

La voix de la
Companie de
Saint Georges

DRAGON

The Voice of the
Company of Saint
George



Martin Schongauer, Saint George and the Dragon, Paris, Bibliothèque Nationale

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Editorial

It has been said that though God cannot alter the past, historians can; it is perhaps because they can be useful to Him in this respect that He tolerates their existence.

Samuel Butler (1835-1902), Erewhon Revisited.

Certain people in our organization happily continue to "nag" about the importance of historical research. Not, of course, the necessity of it - which goes without saying - but the methods and quality applied to it. Research is naturally limited to "what we have"; but just as in music, the silences are as important as the sounds, what we do not have in research should be given as much consideration as what we do have. And what we do not have in our period amounts to an awful lot - it is a sobering thought that very little has survived from "ordinary" people of the eighteenth century, let alone the fifteenth. Whence the great dangers of generalising from the particular - a trap all too many archaeologists still fall into.

The major article in this issue should be taken in

this spirit. John Howe has collected a very important number of lantern references from around our period, and this monumental iconographic thesaurus is probably unique. Unfortunately however, no generalisations can be drawn from it, and although we can be reasonably sure that lanterns of the types illustrated were definitely in use at the end of the fifteenth century, we cannot conclude that the collection is exhaustive, or indeed, that the commonest type of lantern actually used is necessarily represented.

"The historian has two approaches to historical truth", said Wilhelm von Humboldt:

"The first is the exact, impartial, critical investigation of events. The second is the connecting of events explored and the intuitive understanding of them which could not be reached by the first means."



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MEDIEVAL MILITARY DRILL

by GERRY EMBLETON

The better the troops of a garrison are trained and accustomed to discipline, the less problems one will have with them during battle... only a few men are brave by nature – good training increases their numbers

Vegetius: *Regulae Bellorum Generales*, a Roman work published in French, Latin and English in the fifteenth century.

Our Company has developed a set of very simple drill movements tailored to suit its needs and based where possible on the earliest sources. No fifteenth century drill books survive, which is not surprising given that time and chance have left only a tiny random selection of the millions of documents that once circulated in fifteenth century Europe.

The earliest drill books extant are from the sixteenth century, but whenever detailed accounts of medieval army organization still exist there are tantalizingly vague references to “training” and “exercises”.

Whenever large bodies of men must be manoeuvred, particularly at speed or in an emergency, some sort of training practice in moving together to orders or signals is necessary. In the chaos of battle the need for large bodies of troops using different types of weapons to closely cooperate, advance, fall back, change direction and at the same time keep formation under fire makes practice in quite sophisticated drill movements absolutely essential.

Late fifteenth century armies were frequently a mixture of “militia” and professional soldiers. It was in the interest of the professionals who wished to come out of battle alive that the “militia” be well trained and reliable.

The pike, a mainly defensive weapon, had to be used *en masse*: the pikemen formed several ranks deep in a solid block that presented a wall of pike heads to an attacker. The missile men and halbardiers, etc. had to be able to form up on the flanks or inside the block, issuing out on command and retreating inside *without* breaking the pike block.

Formations consisting of hundreds, if not thousands of men had to be able to wheel from column into line (diagrams of manoeuvres for German troops drawn at the end of the fifteenth century show this difficult procedure) to march, turn, halt and change direction in unison, and lower and raise their pikes and polearms without clashing them together.

The best preserved and detailed military instructions are the ordinances of Charles The Bold, Duke of Burgundy. Charles issued many and we know that

some were copied, bound and illuminated and given with a baton of rank to each of his captains when they swore their annual oath of allegiance to the Duke.

The section on training in the ordinance of St. Maximin de Trèves, October 1473 states (a translation into English follows after):

Ordonne en oultre mondit seigneur que pour mieulx habiliter et exerciter lesdictes gens de guerre aux armes et quilz y soyent mieulx duictz et instructz quant aucun affaire surviendra lesdis conducteurs chiefz descadre et de chambre eulx estancs en garnison ou quant Ilz auront temps et loisir de ce faire mement aucunes foyz partir de leurcs hommes darmes Jour aux champs armez aucunes foyz du hault de la piece seullement une aultre foycs de toutes pieces pour eulx essayer a courre la lance eux tenir en la courant Jointz et sevietz et aussy courir vivement garder leurs enseignes eulx departir sil leur est ordonne et eulx raillier en se couvrant lung laultre par commandement et la maniere de soubstenir une charge Et pareillement les archiers a tous leurs chevaux pour les accoustumer a descendre de pie et tirer de larc en les faisant apprendre la maniere datachier et abrider leurs chevaux ensemble et les faire marchier apres eulx de front derriere leurcs doz en attachant les chevaux de trois archiers abridez aux cornetz de larchon de la selle derriere le cheval de paige de lhomme darmes et qui Ilz sont en oultre de marchier vivement de front de tirer sancs eulx rompre Et de faire marchier les piquenaires en front serre devant lesdis archiers et a ung signe deux mettre a ung genouil en tenant leurs picques baisses de la haulteur des arcs des chevaux affin que les archiers puissent tirer pardessus lesditz picquenaires comme pardessus ung mur et que se lesdis picquenaires voient leurs ennemys mettre endessaroy Ilz fussent plus pres a leurs courre sus par bonne maniere ainsy quil leur seroyt ordonne Et aussy deux mettre doz contre doz a double deffence ou en ordonnance quarree ou ronde Et toujours les picquenaires hors des archiers serez pour soubtenir la charge des chevaux des ennemys en enclouant au millieu deulx les paiges et les chevaux des archiers

et pourront lesdis conductiers de primeface introduyre ceste maniere de faire par petites compagnie Et tantost que lune desdites compagnies sera duicte et apprinse Ilz y pourront mener des aultres et en ce faisant lesdis conductiers auront Journallement la veue et le regard de leurs gens lesquels en ce cas ne se oseront absenter ne estre despourveux de leurs chevaulx et harnoiz parce quilz ne seront pas sceurs de Jour que lesditz conductiers les voudront mener a la diete exercite et si sera chacun deulx constraint de apprendre a faire son debvoir et plus expert pour son aydier toutes et quantes foys que besoing sera Et admoneste mondit seigneur lesdis conductiers et ceulx quilz auront soubz eux la charge et conduytte desdictes gens de guerre que en ayant regard a la cause pour laquelle mondit seigneur les a mis sus a la grande despense quil soubstient pour leur entretenement et aussy a la peine et sollicitude que Ja par long temps Il a print pour les mettre en order et discipline Ilz veullent sougneusement faire leurs debvoir en ce que dit est Et eulx tellement y acquiter quilz en facent a recommander a Quoy entre aultre choses les doit principalement mouvoir lamour et obeysance quilz doibvent avoir envers mondit seigneur et a lexaltation de sa mayson Et aussy leurs propre honnheur et renommee qui consiste en ce que mondit seigneur par le moyen de leur bon service puist parvenir en reboutement de ses ennemys

Translation: In order that the troops may be better trained and exercised in the use of arms and better practiced and instructed...when they are in garrison...the captains of the squadrons and the *chambres* are from time to time to take some of their men-at-arms (armoured cavalry) out into the fields...to practise charging with the lance, keeping in close formation...to defend their ensigns, to withdraw on command, and to rally, each helping the other...and how to withstand a charge.

In like manner the archers with their horses, to get them used to dismounting and drawing their bows. They must learn how to attach their horses together by their bridles and make them walk forward directly behind them, attaching the horses of three archers by their bridles to the saddlebow of the page to whose man-at-arms they belong; also to march briskly forwards and to shoot without breaking rank.

The pikemen must be made to advance in close formation in front of the said archers, kneel at a sign from them, holding their pikes lowered to the level of a horse's back so that the archers can shoot over the said pikemen as if over a wall...The archers must also learn to place themselves back to back in double defence, or in a square or a circle, always with the pikemen outside them to withstand the charge of the enemy horse, and their horses with the pages enclosed in their midst.

The officers can begin by introducing this way of doing things to small groups and, when one of these groups is practiced and instructed, they can take out others, Whilst doing this

the officers are to keep an eye on their people every day, so that none will dare absent themselves or be without horse and armour, because they will not be sure on which day the officers will want to take them out on exercises. Thus each will be constrained to learn to do his duty.

Commanders usually agreed a battle formation plan for the coming engagement, based on their knowledge of the terrain and the possible formation of the enemy. This was sometimes quite flexible, and adaptable to developments as the battle progressed. At other times the order of battle was drawn up in quite minute detail, particularly when the troops were neighbours and experienced comrades. The plan of Zurich's battle formation of 1443 survives: here one can see the men of the villages of Talwil, Ruschlikon, Andeltingen and others each allotted to their file, next to files from the Haberdashers' Guild (ten men), the Vintners' Guild (21 men), Blacksmiths, Boatmen and Tanners. Such exact forming-up orders would require practice, which was encouraged by law. Charles the Bold's order of battle at Neuss on 23 May 1475 also survives. Each company had its place in the formation, drawn up in two lines, each line with its own reserves, all wearing the duke's livery and each identified by their banners.

Some modern historians maintain that the Swiss did not train: "any woodcutter who could handle an axe could handle a halbard...". Perhaps – if nobody else stood within seven feet of him in any direction...but not in formation, where wild, swinging blows would split the skull of a comrade in the rank behind, and an undisciplined rush could break up the pike formation and let the enemy cavalry in.

As far as I know the ordinance of Duke Charles of Burgundy quoted above is the only surviving description of medieval drill movements. That it is the only one surviving does not mean that it was the only one written. I am convinced that where there have been large armies there have always been formalized systems of training and drill.

The previous pole arms drills of the Company of Saint George were based on the earliest sources we could find – early sixteenth century, and designed for the pike.

After a lot of thought and practice and a hard look at fifteenth century manuals of fighting techniques we decided this was wrong.

The pike is a defensive weapon, long and unwieldy. It is supported and steadied by the left hand and manoeuvred and pushed forward by the

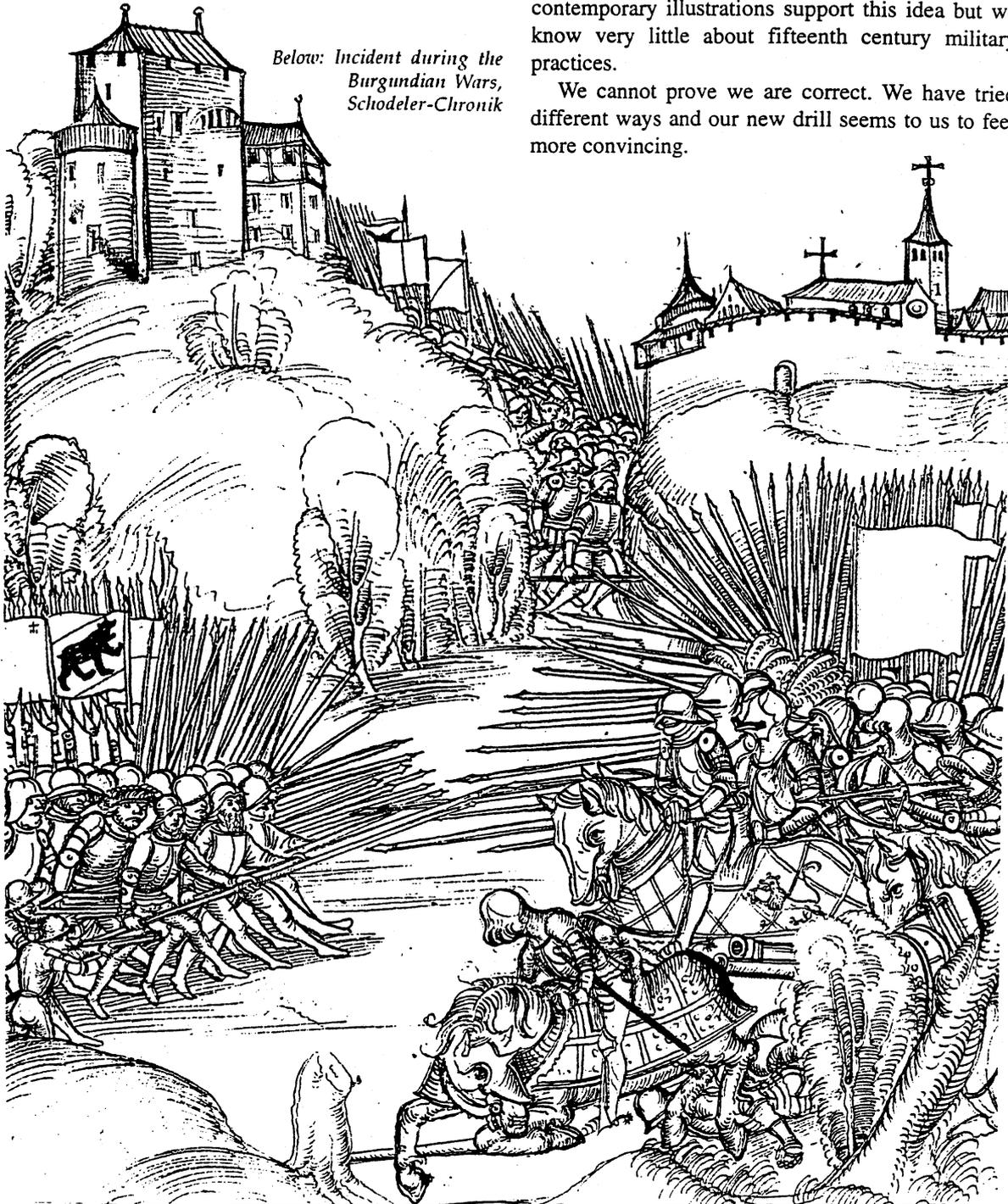
usually more powerful right. This also works with other pole-arms for the safe – but misleading – needs of the re-enactment battlefield.

The halbard is a hacking and thrusting weapon and changes to both in quick succession are necessary if the weapon is to be used effectively. Halbard and war-hammer fighting was fast, fierce and very

athletic. Fencing and stabbing is best done with the usually more powerful right shoulder forward, the right hand uppermost on the weapon to move it, the left, steadying the shaft, tucked into the left side. With a simple turn of the body to the right a striking position can be assumed, like a man chopping wood – without changing the position of the hands. Many contemporary illustrations support this idea but we know very little about fifteenth century military practices.

We cannot prove we are correct. We have tried different ways and our new drill seems to us to feel more convincing.

Below: Incident during the Burgundian Wars, Schodeler-Chronik



MEDIEVAL LANTERNS

by JOHN HOWE

I shal as I can ffolwe thyn lanterne as thow gost byforn. Geoffrey Chaucer, 1385

If the passage of time has left us with scant archaeological evidence of medieval lanterns, iconography has been more generous. Several strong literary themes, mostly of Biblical origin, illustrated with remarkable attention and consistency, provide the majority of these examples. In depictions of the Betrayal of Christ, while Judas bestows the fateful kiss, Peter cuts the ear off the high priest Caiaphas' attendant, who lets his lantern fall to the ground in dismay. In portrayals of the Nativity, Joseph, standing respectfully in the wings, often holds a candle or a lantern. Saint Christopher perceives the lantern-light of the hermit who dwells near the ford as he bows his back under the unexpected weight of his youthful charge. A lantern often figures with the dice, whip, sponge and other instruments of the Passion in evocations of the Man of Sorrows.

Lanterns, like most medieval objects for everyday use, fall into half a dozen loosely delimited categories, in each of which there are innumerable variations.

Such categorisation is a generic convenience and with the exception of Italy and possibly Spain, to no one type of lantern may be assigned "national" characteristics. Nor can size be considered a determining factor, either geographic or temporal, although the enormous lanterns of the 16th century have fewer "medieval" counterparts. The materials involved - wood, metal and horn - are used throughout the period covered, with Italy once again being a possible exception, where glass may have been more extensively

used. Cloth may have also been employed, stretched over a frame, as may have been parchment, skin or paper, but scant evidence of this exists. According to John Caspall (*Making Fire and Light in the Home pre-1820*), mica, or "talc" as it was called by medieval writers, was extensively used, being clear and resistant to heat.

Unfortunately it was also extremely fragile, and easily shattered. Horn is the material used *par excellence* - it is, when properly prepared, quite transparent, and may be made into very thin sheets, no thicker than 100/150-gram paper. It does fear overheating, and will blacken and burn if too close to a flame; however it is supple and nearly unbreakable in normal use, only going yellow and eventually opaque with age. Also, only the cost of the workmanship is involved, as the raw materials were certainly plentiful and their price negligible. Fritz Hornrichter, lantern-window maker, the 36th brother in the Mendel Housebook, who died in 1425, is shown seated in



Fritz Hornrichter, Lantern-Window Maker, from the Mendel Housebook, Nuremberg, c. 1425

his workshop, scraping a large sheet of horn, while other sheets are being flattened in a press beside his workbench. Over a century has passed by between Fritz and his compatriot in the *Standebuch*, dated 1568, and although some accessories, such as candle-snuffers, have come into fashion, it is clear that the trade has remained virtually unchanged.

Many lanterns have been included not because of the details of construction they reveal, but for their sizes and the manner in which they are held and used.

I have often included several lanterns drawn by the same artist, as in the examples by Schongauer (Plate B3-5, 8, 10 & 11) because they all differ subtly from one another (although it is tempting to imagine him painting a lantern he may have owned). Even lanterns copied from one artist by another are seldom slavish reproductions, as in the case of examples 18 and 23 on plate E, where the base of the lantern has been modified. Only evidently redundant examples have been omitted. Wherever possible, hands have been drawn in to give some idea of scale. Some (much) later examples have also been included, either to show characteristics developing in conjunction with the Renaissance, or to underline the persistence of medieval forms into the 16th century and beyond. The very early examples are shown for reasons of thoroughness, among them the two curious examples meant to be held overhead (Plate F10 & 11). No predominant styles can be chosen over others, nor can proportions of one type or another be guessed at, the random nature of medieval documents rendering such an exercise perilous and pointless. It is clear however, if one is to judge from the sense of familiarity evident in the artists' renderings - varying from a graphic shorthand with no other pretension than to indicate the presence of a lantern to the painstakingly rendered still life - that these were familiar elements of everyday life.

Lanterns were generally carried hanging from a loop or a ring, held by a handle fixed to the back or held directly, with no suspension or handle to be seen. All that have their light source visible carry candles, usually inserted in a holder or socket. I have as yet found no evidence of oil lanterns in the 15th century.

Large cylindrical lanterns made apparently of wood with horn plate windows all around were very popular. The top is almost invariably domed, like a soup plate or a bowl upended, with a central hole to allow heat to escape. The sides of these "drum" lanterns may be vertical or slope in slightly towards the top. The window plates are apparently secured in grooves in the uprights, as in the Mary Rose lantern. (This lantern, perhaps because it was destined for use aboard a ship, has what appears to be a sliding door, with horn plates set in two parallel grooves running down facing edges of two of the wooden uprights (Plate H), as opposed to similar models, all with pivoting doors.) The window plates in these lanterns are often clearly riveted to each other, and in one case (Plate C19) also to the posts themselves. These

lanterns often have a loop or a metal handle with a central ring, although many have none. Some have what seems to be a strap held by tacks or nails. Two examples have handles affixed to one side, tankard-fashion (Plate C22 & 23). Most have flat or perhaps slightly concave bases (Plate B16) although some have legs, either fixed directly into the underside of the base, or as prolongations of the uprights themselves. One early example (Plate A36) seems to have an independent plate or disk between the lantern top and the carrying ring, undoubtedly to protect the bearer's hand from the heat. Two examples are perhaps furnished with panes of glass (Plates B2, G10), as the plates are flat and not curved. One dates from the mid-15th century, the other from the beginning of the 16th. Many of these lanterns, especially later examples, are quite large. The door consists of a section which most probably pivots on pegs set in holes in the top and base. How these doors were fastened when shut is a matter of conjecture, although what appears to be a thong or string is visible on Plate B10. These lanterns shed light equally on all sides. The style of lantern preferred by Breughel (Plate C20 & 21), present in many of his paintings, has no 15th-century counterpart.

The second major family is the handle-held, or so-called tankard lantern. Usually metallic, with a cylindrical body and a flat, domed or pointed cap, and a single plate of horn set in the door, these lanterns appear in all shapes and sizes. Many are of a light metallic grey, others are brass or copper-coloured. The German lantern (Plate G31) is a dull copper with hinges and latch made of a white metal. The cap, besides a large central hole, is often pierced with many smaller perforations. Most holes appear to be drilled, although some renderings (Plate D12) suggest punched holes. Several lanterns have perforations in the shape of crescent moons, with the metal formed to make a small gable above the hole (Plates C4, E8 & 27, H16). The body of the lantern may also have holes pierced above and below the door, and down the sides. I have as yet found no "patterning" of holes; the lantern painted by Dürer (Plate C16) is either the earliest example or a personal fantasy of the artist. The 16th century Nativity in Selestat (Plate H16) may be earlier, but the pattern is difficult to make out. Rosace patterns, popular from the 17th century onwards, are nowhere in evidence. Many of these lanterns, especially in the late 15th and early 16th centuries, have a small ring at the top as well as the handle. The doors open on simple hinges. A catch

holds them shut, although many are open in order to shed more light. Most of the doors consist of a large plate of horn held in a metal frame, although some doors are apparently made of metal. Particularly appealing is the lantern on Plate H11. In the original painting, dated 1538, the details are so carefully rendered that it is hard not to imagine the lantern being a family heirloom. Despite the date of the painting, the lantern is distinctly medieval in shape, (as is the candlestick next to it), the scalloped door-rim echoing the smaller of the Smithfield lanterns, as well as the lantern on Plate G19. A long pin seems to run the length of the door, joining one hinge to the other.

Square lanterns existed (Plate D 1-7), but seem rarer. One has a handle, on others there are carrying rings, whilst the remaining ones have neither visible. The window plates seem to be of horn, if the tiny dots visible are to be taken as rivets.

The "onion-domed" lanterns seem to cover a large period, from the early 15th century until well into the 16th, unless the lantern on Plate F7 has been altered. These lanterns usually have legs, but their construction, sometimes very elaborate, is a matter of conjecture.

Several lanterns depicted occur in conjunction with religious processions (Plate E3 & 17). The lantern surmounted by a tiny cross is definitely ecclesiastic, otherwise I have ignored a certain number of so-called "church lanterns" for obvious reasons. Unfortunately, these lanterns are extremely popular amongst historical encyclopedists: Viollet-le-Duc, for example shows one in great detail, ignoring all other pictorial sources.

While all lanterns seem to carry only one candle, the huge lantern drawn by Breughel (Plate D10) seems to have two at least.

Tiny lanterns were also suspended from lecterns

(Plate E19-23). I have included the head and shoulders of the scribe in one case to give some idea of their minute size. They must have become tremendously hot when in use, but I would hesitate to dismiss them as simple allegorical symbols. A similar arrangement is depicted in an annunciation painted in 1496 by the Lombard artist Giovanni Pietra di Cemmo, with a candle holder replacing the lantern. Other lecterns or copyists' desks are surmounted by a metallic post and horizontal arm ending in a small hook, certainly destined to receive a suspended light source.

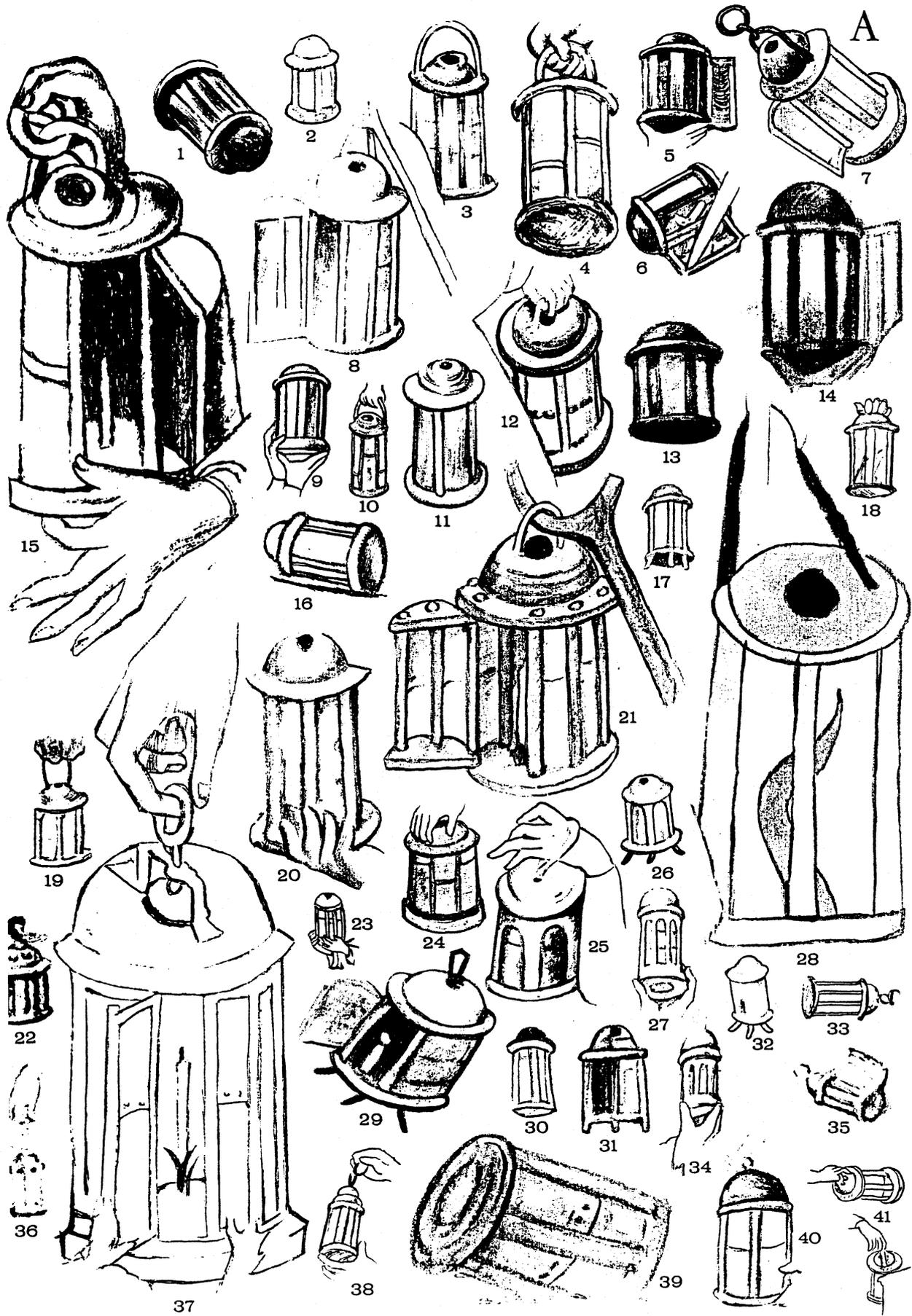


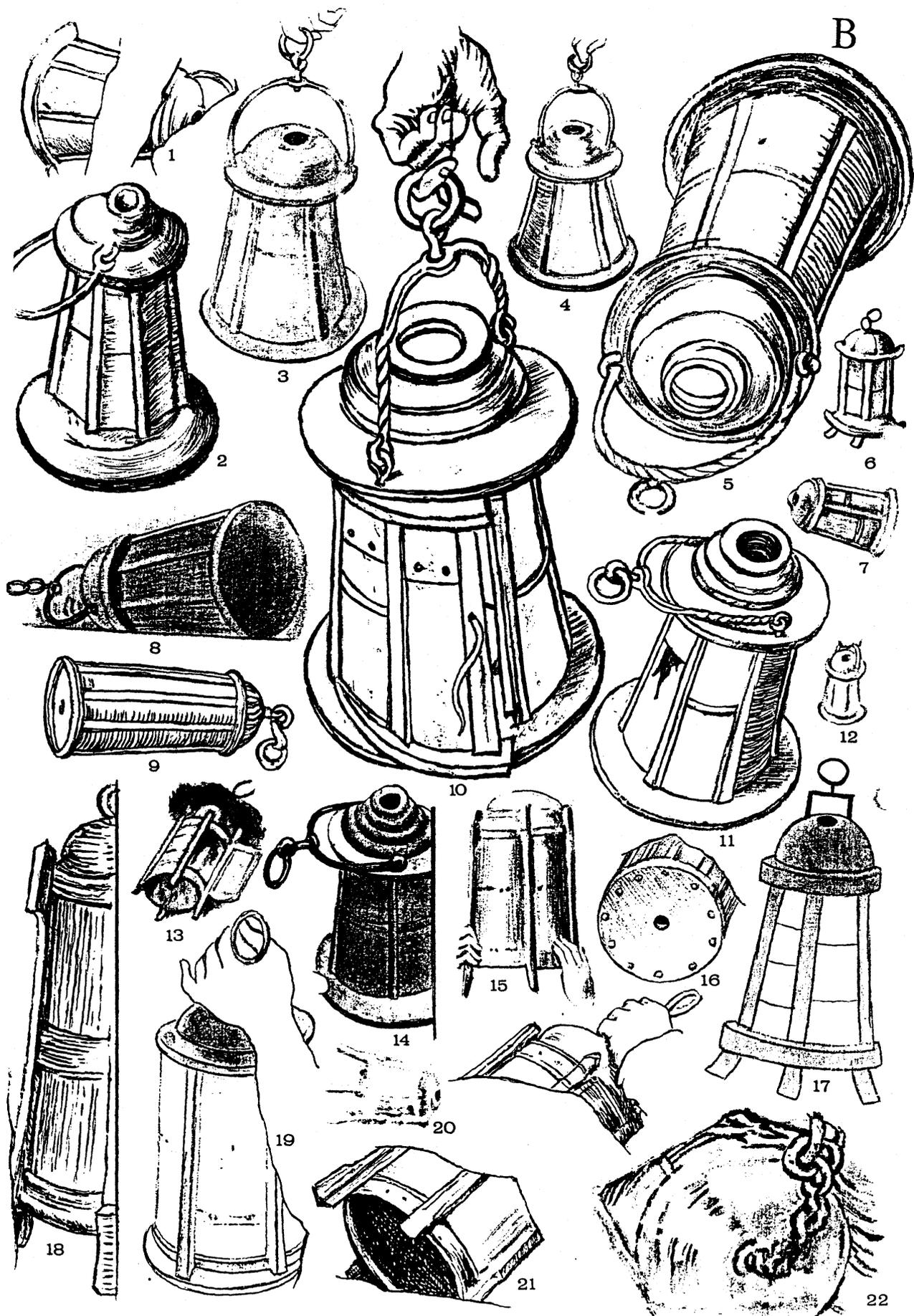
The Lanternmaker, from the Book of Trades, by Jost Ammon & Gunther Sachs, 1568

The Italian examples are typically atypical. Glass may well have been much more common in 15th-century Italy than north of the Alps as the greenish tint of many of the windows would seem to suggest. The stepped roofs (Plate C1 & 11) I have seen only in Italy. The lantern on plate F18 is furnished with white plates in a brass-coloured framework, and is suspended indoors. The topless half-tube affixed to a pole in Giotto's Betrayal of Christ is unusual but not unreasonable.

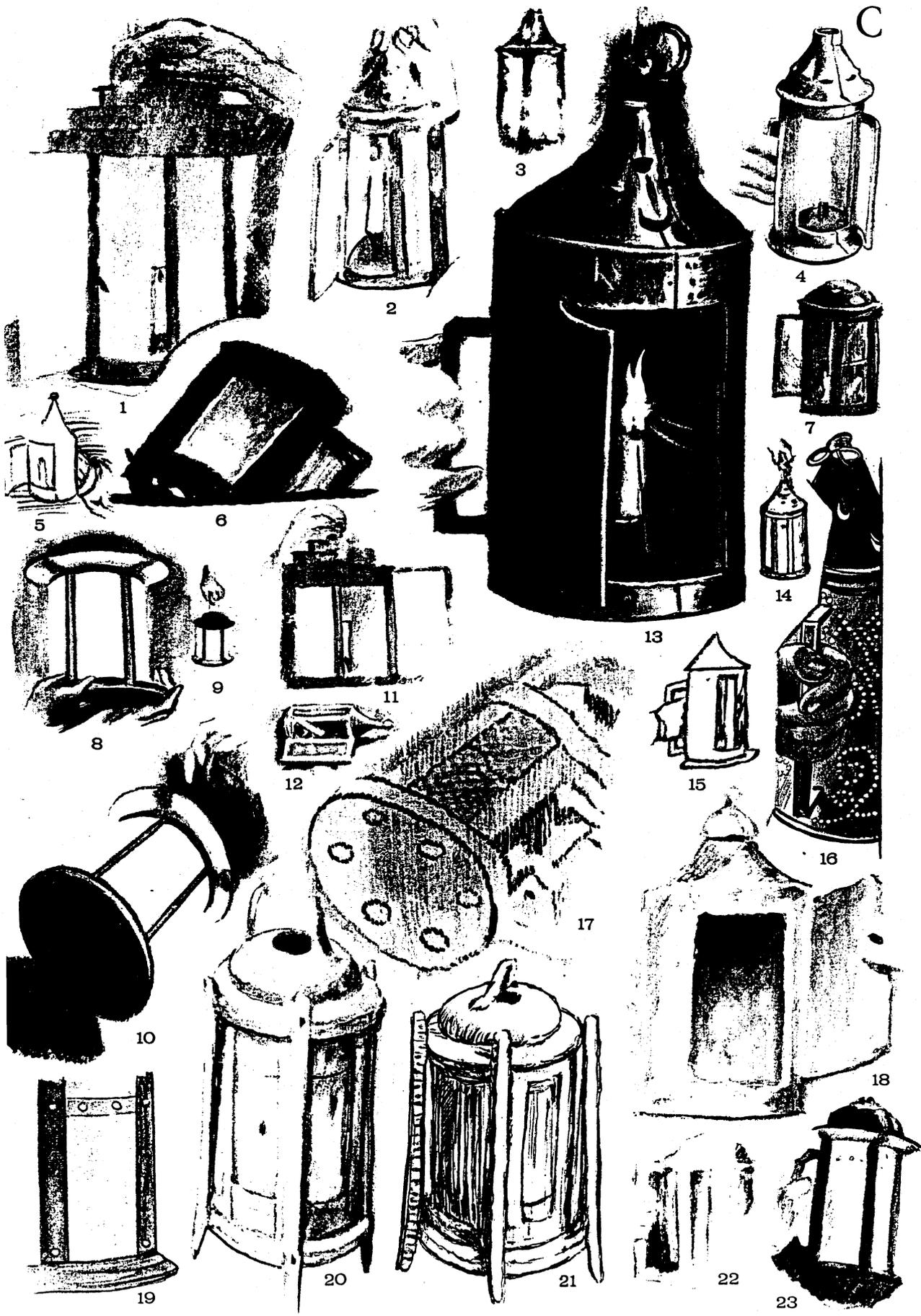
The large lantern by Breughel (Plate D8) is suspended in front of a public house. The huge snake-like flame in the lantern on plate A28 is in keeping with the allegorical nature of the illustration.

The spherical lantern on plate D15, hanging over the throne of King Arthur, may not merit literal interpretation. Also worthy of note is the seemingly round or oval-shaped lantern by Lucas van Leyden (Plate H22). Only one example of lanterns with hooks in lieu of rings appears (Plate E5) but it is not clear whether these are permanently attached or if they are intended only to hang the lanterns for display in the shop. Only one lantern with a chain has appeared (Plate B22). Although technically closer to a candlestick, the broken jug engraved by



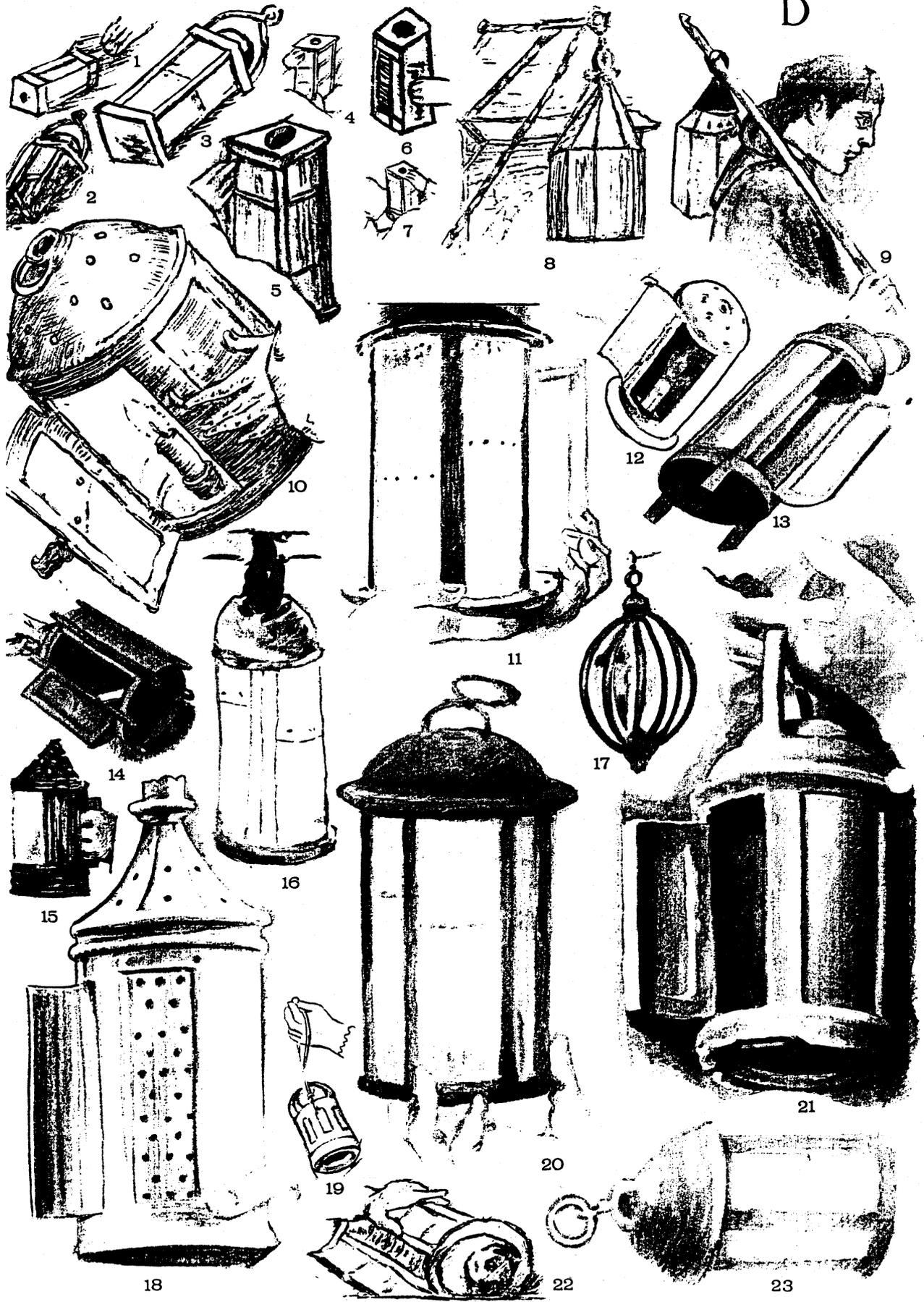


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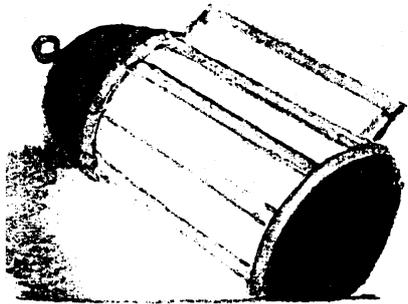




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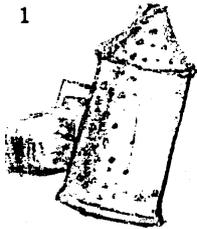




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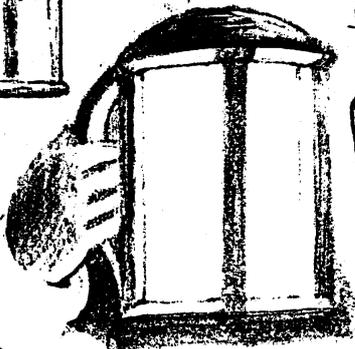
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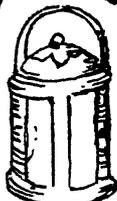
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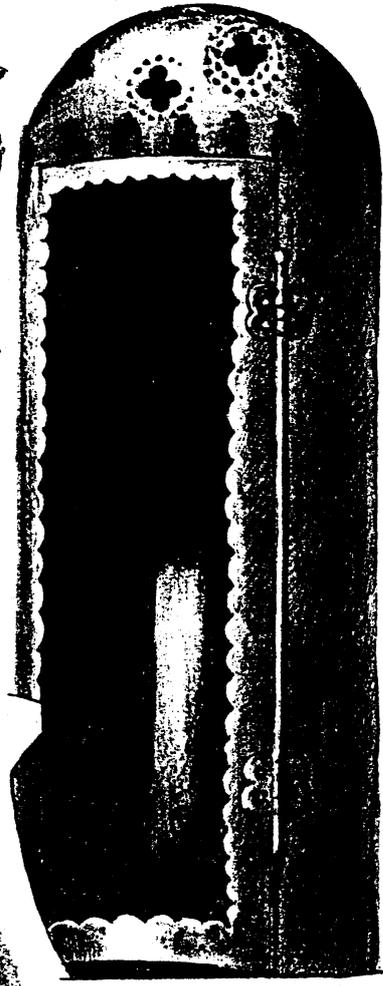
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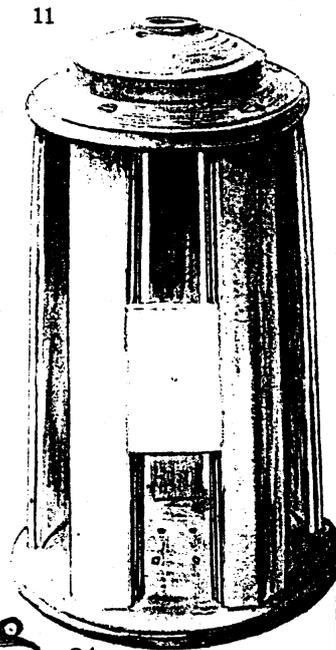
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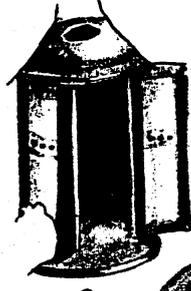
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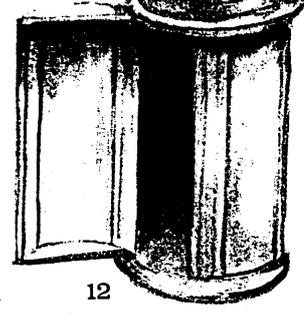
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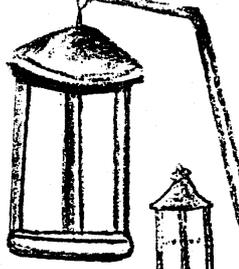
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Schongauer (Plate F20) is an enchanting insight in itself, as is the broken lantern with the top missing (Plate F16). Concerning the Mary Rose lantern (Plate H24), further information has yet to be published. As for the two Smithfield lanterns, now in the Museum of London, they will be dealt with in a further article with the participation of John Buttifant, who has had the privilege of actually handling them, and been able to take precise measurements and examine them from all sides.

Perhaps the most exciting, as well as the most mysterious, are the lanterns from the *De Rebus Militaris*, by the Italian engineer Taccola (Plate F 24, 25, 27 & 28) The plates are accompanied by captions and commentaries. Taccola says: *To make a surprise attack on the enemy at night, it is very useful to have horsemen carrying lanterns hung on the ends of poles, as well as spears and shields. In these lanterns there should be candles, and the pole should be fixed, in the manner of a candelabra, to iron rings on the saddle pommel, so the horsemen can both defend themselves and attack your enemies. And the lantern should be made of horn, or of wood with linen panels¹, fixed on the poles as has been described above. And for five mounted men, one should carry this lantern.*

In this way the commander can come at night with his armed troops and find the enemy fast asleep and unarmed, and will vanquish them. He adds that a knight with a lantern fixed to his helmet can provide light for himself and his companions and thus take his enemies by surprise... A lantern with a candle made of wax and a wick is more useful than a torch because it is not put out by wind or rain. Regrettably, no other source independent of Taccola has (as yet) shown these tactics in action, although experience has demonstrated that inventions in such books are

not to be over readily dismissed as fancies.

Other written references to lanterns are relatively rare. In Italy, in the late 1300's, an iron lantern is mentioned amongst the possessions of a poor merchant². Lanterns are periodically listed in the Burgundian artillery accounts. In her *Book of Armes and of Chivalrye*, Christine de Pisan lists, amongst vast quantities of equipment required on campaign, 200 lanterns. The word lantern itself, despite a clear etymology (from the Latin *lanterna*) was influenced by the horn used for windows, until the accepted form of the word became *lanthorn* in 16th-century England.

The Renaissance engineer Vannoccio Biringuccio (b.1480-d.1539?) mentions lanterns designed for festivities in Rome, consisting of a sheet of white paper over a mound of clay in which a tallow candle is put. These were placed in pairs in the embrasures of the Castel Sant'Angelo during the coronation of a new pope. Says Biringuccio: *When they are lit at night it is a very beautiful thing to see that shining and transparent whiteness in many rows as far as the eye can reach.*

Jost Amman and Gunther Sachs, on the page of the *Book of Trades* consecrated to the Lantern Maker, say the following:

*I make the great noble lanterns bright
That shine in the churches of Lucerne each night,
I also make the punched blind lamps,
So often used in soldiers' camps,
Prepare besides fine cylinders of light,
For feasts and weddings to make bright,
As well as other lanterns great and small,
That in the night are used by all.*

My thanks go to the people without whom this article would not have been possible; to Nick



An unusual lantern with what appears to be panes of leaded glass, Church of San Stephano, Morter (BZ), 1487 Photo: Bruno Chionetti.

Michael for his mastery of Latin; to Gerry Embleton, who lent me first his vision of historical research and secondly all his books; to Hartmut Writh and John Richards for their help with German; to Bruno Chionetti, who supplied all the hitherto unpublished lanterns photographed in northern Italy, and lastly to all the members of the Company of Saint George who sent images of lanterns from Germany, England and France. Several interesting lanterns have arrived too late to be included in this article, but I would like to reassure those who sent them; they will be used at a later date. My regrets, as always, for an occasionally incomplete list of sources; it is never satisfying to be obliged to punctuate references with question marks in parentheses, but there is often little other choice.

JH

The Plates

PLATE A

1. The Betrayal of Christ, French, 15th century
2. Saint Christopher, The Book of Hours of Duke Louis of Savoy, (folio 191 verso) Mid-15th century.
3. Betrayal of Christ, Schwyz, late 15th/early 16th century.
4. Master of Saint John the Baptist, mid-15th century
5. The Kiss of Judas, French, 15th century.
6. The Betrayal of Christ, scene from The Panorama with the Passion of Christ, Hans Memling, c.1470-1471. Turin, Galleria Sabauda, inv.8.
7. The Betrayal of Christ, The hours of Duke Louis de Savoie, (folio 97) Mid -15th century.
8. The Betrayal of Christ, The Parement of Narbonne, Master of the Parement of Narbonne, c.1375
9. The Betrayal of Christ, The Levi Hours, Master of Etienne Loyseau, c. 1417
10. German miniature, early 16th century (?)
11. Man of Sorrows, Cité des Dames Workshop, c.1410. Harley 4431 folio 257, British Museum
12. Boccaccio, The Decameron. Flemish illustrator, c. 1430-1440.
- 13, 14. The Betrayal of Christ, the Hours of Etienne Chevalier
15. Saint Christopher, Illuminated initial, engraving by Master E.S. (b.1420-d.1466 or 67)
16. The Betrayal of Christ, Scenes of the Passion, Master E.S.
17. Man of Sorrows, Master of Saint Veronica, Cologne, c.1400.
18. Saint Christopher, Follower of Van Eyck, early/mid-15th century.
19. The Betrayal of Christ, Hours of Jean de Navarre, Jean le Noir, after 1334.
20. The Betrayal of Christ, the Petites Heures of Jean, Duc de Berry Jean le Noir, c. 1375.
21. The Betrayal of Christ, Master of the Parement of Narbonne, c. 1380.
22. Man of Sorrows, Heures à l'Usage de Rome, c. 1450-60.
23. Saint Christopher, the Buxheim Master, Southern Germany, woodcut dated 1423,
24. The Betrayal of Christ, Savoy, 3rd quarter of the 15th century.
25. The Betrayal of Christ, Anonymous Master, Klarenalter, Cologne, 1360-7
26. Betrayal of Christ, Master of the Small Passion, Cologne, c.1420
27. Betrayal of Christ, Book of Hours, the Sielern Master, early 15th century (?)
28. Allegorical figure, Anonymous, Codex Pal. latin 1066, Vatican Library, 15th century (?).
29. Betrayal of Christ, Hieronymous Bosch, Triptyque of the Temptation of Saint Anthony, dated 1516.
30. Betrayal of Christ, miniature from a book of hours, Paris, Tours(?), 1470-90.
31. Man of Sorrows, detail from twenty-seven scenes from the life of Christ, Cologne, 1370.
32. Man of Sorrows, Sippenalter, Cologne, c. 1420-30
33. Betrayal of Christ, Colin d'Amiens, also called the Master of the Geneva Boccaccio, late 15th century.
34. Saint Christopher, follower of the Limbourg Brothers. c. 1422.
35. Betrayal of Christ, Missel à l'usage de Paris, c. 1492.
36. Judas accepting the price of his betrayal: small scene decorating the Betrayal of Christ, Jean le Noir, the Small Hours of the Duc de Berry, c. 1375, Paris, Bibliothèque Nationale, ms. lat 18014 fol 76.
37. Saint Gudule, Rogier Van der Weyden, middle or third quarter of the 15th century, pen drawing on paper.
38. Betrayal of Christ, Hours of Catherine d'Orléans, 15th century (?)
39. Betrayal of Christ, miniature from a book of hours, 1470-90 Tours (?)
40. Saint Christopher, Master of Boucicaut (Jacques Couène?) Hours of Maréchal Boucicaut, 1410-12.
41. Betrayal of Christ, Large version of the Passion, Master of the Unicorn Hunt, active in Paris c. 1480 to 1510.

PLATE B

1. Betrayal of Christ, Engraver with the Monogram AG, South Germany, (Wurzberg?) active last quarter of the 15th century.
2. Man of Sorrows, Israhel van Meckenhem, active in Westphalia, born before 1450 - died about 1503.
3. Jesus before Caiaphas, Martin Schongauer, c.1430 - 1491.
4. Nativity, Martin Schongauer, Dominican Altarpiece, Colmar, 1480-1490
5. Betrayal of Christ, Martin Schongauer.
6. Man of Sorrows, Israhel van Meckenhem, early 16th century
7. Betrayal of Christ, Workshop of William Vrelant, Bruges, c.1470

8. Betrayal of Christ, Martin Schongauer, Dominican Altarpiece, Colmar, 1480-90.
9. Betrayal of Christ, Albrecht Dürer, 1509.
10. Christ before Anne, Martin Schongauer.
11. The Resurrection, Martin Schongauer.
12. Christ on the Mount of Olives, Engraver with the Monogram AG, last half of the 15th century.
13. Betrayal of Christ, Limbourg altarpiece, late 15th century (?).
14. Resurrection of Christ, Rothenbourg Altarpiece, 1494.
15. Betrayal of Christ, Master of Evert von Soudenbach, Hours of Jan Van Amerongen, dated 1460, Brussels, Bibl. Royale Albert 1er.
16. Betrayal of Christ, Albrecht Dürer, early 16th century.
17. Instruments of the Passion, Flemish miniature from the *Getijdenboek ten Gebruike van Sarum*, Bruges, c.1400-1415.
18. Man of Sorrows, Lucas van Leyden, early 16th century.
19. Betrayal of Christ, Jan Joest, Dresden, c.1500.
20. Betrayal of Christ, Master of Evert von Soudenbach, Hours of Jan Van Amerongen, dated 1460, Brussels, Bibl. Royale Albert 1er.
21. Betrayal of Christ, Lucas van Leyden, early 16th century.
22. Betrayal of Christ, Albrecht Dürer, pen drawing on green paper with white highlights, 1503 (?)

PLATE C

1. Betrayal of Christ, anonymous fresco, North Italian, Confraternita di San Francesco, San Vittorio di Alba (CN) late 15th century.
2. Betrayal of Christ, Fresco, Anonymous, North Italian, Church of San Bernardo, Castellato Stura (CN) 1488.
3. Betrayal of Christ, Jan Van Eyck, the Milan Hours.
4. Nativity, anonymous German master, Mainfranken, c.1470-80 Germanisches National Museum, Nuremberg.
5. Saint Christopher, Martin Schongauer, late 15th century.
6. Betrayal of Christ, German, late 15th/early 16th century.
7. Betrayal of Christ, French (?), late 15th century (?).
- 8, 9, 10. Betrayal of Christ, Master of the Beyghem Altar, early 16th century, Dijon, Musée des Beaux-Arts.
11. Betrayal of Christ, anonymous fresco, North Italian, Confraternita di San Francesco, San Vittorio di Alba (CN) late 15th century.
12. Betrayal of Christ,
13. Nativity, German, late 15th century.
14. Nativity, Master E:S:
15. Saint Christopher, Urs Graf, early 16th century.
16. Nativity, Albrecht Dürer,
17. Betrayal of Christ, Tapestry, late 15th/early 16th century, Freiburg Historisches Museum, Germany.
18. Nativity, anonymous, Upper Rhine area, polychrome bas-relief, c.1510-1520, Zurich, Landesmuseum.
19. Detail, Flemish or Netherlandish master, late 15th/early 16th century, Brussels, Musées Royaux des Beaux-Arts.
20. The Cloudy Day, Peter Breughel, 1565.
21. The Seven Virtues, Peter Breughel, 1559.
22. Betrayal of Christ, Henry de Vulcop, book of hours, late 15th century, Paris, Collection Guy Ladrières.
23. Betrayal of Christ, Master of the Dreux Budé Triptych (Henry de Vulcop?), late 15th century, Bremen, collection of Dr. H. Bischoff

PLATE D

1. Betrayal of Christ, Master of the Dutuit Mount of Olives, active mid-15th century.
2. Betrayal of Christ, Master E:S.
3. Betrayal of Christ, German woodcut, late 15th century.
4. Saint Christopher, Anonymous Middle Rhenish Master, c. 1500.
5. Saint Christopher, Master of the Amsterdam Cabinet, c.1480-1488.
6. Saint Christopher, Master of the Dutuit Mount of Olives, active mid-15th century.
7. Saint Christopher, Israhel van Meckenem, copy of a Saint Christopher by the Master of the Amsterdam Cabinet, early 16th century.
8. The Seven Virtues: Charity, Peter Breughel, 1559.
9. Travellers leaving an inn, oil on wood panel, anonymous, Siena, 15th century (?)
10. "Elck" (Everyman): At the Sign of the Four Winds, Peter Breughel, 1558.
11. Betrayal of Christ, Master of Saint Giles (Flemish painter active in Paris and Holland from 1495 to 1510), Brussels, Musées Royaux des Beaux-Arts.
12. Nativity, the Talheim Altarpiece, c.1519
13. Betrayal of Christ, Colyn de Coter, Triptych of the Descent from the Cross, Brussels, late 15th/early 16th century.
14. Betrayal of Christ, Gaspard Isenmann, 1465, Colmar, Musée Unterlinden,
15. Altarpiece wing, Regensberg, c.1480.
16. Lantern displayed on a shelf, along with vegetables, fruit and household utensils, *Arte Mémoire*, Bibliothèque Sainte-Geneviève, 15th century (?).
17. The arrival of Lunete at Arthur's court, miniature, 15th century.
18. Nativity, Martin Kriechbaum (?) c.1490-98. Pfarrkirche, Kefermarkt.
19. Betrayal of Christ, Hans Holbein the Elder, c.1500.
20. Saint Christopher, Hans Memling
21. Betrayal of Christ, from the Volkhamer Monument, Viet Stoss, 1499, Nuremberg.
22. Betrayal of Christ, Master of the Amsterdam Cabinet, c.1470-75.
23. Betrayal of Christ, Henry de Vulcop, book of hours, late 15th century, Paris, collection Guy Ladrières.

PLATE E

1. Nativity, Jacob Obrecht, *Missa Salve diva parens* (gradual of polyphonic chants), c. 1490-1500, Vienna, *Musiksammlung der Osterreichischen Nationalbibliothek*, Ms. 15495, folio 1 verso.
2. Betrayal of Christ, Urs Graf, 1512.

3. The Priests' Kermess (copy) Peter Flötner, 1535.
 4. Saint Christopher, anonymous, 15th century (?).
 5. Lantern-windowmaker Fritz Hornrichter, 36th brother, the Mendel Housebook, Nuremberg, 1425.
 6. The Combat of Carnival and Careme, Peter Breughel, 1559.
 7. Shield with Instruments of the Passion, the Virgin displaying the body of Christ, artist with the Monogram F, c.1490, London, British Library, Printroom, Lehrs 1.
 8. Betrayal of Christ, Duccio, Siena, c.1308-11.
 9. Nativity, Hans Schaufelein, c.1505/6.
 10. Saint Christopher, Israel Van Meckenhem, late 15th c.
 11. Nativity, Master E.S.
 12. Betrayal of Christ, Burgundian miniature, c.1520, Dijon, Musée des Beaux-Arts.
 13. Saint Christopher, Hans Holbein the Elder, early 16th century.
 14. Nativity, Wolf Traut, 1511.
 15. Instruments of the Passion, The Lehrbook Master, Missale Fratrum Minorum, 1469, Vatican Library.
 16. Saint Christopher, Master FVB, active 1480-1500.
 17. Religious procession, woodcut from the Schedelsche Weltchronik, 1493.
 18. Nativity, Martin Schongauer.
 19. The author at work, pen drawing from the Tacuinum Sanitatis, attributed to the workshop of Giovanni di Grassi (d.1398), Northern Italy, Liège, University Library, ms.1041.
 20. Saint Matthew (?), "Le Mors de la Pomme", 15th century, Paris, Bibliothèque Nationale, ms français 1700, folio116.
 21. The author at work, Flemish miniature, attributed to J. le Tavernier, from the "Avis pour le Passage d'Outremer", 15th century, Brussels, Bibliothèque Royale Albert 1er.
 22. Detail of lantern 21.
 23. Henri Suso, L'Horloge de Sapience: l'Ecole de Théologie, Master of Jean Rolin, c.1455, Brussels, Bibliothèque Royale Albert 1er.
 24. Nativity, Simon Vostre, The Verdun Hours, late 15th c.
 25. The Lantern Maker, from the Standebuch, by Jost Ammon & Gunther Sachs, 1565.
 26. Nativity, Jurg Schweiger, early 16th century.
 27. The Priests, from the Standebuch, by Jost Amman & Gunther Sachs, 1565.
 28. Lantern-maker's shop, from the Mendel Housebook, Nuremberg, 1535.
- PLATE F**
1. Betrayal of Christ, Hans Holbein the Elder, 1500-01.
 - 2, 3. Betrayal of Christ, Master IAM von Zwolle, (German engraver, active in 1462, d.1504.)
 4. Instruments of the Passion, Master IAM von Zwolle.
 5. Master of Heiligen Sipp, Sippenaltar, c.1500-1504.
 6. Instruments of the Passion, (Passionsaule), German, late 15th century.
 7. Betrayal of Christ, Master Bertram (1340-1415), Passionaltar, c.1400, Hanover, Neidersachsiches Landesmuseum.
 8. Betrayal of Christ, Jacob Janz (d.1504)
 9. Betrayal of Christ, The Lambiertaltar Master, c.1420.
 10. Betrayal of Christ, Jean Pucelle (active toward 1320 - 1350), the Hours of Jean d'Evreux.
 11. Betrayal of Christ, Hours of Jean de Navarre, Jean le Noir, after 1334.
 12. Betrayal of Christ, Master of the Lyvesberger Passion, Altar of the Lyvesberger Passion, Cologne, c.1464.
 13. Betrayal of Christ, Fresco, anonymous North Italian artist, Church of Notre Dame des Fontaines, La Brigue (F), c. 1492.
 14. Betrayal of Christ, Giotto, between 1305 and 1310, Padua, chapel of the Scrovegni family.
 15. Betrayal of Christ, Hans Schaufelein, c.1510.
 16. Betrayal of Christ, Hans Baldung (Grien), c.1510.
 17. Betrayal of Christ, Hans Holbein the Elder, c.1500-1501.
 18. Saint Jerome in his study, Italian (?), 15th century (?)
 19. Betrayal of Christ, Fresco, anonymous North Italian artist, Church of Saint Anna, St. Michèle Mondouli (CN), 1475.
 20. Nativity, Master FVB.
 21. Saint Christopher, Martin Schongauer.
 22. Instruments of the Passion, Goswyn van der Weyden, Triptych of Abbot Antonius Tsgrooten, early 16th century.
 23. Saint Christopher, Engraver with the Monogram HS, late 15th - early 16th century,
 - 24, 25 Illustrations by Paoulo Santini, for the De Rebus Militaribus, de Mariano Daniello di Jacopo, known as Taccola, before 1475, Paris, Bibliothèque Nationale
 26. The Ossuary, Niklaus Manuel Deutsch, Dance of Death (1516-17), copy by Albrecht Kauser, 1649.
 - 27, 28. De Rebus Militaribus, Taccola.
 29. Nativity (?) Book of Hours, Lyon, late 15th century.
 30. The Resurrection, Albrecht Altdorfer, Altar of Saint Florian. 1518.
- PLATE G**
1. Three Scenes from the Life of Gideon, Parisian workshop, the Illuminated Bible of Cardinal Maciejowski, c. 1225 (?), New York, Morgan Pierpont Library, ms. 638, folio 13.
 2. From a mid-13th century missal, (M.R. James, Catalogue of the Latin Manuscripts in the Sir John Rylands Library, II, Pl.35)
 3. Betrayal of Christ, 14th century (?) Paris, Bibliothèque Nationale.
 4. Instruments of the Passion, illustration of unknown origin bound at the end of ms 1305, (folio 207), Troyes, Bibliothèque municipale.
 5. Betrayal of Christ, English (London), c.1260.
 6. Prayer book of Claude de France, early 16th century, Cambridge, Fitzwilliam Museum, ms 159.
 7. Man of Sorrows, anonymous copy after the Master of the Playing Cards, Cologne, 1430-1450.
 8. Man of Sorrows, Bruges, 1400-1420.
 9. Instruments of the Passion, woodcut, anonymous Flemish artist, The Missal of Saint Gregory, c.1460, Nuremberg.

10. Nativity, Master E.S. (d. 1467)
11. Miniature from the Oldenburger Sachsenspiegel, 1336, Rastede Cloister, Oldenburg.
12. La Coutume de Toulouse, late 13th century, ms 6187, Paris, Bibliothèque Nationale.
13. Betrayal of Christ. Gaspard Isenmann, 1465, Colmar, Musée Unterlinden.
14. The Resurrection of Christ, Peter Breughel, copy, 1563.
15. Saint Christopher, Master of Saint Sebastian, engraver active in Cologne, last third of the 15th century.
16. Betrayal of Christ, Anonymous Champagnard artist, mid-16th century, Troyes, Musée Valuisant.
17. Betrayal of Christ (?), P. Guido, Santuario d. Madonna, Rezzo (IM), Italy, 1515.
18. Betrayal of Christ, Urs Graf. 1506-07.
19. Nativity, The Ottobeuren Master, c.1520-25, Ottobeuren (D) Klostermuseum.
20. The Excision of the Stone of Madness, engraving after Peter Breughel, mid-16th century.
21. "Soufflacul", choirstall sculpture, Church of Saint-Sulpice, Diest, 16th century.
22. Saint Christopher, Urs Graf, 1511-1512.
23. Betrayal of Christ, Scenes of the life of Christ, a painting commissioned by Saint Nicolas de Flue, late 15th century.
24. Choirstall, Dutch, c.1508.
25. Betrayal of Christ, G. Canavesio, Church of Notre Dame des Fontaines, La Brigue (F), 1492.
26. Betrayal of Christ, Fresco, G. Canavesio, Church of Notre Dame des Fontaines, La Brigue (F), c.1492.
27. Nativity, from the remains of an altarpiece, Jorg Lederer (D.1550), Augsburg.
28. Master of the Legend of Saint Lucy, the Saint Nicolas Altarpiece, last quarter of the 15th century.
29. Nativity, Les Heures d'Anne de Bretagne, 1503-1508.
30. The Luttrell Psalter, folio 91, 1335-40.
31. Nativity, German, c.1470-1480.
32. Betrayal of Christ, Part of an altar frontal, first half 14th century, London, British Museum.

PLATE H

1. Betrayal of Christ, The Limbourg Brothers, Les Très Riches Heures du Duc de Berry, France, 1st half of the 15th century.
2. Betrayal of Christ, Jean Bourdichon, page from a French book of hours, late 15th century.
3. Christ on the Mount of Olives, Juan de Flandes, c.1509.
4. Saint Christopher, German, late 15th century.
5. Saint Christopher, Urs Graf, 1503.
6. The Last Judgement, Hieronymus Bosch, late 15th century, Bruges, Musée Communal des Beaux-Arts.
7. Betrayal of Christ, anonymous, North Italian, Church of San Magno, Castelmagno (CN), 1514.
8. Betrayal of Christ, French (?), late 15th century (?)
9. Miracle of the Sacred Host, French (Rouen), late 15th century.

10. Betrayal of Christ, Jean Bourdichon, page from a French book of hours, late 15th century.
11. The Cupoard, still life, Flemish school, 1538.
12. The Garden of Earthly Delights, Hieronymus Bosch, late 15th century.
13. Saint Christopher, The Master of the Amsterdam Cabinet. c.1490.
14. Man of Sorrows, German, late 15th - early 16th century.
15. Saint Christopher, Hans Baldung Grien, c.1505, Vienna, Staatliche Graphische Sammlung Albertina.
16. Nativity, anonymous, early 16th century, Selestat, Bibliothèque Humaniste.
17. Saint Christopher, Hans Baldung Grien, c.1510-1511, Aschaffenburg, Museum der Stadt.
18. Man of Sorrows, Dutch, late 15th century, Brussels, Cabinet des Estampes.
19. Ghost cotillion of the souls of the Black Death victims who were buried alive in 1342, from an engraving by A. Aubrey, Germany, 1604, perhaps a copy of an earlier engraving.
20. Nativity, Albrecht Dürer, the Small Passion, 1509.
21. Betrayal of Christ, Hans Hirtz, Master of the Karlsruhe Passion, c. 1440, Cologne, Wallraf-Richartz-Museum
22. Betrayal of Christ, Lucas van Leyden, 1521
23. Man of Sorrows, Dutch, first half of the 16th century (?).
24. Lantern from the Mary Rose, early 16th century.
25. Betrayal of Christ, Johannes von Metz, altarpiece, Johanniterkirche St. Leonard, Regensburg, early 15th century.
26. Man of Sorrows, woodcut, German, 15th century (?)
27. Betrayal of Christ, Master of the Unicorn Hunt, Large Passion of Christ, coloured woodcut, late 15th - early 16th c.
- 28, 29. Copper alloy lanterns from Smithfield, 14th century, London, Museum of London.

Footnotes:

1. The Latin reads *de ossibus luadis*, literally "of glowing bones", which we translate as horn, *faute de mieux*.
2. *The Merchant of Prato*, Iris Origo, Penguin Books, 1969



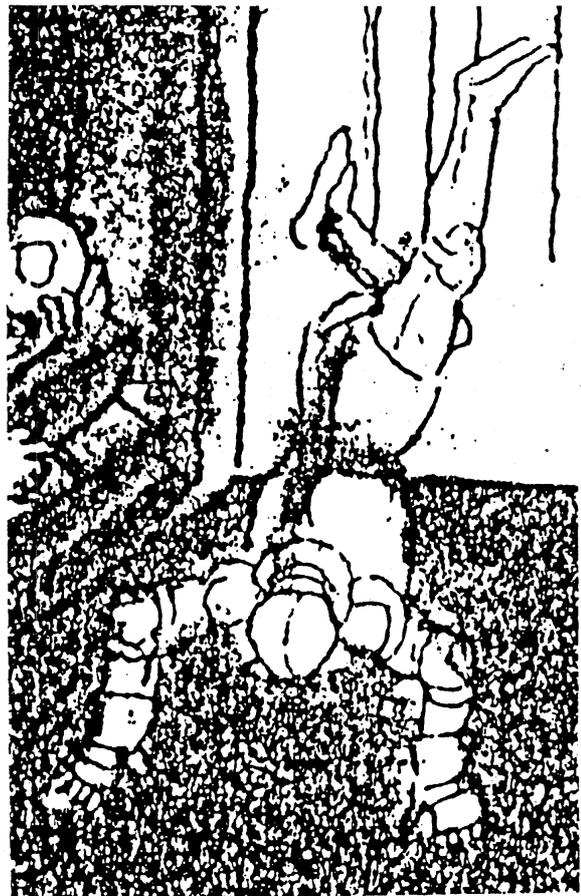
Detail from *Elck (Everyman) At he Sign of the Four Winds*, Engraving by Peter Breughel the Elder, 1558

POIDS ET MOBILITE DES ARMURES DU MOYEN AGE

(Traduction de Pascal Pouly, extraits de "The Medieval Soldier")

Il n'y a pas de doute qu'un homme en pleine forme équipé d'une armure bien ajustée peut courir, sauter en selle et grimper à une échelle. Des faits contemporains et des expériences modernes le prouvent et, sinon, comment les chevaliers et les hommes d'armes auraient-ils pu combattre et survivre dans les batailles? Hollywood, trompé par les armures d'époque portées exclusivement pour la joute, beaucoup plus lourdes et bien moins articulées, a créé une impression complètement fautive des chevaliers se faisant poser sur leur selle par une grue avant le combat, ou étendus, désespérés, comme des tortues retournées après avoir été renversés au sol. La distinction entre des armures de tournoi et des armures de guerre est évidente. Dans le deuxième cas, les lames sont attachées au corps et le poids est distribué de façon équilibrée, permettant à un homme qui y est accoutumé, par un long entraînement, suffisamment d'agilité pour se battre au corps à corps. Il existe une illustration du 15^{ème} siècle d'un chevalier faisant la pièce droite en armure complète - une prouesse reproduite encore facilement de nos jours - Froissard mentionne Sir John Assueton bondissant complètement armé sur son destrier et Olivier de la Marche décrivant Galliot de Balthasin sautant complètement équipé hors de sa selle "bien que n'ayant qu'un pourpoint" en 1446. Le chroniqueur suisse Schilling raconte même qu'un homme d'arme en armure complète avait été jeté d'un pont dans la Moselle. Ce même homme appela Saint Nicolas à l'aide, et, grâce à lui, réussit à sortir de la rivière et survécut. Selon l'expérience de l'auteur, la ventilation et la visibilité à courte distance étaient les principaux problèmes du chevalier. Un casque fermé devenait rapidement une fournaise étouffante; et bien que quelques modèles donnent de façon surprenante une bonne vision, d'autres la restreignent dangereusement. Ce n'est pas surprenant que nous ayons des références sur des casques ouverts où des chevaliers laissant de côté leur mentonnière - lame protégeant le cou et le bas du visage - en dépit des conséquences fatales. Un chevalier conservant une protection complète, combattant avec une visière baissée, pouvait relativement facilement être la proie de deux ou trois assaillants moins bien équipés, l'attaquant de plusieurs côtés à la fois.

Quelques comparaisons de poids peuvent être instructives. La moyenne de quatre armures de la fin du 15^{ème} siècle, donne un poids total de 24 kg. Voici quelques exemples de pièces détachées. - Armet (casque fermé), 2.7 kg - 3.4 kg - Gorgerin, 250 g - Plastron et dossière, 5.6 kg - Tassette, 760 g - Bras droit, 1.3 kg - Bras gauche, 1.16 kg - Jambes, 2.75 kg chacune - Chemise de maille avec les manches courtes ou longues, 7.8 kg et 9.4 kg respectivement - Une épée typique, 1.15 kg. Un soldat d'infanterie avec son équipement de marche quotidien, depuis l'époque napoléonienne à notre période, a normalement transporté entre 27 kg et 32 kg, bien moins uniformément réparties que le poids d'une armure.



From Emperor Sigismund's "Kriegs und Pikenwerch", Kunsthistorisches Museum, Vienna

BOOK REVIEWS

ARMIES AND WARFARE IN THE MIDDLE AGES: the English Experience. Michael Prestwich, Yale University Press, New Haven and London, 1996. ISBN 0-300-06452-7

The author's avowed aim of this book "is to examine the ways in which soldiers were recruited, commanded and supplied in medieval England, together with the way they fought". This promising objective is very well attained, although some of our members will be disappointed by the necessarily cursory treatment of some subjects. However, many aspects not usually dealt with in "popular" history books are brought up: recruitment; how troops were fed, supplied and deployed; the structures of military command. Professor Prestwich challenges many common assumptions about medieval warfare, and dwells on subjects of uncommon interest such as logistics, mercenaries, intelligence and naval warfare - all dear to our hearts. It is perhaps the best English counterpart so far to Philippe Contamine's *La Guerre au Moyen Age* - but far more readable. It is only a shame that Professor Prestwich has seen fit to concentrate on the thirteenth and fourteenth centuries, with little on our own period of interest in this otherwise thoughtful and sensitive book.

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The Battle of Grandson, woodcut from the "Histoire de Pierre de Hagenbach", printed in Strasbourg in 1477

EARLY FRENCH COOKERY: SOURCES, HISTORY, ORIGINAL RECIPES AND MODERN ADAPTATIONS. D. Eleanor Scully and Terence Scully, with illuminations by J. David Scully. The University of Michigan Press, 1995. ISBN 0-472-10648-1

Another winner from our friend Dr Terence Scully - this is the sort of book I have been dreaming about for years. We have a plenitude of "medieval" recipe books with thoughtless reconstructions, some not even quoting the original recipes. We have many scholarly books with accurate and sensitive reconstructions, but with a dearth of commentary. This one is monumental in that it includes no-nonsense reconstructions, full of common sense: Dr Scully suggests turmeric rather than saffron as a colouring medium for pastry (for economic reasons), or adding garlic to chick-pea purée to liven it up (and why not? The Duke of Savoy would have had no reservations about such whims!); some of us however may balk at adding orange juice to hypocras...

Although many of the recipe adaptations are modified for the modern diner, at least we are always given the original recipe, and the reasons for departing from it, which is more than can be said for most similar books.

Another ingredient I have discovered for the first time in a book on such a serious subject is - humour! There is a wonderful chapter reconstructing a day in the life of Chiquart (Scully's darling - he has been researching the cookery of the Savoyard court for decades). There is also a section on costume and how to make it, although this is rudimentary in the extreme.

Altogether a wonderfully entertaining and delightful book that begs to take its place in the library of anyone interested not only in early cookery but also in medieval social history; and an indispensable companion volume to Scully's other recent publication, *The Art of Cookery in the Middle Ages*. (The Boydell Press, Woodbridge 1995. ISBN 0-85115-611-8).

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BISCUIT: the staple of armies from time immemorial

By NICHOLAS MICHAEL

The earliest mention of biscuit we have come across is in Christine de Pisan's early fifteenth century list of necessities during a siege, where she requires *sixty tons of Paris wheat, one third to be baked into biscuit, the rest ground to flour* (see *Dragon* no. 3). But the earliest biscuit recipe we have seems to be from Elinor Fettiplace's *Receipt Book*, written in 1604. Hilary Spurling, who edited the manuscript (*Elinor Fettiplaces' Receipt Book: Elizabethan Country House Cooking*. Viking Salamander, London 1986. ISBN 0-948861-03-9), states it to be "the closest to its ship's biscuit ancestors..." I therefore make no apologies for including it here, although its ancestor must have been plainer by far.

To make bisket bread stif

Put to a pound of flower half a pound of sugar, nyne whites and six yelks of eggs, finelie beaten, mould it together, & make it up in a roule to bake it, when it is baked slice it & drie it, in the oven or on a gredyron, you must put in some anniseeds, & coriander in the moulding.

I am indebted to Mark Gist of Compuserve for the following reconstructions of earlier biscuit:

To make ship's biscuit or hardtack you need only flour (all purpose) and water. To any quantity of flour add enough water to make a soft (but not sticky) dough. Knead or work the dough for a good while (ten minutes) until it becomes elastic. Roll out about 1/4 to 1/2 inch thick; cut out in round shapes; prick with a fork and bake at 450° (230°C) for seven minutes. Then turn the oven to 350° (170°C) and bake for 7-10 minutes. When done hardtack should be as hard as rock.

Mark Gist has supplied me with another recipe, this time from *The Laura Ingalls Wilder Little House Cookbook*. He used this biscuit on the reconstruction of a sixteenth century ship voyage he undertook:

Hardtack is the simplest of all non-perishable meals. Until as recently as World War I it was the

staple food of traveling armies, who called it "sheet-iron", "tooth-dullers", "crown-breakers" and other such names... It was eaten dry only in emergencies and was then more sucked-on than chewed. Dipped in hot coffee, hardtack became edible; soaked well in water and fried in salt pork fat, it is palatable as well. All modern crackers are dimpled in the manner of hardtack, which was pricked with [nails] to keep it compact and breakable.

*About three cups unbleached flour
1 tablespoon salt
1 cup water*

Preheat oven to 375° (190°C). In a 2-quart (2 litre) bowl, mix 3 cups flour and the salt. Add the water and stir until it becomes difficult to continue. Knead in the bowl by hand, adding more flour to make it very dry.

Press, pull and roll the dough into a rectangle that can be divided into squares of 1/2 inch (1.25 cm) thickness. Use a table knife to cut the dough into squares.

Holding each square in the hand, punch 16 holes through it with an 8-penny nail, being careful not to hurt yourself. Place dough squares on ungreased baking sheets and bake for 30 minutes, until crisp and lightly browned. Cool before storing in a closed container. Makes 16 pieces.

If anyone has encountered other early recipes for biscuit, or has come across any references from our period, I should be very interested to hear from them.

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