Colonna at Milan in February 1522. The French Army, which had meanwhile been forced back east of Milan, decided to make a stand at La Bicocca in April 1522. This was a decisive battle not for any strategic reasons but because for the first time Swiss and German mercenaries faced each other in considerable numbers.



Map of the North Italian and Tyrolean theatres of war during the first quarter of the sixteenth century.



1 Imperial Herald, 1525
2 Georg von Frundsberg
3 Götz von Berlichingen (1481-1562)



The Emperor Maximilian I

- 1 Captain, 1520
2 Schultheiss, c.1520
3 Standard Bearer, 1505



- 1 Arquebusier, 1520
- 2 Gemeinweibel, Willibald Pirckheimer Regiment, 1529
- 3 Pikeman, c.1520



Locotenent, 1545





1 Drummer, 1525
2 Landsknecht, c.1553
3 Ensign of Nuremberg, 1550



1 Doppelsöldner of the Black Legion, 1520
2 Sutleress
3 Provost



1. Reichssturmfähne (Imperial battle flag); 2. Standard of Friedrich of Bavaria, 1532; 3. Standard of Charles V; 4. Standard of Maximilian incorporating the Burgundian cross of St. Andrew; 5. Standard of Georg von Frundsberg; 6. Cross of St. Andrew; 7. Standard of the Fugger family; 8. Standard of Memmingen; 9. Standard of the Georgschild Rittergesellschaft (League of Swabian Knights); 10. Reichsrennfähne.



This painting by Titian depicts Charles V at the Battle of Mühlberg, 1547, wearing a suit of half-armor made by his personal armourer Desiderius Helmschmied. It is of blue steel decorated all over with bands and curved devices etched in gold. He is wearing the red or pink commander's sash which was the field sign for the Catholics at Mühlberg.
(Prado, Madrid)

France. This was a great diplomatic move, for by creating an ally in southern France, a front from Italy to Spain could be established against Francis. There was only one drawback and that was the successful invasion of Provence. Joining the Imperial army in Northern Italy, the Duke of Bourbon set off on his campaign in the South of France. After six weeks of inconclusive campaigning he was forced to make a hasty withdrawal. Francis, instead of pursuing Bourbon, had crossed the Alps in the meantime with an army of 40,000 men. Suddenly the tables had turned. By October 1524 Francis was at the gates of Milan with only a handful of fortified cities remaining under Imperial control. On hearing the news that Milan had fallen, the army of German Landsknechts under the command of Kaspar von Frundsberg, the son of the famous commander, and Graf Eitel Fritz von Hohenzollern, which had been marching on Milan, was forced to return to Pavia where they joined the old Spanish general Don Antonio de Leyva. On the same day that the French entered Milan the first assault began on the southern walls of the city of Pavia.

The situation was becoming quite serious for Charles. Pope Clement VII had turned his back on the Empire and entered into an alliance with France and the Venetian Republic, allowing a French army under the command of the Duke of Albany through the Papal State to attack Naples. Charles, in response to the call for help from Leyva, had to throw new troops into the Italian arena.

Bourbon, after a disastrous retreat from Provence, entered Germany and began recruiting a new army in January 1525. Together with Lannoy he approached the ailing Georg von Frundsberg, who obliged and promptly raised eleven *Fähnlein*. At Lodi, north-east of Pavia, he joined Marx Sittich von Ems, who had brought a further eighteen companies with him. Along with the Spanish troops of Pescara, a considerable army numbering some 17,000 infantry and 1,000 horse was ready to relieve the garrison at Pavia.

Meanwhile attempts by the French to divert the River Tisino had proved a failure and a three-pronged assault on the city had been equally unsuccessful. Realising that the Imperial relief force would soon be arriving, Francis had moved his headquarters to the park of Mirabello, securing a strong position between Pavia and the oncoming Imperialist army. Frundsberg, ordering pontoons to be built across the Po, drew up his forces facing the French artillery. There followed three weeks of trench warfare and intermittent sorties. Frundsberg's men succeeded in making contact with Leyva in the city, supplying him with ammunition and provisions and co-ordinating plans for the oncoming battle.

Drenched by rain and decimated by sickness, the French soon began to lose morale. On 20 February, 6,000 French troops insisted on returning home. At the same time 2,000 Germans deserted the French camp, thus reducing Francis's army to less than 20,000 men. Of this total 9,000 were Italian, 5,000 Swiss, 4,500 Germans and 1,300 Gendarmerie. His generals advised Francis to withdraw, while Leyva, in a similarly desperate situation, warned Lannoy that he could no longer hold the city. At this point Bourbon begged for an attack.

At midnight 23/24 February the Imperialist army, under cover of an artillery barrage and a noisy decoy created by three companies of Landsknechts remaining in the camp, moved north-

wards up the River Vernavola to a fordable stretch and proceeded to cross it, thus outflanking the French. Having crossed the ford they reached the wall of the park. Without drawing the attention of the enemy the Spanish engineers succeeded by daybreak in making a breach 50 yards wide. Frundsberg now formed a van of seven *Fähnlein*, ordering them to put on their white shirts over their armour (those who did not have shirts were ordered to use paper) so that they could easily recognise comrades in the darkness. By daybreak the Imperial forces had advanced in column on Mirabello, Lannoy and Bourbon commanding the horse in front, with the artillery and the main body of infantry under Pescara behind them. With three blasts from a cannon Frundsberg signalled to Leyva that it was time to attack.

The French, now having to reverse their front, were brought into confusion. Since most of his troops were guarding the lower banks of the Vernavola, Francis was forced to deploy the remainder (the more doubtful units of the Black Legion) to the right and the Swiss to the left. Leyva, seeing the time was right, now swept out of the city, thus cutting off Alençon, in command of the French forces on the western flank, from his king. Francis, ordering the attack, sent his horse against the breach in the park wall where several companies of Italians were persevering with the remainder of the artillery which was bogged down in the mud. The French had little trouble in forcing the Italians to withdraw to a near-by wood. On seeing this, Pescara ordered Lannoy to throw his horse against the French lines, but they were met with such a heavy fusillade from the French artillery that they too had to seek shelter, this time behind a group of farmhouses. Francis now took the offensive and ordered his horse to charge, with the Swiss and German foot to follow. The salvo which Galiot, the French military commander, had fired at the German horse was his first and last, for the French were now charging across his line of fire. In spite of this situation the French had rallied well and were attacking in good order. However, the infantry were too slow in following up the charge and were checked by the Imperialists. The German Landsknechts of the Black Band now found themselves facing their own kinsmen in the ranks of Frundsberg and Ems. In the violent mêlée which ensued

the mercenaries in the pay of the French were surrounded on three sides by the Imperial foot and hacked to pieces.

Meanwhile the Swiss, facing Pescara's arquebusiers positioned in the trees of the park, suffered grievously as swift volleys from 1,500 muskets began decimating their ranks. With his foot in rout Francis now threw his mounted Gendarmes into the fray in a last-ditch attempt to break the Imperial assault. However, with their lances useless amidst the trees in the park, they were gunned down at point-blank range by the now well-positioned arquebusiers. Francis was one of the victims. His horse shot from beneath him, he was only barely saved from a mob of vicious Spaniards by several of his entourage and the speedy



Francis I, 1494-1547, was King of France from 1515 until his death. Anxious to realise the Valois claims on Milan and Burgundy, he pursued an aggressive foreign policy which involved him in a series of wars with Charles V of Germany. By his victory at Marignano he won the reputation of the most powerful and glorious prince in Europe. In 1519 he was unsuccessful as candidate for the election of the Holy Roman Emperor. In 1522 Francis failed to acquire the support of Henry VIII at the Field of the Cloth of Gold, and suffered further set-backs at Milan in 1522 and with the defection of Charles Duke of Bourbon in 1523. In retaliation for Bourbon's assault on Marseilles Francis once more invaded Italy, but was defeated resoundingly at the Battle of Pavia in 1525. Before his death, Francis had mounted further campaigns against Charles aided by new allies—the Turks and the Protestant Princes of Germany.

(Painting by Clouet, Uffizi Museum; photo courtesy Scala)

intervention of Lannoy, who granted him safe conduct from the field of battle.

The battle had been equally disastrous for the French on the right flank. Kaspar von Frundsberg, leading the charge from the city against Alençon's troops, had succeeded in driving hundreds of the French into the Tisino where many drowned in their heavy armour.

In less than two hours 8,000 Frenchmen had fallen at the expense of only 700 Imperialists. The defeat of the French at Pavia left Italy at the mercy of Charles, and proved that the Spanish and the German Landsknechts were the best shock troops in Europe.

Francis, exiled to Spain, had to suffer the humiliation of complying with Charles's terms before he could return to his kingdom. Thus he pledged to renounce his claims on Burgundy, Italy

and Flanders. However, no sooner was he reinstated at his court than he declared the terms of peace invalid and set about establishing a new anti-Habsburg alliance. On 22 May 1526 in Cognac, Francis formed the Holy League with the Pope, Francesco Sforza of Milan, and the princes of the Venetian Republic and Florence.

Italian Campaigns 1526-29

Meanwhile Charles had been faced with internal problems. The German peasants had sought to vent their political frustration by means of revolt, but this had been speedily crushed by the Swabian Alliance. Furious at the defiance shown by the French court Charles approached Frundsberg once again. The forces of the League had already begun to consolidate their positions in Lombardy. With



Locotenant, or Lieutenant-Colonel.

(Woodcut by Hans Döring, 'Kriegsbuch of Graf Reinhard of Solms', Bayerische Staatsbibliothek, Munich)

RIGHT:

The ensign was always hand-picked from the ranks. He was continually accompanied by the drummer and fifer, and cut a

fine figure at the head of the regiment or Fähnlein. It was not uncommon to find the ensign in the thick of the fray defending his standard literally with tooth and nail. Jovius, the Italian historian, gives an account of a dead ensign found on the battlefield with both arms hacked to pieces and his standard clenched in his teeth.

an army of 12,000 Landsknechts, poorly equipped and without adequate financial resources, the Imperial commander succeeded in avoiding an engagement at Trient and reached Brescia by mid-November 1526. However, Frundsberg and Bourbon were divided and unable to join together. Medici, commanding the Papal forces, had planned to ambush the Imperial army under Frundsberg south of Mantua at the Po crossing by Borgoforte. Frundsberg rightly hesitated to cross, hoping to hear news of the conclusion of a peace treaty, but on seeing that the Papal Venetian army was about to take the offensive he ordered a small falconet to be brought up: loading it himself, he hit the commander of the enemy's forces, smashing Medici's leg to pieces with only his second shot. The Italians withdrew in confusion.

Although the Imperial troops were now able to cross the Po and enter Papal territory their strategic position was not strong, as provisions and finances were very low. What Frundsberg must have been fearing had already happened to Bourbon—his Spanish troops had mutinied and were now running riot in the Italian Countryside.

By the end of the year Bourbon had succeeded in assembling an army again and in February 1527, with some 20,000 men, he left Milan and joined Frundsberg near Piacenza. A march on Rome now seemed inevitable, for only by forcing Clement to recognise the Imperial claim to Italy could Charles succeed in splitting the League down the middle. At the same time the Imperial army was thirsting for plunder and to deny the Landsknechts such an opportunity would have been an open invitation to mutiny. On the march to Rome news came that the Pope had signed a peace treaty with Lannoy and had offered 60,000 ducats to appease the Landsknechts. Enraged at the offer of only two ducats per man, the Spanish and Italian contingents mutinied on Bourbon. The news soon spread to Frundsberg's camp, where his men demanded immediate payment on their *Monatssold*. In a great speech the veteran commander tried to placate his troops, who seemed to be on the verge of mutiny. His attempt was in vain, yet just when it seemed that total rebellion was inevitable, the situation was saved by an odd twist of fate. Frundsberg, exhausted by his extensive campaigning and now in ill health, collapsed in front of his men. Their reaction



Blockhouse at Antwerp: This woodcut taken from the 'Weiss Kunig' (courtesy of the British Museum) depicts a scene from one of Maximilian's early campaigns in the Low Countries. In 1484 when Maximilian was marching on Antwerp he was halted by a blockhouse which Charles VIII had erected to defend the city. Although outnumbered, Maximilian avoided the blockhouse and charged the enemy at his narrowest front to make effective use of his Landsknechts. After taking the blockhouse he ordered it to be razed and the occupants barbarously executed by hanging and the 'wheel'.

was one of immediate sympathy for their commander and all thoughts of mutiny soon disappeared.

Frundsberg was taken to Ferrara and Konrad von Boyneburg took over his command. Discipline, in spite of the incident in the German camp, was now virtually non-existent. It was only the thought of rich plunder which drove the Imperial army on towards Rome. By April, Bourbon and Boyneburg had reached Florence, and by decoy, passed an army of the League which stood in their way. By May they had reached Rome. Bourbon, who had been forced to leave his artillery behind and was without any siege equipment, asked the Pope for provisions for his men and free access to Naples. Clement, hoping for relief from the Duke of Urbino, refused. The Constable, now growing desperate, had to make a quick decision. The army of the League which he had cleverly by-passed was now in his rear and his own troops were begging for an assault.

On the morning of 6 May 1527 the first German

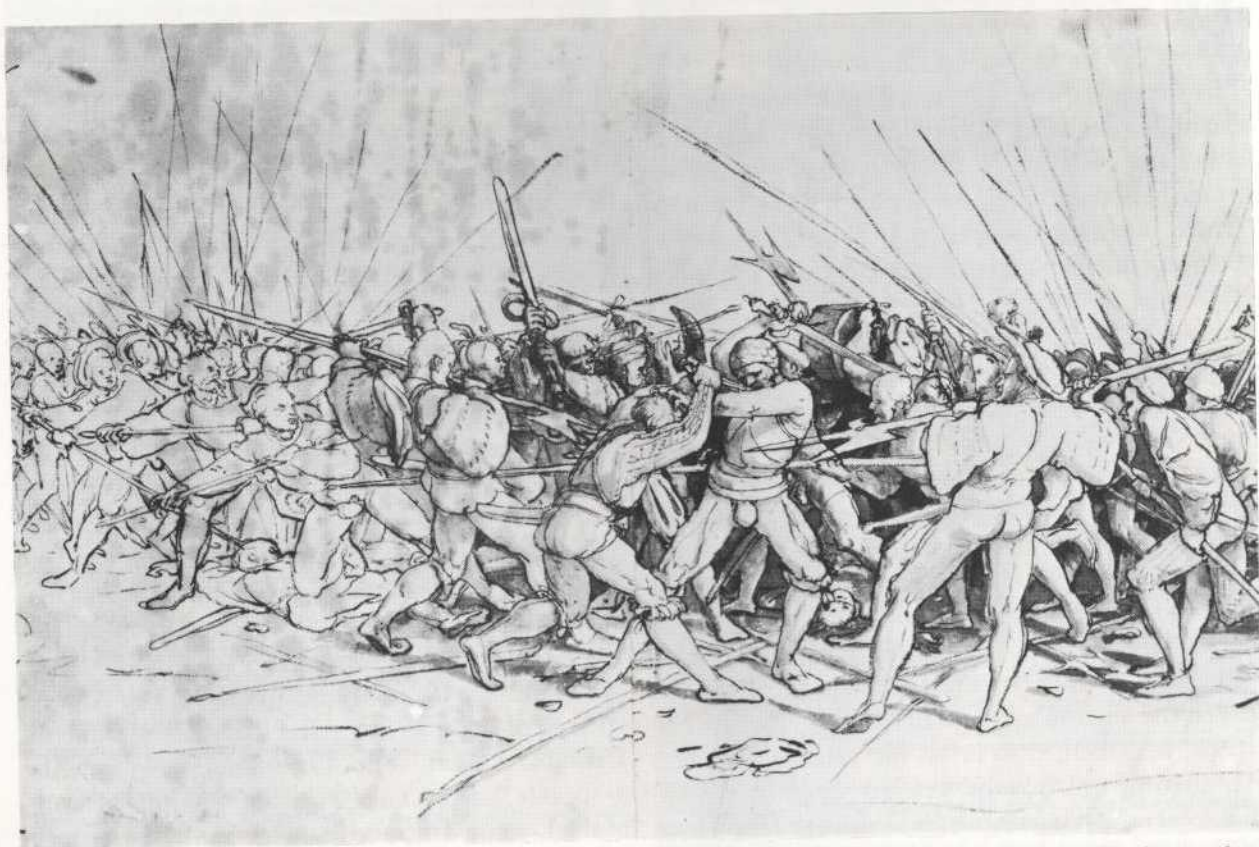
Landsknechts broke through the walls of Rome. Bourbon, who had insisted on leading the first assault, was killed climbing the city wall. As soon as the first cannons had been captured they were aimed at the fortress of San Angelo. The Pope followed by his cardinals only just managed to escape to the Castel San Angelo, while his Swiss bodyguard fought a fateful rearguard action in the Vatican. Within three hours the whole Vatican had been taken. Von Boyneburg made an attempt to restrain his troops from plunder, but predictably, it was in vain. Although they had assembled in squared formation, expecting an attack from Urbino's oncoming relief force, they soon dispersed on sight of their Spanish and Italian comrades who began a wild rampage through the city, looting and murdering. The 'Sacco di Roma' outraged the sentiment of the whole civilised world.

Charles, now with the whole Papal State in his power, was expected to declare himself 'The Supreme Head of the Christian Church'; but he refrained from doing so, seeing that he needed the

Pope to maintain his hold on Italy. Not until February 1528 did the last units of Landsknechts leave Rome. For the march on Naples a final muster-parade was arranged. Of the 12,000 men who had crossed the Alps with Frundsberg scarcely 5,000 remained, the ranks having been decimated by the plague which had meanwhile broken out in Rome.

The war in Italy did not end until the summer of 1529. At the Peace of Cambrai Francis renounced his claims on Italy for the second time at the Imperial expense of the Duchy of Burgundy. Charles had to promise to overthrow the Medicis of Florence in return for the Papal recognition of Habsburg sovereignty in Italy and Europe.

In February 1530 Charles V was crowned Emperor of the Holy Roman Empire by the Pope in Bologna. The '*Monarchia Universalis*' thus seemed to have been achieved at last. However, external pressures were soon to change this. In the East the Turkish Emperor Suleiman II had been extending his influence. In 1532 the Turks, having swept



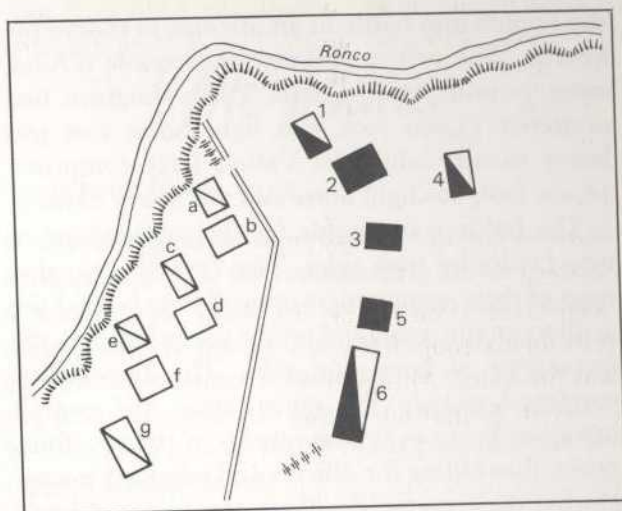
Taken from the 'Schweizerschlacht' by Hans Holbein, this is a vivid portrayal of what 'bad war'—i.e. a confrontation between Swiss and German mercenaries—must have been

like. The short Katzbalger proved most effective at close quarters against the cumbersome halberds and pikes. (Courtesy the Kupferstichkabinett, Basle)

through Hungary, had arrived at the gates of Vienna. Charles, who had been involved in religious conflict with factions within the Empire, was forced to concede to the Protestant princes once again in order to acquire arms and money at the Imperial Diet at Augsburg in 1530. In 1532 he advanced on the Turks at the head of a huge army and repulsed them in the woods of Vienna. Despite their defeat the Turks maintained their aggressive policy. In the Mediterranean Barbarossa, the much-feared pirate, became the scourge of Spanish and Italian shipping and in 1534 crowned himself 'King of Algiers and Tunis'. In the same year he approached Genoa with his fleet as an open gesture of challenge to Charles. The latter promptly retaliated and with an army of 30,000 and an armada of some 364 ships and galleys attacked Barbarossa at Tunis, utterly defeating the Turkish commander both on land and at sea. Francis, who had in part instigated the aggressive Turkish policy, was unable to offer the Turks any direct help since the Imperial campaign had the aura of a crusade for Western civilisation. He did, however, hastily conclude the so-called 'Capitulations' with Suleiman, strengthening their alliance in an attempt to restore the balance of power.

Campaigns of 1536-54

In the meantime the war in Italy had flared up again. Francesco Maria Sforza, the last Duke of Milan, died in 1535 without an heir. The Duchy of Milan therefore fell to Charles V. Francis promptly claimed the Duchy for his son Charles III, Duke of Orleans and occupied Turin in 1536. As a result the German Emperor crossed the Alps once again, this time entering his opponent's territory. With an army 50,000 strong he devastated Provence and began besieging Marseilles. He was soon forced to beat a retreat as his ranks were decimated by the plague, and he returned to Germany with his objectives unachieved. The Turks had meanwhile renewed their threat—Barbarossa conquering Naples and Suleiman II inflicting a heavy defeat on Ferdinand of Bavaria, the brother of Charles V, at the Battle of Esseg. The Emperor realised that he was incapable of fighting a war on two fronts and agreed to a meeting with Francis at Aigues-Mortes in 1538. Francis thereby agreed to abandon further



Map of the Battle of Ravenna: a) Colonna with 800 heavy horse, b) 6,000 Spanish infantry. c) 600 heavy cavalry. d) 4,000 infantry in square under Cardona. e) 400 heavy horse. f) 4,000 foot. g) Pescara with 1,000 light horse. 1) Duke of Ferrara with 750 heavy cavalry from the Compagnies d'Ordonnance. 2) 8,000 German Landsknechts under Mollard and Jacob von Ems. 3) 3,000 Gascon and Picardy infantry in support. 4) La Palisse with 580 heavy cavalry. 5) 4,400 infantry, mainly Italian. 6) 3,000 light horse.

(From Rüstow, 'Geschichte der Infanterie', Vol. I)

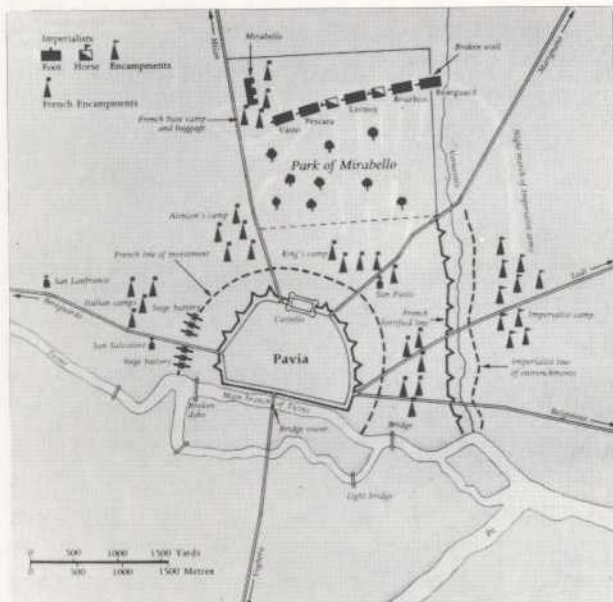
alliances with the Turks and Charles promised to yield Savoy and two-thirds of the territory of Piedmont to the French. Milan was not discussed.

The Turkish pressure was soon to gather fresh momentum. In 1538 Corfu fell to Barbarossa and Ferdinand was dealt a second blow by Turkish forces at Pest in Hungary. Charles was obliged to undertake a second expedition, this time against Algiers. His fleet ravaged by the elements and his army drenched by rainstorms, the expedition proved abortive. In the light of these defeats Francis decided to declare war on Charles once again, using the murders of his diplomats as a pretext. After a succession of inconclusive campaigns the French lost Luxemburg and much of their southern front around Piedmont. In February 1543 Charles entered into an alliance with Henry VIII of England and in June the same year the new Imperial ally declared war on France. The idea was an obvious pincer movement—Henry via Calais and Charles from the Low Countries. Charles was delayed by further Turkish aggression in the Mediterranean. In Piedmont, the French had also been successful. Francois d'Enghien, a cousin of the French king, had laid siege to the Imperialist fortress of Carignano. The Marquis del Vasto, in command of the Imperial forces, decided to force

the French into battle in an attempt to relieve the fortress. The two armies met at Ceresole d'Alba, some 30 miles south east of Turin. Enghien had mustered 13,000 foot, 600 light horse and 900 heavy cavalry while del Vasto's force comprised 18,000 foot, 800 light horse and 200 heavy cavalry.

The battle was notable for the introduction of new tactics by both sides. The French concealed most of their arquebusiers immediately behind the artillery in the front, and on the wings between the formations of horse and pike. The Imperialists employed exactly the same tactic, the overall intention being to fire on impact of the two front ranks, thus killing the officers and seasoned troops. During the ensuing bloodbath the Imperial horse on the left flank registered an initial triumph against Enghien's gendarmes, but the foot guarding the right flank were soon repulsed and routed by the French 'provincial legions', and Swiss detachments. Del Vasto managed to beat a hasty retreat having lost some 6,000 men and all his artillery. Yet in spite of this victory the French were recalled from Piedmont as Charles had invaded Champagne with 30,000 Landsknechts and 9,000 Spaniards. Henry VIII had also landed and taken Boulogne, with 40,000 troops. By July 1544 Charles had taken Saint Dizier, Epernay, and Chateau Thierry. Henry VIII, content with his 'Enterprise of Boulogne', showed no intention of advancing inland and the Dauphin, who had successfully implemented 'scorched earth' tactics, placed the Imperial army in an impossible situation. The German troops, starving and mutinous, began to desert and Charles was forced to sign the Peace of Crepy on 18 September, whereby the Emperor renounced his claims on Burgundy while Francis acceded Naples, Artois and Flanders; Savoy and Piedmont were restored to their rightful houses.

In the space of 27 years the Valois-Habsburg struggle had brought four wars to Europe without either side gaining any monumental advantage. Francis died in 1547, giving Charles the leeway he needed to turn his attention to the religious conflict which was threatening to split the Empire from within. In December 1545 an ecumenical council had been held at Trient to solve the religious question. The Protestant princes, notably Moritz, Elector of Saxony, and Philip, Duke of Hessen had



This detailed plan of the Battle of Pavia shows how the Imperialist army outmanoeuvred Francis' army, thus forcing him to turn his line to face a charge through the trees of the park of Mirabello. The trees proved to be a great advantage to the German and Spanish arquebusiers, who were suitably covered against the counter-charges of the French horse. Alençon and the Italian contingents failed to come to the assistance of Francis, being pinned down by a well-timed assault from the garrison troops in Pavia under the command of Kaspar von Frundsberg, the son of the famous Imperialist general.

(Photo courtesy George Rainbird Ltd)

refused to accept the authority of this Council and were consequently outlawed by Charles. The electors had formed the Schmalkaldic League in 1546 in an attempt to defend Protestant interests against Imperial intervention. By 1547 they had mobilised a considerable army supported by the cities of Ulm, Augsburg, Constance and Strasbourg. In April that year Charles engaged Moritz of Saxony at Mühlberg with 13,000 Imperialists and 3,500 Papal troops. The battle was important for the introduction of a new tactic determined by the increasing importance of the mounted pistolier. This new mobile firepower proved devastating against infantry, and the repeated volleys fired by each line of horse before dropping back demolished ranks at a time. The Protestant army, numbering 9,000, was thoroughly defeated by the Imperialists, who suffered only 50 casualties. The two Protestant leaders were taken prisoner and all fears of a prolonged civil war seemed to have been groundless. In France, however, the new king Henry II had resumed his father's policy of aggression and

concluded an alliance with the Protestant princes in Germany. In 1551 Henry met Moritz of Saxony and Philip of Hessen at Friedewald, and they arranged to assist the French king in taking the cities of Metz, Toul and Verdun. In 1553 Charles besieged Metz but was forced to retreat and in 1554 he suffered a further defeat at the hands of the French king at Reuly. Meanwhile Moritz had been pressing south towards Innsbruck, the Emperor's place of residence. In 1552 Ferdinand of Austria, the brother of the Emperor, was forced to sign the Treaty of Nassau with the Protestants. Charles was by now no longer in a position to govern his Empire and handed Ferdinand this responsibility.

In 1554 Charles, in a last attempt to weaken the French threat, organised a marriage between his son Philip of Spain and Mary Tudor of England. In January 1566 Charles abdicated in favour of his son, who received control of all the Italian lands and colonies. In September that year he renounced the Imperial title in favour of his brother Ferdinand.

Conclusion

Although the Landsknechts were to see service throughout Europe, it was precisely this international involvement which caused their ultimate disappearance. Charles was continually at pains to acquire funds and support for his campaigns from his Princes, who were inclined to offer financial aid only at a political price. The Landsknechts, for their part, suffered largely from a breakdown in discipline, as the mercenaries were prepared to renounce their allegiance to the Emperor at a price. The ultimatum 'No money—no Landsknechts' was often heard. Many historians are led to believe that the decline of the Landsknechts began upon the death of Frundsberg. Certainly the original conception of Maximilian's reign—that of a body of pikemen who would be a match for the Swiss—had gradually been superseded due to the progress of firearms. By the second half of the sixteenth century garish costume began to disappear, and even the word Landsknecht soon made way for '*kaiserlicher Fussknecht*' (Imperial Foot-soldier), thus marking the end of one of the most colourful periods in European military history.

The Plates

A1 *Imperial Herald, 1525*

If several regiments were together in one army it was customary for the commanding officer to have a herald who could act as liaison and convey messages to the enemy. He was normally clad in a silk surcoat bearing the embroidered coat of arms of the *Obrist* or, as in this case, the Imperial double-headed eagle. As a symbol of his peaceful task he carried a white baton.

A2 *Georg von Frundsberg*

Born in Mindelheim in 1473, Georg von Frundsberg became a devoted servant of the Habsburgs. He continually wore the Imperial field recognition sign, which was a red sash, and was noted for his Roman-styled helmet and the halberd which he bore with distinction.

A3 *Götz von Berlichingen (1481–1562)*

Known as 'Götz of the Iron Hand', he belonged to the class of Imperial knights who were fast becoming an anachronism at this time of upheaval. His iron hand was a substitute for the one he had lost at the Siege of Landshut in 1504. Largely celebrated as a 'robber baron', he took part in many campaigns in Burgundy, Lorraine, Switzerland and for Maximilian in 1497 and 1498; his career ended with the wars against the Turks in Hungary in 1542 and the campaigns of Charles V against the French in 1544. He was also prominent in the Peasant's Revolt, in which he led the peasant '*Bundschuh Regiment*'. (The standard was a red flag with a green shoe and trailing ribbon motif.) He was acquitted by the Imperial Chamber for his part in the rebellion, but seized by the Swabian Alliance in 1528 and kept prisoner at Augsburg until 1530.

B *The Emperor Maximilian I*

Apart from his contribution towards the creation of the Landsknechts and the development of a 'modern' artillery system, Maximilian was also responsible for the production of one of the most important styles of renaissance armour. Known as



This rather inaccurate representation of Pavia by Patinier captures, nevertheless, the main features of the battle. In the top left of the picture one can see Alençon's troops in their vain attempt to escape across the Tisino. In the centre the

Imperial troops are forcing their way through the breach in the wall of the Park of Mirabello. In the foreground, the clash between the French mounted Gendarmes and Lannoy's cavalry is clearly visible. (*Kunsthistorisches Museum, Vienna*)

'Maximilian armour' in reference to the support which the Emperor gave to the armouring guilds in Germany and Austria, this style was dominant in the years between 1500 and 1530. It was characterised by the multiple grooves and flutings which afforded both ornamentation and greater protection. The Emperor owned two sets of horse furnishings. The larger battle armour retained a Gothic outline and was festooned with the Imperial device (the two-headed eagle). The horse furniture depicted here is the lighter set bearing the Austrian coat of arms—note the Tyrolean eagles on the pectoral.

C1 Captain, 1520

Since they were expected to fight in the front rank it

was customary to find the '*Hauptleute*' in armour. This captain is wearing a later form of 'Maximilian' armour with ornamental flutings. A later development was the so-called *Trabharnisch* or trotting armour, which was a much lighter form of protection with more rounded articulations, wider arm-guards and shoulder pieces. Headgear in general consisted of a felt beret with a basin-shaped crown and a wide brim. Often this was cut at regular intervals all round, and sometimes turned back to form stiff loops. This was suitably adorned with bright feathers, or ruffled wool.

C2 Schultheiss, c.1520

Since this office was usually taken up by a village magistrate or some other public dignitary, the

uniform rarely underwent a transformation of any sort. The important features are the chain of office and the staff, a form of boar spear, which was probably the forerunner of the officer's spontoon. The skull cap he is wearing, known as a *calotte*, was usually made of cheesecloth or thin linen, decorated with slashing. The purpose of the cap was to keep both hair and hat in place but in actual fact it was originally a type of hairnet worn by the womenfolk. The tunic, in Italian Renaissance style, is typical of the dress worn by officers, members of the nobility and indeed the mounted troops of the day.

C3 Standard Bearer, 1505

Hairstyles were still long at the beginning of the sixteenth century and beards were not yet in fashion. With the advent of the Spanish trends in fashion a reversal in styles took place, short hair being preferred, together with long, often exaggerated beards. A certain Austrian by the name of Andreas von Rauber, it is recorded, let his beard grow to the ground and whenever he fought tied it round his waist; and the Oberst Graf Eitel Fritz von Hohenzollern plaited his beard from his chin downwards! The red cross, which was the field sign for Imperial troops (the other being a red sash) was sewn on to the doublet. The Swiss mercenaries wore a white cross on their jerkins to distinguish themselves from the foe in times of 'bad war'. The standard is the '*Blutfahne*' which was carried in the 'forlorn hope' to remind the Landsknechts of the deadly situation in which they found themselves.

D1 Arquebusier, 1520

Before the early 1520s, which marked the arrival of the musket, the arquebusiers rarely used rests. With the introduction of the musket, incorporating a longer barrel, rests became more common. It was also customary for arquebusiers to carry the powder, unmeasured against the number of bullets, in a horn around the neck. Here, however, we see a bandolier bearing the 'Eleven Apostles', the eleven charges equalling 1 lb. of powder. Each charge was contained in a wooden vessel with a leather covering, which was preferred to the somewhat noisy copper vessels, and attached firmly to the bandolier. A leather pouch containing shot, clean-

ing needle, grease, rag and clout was worn at the waist and suspended beneath this was a small tin phial containing olive oil for cleaning and lubricating the moving parts of the arquebus/musket. Further accoutrements were the small touch-powder horn, sometimes hooked on to the butt of the gun; the iron ramrod, which was later replaced by a wooden version; and a four-foot-long match which hung from the belt on the right hand side. In wet weather this was carried under the beret or in the leather pouch. The invention of the cartridge case in the latter half of the sixteenth century greatly facilitated the whole procedure of loading.

D2 Gemeinweibel, Willibald Pirckheimer Regiment, 1529

The only attempt made in these times at some form of uniformity was made by the Nuremberg patrician Willibald Pirckheimer, who raised a regiment in 1529, fitting it out with red jerkins and hose, red being the heraldic colour of Nuremberg, and also blending in well with blood! This corporal is wearing the normal shirt gathered at the neck, with full sleeves which were pulled out through the slashes in the puffed-out jerkin. The origin of 'slashing' probably lies in the complete unsuitability of sixteenth century costume for fighting. An oversized shirt, often gathered at the neck, and tight-fitting hose and doublet restricted movement at the joints. Realising this the Landsknecht set about converting and adding to his 'uniform'. The first step was to slit open the jerkin at the elbows and shoulders, the hose at the knees and hips. To create a more striking appearance, strips of ribbons were tied round the arms and the shirt was pulled through the jerkin in bunches.

D3 Pikeman, c.1520

It was uncommon for the normal footsoldier to wear armour. The 'true' Landsknecht never wore a backplate since he never turned his back on the enemy. It was, however, due to lack of resources that this custom was adopted. The left leg was often left bare, free of any hindrance, so that pike drill could be carried out with greater dexterity. Sometimes this was carried to the extreme, the buttocks being completely exposed. The hose were sometimes slashed in the upper part and striped in

the lower. The legs were of different colours and decorated in various ways with pipings, stripes and spiral bands.

E Locotenant, 1545

Armour underwent several changes during the sixteenth century. A complete suit of armour usually weighed between forty and fifty pounds. It was therefore necessary to introduce as many articulations as possible to increase mobility in some way. By 1530 the Maximilian-styled armour with its multiple grooves and flutings had disappeared, with the breast plate and the cuisses reverting to their former smooth states. The breast plate began to assume a more curved shape, taking on the form of a peascod. The neck-piece was replaced by a collar with a gorget which was articulated in lobster fashion, as were the upper arm sections and the gauntlets, which had jointed fingers. The saddlery, which at the beginning of the sixteenth century had been essentially iron with the cantle fitted to its mountings, was now made of wood and leather reinforced with iron, affording greater comfort and freedom of movement. There

were also developments in the horse-armour, which began to show greater articulation, notably with the three-piece hinged 'peytral' or pectoral buckled to the main body-piece by means of leather straps. The bulbous ornamentation on the pectoral, known as the glance-knob, was designed to parry lance blows.

F1 Drummer, 1525

The drum was often large and cumbersome and was usually carried on the back during the march. Sometimes it bore the Imperial motif—either the double-headed eagle or the Burgundian crossed staves and fiery devices.

F2 Landsknecht, c.1553

The origin of the 'Pluderhose'—the huge baggy hose—dates back to 1553 when they first appeared in the camp of Prince Moritz of Saxony who was besieging Magdeburg. So monstrous was their appearance that the clergy banned them. The court priest at Berlin, a certain Musculus, in a great treatise on the subject complained that the hose did more to expose the anatomy than hide it since it was divided at the hips by a huge (often obscene) cod-piece in the form of a bow of slashed material. Before its acceptance as a fashion it was not uncommon for Landsknechts caught wearing *Pluderhose* to be incarcerated. Essentially the hose consisted of yards of material held up by slashed bands suspended from the waist at the front and rear.

F3 Ensign of Nuremberg, 1550

By the mid-sixteenth century costume had undergone a considerable transformation, being influenced to a large extent by Spanish trends. Beards became more pointed; and the wide slashed beret gave way to a much smaller version, or to a helmet of morion and burgonet type. The burgonet had hinged cheek-pieces, and often an additional face plate known as a beaver. The morion was a simple open helmet used particularly by the arquebusiers. Doublets were prone to extensive vertical slashing, and the shirt was ruffled at neck and cuffs in typical Spanish fashion. Footwear began to cover the whole instep at this stage. In the earlier period an exaggerated type of shoe called



The 'Recht der langen Spiesse' or 'judgment of the pikes' was a form of running the gauntlet. After the prisoner had been tried by jury he was led to the place of execution, which was an avenue of the pikes of his comrades. After the execution, the Provost reminded them once more of the 'articles' and the cost of failing to obey them.



As was often the case, justice sometimes had to be administered without trial. Common forms of execution were

hanging, beheading and the 'wheel'. (Woodcut by Burgkmair from 'Weiss Kunig', courtesy British Museum)

'Kuhmäule'—cow's mouth—had been fashionable, but the open instep and elaborate toe section was quite impractical on muddy battlefields.

G1 Doppelsöldner of the Black Legion, 1520

Known as the 'Black Legion' or 'Black Bands', this

group of soldiers grew originally from a nucleus of some 800 Landsknechts in French pay who refused to return to Germany in accordance with Maximilian's decree after the Imperial defeat at Ravenna in 1512. Under the command of the Duke of Gueldres, this notorious company was outfitted



Drummer and Piper: Found invariably in the entourage of the ensign, the musicians were responsible for maintaining the impetus in the assault, movement being set at three paces for

every five beats of the drum. During the march one musician normally joined the rear.

(Woodcut by Jost Amman in Blau: 'Der deutsche Landsknecht')

in black jerkins and hose, and their armour was blackened by fire to avoid rusting. The 'Black Legion' was finally destroyed at Pavia in 1525.

require, and was often the first to join in the plunder of a captured town.

G2 Sutleress

The sutleress and her male counterpart were often found in the train, where their goods found a certain market. Their prices were fixed by the *Schultheiss* to avoid any haggling, which was often the cause of camp brawls. In general the sutleress provided virtually everything a soldier might

G3 Provost

The provost was responsible principally for policing the Landsknechts and enforcing the 'articles'. After the quartermaster had selected a suitable site for the camp, the provost immediately determined the location of the marketplace and ordered a gallows to be erected. While the *Schultheiss* fixed the prices of the goods to be sold, the provost charged

the sutlers and sutleresses a small 'protection' fee. Similarly he often demanded a sum of money from prisoners who had finished their sentence in the camp gaol (often the provost's own tent).

H: Standards

The *Fähnlein*, which in German is the diminutive of flag, was by no means a small affair. Standards were usually anything up to ten feet in length with a width of six feet. The staff was normally slightly longer than the width of the standard and bore a knob at the lower end which was used to facilitate the celebrated 'flag swinging', which still goes on in parts of Switzerland and Southern Germany today. The standards of the *Fähnlein* usually bore the colours and heraldic devices of the captain, or of a city, if it was represented. The material was usually silk and the shape and size often varied. Contemporary prints show rounded standards attached to halberds, for example. The standard was a symbol of the *esprit de corps* and accordingly if a regiment or *Fähnlein* had fallen into disrepute the

flag was not to be unfurled until the unit had re-established its honour. During this time the standard was always carried with the point facing the ground. On the death of the *Obrist*, his body was draped in the flag and buried with it. Similarly, when the regiment disbanded after a campaign, the standards were usually taken down from their staves and torn into pieces, each soldier receiving a portion as remembrance for his service.

There were also flags designed for the train. The leading carriage of the Emperor or the *Feldobrist* usually carried the imperial standard or that of the commanding officer. Those wagons carrying bread and flour carried a white flag, and the field kitchen a red flag. Often standards were taken along which had no place in the train whatsoever. These of course belonged to unwarranted bands (the so-called *Merodebruder*, from which we have the word marauder) who were to be found in most armies on the march at that time.

H1 The *Reichssturmflagge* was the Imperial battle flag and as such always bore the double-



The whole baggage train, often derisively called the 'whores and knaves', was in many respects a unit in itself, having its own standard and often being employed to construct

earthworks or assist the artillery. The whole train was under the command of the *Hurenweibel*, an officer with the rank of captain who had his own lieutenant, ensign and sergeant.

headed eagle. When the Emperor was not present the standard of the commanding officer became the leading battle flag.

H2 In the Turkish Wars, 1532, the standard of Friedrich of Bavaria who was the supreme commander of the Imperial forces was used instead of the double-headed eagle. It bore the figure of St Michael on the Bavarian colours beneath the words 'DE COELO VICTORIA'.

H3 Charles V as successor to Maximilian inherited an immense empire. This was symbolised on a new Imperial flag depicting the twin pillars of Hercules (i.e. Germany and Spain) and the motif 'PLUS OULTRE' or in German 'NOCH WEITER'.

H4 After the marriage of Maximilian to Mary, daughter of Charles the Bold, the Burgundian motif of the cross of St Andrew was adopted and appeared on all his standards until his death. The figure of the crossed branches later appeared in gold, blue and red. It was not uncommon to see the Cross of St Andrew flanked by the twin pillars of Hercules with the words 'PLUS ULTRA' above.

H5 Standard of Georg von Frundsberg.

H6 The Cross of St Andrew often appeared in simple form against a yellow background.

H7 Standard of the Fugger family, Augsburg.

H8 Standard of Memmingen.

H9 Standard of the *Georgschild Rittergesellschaft* (league of Swabian knights). This standard was adopted by the Swabian Alliance and ultimately carried by Swabian troops in the fifteenth and sixteenth centuries.



Camp: Within the wagon fort, the Landsknechts were left to their own ends to find or erect their own shelters. This often took the form of a simple lean-to or an igloo-shaped hut made of branches and mud supported on an 'A' frame of halberds. The camp scene never seems to have been complete without the huge beer barrel and the numerous drums used as gambling tables.

H10 *Reichsrennfahne*. This flag was always carried by the arch-marshal alongside the Emperor.

BIBLIOGRAPHY

- Anon, *Weiss Kunig*, Biography of Maximilian I, 1518.
- Blau, Friedrich, *Der deutsche Landsknecht*, Görlitz 1882.
- Deiss, Friedrich, *Das deutsche Soldatenbuch*, Berlin 1932.
- Döring, Hans, *Kriegsbuch of Graf Reinhard of Solms*, 1545.
- Lezius, Martin, *Vorwärts ... Vorwärts ... zur Geschichte der deutschen Landsknecht*, Leipzig 1935.
- Nell, Martin, *Zur Entstehung der deutschen Landsknechte*.
- Richter, Erich, *Frundsberg*, Munich 1968.
- Rustow, Vol. I, *Geschichte der Infanterie*, 1884.
- Scheer, Johannes, *Das Landsknechtsleben*.
- Zwiedeneck-Südenhorst, Hans von, *Kriegsbilder der deutschen Landsknecht*, Stuttgart, 1884.

An unrivalled source of information on the uniforms, insignia and appearance of the world's fighting men of past and present. The *Men-at-Arms* titles cover subjects as diverse as the Imperial Roman army, the Napoleonic wars and German airborne troops in a popular 48-page format including some 40 photographs and diagrams, and eight full-colour plates.

COMPANION SERIES FROM OSPREY

ELITE

Detailed information on the uniforms and insignia of the world's most famous military forces. Each 64-page book contains some 50 photographs and diagrams, and 12 pages of full-colour artwork.

WARRIOR

Definitive analysis of the armour, weapons, tactics and motivation of the fighting men of history. Each 64-page book contains cutaways and exploded artwork of the warrior's weapons and armour.

NEW VANGUARD

Comprehensive histories of the design, development and operational use of the world's armoured vehicles and artillery. Each 48-page book contains eight pages of full-colour artwork including a detailed cutaway of the vehicle's interior.

CAMPAIGN

Concise, authoritative accounts of decisive encounters in military history. Each 96-page book contains more than 90 illustrations including maps, orders of battle and colour plates, plus a series of three-dimensional battle maps that mark the critical stages of the campaign.

THE ANCIENT WORLD

- 218 Ancient Chinese Armies
- 109 Ancient Middle East
- 137 The Scythians 700-300 B.C.
- 69 Greek & Persian Wars 500-323 B.C.
- 148 Army of Alexander the Great
- 121 Carthaginian Wars
- 46 Roman Army:
 - (1): Caesar-Trajan
- 93 (2): Hadrian-Constantine
- 129 Rome's Enemies:
 - (1): Germanics & Dacians
 - 158 (2): Gallic & British Celts
 - 175 (3): Parthians & Sassanids
 - 180 (4): Spain 218 B.C.-19 B.C.
 - 243 (5): The Desert Frontier

THE MEDIEVAL WORLD

- 247 Romano-Byzantine Armies 4th-9th C.
- 154 Arthur & Anglo-Saxon Wars
- 255 Armies of the Muslim Conquest
- 125 Armies of Islam, 7th-11th C.
- 150 The Age of Charlemagne
- 89 Byzantine Armies 886-1118
- 85 Saxon, Viking & Norman
- 231 French Medieval Armies 1000-1300
- 75 Armies of the Crusades
- 171 Saladin & the Saracens
- 155 Knights of Christ
- 200 El Cid & Reconquista 1050-1492
- 105 The Mongols
- 222 The Age of Tamerlane

- 251 Medieval Chinese Armies
- 50 Medieval European Armies
- 151 Scots & Welsh Wars
- 94 The Swiss 1300-1500
- 136 Italian Armies 1300-1500
- 166 German Armies 1300-1500
- 195 Hungary & E. Europe 1000-1568
- 259 The Mamluks 1250-1517
- 140 Ottoman Turks 1300-1774
- 210 Venetian Empire 1200-1670
- 111 Armies of Crécy and Poitiers
- 144 Medieval Burgundy 1364-1477
- 113 Armies of Agincourt
- 145 Wars of the Roses
- 99 Medieval Heraldry

16TH AND 17TH CENTURIES

- 256 The Irish Wars 1485-1603
- 191 Henry VIII's Army
- 38 The Landsknechts
- 101 The Conquistadores
- 263 Mughul India 1504-1761
- 235 Gustavus Adolphus (1): Infantry
- 262 Gustavus Adolphus (2): Cavalry
- 14 English Civil War Armies
- 110 New Model Army 1645-60
- 203 Louis XIV's Army
- 267 The British Army 1660-1704
- 97 Marlborough's Army
- 86 Samurai Armies 1550-1615
- 184 Polish Armies 1569-1696 (1)
- 188 Polish Armies 1569-1696 (2)

- 279 The Border Reivers

18TH CENTURY

- 261 18th Century Highlanders
- 260 Peter the Great's Army (1): Infantry
- 264 Peter the Great's Army (2): Cavalry
- 118 Jacobite Rebellions
- 236 Frederick the Great (1)
- 240 Frederick the Great (2)
- 248 Frederick the Great (3)
- 271 Austrian Army 1740-80 (1)
- 276 Austrian Army 1740-80 (2)
- 280 Austrian Army 1740-80 (3)
- 48 Wolfe's Army
- 228 American Woodland Indians
- 39 British Army in N. America
- 244 French in Amer. War Ind.
- 273 General Washington's Army (1): 1775-1778

NAPOLEONIC PERIOD

- 257 Napoleon's Campaigns in Italy
- 79 Napoleon's Egyptian Campaign
- 87 Napoleon's Marshals
- 64 Nap's Cuirassiers & Carabiniers
- 55 Nap's Dragoons & Lancers
- 68 Nap's Line Chasseurs
- 76 Nap's Hussars
- 83 Nap's Guard Cavalry
- 141 Nap's Line Infantry
- 146 Nap's Light Infantry
- 153 Nap's Guard Infantry (1)

Title list continued on inside back cover

Please note that for space reasons abbreviated titles are given above; when ordering, please quote the title number, e.g. 'W3 Viking Hersir', etc.

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

ISBN 0-85045-258-9



9 780850 452587