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JOHN HEWITT

ANCIENT ARMOUR
AND
WEAPONS IN EUROPE

III

Preface by
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ANCIENT ARMOUR
AND
WEAPONS IN EUROPE:

FROM THE
IRON PERIOD OF THE NORTHERN NATIONS TO THE END
OF THE SEVENTEENTH CENTURY:

WITH
ILLUSTRATIONS FROM COTEMPORARY MONUMENTS.

By JOHN HEWITT,
MEMBER OF THE ARCHEOLOGICAL INSTITUTE OF GREAT BRITAIN.

SUPPLEMENT.
COMPRISING THE 15TH, 16TH, AND 17TH CENTURIES.

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SUPPLEMENT,

COMPRISING THE

FIFTEENTH, SIXTEENTH AND SEVENTEENTH CENTURIES.

ARRIVED at that century when the Art of PRINTING throws its light on every branch of knowledge, when monuments of all kinds exist in a wonderful profusion, it has been considered needless to pursue our researches on so extensive a plan as heretofore. Not, however, to leave an entire blank between the fourteenth century and the termination of armour-bearing (the seventeenth century), it has been thought advisable to offer, as a Supplement, a series of the most prominent examples of armour and weapons characteristic of this time.

It is by no means contended that a complete examination of these later centuries would not be desirable; but, to effect this, our little work would be so much augmented in bulk and costliness, that our chief hope of its usefulness, a wide circulation among artists and students, (to a certain number of whom the expensiveness of a book is a serious objection,) would be materially diminished. We have therefore resolved to adopt the plan already indicated: in carrying it into effect, we shall endeavour, by giving numerous references, to make it an easy task for the student to complete the investigation by his own researches. It may be further remarked that, on quitting the fourteenth century, the fashions of armour are much more easy to be understood than before. Defences of plate being now generally adopted, the differences of suits are principally differences of form; and, as remains of real armour and weapons of this time are to be found in many Collections, there is no longer the same mystery regarding their construction and materials. In the fourteenth century espe-

cially we find the germs of almost all the fashions and contrivances observed in the succeeding ages. And it is not till the general adoption of Hand-fire-arms came to change the whole scheme of warlike operations, that anything essentially new can be said to have appeared in military art. The arquebus indeed effected a wonderful revolution, and, after four centuries of experiences, we are still inundated with changes in its fashion and action. The hand-gun of Austerlitz and Waterloo is already a "curiosity" in the cabinets of virtuosi, and in a few years we may expect the "Enfield arquebus of 1859" to be labelled up in the archæologist's museum as a marvel of clumsiness and ineffectiveness. But whatever the musquet may become, the Bayonet can undergo but little change. *That* is the British soldier's arm. What the Long-bow was in the middle-ages in the hands of the sturdy Saxon yeoman, the bayonet is now. But the medieval fighter had one great advantage over his modern successor: in his day, it was muscle that *began* the battle; in our time it tells only on the *finish* of the fray. The sooner, therefore, the British commander can bring his men within bayonet-distance of his adversaries, the sooner, to our humble perceptions, will the crown of Victory be his own.

FIFTEENTH CENTURY.



管
No. 52.

PLATE 52.

THIS miniature is from Royal MS., 20, C, vii., folio 136: *Hystoire des Roys de France apres Philippe III. filz au Roy S. Louis jusques à Charles VI.* The scene represents "cōment les gens du roy de navarre coururent sus aus gens du regent." The manuscript appears to be of the first years of the fifteenth century. It abounds in examples of armour and weapons, as well as in subjects illustrative of civil and ecclesiastical life. The beaked bassinet is the most striking feature of the miniature before us. This defence, which we have seen was introduced in the fourteenth century (p. 211), is more frequently found in illuminations of the beginning of the fifteenth century. For examples see Add. MS., 15,269, a valuable book for armour subjects, Strutt's "Regal Antiquities," plate 59, and our plate 75. A curious variety of the beaked bassinet occurs on folio 24 of Roy. MS., 20, C, vii., where the gorget is of plate. Compare our woodcut, No. 38, p. 209. One of the front figures in the group before us has the visor of his bassinet gilt. A similar instance occurs on folio 62. The shield borne by the man-at-arms in the centre of the mêlée is characteristic of this period. Examples appear among the sculptures of the Chapel of Henry V. in Westminster Abbey (figured in Carter's "Sculpture and Painting," plates 65 and 66), in the carved chest preserved in the treasury of York Cathedral (engraved in the same work, plate 105), in Roy. MS., 20, C, viii., folio 1, Sloane MS., 2,433, Harl. MS., 4,205, and Archæological Journal, vol. ix. p. 119. These shields of three planes sometimes have the notch (or *bouche*) at the corner, but are sometimes without it. The round shields of this century are of two kinds: the buckler, borne in the hand, as in

our woodcuts, No. 53, from Roy. MS., 20, C, vii., and No. 89, from Roy. MS., 18, E, v., and Cotton MS., Julius, E, iv., fol. 204; and the larger target, borne on the arm, as in our engraving, No. 75, from Harl. MS., 4,605, and among the woodcuts of the *Speculum Conversionis Peccatorum*, published in 1473. The shield in the drawing before us appears to be of the latter description. The pole-axe (*guisarme*?), so prominent in this group, was a favourite weapon in this century, not alone with the humbler soldiery, but with leaders. Pictorial examples of the arm may be seen in Cotton MSS., Nero, D, ix., ff. 58 and 103; Nero, E, ii., f. 2; and Julius, E, iv., f. 204; in Harl. MS., 4,205, f. 1; Hefner's *Trachten*, plates 131, 171 and 158; Strutt's "Regal Antiq.," pl. 45; and Archæol. Journ., iv. 226. The varlets and camp followers sometimes brought their common wood-axes into play, as at Fornoue, where they had "des haches à couper bois, dequoy ils faisoient nos logis, dont ils rompirent les visieres des armets et leur en donnoyent (aux hommes-d'armes italiens) de grans coups sur les testes*." The *martel-de-fer* was a favourite weapon in this century: it was long-handled and short-handled; the hammer itself was sometimes plain, sometimes dentated. The plain hammer is before us: it occurs again in Roy. MSS., 20, C, viii., fol. 1; and 15, D, iii., fol. 243; and in Hefner's *Trachten*, plate 11. The dentated variety is seen in Harl. MS., 4,375, fol. 171, and in Shaw's "Dresses and Decorations," from the Beauchamp Pageants, Julius, E, iv. On folio 34 of 20, C, vii., is an example in which both sides are flat. The sleeved surcoats appear to be of quilted work; except the one in front, fastened by lacing. Of the laced surcoat, see page 155.

* Comines, p. 297, ed. Sauvage.



No 43.

PLATE 53.

THIS figure is from the same manuscript as the last illustration. It occurs on folio 133, and represents a soldier contending with sword and buckler. The boss is iron-colour in the original, the remainder painted yellow. We have, therefore, in this shield exactly the buckler of the Anglo-Saxons (see woodcuts, Nos. 13 and 20, vol. i.). The headpiece of scale-work is not often found at this time, but it again appears at folio 41^{vo}. of the manuscript before us. On the same page is a variety of the scale helmet, in which the scales are rectangular, and arranged as the body armour of woodcut, No. 62. At folio 29^{vo}. is an example of a shield of most singular form: it resembles in shape a banker's money-shovel, the open end being below, and it is represented as about five feet high. There was great diversity in the forms of shields during this century. The bouche shield remained in favour: examples occur in our engravings, Nos. 52, 91 and 93; in Roy. MS., 15, D, iii. fol. 243, Cott. MS., Nero, E, ii. f. 130, Harl. MS., 4,205, f. 30; in Archæol. Journ., ix. 119; and Hefner's *Trachten*, plates 97, 98, 3 and 155. The ancient triangular shield is seen in our illustrations, Nos. 55 and 66, in the great seal of Henry V., and in the real shield placed over the tomb of this monarch in Westminster Abbey. The target rectangular above and rounded below is found in Hefner's 92nd plate, A.D. 1407, and in the great seals of Edward IV., Richard III. and Henry VII. The circular shield has been already noticed (at p. 353). The oval form appears in the subject engraved by Hefner, pl. 169. The square with rounded corners is in our plate 62. The kite-formed

occurs in the Beauvais Tapestry (in Jubinal's *Tapestries*). The heart-shaped is found in Sloane MS., 2,433, vol. C., f. 83, in Hefner's plate 34, and in the *Descriptio Obsidionis Rhodiæ*, Ulm, 1496. Shields with an undulating or cusped outline appear in Hefner's plates 97, 98, 80 and 20, and in the figure engraved in Shaw's "Dresses and Decorations," from Rouse's Warwick Roll. A variety having a vertical projection along the centre is figured by Hefner, plates 20 and 42, and in *Archæologia*, vol. xxix. pl. 35. The small shield curving from top to bottom is well exemplified in Hefner's plates 165 and 155. The bossed shield is seen in our prints, Nos. 53, 62 and 94, in several miniatures of Harl. MS., 4,374, and among the woodcuts of the *Speculum Conversionis Peccatorum*, Alost, 1473. A kind of fixed shield (*manteau d'armes*) was worn in the tilt, well shewn in Hefner's pl. 109, A.D. 1497. A smaller fixed shield sometimes appears towards the close of the century, of which a good example is offered by the figure of St. George in Westminster Abbey, a cast of which is in the Sydenham Collection. And compare Hollis, pt. 6. The shield preserved in Westminster Abbey, and called the shield of Edward III., appears to be of this century. It is thus made: vertical strips of wood are glued together strengthened by a horizontal band of iron; then come two layers of canvas glued together; then a covering of leather with nails along the edge: a piece of string laid round the edge of the face of the shield, serves to press up the leather so as to form a fillet.



No. 54.

PLATE 54.

FROM the same manuscript as the preceding figure, fol. 70^o. We have here, standing beside the tent of his master, the armed courser, exhibiting the trapper of chain mail, the caparison of cloth or silk, the crinet and the chanfrein. Of the mail trapper we have noted the contrivance in preceding centuries (see vol. i. pp. 169, 197, 335, 341 and 343, and vol. ii. p. 312, and compare woodcut, No. 61). In the *Histoire de Charles VII.*, Mathieu de Coucy tells us that in 1446 a *combat à outrance* took place between the Seigneur de Ternant and Galliot de Balthazin, in which the latter was mounted "sur un puissant cheval, liquel, selon la coustume de Lombardie, estoit tout couvert de fer" (p. 556). The silken caparison was generally decorated heraldically. Examples may be seen in the Great Seals of the English kings from Henry V. to Henry VII. In all these, the arms occupy the whole of the trapper; but in the seal of Albert, Archduke of Austria, the arms are repeated on numerous escutcheons throughout the surface. Sometimes the *couverture* was embroidered in a pattern only: a good example is furnished by Cotton MS., Nero, D, ix. fol. 39, the subject of our engraving, No. 94. The trapper was occasionally slittered along the edge, as in Hefner's plate 138. From Jean Chartier, *Historiographe de France* under Charles VII., we learn that the housings of horses, when of a rich character, were sometimes converted into vestments for the altar. In 1451, at his entry into Bayonne, after the seigneurs had performed their devotions in the *grande Eglise*, "le susdit Comte de Foix envoya la couverture de son coursier, qui estoit de drap d'or, prisee

quatre cent escus d'or, devant Nostre Dame de Bayonne, pour en faire des chappes." (*Hist. de Charles VII.*, p. 257.) The neck-armour of the horse differs from the examples we have already seen, in the plates encircling the whole neck : compare woodcut No. 41, p. 231. The chanfrein of this century is characterised by the cusped ridge in front, simple at first, then multiplying the cusps through the whole length of the defence. See the examples given in our engravings, Nos. 61 and 94, of 1420 and 1480, and that on folio 30 of Harl. MS., 4,205. In the former of these are also found the perforations for hearing and vision which appear in our woodcut. The chanfrein preserved at Warwick Castle and engraved by Grose, plate 42, affords curious illustration of this headpiece. Compare also the figures given in Carter's "Sculpture and Painting," plates 65 and 66, and our woodcut, No. 106.



No. 55.

PLATE 55.

FIGURE of St. George, from the canopy-work of the monumental brass of Sir Nicholas Hawberk at Cobham, Kent. There are few churches more attractive to the student of ancient armour than that of Cobham. Besides its military brasses, of which there are seven, ranging from 1354 to 1529, the walls are furnished with examples of knightly helmets of the fifteenth century of the utmost interest and rarity. The memorial of Sir Nicholas Hawberk, the husband of the Lady Joan Cobham, who was heiress of Sir John de Cobham, the lord of Cowling Castle and founder of the college adjoining the church, is one of the finest examples of the "lattener's" art that has come down to our times. The effigy of the knight, who died in 1407, has been engraved in Boutell's "Brasses and Slabs," page 178, and the whole monument is fully described at p. 54 of the Oxford "Manual of Brasses." Our figure of St. George appears in a body-armour of complete plate. The defences below the waist, formed of overlapping hoops, are constantly seen in the fifteenth century, and receive the most curious illustration from the suit of armour in the Tower of London, which, covered with Tudor cognizances and saintly figures, and having the Collar and George of the Order of the Garter engraved on the gorget, is clearly a royal panoply worn in his younger days by Henry VIII. Over his flexible skirt St. George wears the Military Belt. This costly decoration of the knights is still frequent during the first quarter of the century, but afterwards rapidly disappears. Examples may be seen in our engravings, Nos. 56, 57, 58, 59, 63, 64, 65 and 66; ranging

from the beginning of the age to 1421. A variety, with bells appended, is found in our Nos. 62 and 72, and again in plate 88 of Hefner's *Trachten*. The bassinet in our figure is somewhat out of drawing, but is intended to represent the ordinary form of this defence as seen in woodcut No. 16, and many others. The remainder of the costume is familiar to us from former studies.



PLATE 56.

MONUMENTAL brass of Sir William de Tendering, in Stoke-by-Nayland Church, Suffolk: 1408. The armour of this figure is chiefly remarkable for the gorget, or "standard of mail;" a defence which, it will be perceived, differs materially from the ordinary chain camail, as seen in our engraving No. 43, and others. Its purpose seems to be, to act as a supplementary piece to the gorget of plate; as the latter, without its aid, might admit the point of a lance to penetrate between the gorget and the breastplate. In the next illustration it will be seen how the plate collar was worn over it. Other instances of the standard of mail occur in our woodcuts, Nos. 67 and 85, and in Hefner's *Costumes*, pl. 175. A very curious example is furnished by the sculptured effigy of a Fitzherbert, *c.* 1485, in Norbury Church, Derbyshire. The coat of the family is *Vairy*, and this bearing is produced in the collar by the employment of large and small rings for the alternating figures. The battlements of the church are in the same conceit, being notched in *vair* forms. The standard of mail itself became a heraldic bearing. See the example engraved in the *Excerpta Historica*, p. 318. A real specimen of this defence, of the fifteenth century, is preserved in the Tower Armory. The skirt of mail terminating in an escalloped edge is a fashion of this time, of which other examples are supplied by our engravings, Nos. 63 and 64. The articulated shoulder-plates are constant from this period till about 1340. See our illustrations, Nos. 57, 58, 59, 60, 64, 65, 68, 69, 70, 71, 73, 74, 75 and 76; from 1410 to 1435. They were succeeded by a larger plate, as in 77, 86 and

others. The short surcoat of this figure is rarely found beyond the first quarter of the century. It is seen in the Canterbury Cathedral picture engraved by Carter ("Sculpt. and Painting," pl. 36). Stothard has an example of 1418 (pl. 113), and a very late one—of 1484 (pl. 134). Rich swords, as in former times, were much in favour with princes and knights. Chartier tells us that, on the entry of Charles VII. into Rouen, the Sire de Xaintrailles "portoit la grande Espée de parement du Roy, dont le pommeau, la croix, la boucle, le mordant, et la bouterole de la gaine estoient couvertes de veloux azuré, semé par-dessus de fleurs-de-lys d'or en broderie." (*Hist. de Charles VII.*, p. 181.) Mathieu de Coucy informs us that the sword of the Comte de Dunois "estoit estimée à la valeur de vingt mille escus d'or, car il y avoit de riches pierreries par dessus." (*Hist.*, p. 593.) Compare also the account in Monstrelet of the rich sword stolen from the tent of King Henry V. at Agincourt. And see the fine examples figured by Stothard, pl. 139, and Hefner, pl. 74. The helm, with the Wing crest and buckle in front to attach it to the plastron, is a good example of this defence. The body-armour beneath the surcoat may be inferred from the preceding figure of St. George.



No. 57.

PLATE 57.

MONUMENTAL brass of a knight of the D'Eresby family, in Spilsby Church, Lincolnshire: about 1410. In this figure we have the gorget of mail covered by the plate gorget, the purpose of which we have already noticed under No. 56. The jewelled wreath was a favourite ornament for the bassinet during this century. See examples of various fashions in our illustration, No. 63, in Stothard's plates 110 and 113, in the effigy at Lowick (Hyett's "Memorials of Northamptonshire," pl. 3), and in Cott. MS., Julius, E, iv., fol. 216. The bassinet, to be complete for war, requires the addition of its visor, as explained at p. 208 and exemplified in our illustration, No. 38. The gauntlets are noticeable from their extremities being wrought to resemble the nails of the fingers. Other examples of this century occur in our woodcut, No. 71, in Stothard's plates 110 and 113, and in the effigy of an Arderne at Elford, Staffordshire, of which a model is in the Sydenham Collection. The tassets, with the underskirt of mail, deserve remark because they shew us that in such figures as the preceding one of Tendering, the portion of chain underlying the surcoat is by no means to be taken as an evidence that the knight has not a body-armour of plate. Nor is it to be assumed that, because the knight has a body-armour of plate, he does not also wear a complete hauberk of chain-mail. St. Remy tells us very clearly that the French men-at-arms at Agincourt had hauberks under their plate harness. "*Premièrement, estoient armés de cottes d'acier, longues, passants les genoux, et moult pesantes; et par-dessous harnois de jambe; et par-dessus*

blancs harnois ; et de plus, bachinets de camail." (Chap. 62, ed. Buchon.) Compare the cuirass figured in our plate 90, where there is a skirt only of chain-mail, and the figure engraved in *Archæological Journal*, vol. iv. p. 226, where the mail is in gussets. The military belt, whose place was formerly outside the surcoat, descending nearly to its edge, has in this monument changed both its place and proportions. It is, however, not so commonly worn during this century as in the preceding. The sword-belt, fixed transversely, is distinct from the *cingulum militare*, but of workmanship equally elaborate. The instep of chain-mail has already been noticed in the fourteenth century. Compare Nos. 32, 33 and 37. The enriched sword-sheath affords a good illustration of the architectural influence on decorative art so constantly seen throughout the middle ages.



1 Foot

No. 66.

PLATE 58.

LATTEN effigy of Sir John Wylcotes, in Great Tew Church, Oxfordshire: 1410. The head and neck-armour of this figure are like that of the preceding monument. Gussets of plate are at the arms, a fashion constant from this period to the middle of the century. The object of these gussets was to protect the arms at that part where the plate defences of the arm and breast left a gap, imperfectly filled by a portion of chain-mail. See the two preceding engravings. This vulnerable point was called at this time the *vif de l'harnois*, at a later period the *défaut de la cuirasse*. Mathieu de Coucy, in his History of Charles VII., tells us that, at a joust in 1446, "l'Anglois frappa de sa lance le dit Louis tout dedans et au travers, seavoir, audessous du bras et au vif de son harnois, par faute et manque d'y avoir un croissant ou gouchet." (p. 560.) This "croissant" is found in our engraving, No. 64. Besides the oval form, as seen in our present illustration and the crescent of No. 64, there are several varying shapes for this defence: the round, the shell-formed, the tile-formed, and the dish-formed. The first appear in our plates 59, 60, 69, 70, 71 and 74. The shell-formed is seen in the effigy of Lord Bardolf (Stothard, pl. 110^b). The tile-shaped is found in the monument of Stetinberg (Hefner, pl. 98). The dish-formed occur in our illustrations, Nos. 73 and 76. It is remarkable that these adjuncts are not always in pairs. That for the sword arm, where they differ, is always the smaller. See examples in our woodcut No. 63, and in

^b Called there, in error, the effigy of Sir Robert Grushull.

plate 168 of Hefner's *Trachten*. Occasionally the gussets of plate are charged with a cross, as in the brasses of Sir Thomas Swynborne and Sir Simon Felbrigg, both figured in Boutell's "Brasses," pp. 55 and 63. Over the plate gorget our knight wears a Livery Collar, which was probably a collar of SS. Other examples of this decoration worn over armour occur in our Nos. 69 and 74, and in Stothard's plates 110, 113, 119 and 129. The collar of Suns and Roses is found in Stothard's Nos. 131 and 134, the pendent in the first being the White Lion of the house of March, in the second the Boar, the badge of Richard III. In the effigies of knights of the Fitzherbert family in Norbury Church, Derbyshire, are examples both of the Lion and Boar pendants. The brass of Lord Berkeley, who died in 1417, shews over the camail a Collar of Mermaids, the mermaid being a cognizance of his house. (Figured in Boutell's Brasses, p. 57.) Livery collars from foreign examples may be seen in Hefner's plates 112 and 161.



No 59.

PLATE 59.

MONUMENTAL brass of Sir John Fitzwaryn, in Wantage Church, Berkshire: 1414. In this figure we again find the bassinet with plate gorget; but, for the first time in our series, the gorget appears without any underlying defence of chain-mail. The gussets at the *vif de l'auberc*, the overlapping tassets, girt by the Military belt, and the insteps of mail, are already familiar to us from preceding examples. In the gussets of plate placed over the chain-mail at the bend of the arm we see the renewal of an old fashion, of which instances are found in our engravings, Nos. 28 and 31. They again occur in Nos. 63 and 70, in Stothard's plate 112, and in Hefner's plate 11. The gauntlet with articulated cuff is much in favour in the early years of this century. Further instances are offered by our engravings, Nos. 69, 70 and 71. The rings hanging free along the edge of the mail skirt are also characteristic of this time. From the coloured example given in Stothard's 113th plate, it would appear that they formed part of an edge of brass or gilded links. The knightly sword, with its pear-shaped pommel, is an excellent specimen, and may be taken as the type of this weapon during the fifteenth century.



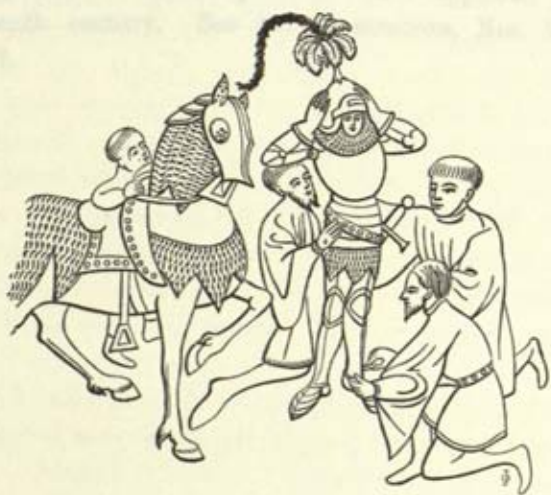
No. 60.

PLATE 60.

BRASS of Sir John Lysle, in Thruxton Church, Hampshire. This knight died in 1407, as we learn from the inscription on his monument, but from the fashion of the armour, the effigy does not appear to have been laid down earlier than about 1420. This custom, of placing memorials over the tombs of relatives at some distance of time after the period of their death, was not unusual in the middle ages. In the *Testamenta Vetusta* may be found instances of wills directing the construction of such monuments after the lapse of several generations. Brasses were also laid down in some cases long *before* the knight's decease. Mr. Waller, in a paper contributed to the "Journal of the Archæological Association," has pointed out the singularity of the effigy before us and that of Sir John Cobham differing in their armour by nearly sixty years, though both knights died in the same year. The Cobham figure was probably executed about 1362, when Sir John founded his college. See also the instances of this practice given at p. 14 of the Oxford "Manual of Brasses."

The harness of Sir John de Lysle is remarkable in its being entirely of plate, so far at least as the defences are in view. The tassets, eight in number, indicate an advance in date, as compared with former examples of this fitment. The "wings" of the elbow-pieces, large and fan-shaped, are also a novelty of the period, of which further instances are found in our woodcuts, Nos. 64, 69, 71 and 73. The plates beneath the knee-cops are remarkable for their depth.

The *cingulum militare* is absent, and from this time it is but rarely seen in the knightly equipment. Of the transverse sword-belt we have already had examples. The sword presents a feature characteristic of this century—the long grip. Compare our prints, Nos. 66 and 69, and Hefner's plates 92, 88, 129, 98, 168, 74 and 157, extending throughout the period. The pommel bearing a Cross is a continuance of a very ancient usage. The dagger is of a pattern of which specimens have appeared in the fourteenth century. See our illustrations, Nos. 29, 32 and 37.



No. 61.

PLATE 61.

MINIATURE from Harleian MS., 4,431, folio 114. This volume is a copy of the poems of Christine de Pisan, written and illuminated about 1420, for Isabel, Queen of France. It afterwards belonged to Jaquette, wife of John, Duke of Bedford. The book contains many drawings illustrative of military costume, though they are on a small scale.

The subject before us, representing a knight arming, is especially curious from its affording an example of the plume worn upon the head-piece. Hitherto feathers, when they surmount the helm, are employed as *crests* only, in the same manner as lions, dragons, birds or flowers; but about this time came in the fashion of adorning the head-defence with real feathers, which were regarded merely as ornaments. Examples of the plume crest are found from about 1300. A good specimen occurs on folio 205 of Roy. MS., 20, D, i.; and compare ff. 60^{vo}. and 239^{vo}. of the same volume. In 1349 it is seen in the effigy of Günther von Schwarzburg (frontispiece). In the fifteenth century we find it in our woodcut, No. 70, and again in Stothard's 113th plate. The feathers, in all these examples, are those of the peacock. In the manuscript named above, they seem to be real feathers, but in the effigies cited, the crest is probably formed in the usual material of this fitment—metal or *cuir bouilli*. Feathers worn ornamentally are found not only on the bassinet and *salade* from this time to the end of the century, but on the more humble *chapel-de-fer*. The plumed bassinet is seen in our engraving, No. 72; in Cotton MS., Julius, E, iv., ff. 211 and 216; Harl. MS., 4,205, fol. 1; Harl., 4,431, fol. 137;

Harl., 4,425, the fine copy of the "Romance of the Rose;" and in Strutt's "Regal Antiquities," plate 59. The plumed salade occurs on folio 222 of Roy. MS., 15, E, vi.; in the figure of "the Knyght" in the "Canterbury Tales" printed in this century by Pynson; in the picture from the tomb of Henry IV. at Canterbury, engraved by Carter ("Sculpture and Painting," pl. 36); in Hefner's *Trachten*, plates 80, 161 and 109, and in Dibdin's *Bibliotheca Spenceriana*, vol. iv. p. 485. The feather surmounting the broad-rimmed *chapel-de-fer* is found in Roy. MSS., 15, D, iii., fol. 243, and 18, E, v., fol. 174. Towards the end of the century, a single broad feather was sometimes worn at the *side* of the visored helmet, a very graceful arrangement, of which a good example is afforded by the figure of St. George engraved by Hefner, plate 1. From the foregoing evidences it will be seen that there was the greatest diversity in the manner of wearing the plumes, some knights being content with a single feather, others insisting on a cluster, and perhaps there are few who gave more freedom to their caprice than the knight before us. The remainder of his costume has been already examined in previous monuments. The armour of the horse also has been seen in various preceding examples. The leg-shield of the saddle is found in woodcut No. 49, and described at p. 320. The chanfrein differs but little from that figured on plate 54. The triangular stirrup is an old fashion continued. The great "pocketing sleeves" (as they were called) of the attendants are constant during the early part of this century, and the cropped hair is equally characteristic of the period. Their dresses in the original are thus coloured: one red, one grey, and the third a flowered pattern in buff.



No. 62.

PLATE 62.

MINIATURE from Cotton MS., Nero, E, ii., fol. 124: about 1420. The volume is a copy of the *Chroniques de St.-Denis*, very rich in pictorial illustration. The subject before us represents how, under the reign of "charlemaine," "le bon duc rolant se combati contre le païen, fernagu, pour soustenir la foy crestienne." Both the giant and Roland have armour of rectangular scales, a defence of which examples have already been given in our plates, Nos. 17 and 42 (and see *ante*, p. 112). A similar arming is found in the brass of Mauntell, 1487, engraved in the *Archæol. Journ.*, ix. 300. The shoulder-piece with spike is of unusual occurrence: it is again seen, however, in Roy. MS., 15, D, iii., fol. 130; and in the Beauchamp Pageants, Cott. MS., Julius, E, iv. The chausses of chain-mail is also rare at this time: examples appear in Hefner's *Trachten*, plates 110 and 129. The bassinet with visor affixed is again seen in our plates 72 and 75. The visored bassinet is sometimes in this century surmounted by the heraldic crest, as in Hefner's plate 92, and in Cott. MS., Julius, E, iv., fol. 211^{vo}. The skull-cap worn by the giant is again seen in several figures given by Hefner, pl. 169. Nasals are occasionally found with the plain iron headpiece: see Cott. MS., Nero, E, ii., vol. ii. fol. 269, Roy. MS., 14, E, iv. *passim*, and Jubinal's *Tapestries, Tapisserie d'Aulhac*. The camail fastened down by a buckle occurs also in Hefner's plate 11, where the fastening is in front. The belt ornamented with bells appears again in our plate 72 and in Hefner's No. 88.

The scymetar, occasionally seen in the early part of the century, becomes common in the second half of it. Notices of examples of that time and of the various forms under which it appears will be found with our illustration, No. 105.



No. 63.

PLATE 63.

MONUMENTAL brass of Sir Thomas de St. Quintin in Harpham Church, Yorkshire: about 1420. The wreath on the bassinet of this knight is of the most curious contrivance: in the centre is an ornament representing a cluster of gems: the circle of feathers may imply real plumes or their semblance in goldsmiths' work. Figures in civil costume wearing similar chaplets are engraved in Strutt's "Dress and Habits," vol. ii. plates 77 and 79. The plate gussets at the shoulders, of differing patterns, have been already noticed under No. 58. Chain-mail armour is still seen at the skirt, interposed between the quilted gambeson and the tassets of plate. From the account of the Retinue of Henry V. in 1415, printed in Sir H. Nicolas's "History of the Battle of Agincourt," from the Collections for Rymer's *Fœdera*, Sloane MS., 6,400, we learn that one or more mail-makers accompanied the army in its campaigns:—"Albright Mailmaker with other Armourers, 12." (Appendix, p. 97.) In Roy. MS., 16, G, v., fol. 11, of the same period, we have an illumination representing the mail-maker at work. He plies his handicraft with a pair of pincers, a hammer lying at his feet. Near at hand, a second armorer is engaged in forming on the anvil a piece of plate armour.



No. 64.

PLATE 64.

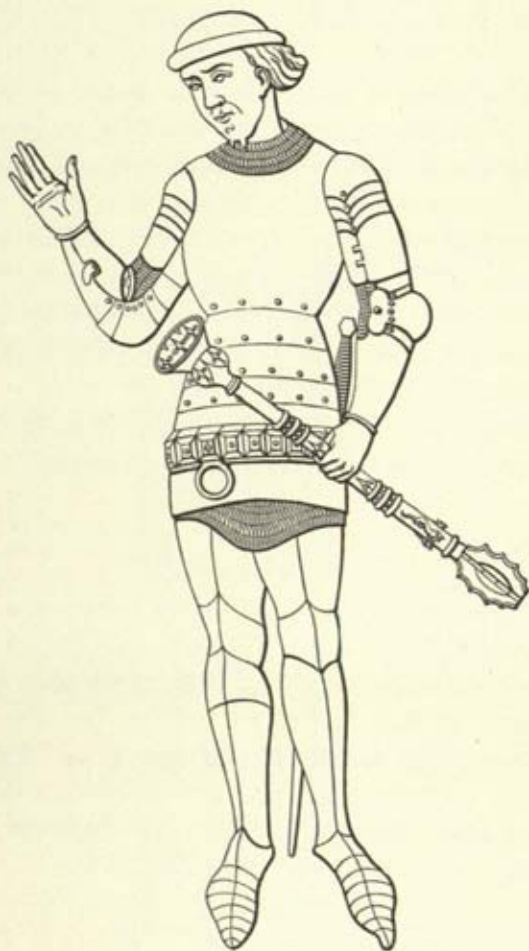
BRASS of a knight in South Kelsey Church, Lincolnshire: about 1420. We have here several of the features already noticed in previous examples:—the gorget of plate, the gussets of differing patterns, the fan-shaped elbow-pieces, the deep tassets of overlapping hoops, the escalopped skirt of chain-mail, and the richly ornamented *cingulum militare*. The gauntlets are of a fashion which has not hitherto come before us. While the fingers are furnished with numerous articulations, the remainder of the hand, with the wrist, is defended by a single piece of plate. Analogous examples are found in Hefner's plates 129 and 180.

The pay of the various troops at this time, as we learn from Rymer under the year 1418, was as follows:—

	s.	d.
An Earl, per day . . .	6	8
Banneret, „ . . .	4	0
Knight, „ . . .	2	0
Esquire, „ . . .	1	0
Archer, „ . . .		6

This was for the Retinue of the Duke of Clarence, to serve in France. *Fœdera*, ix. 545.

The pay of a Duke was 13s. 4d. per day:—"Preignant le dit duc (d'York), pour les gages de luy mesme, tresze souldz et quatre deniers le jour. Pour le dit *Baron*, quatre souldz le jour." Rymer, ix. 228. 3 Hen. V.



No. 66.

PLATE 65.

FIGURE of a Serjeant-at-arms: about 1420: from an incised slab now preserved in the church of St.-Denis. The memorial of the *Sergens d'armes* consists of two slabs, containing six figures. The designs are engraved on the stone, and have been richly painted and gilt. One of the groups consists of two *sergens* in armour and the king's confessor⁴ in conventual costume; the other represents two serjeants in their civil dress, and the king, St. Louis. The inscription runs thus:—"A la priere des Sergens darmes Mons^r. Saint Loys fonda ceste Eglise et y mist la premiere pierre: Et fu pour la joie de la vittoire qui fu au Pont de Bovines lan Mil. cc. et xiiii. Les Sergens darmes pour le temps gardoient ledit pont et vouerent que se Dieu leur donnoit vittoire ils fonderoient une eglise en lonneur de Madame Sainte Katherine. Et ainsi fu il." From the date of the monument before us, it seems probable that it was constructed by the brave *servientes armorum* on some reparation of their church long subsequent to its foundation, and when perhaps the fame of their exploits had suffered some abatement from the lapse of time. The building thus founded by them was the church of "Sainte-Catherine-du-Val-des-Ecoliers" at Paris. "Elle était le siège de la confrérie des Sergents d'armes, qui avaient droit de sépulture dans l'église, et dans le cloître. Après la mort de chaque confrère, son écu et sa masse étaient appendus aux murs de l'église." (Guilhermy, "Eglise Royale de St. Denis," p. 244.) The church was destroyed in the time of Louis XVI. and a public market established on its

⁴ Daniel, *Mil. fran.*, ii. 93.

site. The monument of the sergens d'armes has found a resting-place among the tombs of St. Denis. The arming of the figure before us is almost entirely of plate. The mail gorget, the articulated skirt, and the military belt overlying the lower part of the tassets, have already been seen in earlier examples. The small forked beard is familiar to us from the effigy of Richard II. in Westminster Abbey. The characteristic arm of the *sergent*, the Mace, is very minutely displayed; its material, as we learn from other evidences, being silver, and the *fleurs-de-lis* on its surface expressed by enamels. When, in 1378, the Emperor Charles IV. visited the French king in Paris, the *sergens d'armes* were both of the royal and the imperial guard. "Devant (le roy) aloyent sergens d'armes, arbalestriers, puis chevaliers et escuyers." . . . "A l'entrée de Paris descendirent à pied trente sergens d'armes, à tout leur maces d'argent et leurs espées en escharpes. (*Faitz du roy Charles V.*, ch. 35.) The enamelling of the mace we ascertain from the *Chron. de St. Denis*: under 1323 we have "un sergent du roy qui avoit sa mace esmailliée de fleurs-de-lis, et la portoit avec soy, comme sergent d'armes ont de coustume." The entire series of figures of the incised slabs is engraved in Daniels' *Milice française*, ii. 93. And compare Willemin, *Mon. Inédits*, i. pl. 126. The English Sergeant-at-arms is seen in the brass in Wandsworth Church, Surrey: date 1420. (Manning's *Hist. of Surrey*, iii. 353.) See also Strutt's "Regal Antiquities," plates 40 and 43; and for other foreign examples, the Tourney-book of René d'Anjou (plates 1, 2 and 3, ed. Paulin-Paris), the figure engraved in Pettigrew's *Bibliotheca Sussexiana*, and De Vigne's *Vade-mecum du peintre*, vol. ii. plates 68 and 81.



PLATE 66.

EFFIGY of a knight of the family of Haberkorn, from his monument formerly in the church of St. John-of-Jerusalem at Wurzburg: dated 1421*. The most curious part of this figure is the skirt of scale-armour, a fabric but rarely found in this century, except in a form very different from this—the brigandine. A similar defence to the one before us appears in the monument figured by Hefner, pl. 92, A.D. 1407. In Roy. MS., 20, C, viii., fol. 1, are two examples of the scale skirt, and it is again seen in Harl. MS., 4,374, fol. 161. Compare the specimen (of the fourteenth century) engraved in our plate 9. At the waist is worn the Military belt, while a second belt, placed over the scale defence, carries the sword. Beneath the body-armour the knight has a garment of cloth or velvet, with large hanging sleeves, a fashion much in favour at this period. Examples may be seen in Roy. MS., 15, D, iii., fol. 225, and in Hefner's plates 92, 88, 32 and 112. The epaulette of plate very closely resembles that on the statue of St. George at Prague, of which a cast is in the Sydenham Collection: in the Prague figure it is attached to the gorget by a hinge. The gauntlets are of mixed plate and scale: compare our illustration, No. 61 and Hefner's plates 88 and 11. Occasionally we find at this time gauntlets of combined plate and chain. Good examples are offered by Hefner's Nos. 106, 97, 129 and 112. The chausson appears to represent a defence of leather. The helm has the ocularium in a single cleft, a point strongly characteristic of this century. See our illustration, No. 94 and Stothard's

* From Hefner's *Trachten*, pt. ii. pl. 110.

plates 113 and 121. The helm with double cleft but rarely occurs: an instance is found in plate 112 of Hefner's *Trachten*, A.D. 1434. Rymer has preserved the account of the price of a funeral helm of this time. It is that ordered for the interment of King Henry V. in 1422. "Item, eidem Thomæ (Daunt) pro factura unius Crestæ et unius Helmæ pro Rege, xxxiiis. ivd." (*Fœdera*, vol. x. p. 256.)



hic iacet Johes Wantele. qui obiit. xxix die Jannar'
Anno dñi. millo. cccc. xxxij. em. die ppietm deus,

WING 50

1 Foot

No. 67.

PLATE 67.

SUCCESSIVE centuries have presented to us a great variety of the knightly Surcoat, the long and the short, the loose and the tight, the laced and the buckled, the sleeved and the sleeveless, the heraldic and the plain. The fifteenth century contributes a new kind. The characteristic of the armorial surcoat or "tabard of arms" of this time was that it presented a fourfold picture of the heraldic cognizance; in front, behind, and on each of the sleeves. These sleeves did not always encircle the arms: in lieu of the complete sleeve, a broad flap hung free over the upper-arm, on which the bearings were figured. This is the arrangement of the Herald's tabard to the present day. Examples of the complete sleeve are supplied by Hefner's *Trachten*, plates 44 and 165; c. 1450. The other mode is seen in the figure before us; and again in the brass of Sir Ralph Shelton (Cotman, vol. i. pl. 19), in Carter's "Sculpture and Painting," plates 65 and 66, in Stothard's "Monuments," pl. 119, in Boutell's "Brasses," page 71, in Harl. MS., 4,205 *passim*, in Strutt's "Regal Antiquities," pl. 47, in Shaw's "Dresses and Decorations," from the Beauchamp Pageant, in the Great Seal of Henry VII., and in Cotman's plate 46; ranging from 1423 to the end of the century. The side-pieces remaining blank in the effigy before us may have been so left from the artist's unwillingness to encounter the difficulties of foreshortening. The closely-cut hair of this figure is not unworthy of remark, because sometimes the fashion of wearing the hair and beard affords a help in determining the age of a monument. In the first quarter of the century

we find the general mode to have been closely-cut hair, small, forked beard, and moustache; from about 1425 to 1460, the hair as before, moustache and beard abolished; from about 1460 to the end of the century, the hair worn very long, moustache and beard still in disfavour. Many exceptions occur in all these arrangements, and especially it will be observed that the aged are often found to retain their beards when their juniors have entirely discarded them. The armour of our figure has little that is noticeable: the "standard of mail" is already familiar to us: the double plates below the knees have not before appeared. The brass is in Amberley Church, Sussex: the arms are Vert, three lions' heads langued argent, represented on the brass in enamel.



Hic iacet Robertus Hapton Armiger qui obiit
 xlv die Mensis february Anno dñi Millesimo
 IIII vicessimo quarto cuius anima paret deus amc

1 Foot

K.T.M.C. 54

No. 68.

PLATE 68.

MONUMENTAL effigy in Theddlethorpe Church, Lincolnshire: 1424. This example is curious, as being the latest knightly brass exhibiting the bassinet with camail of chain-mail; a defence of which we have seen so many instances in the fourteenth century. The mail gorget is, however, found much later in the present age, worn by archers, arbalesters, billmen and others, as in our illustrations, Nos. 97 and 98, about 1480. The bassinet itself at this period not unfrequently bore in its front an inscription of a sacred character. The sculptured effigy of a knight in Bakewell Church, Derbyshire, has on the portion covering the temples "IHS . NAZAREN." And at Tideswell, in the same county, is a second sculpture with the same inscription. At Elford, Staffordshire, the writing seems to be "AVE MARIA," but the first of the words having been nearly expunged, it is difficult to read it with certainty. The effigy of Lord Bardolf, engraved by Stothard, pl. 110, presents simply the monogram "IHS." The bassinet of the Duke of Somerset at Wimborn Minster is inscribed "IESV MARCI." (Gough's "Monuments," vol. ii. pt. 2, p. 131.) That of a Wilcote, at Northleigh, Oxfordshire, bears "IHS . NAZAREN." (Engraved in Skelton's "Oxfordsh.") And a similar example is given by Gough. Not the bassinet alone, but the sword and its sheath were occasionally inscribed. The sword of Talbot is a well-known instance, bearing on its blade, "Sum Talboti pro vincere inimicos meos." This weapon, formerly reposed in the Treasury of St. Denis, and removed to the Bibliothèque Nationale

in Paris at the revolution of 1790, has since been lost. Examples of the inscribed scabbard occur in the monuments figured by Stothard, plates 111 and 139. In both cases the sacred monogram "IHS." is engraved on the locket.



PLATE 69.

MONUMENTAL brass of Sir John Drayton, c. 1425, in Dorchester Abbey Church, Oxfordshire. In the harness, we see an attempt of the armour-smith to effect an improvement by limiting the tassets in their lateral and maintaining them in their vertical direction. The arm-defences are remarkable for the continuous articulations from the shoulder to the elbow. The lower part of the effigy does not exist in the original, but the lost portion has been supplied from authentic contemporary examples. Beneath the knight's head lies his helm, surmounted with crest and mantling. The crests of this century exhibit every variety of fanciful design. Among many volumes that might be consulted for specimens of their fantastic shapes, the Tournay-book of King René d'Anjou is perhaps the best. The Beauchamp Pageants have some good examples (Cotton MS., Julius, E, iv.; engraved in Strutt's *Horda*). Compare our illustrations, Nos. 70, 71, 73, 76 and 94. Among the whole there is not a more singular fancy than that of the Seigneur de Hailbourding, who, joining the forces of the Dauphin in 1444, "portoit sur son armet la queue de renard." (Mathieu de Coucy, *Histoire de Charles VII.*, p. 535.) The manner of constructing the crest at this time, we learn very distinctly from King René's Tournay-book, where we have both drawings and description of the whole process. "Le timbre^f doibt estre sur une piece de cuir bouilly, laquelle doibt estre bien faultrée d'ung doy d'espez, ou plus, par le dedens; et doibt contenir la dite piece de

^f A skull-cap of leather covering the crown of the helm.

cuir tout le sommet du heaulme, et sera couverte ladite piece du lambrequin*, armoyé des armes de celui qui le portera. Et sur le dit lambrequin, au plus hault du sommet, sera assis ledit timbre, et autour d'icellui aura ung tortis^b, des couleurs que voudra ledit tournoyeur, du gros du bras, ou plus ou moins à son plaisir. Et, pour mieulx faire entendre la manière du timbre de cuir bouilly et du heaulme, il seront cy dessous pourtraits en trois facons." The drawings throw further light on the subject. We have first the iron headpiece, perforated all round for attachment of the *timbre*. The *timbre* or skullcap of cuir bouilli is in form of a bowl reversed: from its apex rises an iron rod, fixed to the leather by four claws: the mantling is next added, quite concealing the leather cap: the crest is then made fast by means of the iron rod: and lastly, the wreath is wound round the helm at the joining of the crest and mantling.

* Mantling.

† Wreath.



No. 70.

PLATES 70 & 71.

MONUMENTAL brasses, 1426. The first of these is in Merevale Church, Warwickshire, and has been assigned to Robert Lord Ferrers of Chartley. The second is that of Sir John de Brewys, in Wiston Church, Sussex. Both exhibit the arrangement of the tassets noticed in the preceding example, have the transverse sword-belt seen in Nos. 57, 60 and 69, and the gauntlets marked in imitation of the nails of the fingers, as in No. 57. The first has the four round gussets of plate, as in the arm-defences of Fitzwaryn, No. 59. The second shews with particular clearness the manner of forming the *épaulières*, each strip overlapped by the one above it. The chapeau fixed upon the helm has already been noticed at page 203. Other examples, of the fifteenth century, are furnished by the Great Seals of Henry V., Edward IV., Richard III. and Henry VII. The effigy of Brewys affords an early instance of the long-necked spur, a fashion which, as the century advanced, ran to a great extravagance. See our illustrations, Nos. 79, 80, 93 and 94. And compare Hefner's *Trachten*, plates 175, 80, 14 and 179. A fine example of the long-necked spur, attached to its long-toed, articulated solleret, is in the Tower collection, and another real specimen, similarly constructed, is engraved in the eleventh volume of the Journal of the Archæological Association. King René has recorded his disapproval of the long spur:—"Les plus cours esperons sont plus convenables que les longs, à

ce que on ne les puisse arracher ou destordre hors les pieds en la presse." (*Tournois du roi René.*) One of the inconveniences of the long spur is prominently exhibited in our plate 94.



No. 71.



No. 72.

PLATE 72.

KNIGHTLY costume of about 1430, from a miniature in the University Library at Wurzburg, engraved in Part 2 of Hefner's *Trachten*. The most curious part of this dress is the coat of the knight, with its skirt arranged in formal folds and its sleeves cut into a cluster of jagged strips. Its colour in the original illumination is crimson, with a border of white to the skirt. The fashion of jagged sleeves was in much favour during the first half of the century. Good examples will be found in Carter's "Sculpture and Painting," plate 105, in Roy. MS., 15, D, iii., fol. 243, and in Hefner's plates 92 and 129. Occasionally the skirt of the coat had an aperture cut in the left side, through which the sword was passed. Hefner's plates 21 and 32 afford instances of this arrangement. The bells appended to the knightly belt have already been noticed under No. 62. The short spear in the hand of our figure reminds us of the *lances retaiillées* of the fourteenth century (described at p. 78). The reduced spear was still in vogue at this time: St. Remy informs us that the French knights employed such weapons at the field of Agincourt. In the second half of the century we find that hollow spears were in use. At the battle of Fornoue, Comines tells us: "nous feismes descendre les varlets et amasser des lances par le camp, dont il y avoit assez, par especial de bourdonnasses, qui ne valaient gueres, et estoient creuses et legeres, ne pesans point une javeline, mais bien peintes." (Page 297, ed. Sauvage.) This painting of the hollow spear is noticed in the Beauchamp Accounts, 15 Hen. VI., given in Dugdale's "Warwickshire," p. 327:—"Item, i. nother Burdon,

ywrithyn (wreathed) with my Lordis colours, reed, white and russet, 00-02-00." The man-at-arms with his attendants (or *lance fournie*) suffered a gradual reduction during this century, as already noticed at p. 27. Beginning at ten men to each spear, the supply was diminished to four. Charles VII. of France reduced the number from ten to seven; Louis XI. from seven to six, "c'est à savoir, la lance trois chevaux, pour lui, son page, et le coustillier; et les deux archers deux chevaux, et un cheval pour le varlet." (*Chron. de Louys de Valois, année 1473.*) In Italy in 1495 the man-at-arms and his retinue comprised four horsemen:—"Y avoit bien deux mille six cens hommes-d'armes bardez, ayant chascun un arbalestrier à cheval, un autre homme en habillement avec eux, faisant le nombre de quatre chevaulx pour homme-d'armes." (Comines, p. 291.) The *Diario Ferrarese* in the same year confirms this:—"Cento cinquanta homini d'arme, a quattro cavalli per homo d'arme, come si costuma a la Taliana." (Muratori, vol. xxiv. col. 303.)



PLATE 73.

LATTEN effigy of Sir Thomas Brounlet, in Wymington Church, Bedfordshire: 1430. In this fine brass we have the type of the knightly panoply of this period. Soon the various portions of the suit undergo a considerable change: the visored bassinet gives place to the *salade* with *mentonnière*: the shoulder-piece of many articulated strips is superseded by a pauldron formed of large, broad plates: these plates, overlapping the *défaut de la cuirasse*, displace the gussets of steel now seen in front of each arm: the tassets, instead of terminating in a wide hoop, have tile-like pieces (*tuilles*) appended to them, moving upon hinges or straps: the *solleret*, here of a natural form and ingenious construction, gives way to the long-toed "cracowe," absurd in appearance and incommodious in use: the spurs, of moderate dimensions, are laid aside for others in which the preposterous length of the neck and magnitude of the rowels cover with ludicrousness this time-honoured emblem of knightly rank.

In the example before us the visor of the bassinet has been removed, in order to show the features of the person commemorated, but it was usually worn at the moment of encounter. Not always, however; for a daring champion would occasionally choose to contend with his face exposed to the strokes of his adversary. At Arras, in 1435, two knights fought in presence of the Duke of Burgundy, "pour acquerir honneur." One of these, a Spanish knight, entered the lists with his face entirely unprotected. "Si commencerent vigoureusement et de grand courage à marcher l'un contre l'autre, leurs lances palmoyant. Et

tousjours avoit ledit Espaignol, et eut durant ceste besongne la visiere levée. . . . Toutesfois ledit Chevalier d'Espaigne fut là noté de plusieurs nobles là estans, d'avoir entrepris une grand hardiesse et habilité de combattre par ceste maniere, la visiere levée, pource que pareil cas n'avoit point esté veu." (Monstrelet, vol. ii. *ad an.* 1435, ed. 1622.) The Earl of Warwick furnishes another example of this daring mode of encounter. In the "lawnde called the Park Hedge of Gynes," his antagonist being a French knight named Sir Colard Fymes, "on the last day of the joustes, the erle Richard came in face opyn, his basnet as the day afore, save the chapellet was rich of perle and precious stones, in Guy his armes and Beauchampe quarterly, and the armes also of Tony and Haunslape ^a in his trap-pure," &c. The "pageant" illustrating this event shews the Earl tilting, his face quite uncovered; the bearings pictured on his tabard and on the trapper of his steed, further exemplifying the usage mentioned in the legend—that of the knight bringing into the field or lists any combination of his family arms that he might think fit to adopt. In 1467, in the jousts at Smithfield between Lord Scales and the Comte de la Roche, the English champion "fought with his visern opyn, which was thought jepardous." (*Excerpta Historica*, p. 211.) The crest in our illustration represents a fox. It was a favourite fancy of the verse-writers of this day to designate the leaders of a host by the names of their crests, and indulge in a metaphorical play upon the attributes of the heraldic creation. Thus, the horn of the Bull, the tusk of the Boar, and the claw of the Eagle became fertile sources of ingenious combination

^a His ancestors.

—on occasion of a victory; while, for the vanquished, the flight of the Swallow, the eclipse of the Sun, and the wreck of the Ship, were in equal readiness. A few lines from the "Verses on the Battle of Towton," written in this century, may suffice to give an idea of this species of composition:—

"The way into the northe contre the Rose¹ ful fast he sought,
 W^t hym went ye Ragged Staf¹, y^t many man dere bought;
 The Fissehe Hoke^k cam into the felde, w^t ful egre mode,
 So did the Cornyssh Chowghe¹, and brought forthe alle hir brode;
 Ther was the Blak Ragged Staf⁼, y^t is bothe trewe and goode,
 The Brideld Horse, ye Watyr Bougeⁿ by ye Horse stode.
 The Grehound and the Hertes Hede^o, thei quyt hem wele y^t day,
 So did ye Harow of Caunterbury^p, and Clynton^q w^t his Kay;
 Ye White Ship of Brystow, he feryd not yt fray,
 Ye Blak Ram of Couentre, he said not one nay.
 The Wolf cam fro Wercetre, ful sore he thought to byte,
 Ye Dragon cam fro Glowcestre, he bent his tayle to smyte;
 The Griffon cam fro Leycestre, fleying in as tyte,
 The George cam fro Notynggham, w^t spere for to fyte."

¹ The "Rose of Rouen," the Earl of March.

² The Earl of Warwick.

^k Lord Fauconberg.

¹ Lord Scrope of Bolton.

⁼ Lord Grey of Ruthin.

^o Probably Lord Bourchier.

^p Lord Stanley?

^q This and most of the following refer to the Banners of the Towns which assisted the Earl of March.

ⁿ John Lord Clynton. See *Archæologia*, vol. xxix. p. 343, for the remainder of this curious poem, and *Excerpta Historica*, pp. 161 and 279, for similar compositions.

PLATE 74.

BRASS of John Leventhorpe, Esquire, Sawbridgeworth Church, Hertfordshire: 1433. In this figure we have the first example in our series of the so-called *tuilles*. The wide-spreading hoops of the tassets had this fault, that they permitted the spear or sword of an adversary to find its way beneath them to the body of the wearer. The hinged pieces or *tuilles* now replacing the lowest hoop, were to remedy this defect by lying closer to the person. At first they were small, as in the monument before us, but they gradually increased in size till they nearly reached the knee. Instances of the early form may be seen in our plates 76, 79 and 81, and in Stothard's plate 110. The later and larger kind is found in our Nos. 85, 86 and 91, and in Stothard's "Monuments," 127, 129 and 131. Sometimes the *tuilles* are two in number only, and fixed in front; but occasionally smaller pieces are added at the sides, as in the Beauchamp statue, No. 83, in Stothard's plate 129, and in Hefner's figures 180 and 14. Hefner's plate 129 affords a very curious variety, in which a considerable number of small plates seem to be continued all round the body, and are appended to the lowest hoop of the tassets by a portion of chain-mail. The *tuilles* are sometimes worn over a skirt of mail, as in our illustrations, Nos. 91 and 105, in Valturius, *De re militari*, 1472, and in the effigy of Sir Giles Daubeny in Westminster Abbey, of the end of the century. The statue of Sir John Crosby in St. Helen's Church, London, presents this singularity, that

* Apud Dibdin, vol. iv. p. 52.



No. 74

the tuille on the right side has a staple in the midst of it, to which the dagger-cord is fastened. The remaining portion of the armour of the figure before us has already been examined in previous specimens. The dagger-sheath at this time is not unfrequently found to carry a knife in addition to the misericorde. Examples occur in the effigies of Ingelheim, 1431, and Heinrich zum Jungen, 1433 (plates 129 and 32 of Hefner's *Trachten*).

PLATE 75.

COMBAT of men-at-arms, from Harleian MS., 4,605, a transcript of the *Fays d'armes et de Chevalerie* of Christine de Pisan, written in London in 1434. The date appears in the colophon:—"Explicit. Digatz* un pater noster et un ave maria per mossen pey* delafica, qui a escruit aquest present livre en lan de nre senhr mil cccxxxiiii°, et fut fait a londres a xv. de may." The bassinet with globose visor is conspicuous here; a fashion often seen in the fifteenth century. Other examples occur in Roy. MS., 15, D, iii., fol. 243, in Harl. MS., 4,431 *passim*, in Cotton MSS., Nero, E, ii., ff. 130 and 285, and Julius, E, iv., ff. 207 and 211, and in Carter's "Sculpture and Painting," plate 36. The wide-rimmed helmet has been often seen in previous ages¹. Other instances, in the present century, are found in Roy. MS., 15, D, iii., fol. 243, and in Hefner's *Trachten*, plates 82 and 83. Occasionally the broad rim of the helmet has a horizontal cleft in front, for the purposes of vision when the casque was drawn down over the face in combat. See Cott. MS., Nero, E, ii., vol. ii. fol. 428, and Hefner's plate 161. It is sometimes encircled by a kerchief, as in Roy. MS., 18, E, v. fol. 174, and surmounted by a feather, as in that example and in 15, D, iii. fol. 243. The armour of rectangular scales, seen in several of the gorgets in this group, has already been noticed under No. 62. It is difficult to determine whether the outer garment of some of these figures is merely a light surcoat or a "jacque of defence."

* Say.

¹ See vol. i. pp. 112, 141 and 290.



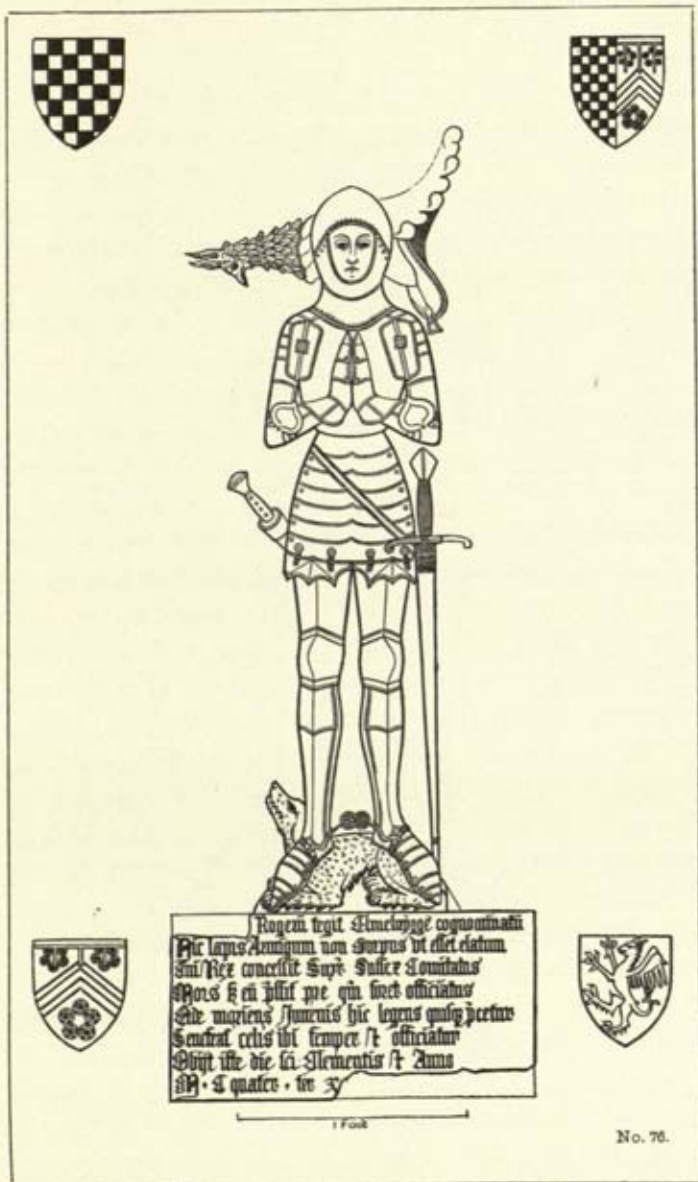
No. 75.

The jacque was at all events in frequent use at this time, and its composition was sometimes of a kind that seems more characteristic of a primitive tribe than of the gendarmerie of the cinque-cento period. Among the effects of Sir John Fastolfe (temp. Hen. VI.) are "vi. jakkes stuffyd with horne". The same inventory names "j. jakke of blakke lynen clothe stuffyd with mayle." In the East, armours of chain-mail covered with silk (so that no metal is in view) are still in use. Of the levy of troops in this century, see Dr. Lingard's "History of England," vol. v. p. 9, *ad an.* 1415; page 30, *ad an.* 1417; page 45, 1421; page 297, 1489; and page 303, 1492. Compare Rymer under those dates, for the contracts in full.

* *Archæologia*, vol. xxi.

PLATE 76.

MONUMENTAL brass of Roger Elmbrygge, Esquire, in Bedington Church, Surrey: about 1435. We have here a further example of the *tuilles* attached by straps to the lowest hoop of the tassets; a fashion of which we have already noticed the existence under No. 74. The gauntlets in this effigy are of a construction not yet seen in our series. They differ from the older fashion in substituting for the small articulations which covered each separate finger, a few broad plates enclosing the whole hand. This mode continued in favour till the close of the century: examples, differing nothing in principle and little in detail from the one before us, are offered by our plates 77, 79, 81, 82, 84, 85, 93 and 105. The head of our warrior rests upon his helm, surmounted by his crest and decked with wreath and mantling. Though a particular crest was no doubt generally worn by each knight, it was by no means unusual (especially in tournaments) for a champion to appear with the crest of some remote ancestor, or even with no more than a plume of feathers in lieu of any definite cognizance. Thus, in the Beauchamp Pageant, pl. 20, Earl Richard encounters Sir Pandolf, with his family Bear and Ragged Staff at the top of his helmet; but in scene 35 he "comes to the felde, a bussh of Estrich fethers on his hede, his horse trapped with the armes of oone of his auncestres, the lorde 'Tony;'" while at scene 40 of the same jousts, he again appears wearing his crest of the Bear and Ragged Staff. The remainder of the suit of Elmbrygge presents no feature that has not already been noticed. The large gussets of plate have appeared in the previous monument of Brounket, No. 73.





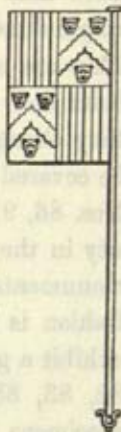
No. 77.

PLATES 77 & 78.

THE brass here engraved is that of a knight of the Cuttes family, in Arkesdon Church, Essex: about 1440. In this harness we find the great shoulder-plates and elbow-plates, which, becoming larger and more fantastic as the century advances, assume at length a form closely pressing upon the bounds of credibility. See the example in our plate 85. In their first form they appear to be no more than a modification of the gussets of plate, whose ample dimensions have been noticed under Nos. 73 and 76. They are additional pieces fixed to the under-armour by bolts and staples, or by nuts and screws. But at length they change their fashion, and each shoulder is found to be covered with a single large plate, as in our illustrations, Nos. 86, 91, 92 and 105. There is, however, much diversity in the arrangement of these plates, in the successive monuments of the period; and if the general course of the fashion is as we have indicated, the particular examples exhibit a good deal of minute variety. Our figures 79, 81, 82, 83, 85, 86, 91, 92, 93 and 105 furnish a series of specimens of the great shoulder-guard, and others may be seen in Hefner, Nos. 136, 131, 161 and 157. The four views of the Beauchamp statue at Warwick, in Stothard's "Monuments," should be carefully examined. The alabaster effigy of Nicholas Fitzherbert, in Norbury Church, Derbyshire, very clearly shews the manner of attaching the over-plate by nut and screw. In the statue of Saint George in Henry the Seventh's Chapel at Westminster (a cast of which is in the Sydenham Collection), this over-plate has the form of a little shield. The great shoulder-

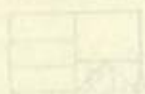
pieces are frequently different in size on the right and left sides, that for the sword-arm being invariably the smaller. The figure before us furnishes an example: others are supplied by our plates 79, 81 and 85. The large elbow-pieces also are found to be of greater dimension on the left side. Specimens of them may be seen in our engravings, Nos. 79, 81, 83, 84, 85, 86 and 93; in Stothard's plate 129; and in Hefner's plates 14 and 25. The cast from the statue of Louis of Bavaria, in the Sydenham Collection, affords also useful illustration.

The Banner here given is from the brass of Sir Hugh Halsham, in West Grinstead Church, Sussex: 1441. The bearings are those of his own family: quarterly, 1 and 4, Halsham, 2 and 3, Strabolgie. Other examples of the banner of this time may be seen in Harl. MS., 4,205, in the Tourney-book of René d'Anjou, in the Beauchamp Pageants (*Horda*, ii. plates 12, 13, 46 and 54). The heavy-armed "Bannerer" is shewn on fol. 1 of Harl. MS., 4,205, and in plates 46 and 54 of the Beauchamp Pageants. The bannerers were chosen men, eminent for strength and skill. Thus, Henry V. at Agincourt "committed the bearing of the standards and banners and other ensigns to such men as he knew to be of great strength and prowess in the bearing of them*." The banner of Saint George in that field was borne by an esquire named Thomas Strickland, who is designated in Rymer "Baniour de la Baner de Saint George†."



No. 79.

* Titus Livius, cited by Nicolas, "Batt. of Agincourt," p. 96. And compare p. 340.
† *Fodera*, x. 318.



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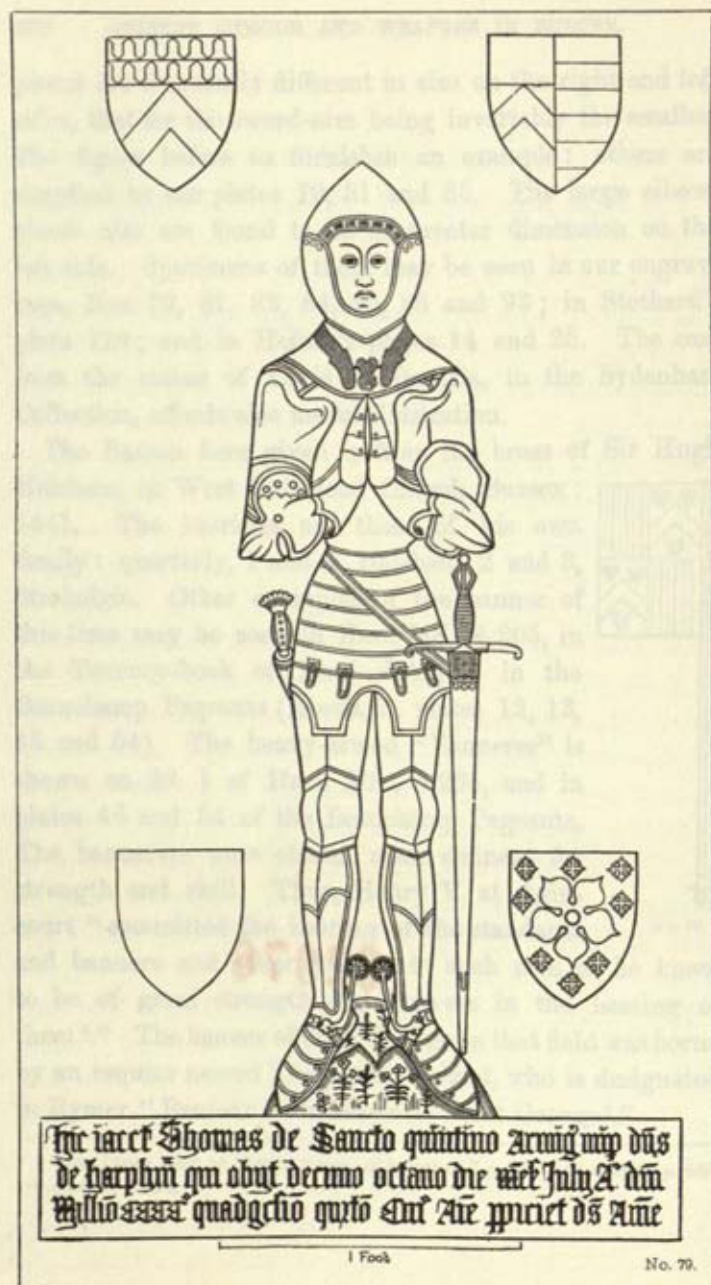


PLATE 79 (AND No. 80.)

MONUMENTAL brass of Thomas de Saint Quintin, Esquire, in Harpham Church, Yorkshire. This armour presents us with many features which have already been noticed: the large shoulder and elbow guards, the gauntlets formed of broad overlapping plates, the tassets of steel hoops, terminating in tuilles, and the deep pieces fixed beneath the knee-cops. But a new adaptation is found in the breast-plate. Instead of being of one piece, it is formed of two parts, the lower overlapping the upper, and contrived (by means of a strap or sliding rivet) to give flexibility to this defence. This kind of cuirass, called by the French "à emboîtement," is found constantly from this time till the end of the century; but the number of pieces employed in the articulations is various, as will be seen from the examples furnished by our plates 92, 94, 104 and 105. Other specimens occur in Stothard's "Monuments," plates 121 and 124; in Hollis's "Effigies," parts 3 and 5; and in Hefner's *Trachten*, plates 136, 131, 157, 82 and 115. Hefner's No. 83 shews us the back-plate articulated as well as the breast, and in the Tower suit, No. 1, this arrangement is again exemplified. In both instances, it will be remarked, the plates of the back-piece overlap from above, which is just the reverse of the overlap in the breastplate.

The long-necked spur seen in the effigy before us, and again in this example from the brass of Sir John Cherowin (or Curwen) at Brading, Isle of Wight, 1441, has already been noticed under No. 71. From many documents of this century we learn that the knightly



No. 80.

spur was held in much honour. When used for investiture, it was gilt. In 1415, Juvenal des Ursins tells us, "l'empereur tira une bien belle espée qu'il demanda, et fit chevalier maistre Guillaume Signet, et luy fit chausser ses esperons dorés." (*Hist. de Charles VI.*, p. 530: *Panthéon littéraire*.) Again, in the directions "How knyghtis of the Bathe shulde be made," printed by Mr. Way in the *Archæological Journal*, from a MS. of this period, we read:—"Then the servauntis and chambirleynes that bene asynid to awate upon them (the squyers) schalle take their swerdis and a payre of gilte sporis hangynge upon the hiltis of the same sworde, and the seyde servauntis and chambirleynes schalle bere the seyde sworde with the sporis before them." (Vol. v. p. 261.) By the statute of 8 Hen. V., cap. 3, it was forbidden to gild any sheaths, or any metal but silver and the ornaments for churches, or to *silver* any metal but knights' spurs, and all the apparel pertaining to a baron and above that estate. In the ceremonial of a knight's degradation, the offender had his spurs hacked off his heels by the king's master-cook. See in Lingard's *Hist. of England*, the account of the proceedings against Sir Ralph Grey in 1464 (vol. v. p. 180). And compare *Archæol. Journ.*, v. 262.



No. 61.

PLATE 81.

BRASS of John Daundelyon, "Gentilman," Margate, Kent: about 1445. In this effigy we have the left elbow-piece of an immoderate size, a fashion already noticed under No. 77. The shoulder-plates and tuilles are familiar to us. The gauntlets are curious from their piked cuffs, a form not unfrequently found in monuments from this period to the end of the century. See our illustrations, Nos. 77, 84, 85 and 87, and Hefner's plates 131, 157, 83 and 115. From several evidences of this date, we obtain the form and material of the knightly Mantle. The effigies given by Stothard, of the Earl of Shrewsbury and the Duke of Suffolk (plates 127 and 138), exhibit very exactly the Mantle of the Order of the Garter as it was fashioned at this time. In the document printed in the fifth volume of the *Archæological Journal*, from Cotton MS., Tiberius, E, viii., "Le ordre pur faire lez Chivalers de la Bathe, solonque le custome dengleterre," we read:—"un auter (chivaler) luy vestiera ove un kyrtelle de rouge tartaryn; un auter luy donera le Mantelle, del suyte del kyrtelle, de rouge tartaryn", taychez (attaché) ove un lace de soy blanc, ove un par de blanc gantz pendantz a boutte de la lace," &c. (p. 269.) In Hefner's *Trachten*, plate 25, we have the figure of the Elector, Albrecht von Brandenburg, about 1472; in which the electoral mantle, worn over the armour, is very distinctly shewn. It is entirely open at the sides from the shoulder to the feet, two full breadths

* A rich and costly stuff from the East (Tartary), of which the exact fabric has not been ascertained.

cover the front and back; the exterior is crimson, the lining, border and tippet are of ermine. The statue of Sir John Crosby, in St. Helen's Church, Bishopsgate, represents the knight wearing over his cap-à-pie suit of armour the gown of an Alderman of the City of London.



Hic iacet Johannes Baguetford Semon Armiger qui
obijt xij die mensis Julij Anno dñi millmo CCC
quingagesimo Quinto aetate pfecta deus Amen.

PLATE 82.

BRASS of John Gaynesford, Esquire, at Crowhurst, Surrey: 1450. The armour for the shoulders, in this figure, is of an unusual construction: the reinforcing plates are of the same size on both sides, and beneath are articulated epaulets, held together at the neck by a strap. A similar arrangement is found in the brass of Walter Green at Hayes, Middlesex, engraved in Boutell's "Brasses," p. 70. The elbow-pieces, in order better to protect the bend of the arm, are made to overlap at that part; an improvement of which other examples may be seen in our plates 83 and 85. The skirt of nine hoops is curious from the absence of the tuilles usually found at this time. A similar instance is that of the brass of Sir John Harpedon in Westminster Abbey, 1457. It seems likely that an armour of this plan was intended for a contest on foot. The suit of Henry VIII. in the Tower Collection, No. $\frac{1}{2}$, which has tassets only, as in the example before us, is traditionally called "the foot armour of King Henry VIII." Further corroboration is obtained from the well-known harness in the Ambras Collection (our No. 109), where the deep skirt of plate is so contrived that, when complete, it serves for a foot combat, but when employed on horseback, a portion of the skirt has to be removed, in order to afford the knight a proper seat in his saddle. A singular use is sometimes made of the steel tassets. In the lowest hoop an aperture is formed, through which are thrust the sword and its sheath. Plate 90 of Hefner's *Trachten* furnishes an example. The plates beneath the knee-pieces in the brass before us take a peaked form, a fashion of which further instances

occur in our Nos. 85, 92 and 93; and again in Hefner's figures 44, 180 and 25; extending from the middle to the close of the century. In lieu of the knightly helm, our warrior has for pillow the visored bassinet, an unusual arrangement, of which another example is found in the brass at Hayes, noticed above. The bassinet, it will be seen, has the gorget fixed; exactly in the manner of the real helmet figured in our plate 38. The head being without armour, supplies a good example of the "rounded" hair of this period.



No. 88

PLATE 83.

STATUE in gilt brass, of Richard Beauchamp, Earl of Warwick, from his tomb in St. Mary's Church, Warwick. The Earl died in 1439, but the effigy appears to have been made about 1454, the fashion of that period being adopted for the armour. The contract for the monument is still preserved among the archives of the corporation of Warwick, and has been printed in Dugdale's history of the county*, and again in Gough's "Beauchamp Chapel^b." From this curious document we learn that the statue was cast by one person and gilt by another. In the 28th Henry VI. (1451), under the direction of the Earl's executors, "William Austen, Citizen and Founder of London, doth covenant to cast and make an Image of a man armed, of fine Latten, garnished with certain ornaments, viz., with Sword and Dagger; with a Garter; with a Helme and Crest under his head, and at his feet a Bear musled and a Griffon, perfectly made of the finest Latten, according to pattern; the said Executors paying for the Image, perfectly made and laid," &c. "in total xlii."

"Bartholomew Lambespring, Dutchman, and goldsmyth of London, xxiii. Maii, 27 Hen. VI., covenanteth to repaire, whone, and pullish, and to make perfect to the gilding, an Image of latten, of a man armed that is in making, and all the apparell that belongeth thereunto, as Helme, Crest, Sword, &c., and Beasts; the said Executors paying therefor xiii*li*."

"The said Bartholomew, iii. Martii, 32 Hen. VI. (1454), doth covenant to make clean, to gild, to burnish and pullish the great Image of latten, with the Helme and

* Vol. i. p. 445.

^b Page 9.

Crest, the Bear and the Griffon," &c.; the said Bartholomew "to finde all manner of stuffe for the doing thereof, saving gold; the said Executors providing gold;" the cost to be *xvlii. iis. viii*d**. Of the effigy itself, Stothard says, in a letter to Mr. Kerrich, "I never saw armour so well made out on any monumental figure: every buckle, strap and hinge is attended to. The best idea I can give you of it is to say that it appears to be a suit of brass armour, having the head, hands and straps added in the same metal*." The drawings made at the period of this visit to the Beauchamp Chapel form the subjects of four plates in the "Monuments," all deserving of a careful study. The cast of the statue at Sydenham very exactly reproduces the original harness. The reinforced shoulder-guards are well exemplified. In addition, we see the commencement of those upright plates, or neck-guards, so frequently found in suits of the sixteenth century. The great elbow-piece is very prominent in this side view: it overlaps at the bend of the arm. The back and breast plates are each in two parts, the lower attached to the upper by a strap. The *tuilles*, four in number, are fixed in front and at the sides. The *cuissards* do not entirely enclose the leg (see Stothard's plate 124). The wings of the knee-cops overlap at the bend of the leg. The rowel spur has been broken. On the sword pommel is the Earl's "beast," a "musled Beare." The Garter of the Order of the Garter is on his leg. For pillow the Earl has a helm with a Swan crest. At his feet are two figures, a "musled Bear and a Griffon."

* Stothard's "Memoirs," p. 124.



No. 64.

PLATE 84.

BRASS of Sir Robert Staunton, at Castle Donnington, Leicestershire: 1458. We have here a new kind of head-defence, the Salade, to which belongs a chin-piece (*mentonnière*) or buff; the latter not found in the illustration, because it was usual to omit this piece in monumental figures, for the same reason that the visor was omitted from the bassinet; namely, to permit the features of the person commemorated to be seen⁴. The salade with *mentonnière*, which comes into use at this time, and continues in favour to the end of the century, seems to have met a requirement which was not fulfilled by the visored bassinet, that of permitting a free supply of air. The chin-piece was fixed: the upper part followed the movements of the head, so that the champion could preserve his face uncovered till the moment of the shock, when, by a slight change of posture, the upper portion closed upon the lower and the face of the combatant was wholly concealed. There were several varieties of the Salade or Sallet. The simplest was little more than a skull-cap, with a prolongation over the neck. This was the common headpiece of the archers, billmen, &c. See plate 95. The next kind was brought lower over the face, and had a cleft for sight. Plate 101. A third variety had the visor moveable, as in plates 97, 98 and 105. A fourth sort had the addition of a *mentonnière*. This piece is seen in plate 86, but of somewhat reduced dimensions, in order not to conceal the features of

⁴ This was not always insisted on during the earlier centuries: in some knightly monuments there is not the smallest por-

tion of the person in view: nothing appears but a suit of armour. See Stothard's plate 24 and Surtees' Durham, vol. i. p. 24.

the knight. In the effigy of Ralph Nevill (Stothard, pl. 134) the warrior has both salade and chin-piece. A Great Seal of Edward IV. also has both those pieces. In the Tower Armory are good examples of the knightly salade, one of them with a mentonnière attached. (Nos. $\frac{1}{2}$ and $\frac{1}{4}$.) The fifth kind is the so-called Venetian Salade, contrived on the model of the Ancient-Greek helmet, in which the sides are advanced over the cheeks, and oval apertures are made for sight. See the Tourney-book of René d'Anjou, and real examples in the Tower. The salade is sometimes surmounted by a crest, as in Hefner's plate 44, A.D. 1449, and the Great Seals of Richard III. and Henry VII. It has sometimes a wreath, as in Hefner's plate 169; often a plume, as in Roy. MS., 15, E, vi., fol. 222, Dibdin's *Bibliotheca Spenseriana*, iv. 430 and 485, from woodcuts of this century, and in Hefner's plates 80, 1, 161 and 109. From Mathieu de Coucy we learn that the sallets of the Archers of the Count of Clermont were ornamented with silver: on the entry of Charles VII. into Rouen in 1449, the Count was accompanied by forty archers who had "brigandines et harnois de jambes, et leurs salades pour la plus grande partie garnies d'argent, et si portoient des auctons rouges sans croix." (*Hist. de Charles VII.*, p. 593.) The remainder of the armour in the effigy before us has already been examined in previous monuments.



PLATE 85.

BRASS of Richard Quartremayns, Esquire, in St. Mary's Church, Thame, Oxfordshire: about 1460. Round the margin of this monument, which includes the effigy of the lady of our warrior, is this curious inscription:—

"O certeyne dethe, that now hast overthrow
Richard Quartremayns Squyer and Sibil his wife, that lie here now full
lowe,
That withe rial princes of Counsel was true and wise famed,
To Richard Duke of York, and aftur with his Sone Kyng Edward the iiiiith.
named,
That foundid in the Chirche of Thame a Chauntrie. vi. pore men and a
fraternyte,
In the Worshipp of Seynt Christofere, to be relevid in perpetuyte.
They that of her almys for ther Soulis a pater noster and ave devoutly
wul sey,
Of holy ffadurs is grantid they pardon of dayes forty alwey.
Whiche Richard and Sibil oute of the worlde passid in the yere of oure
Lord MCCCC LX."

In the armour of the figure, the fashion of the great elbow-pieces is carried to the utmost excess: that on the left side in particular has nearly the proportions of the knightly shield of olden time. Compare plates 55 and 72 of our first volume. It is contrived, by a succession of channels, to turn off the point of a lance. On both sides the elbow-defences are made to overlap at the bend of the arm. The left shoulder-piece has similar channels to the *coudière*. The reinforcing piece on the right side is smaller than that on the left, permitting us to see the articulations of the shoulder-armour beneath. The "standard of mail" has been already noticed (with No. 56). The gauntlets exhibit the peaked cuffs previously seen in Nos. 77, 81 and 84. The *tuilles* are of large size and channelled: beneath

them is worn a skirt of mail, as in Nos. 83 and 84. The knee-pieces are formed to overlap. The sollerets are wrought exactly as the hand-defences. The sword is suspended in front, a fashion of which examples occur in our Nos. 86 and 93, and again in Cotman's plates 30, 32, 34 and 44, ranging from this date to the end of the century. Though the sword worn in front is often seen during the period named, this is by no means a universal mode: caprice seems to have been the only arbiter in the matter. However unpicturesque European armour may now appear, it seems to have been coveted by some of the princes of Asia. One of the charges against Jacques Cœur (in 1453) was "qu'il devoit avoir envoyé au Souldan de Babilone, au deceu du Roy, un harnois complet, à la façon des parties de deça; duquel harnois ledit Souldan avoit eu grand desir, afin d'en faire de pareils en son pays; car, en leurs marches, ils ne s'armoient pas ainsi comme on fait par deça." (Mathieu de Coucy, *Histoire de Charles VII.*, p. 692.)



No. 85.

PLATE 86.

MONUMENTAL brass at Quy, Cambridgeshire, of John Dengayn, "Domini istius Ville:" date about 1460. The lord of Quy wears the *mentonière*, to which belongs the helmet called the Salade, as we have seen under No. 84. The shoulder-pieces are of unusual form, consisting of large plates, each of which carries two upright neck-guards. The brass at Shernbourn, Norfolk, figured by Cotman, plate 24, furnishes a similar example; but these two memorials are in fact so closely similar throughout in the armour, that it seems impossible to believe that one was not copied from the other. The statue of Conrad von Schaumberg, however (Hefner's plate 157), shews us very clearly the double neck-guard, the figure being armed throughout in defences very much resembling those of the effigy before us. The elbow-pieces overlap at the bend of the arm. The tassets have their upper edges engrailed, a fashion of which other examples may be seen in Stothard's 127th plate, in Hollis's "Effigies," pts. 5 and 6, and in Hefner's plates 136, 138, 14 and 115. Large tuilles overlies a skirt of chain-mail. The knee-cops overlap at the inner bend of the leg. The sword carried in front has already appeared in the effigy of Quatremaisons, plate 85.



PLATE 87.

FIGURE of a knight from the tapestry of Charles the Bold, which was captured by the Swiss in their memorable sack of the duke's camp in 1476, and is now preserved in the Cathedral of Berne. The tapestry is kept with great care in the sacristy, and on high festivals is produced and hung in the choir. Its date appears to be about 1470-75: the whole suit comprises six pieces; they are engraved (under the name of "The Tapestry of Berne") in Jubinal's *Tapisseries historiques*. To this fine work, of the highest interest to the student of medieval military costume, we are indebted for the subject before us. In addition to the numerous fashions of surcoat that have already come under our notice, we have here a further variety. It is characterised by the short, plaited skirt, so much in favour throughout the sixteenth century; but more especially by the sleeve, which is so contrived that, by means of an aperture in the middle, the wearer can either have his fore-arm free, or encase the whole arm in the cloth. This fashion of the knightly surcoat was borrowed from the civil garment of similar form; for, in all ages, it is found that the modes of civil costume were readily accepted into the military dress: sometimes, indeed, to a ludicrous extent, as is well known to those familiar with the panoply of Tudor times. The sleeve here seen appears to be a fashion originated in Italy, where it occurs as early as the first half of the fifteenth century. The picture representing the Offering of the three Kings, by Antonio Vivarini, who flourished at this period, and who is named as late

as 1451*, has a striking example of the contrivance in question. The picture is in the Royal Gallery at Berlin, an engraving from it forms the 139th plate of Hefner's *Trachten*. Plates 128, 13 and 107 of the same work contribute other examples, the last-named being from a female costume. See also Roy. MSS., 14, E, iv., and 15, E, iv., and Harl. MS., 4,425, the celebrated transcript of the Romance of the Rose; Strutt's "Dress and Habits," vol. ii. plates 108, 128, 131, 132 and 133; "Regal Antiquities," plates 32, 38 and 46; and "Domestic Architecture," vol. ii. p. 61. This fashion of sleeve continued in favour throughout the sixteenth century. The armour of the knight presents no new feature. To the long-toed solleret belongs the long-necked spur noticed under No. 70. The lance is a good example of this weapon. The trappings of the horse, formed in bands, are again seen in Harl. MS., 326, fol. 13, in the figure of St. George (Hefner, pl. 1), and in our illustration, No. 92.

* Waagen, Catalogue of Berlin Gallery.

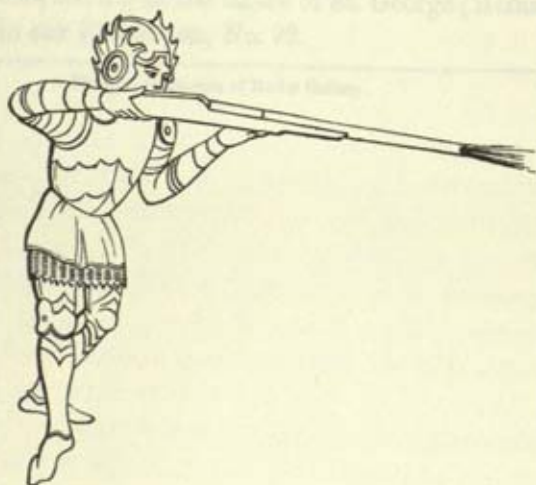


PLATE 88.

THE first hand-gunner here figured is from Burney MS., No. 169, fol. 127. The manuscript is "Des fais du grant Alexandre, translate du latin en françois par venerable personne Vasque de Luce, ne portugalois, en lan de grace mil quatrecent soixante huit," &c. The Latin is that of Quintus Curtius. At folio 13 is a record of the purchase of the volume in 1475: it was then acquired by "phelippe de Cluys chl^r de lordre saint jehan de jherusalem, co^mmandeur du blison et de la vaude, achete par lui en lan mil cccclxxv." The transcript appears to have been made about 1470-74. The volume contains many miniatures interesting to the student of military antiquities. Knights mounted and on foot, archers, Greek-fire, cannon, hand-gunners, combats and jousts are among the subjects represented. The figure here given furnishes an early example of the hand-gun, and from the colouring of the miniature we learn that the material of the arm was iron. The Hand-gun of this time differed in nothing but its size from the small cannon of the day: it consisted of a metal tube fixed in a straight stock of wood; the vent was at the top of the barrel; there was no lock of any kind. The barrel was of iron or brass, and these barrels were occasionally furnished with moveable chambers. In the Inventory of stores in the "Bastide de Saint Anthoine" at Paris in 1428, we have:—"Item, xvii. canons a main, dont les deux sont de cuivre, et les xv. de fer sans chambres¹." The example found in the old castle of Tannenberg (noticed

¹ Printed at the end of vol. i. of the *Etudes sur l'Artillerie* by the Emperor of the French.

at p. 299) is of brass. An early mention of the hand-gun is that of Juvenal des Ursins, who tells us, under the year 1414, that "Au siege d'Arras y avoit un canonier, lequel se mit dedans la ville, et dit tout l'estat de l'ost, et le gouvernement, en les exhortant qu'ils se tinsent bien et se defendissent. Et aussi faisoient-ils; et souvent sailloient, et avoient belles retraites, et lieux propices à eux retraire. Mais toutes les fois qu'ils sailloient dehors esdits lieux, il y avoit bonnes arbalestres, archers, et canons à main pour les recevoir, et en toutes les sorties qu'ils firent, ils furent reboutés à leur grand dommage*." Hand-guns are mentioned in the Paston Letters in a missive from Norfolk written about 1459:—"They have made wickets on every quarter of the house (at Caistor) to shoot out of, both with bows and with hand-guns; and the holes that be made for hand-guns, they be scarce knee-high from the placher." (Vol. i. p. 88, ed. 1840.) It is not till the second half of the fifteenth century that any pictorial example of the hand-gun is found. The miniature before us is one of the earliest. The arm again appears in the second illustration, from Roy. MS., 18, E, v., fol. 34^{vo}., written in 1473; in the woodcuts of Valturius, *De re militari*, cap. x., printed in 1472; and in De Vigne's *Vade-mecum*, vol. ii., Appendix. All these very closely resemble each other, both in the simplicity of their form and the mode of discharge. It is not unprofitable to compare this primitive arm with its modern successor, the telescope rifle, sighted to kill at 900 yards. In the example from Roy. MS., 18, E, v., the barrel appears from its colouring to be of brass.

* *Hist. de Charles VI.*, p. 498, ed. of *Panthéon Littéraire*.



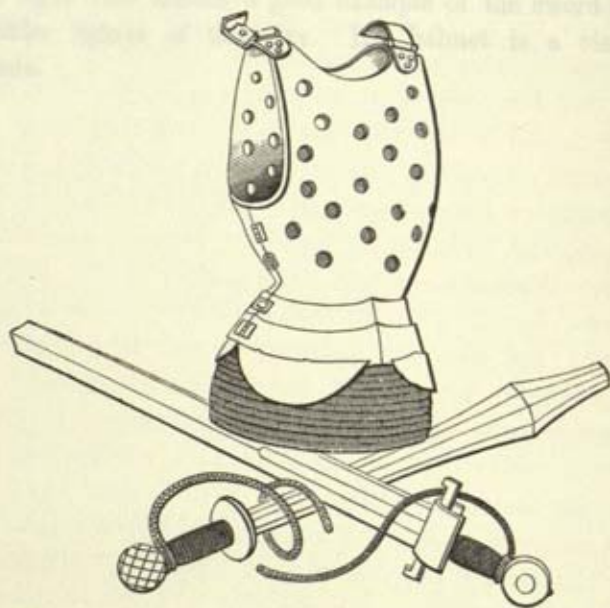
No. 69.

PLATE 89.

MINIATURE from Roy. MS., 18, E, v., fol. 34^{vo}. The volume is "L'histoire tripartite jusqu'à la mort de l'empereur Hadrien . . . qui fut escripte et finie le xxvii^e. jour de mars lan de lincarnation nostre seigneur mil iiii^e. lxxiii." It abounds in subjects illustrative of military arts: among the rest are pictures of knights, archers, crossbow-men, cannon, and a variety of soldiers contending with the "menues armes" of the period. In the curious sketch before us we have an example of an implement of assault of which we have already noted the existence as far back as the thirteenth century. The fire-pot of the Arabian treatise described in our first volume^b is here seen in action; and from the accounts in that old treatise of the analogous fire-weapons, the "massue de guerre," the "massue pour asperger," &c., we may gather a pretty accurate notion both of the manner of constructing and applying these diabolical agents. Both fire-pots and lime-pots were employed at the siege of Harfleur in 1415. In the "Relation of the Campaign of Henry V.," printed by Sir Harris Nicolas, we read that the defenders of the city "had warily provided on the walls an abundance of pots full of combustible powders of sulphur, and quicklime to cast into the eyes of our men (the English), if an assault should be made, and vessels of scorching earth and oils, and fat combustibles, for the burning and destruction of our ranks when they should approach to the walls." ("Battle of Agincourt," p. 111.) Compare the miniature

^b Page 329 *seq.*

from a fifteenth-century Froissart, given by M. Viollet-le-Duc at p. 383 of his *Dictionnaire de l'Architecture française*. The *chapel-de-fer*, made in one piece, with a circlet of bosses or studs, as worn by the left-hand figure, is frequent in this age. See our plate 101 and Strutt's *Horda*, vol. ii. plates 20, 42, 46 and 55. The figure on the right hand affords a good example of the sword-and-buckler fighter of this day. His helmet is a visored *salade*.



No. 90.

PLATE 90.

TOURNAMENT arms and armour from the Tourney-book of King René d'Anjou¹. Jousts and tournaments were still in favour. Good examples of the former are supplied by the Beauchamp Pageants, Cotton MS., Julius, E, iv., faithfully reproduced by Strutt (*Horda*, vol. ii.); of the latter, in the volume named above, of René d'Anjou. The cuirass here figured is thus described by the royal author:—"Le harnoys de corps est come une cuirasse ou comme ung harnoys a pié qu'on appelle tonnelet." And again:—"une cuirasse pertuissée en la meilleure et plus propre façon et maniere quelle peut estre pour ledit tournoy." Beneath is to be worn a quilted arming-coat:—"et fault que le porpoint soit faultré de troys dois d'espez sur les espauls, et au long des bras jusques au col, et sur le dos aussi, pourceque les coups des masses et des espées descendent plus volentiers ès endrois dessus-dis que en autres lieux." "Et aussi peult-on bien tournoyer en brigandines qui vueult." The arm-defences are either of metal or leather:—"c'est assavoir, gardebras, avantbras, et gantelez: et y en a de deux façons, dont les ungs sont de harnoys blanc et les autres de cuir bouilly." In the Low Countries a different kind of defence is in favour. "En Brabant, Flandres, et Haynault, et en ces pays-là vers les Almaignes ont acoustumé d'eulx armer de la personne autrement au tournoy; car ils prennent ung demy pourpoint de deux toilles, sans plus, du faulx du corps en bas,

¹ The best edition is that of M. Champollion. The treatise is included also in the *Œuvres du roi René*, edited by M.

Paulin-Paris, and much of it is printed in M. Leber's *Collection des Traités*, &c., vol. xiii.

et l'autre sur le ventre; et puis sur cela mettent unes bracières grosses de quatre doits d'espez et remplies de cotton; sur quoy ils arment les avantbras et les gardebras de cuir bouilly, sur lequel cuir bouilly y a de menuz bastons cinq ou six, de la grosseur d'ung doigt, et collez dessus, qui vont tout au long du bras jusques aux jointes. Et sont fais les gardebras et avantbras de cuir bouilly. Puis ont une bien legiere brigantine, dont la poitrine est pertuisée comme cy dessus est devisé," &c. The leg-armour is to be like that worn in war, "et les sollerez y sont tres bons contre la pointe des esperons." The "espée rabatue" and the mace are each provided with a chain or cord for recovery in the *mêlée*:—"Et peult-on, qui veult, atacher son espée ou sa masse à une déliée chaesne, tresse, ou cordon, autour du bras, ou à sa sainture, a ce que se elles eschap-poient de la main, on les peust recouvrer sans cheoir à terre." The mace is of wood. The helm has already been described at p. 421. Other examples of the barred tourneying helm will be found in Hefner's plates 137 and 138. The whole series of illustrations in King René's book are curious for their minute exemplification of the implements and practices of the tournament, and should be consulted by all who would clearly understand the manner of these brilliant spectacles.



No. 91.

PLATE 91.

KNIGHTLY Shield formerly in the Schutz family at Shotover House, Oxfordshire, now in the collection of the Rev. J. Wilson, D.D., President of Trinity College, Oxford. This very curious relic of the fifteenth century is formed of wood, lined with leather and faced with canvas, on which is laid a *gesso* to receive the painting and gilding. Its section longitudinally is concave on the face; transversely it is convex. At the upper corner is a notch (or *bouche*) for reception of the lance-shaft. The height is 2 ft. 8 in., the breadth 1 ft. 1½ in.: the inside has two rings for suspension round the neck of the champion. In its decoration, the whole face of the shield has been first gilt, and the design then painted upon the gilding, the stepping in the background being crimson, and the colours here and there heightened with gold. The lady's dress is pale yellow, the pattern of flowers and leaves, brownish crimson picked in with gold, the border of ermine. The armour of the knight consists of pieces which have already been seen in previous examples. The shield itself appears to be one of those which it was not unusual to adopt on occasion of a jousting festival, when the champion desired to remain unknown till his prowess had been established. A striking example is furnished by the Beauchamp Pageant (plate 33 of the *Horda*), where the Earl of Warwick has three such shields suspended over his seat, his intention being to personate the three knights to whom they are supposed to belong. "When that he herd," says his biographer, John Rous, "that the gaderyng in Fraunce was nat appoynted to

come to Caleys¹, he cast in his mynde to do some newe poynt of chevalry; whereuppon he lete paynt iii. pavises, and in every pavise a lady; the first harpyng atte ende of a bedstede, with a grate of gold on her lifte sleve, and her knyght called the Grene Knyght, with a blakke quarter; and he shulde be redy to just with eny knyght of Fraunce xii. corses, and ii. shildes shuld be of purviance; and that knyghtes lettre was sealed with the seale of his armes, the felde sylver, a maunche gowlys. The second pavys hadde a lady sitting at a covered borde, worchyng perles; and on her sleve was tached a glove of plate, and her knyght was called Chevaler Vert; and his lettre was sealed with the armes, the felde sylver and ii. barres of gowles; and he must just xv. courses, and that shulde be ii. sadilles of choyes. The iii^d. pavys a lady sitting in a gardeyn making a chapellet, and on her sleve a poleyn with a rivet; her knyght was called Chevaler Attendant, and he and his felowe must renne x. cours, with scharpe speres and without sheldys: his lettre was sealed with golde and gowles quarte, a bordour of vere. Thies lettres were sent to the kyng's coort of Fraunce, and a noon other iii. Frenche knyghtes received them, and graunted their felowes to mete at day and place assigned." How Earl Richard met the three knights, justed with and overthrew in succession the Chevaler Ruge, the Chevaler Blank, and Sir Colard, and afterwards feasted all the people and rode to Calys with great worship, may be seen and read in the Pageants and their legends¹ already often cited in these pages.

¹ The Earl was at this time "Captain of Calais;" and it was not unusual for the French knights, when bent on a feat of arms, to come to the neighbourhood of this town, in order to give the English

knights an opportunity of trying their skill against them.

² So much as we have here printed is from the manuscript (Julius, E, iv.), the text in the *Herba* not being quite exact.

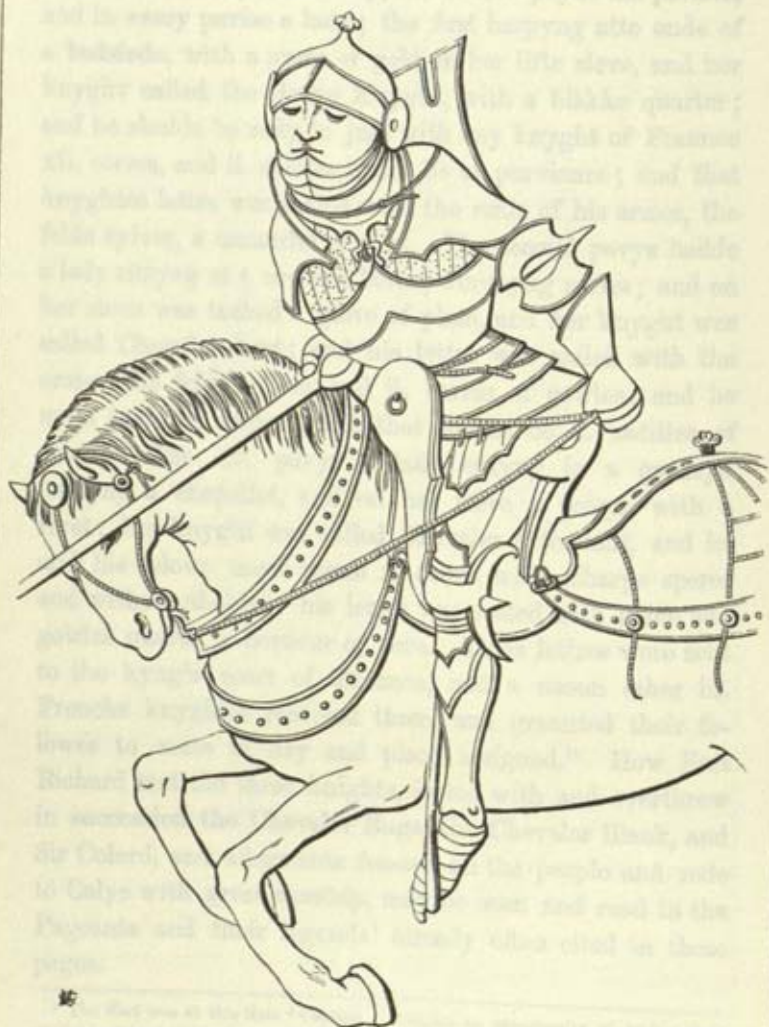


PLATE 92.

MINIATURE from Roy. MS., 18, E, iv., fol. 292. The volume is a transcript of Valerius Maximus, written in 1479; this date, with a portrait of the illuminator, appearing on folio 24. The book is a fine example of the art of the period, but the armour subjects are few. The figure before us exhibits a fashion frequently seen at this time, in which the upper part of the body-armour differs from the lower. This upper portion is often of a brilliant hue, and has been considered to represent a covering of silk or velvet laid over a pectoral of steel. In the example now under notice it appears to be of brigandine-work, similar to the defences shown in plates 97, 98 and 105. The lower part of the body-armour is fastened to the gorget by a strap and buckle; a mode already seen in the Beauchamp figure, No. 83, and again found in plate 105. Compare Hefner's plates 136, 138 and 14. In lieu of the strap and buckle, allowing a certain degree of play between these parts, the two pieces are sometimes firmly united by bolt and staple, as in the illustrations given by Hefner, Nos. 131 and 179. The elbow-defence is curious from the steel claw with which it is armed. Similar instances occur in our No. 96 and Hefner's plate 180. The knee-piece of our knight is also furnished with a spike. His helmet is a visored salade with chin-piece. At his shoulder he carries a bouche shield. The shoulder-defences and the remainder of the suit have appeared in former illustrations. The saddle, with its high front and curved cantle, and trappings fixed by buckles to the flaps, is a good example of this part

of the knightly outfit. The bridle has a singular arrangement in front, where there is no brow-band, but a strap passes over the forehead, and then dividing, is continued to the bit. In the colouring of this miniature, the knight's armour is represented as if gilded, that of his antagonist is iron-colour.



No. 93

PLATE 93.

BRASS in Sotherly Church, Suffolk, of Thomas Playters, Esquire, 1479. This effigy presents two noticeable facts distinct from the costume; both useful to be remarked by the archæological student. The hair shows the return to the fashion of long locks which characterises the later portion of this century. The figure turned sideways is also an indication of the same period. This departure from the rigid position to which, in monumental portraiture, we have so long been accustomed, appears to have arisen from the necessity of representing the female effigies of the time in profile, in order to show the so-called "butterfly head-dress;" which, projecting at the back of the head, could only be depicted in a side view. Lady Playters, in the brass of which this figure forms part, has the head-dress in question^m: the lady being thus of necessity portrayed in profile, it became requisite to picture the husband in a similar position; and the fashion once begun, the arrangement soon became established, even though the succeeding modes of head-dress did not require its continuance. The armour in this example offers no striking novelty. The shoulder-defences, however, differ from anything we have yet seen; each consisting of two plates, the upper plates with recurved edges, and the pieces being of equal dimension on both sides. Similar pauldrons are found in the effigy of Sir Anthony de Grey, 1480 (Boutell's "Brasses," page 73); and in the figure on folio 1 of Harl. MS., 4,205, is a defence differing only from these in having three

^m Cotman, vol. ii. plate 15.

plates instead of two. The great elbow-pieces have a close resemblance to those already seen in our plate 86: they are made to overlap at the inner bend of the arm. The breastplate is articulated: at the throat is worn the collar of mail. The tassets with tuilles, and the long-necked spurs have already been often noticed. The sword is curious from the tufts of fringe at the pommel and cross-piece. A similar tuft is seen in the brass figured by Cotman, vol. i. plate 31. In some memorials of this period, the sword-sheaths are contrived to contain one or more little knives in addition to the sword itself. The statue of the merchant, William Canynges at Bristol, 1474, engraved in Hollis's "Effigies," affords an example. And another is furnished by the figures of the soldiers in the Entombment at Mayence Cathedral, of which there is a cast in the Sydenham Collection. In these examples, it will be observed, it is not the knightly sword which is thus accompanied, but in one case the sword of a civilian, in the other that of the common soldiery.

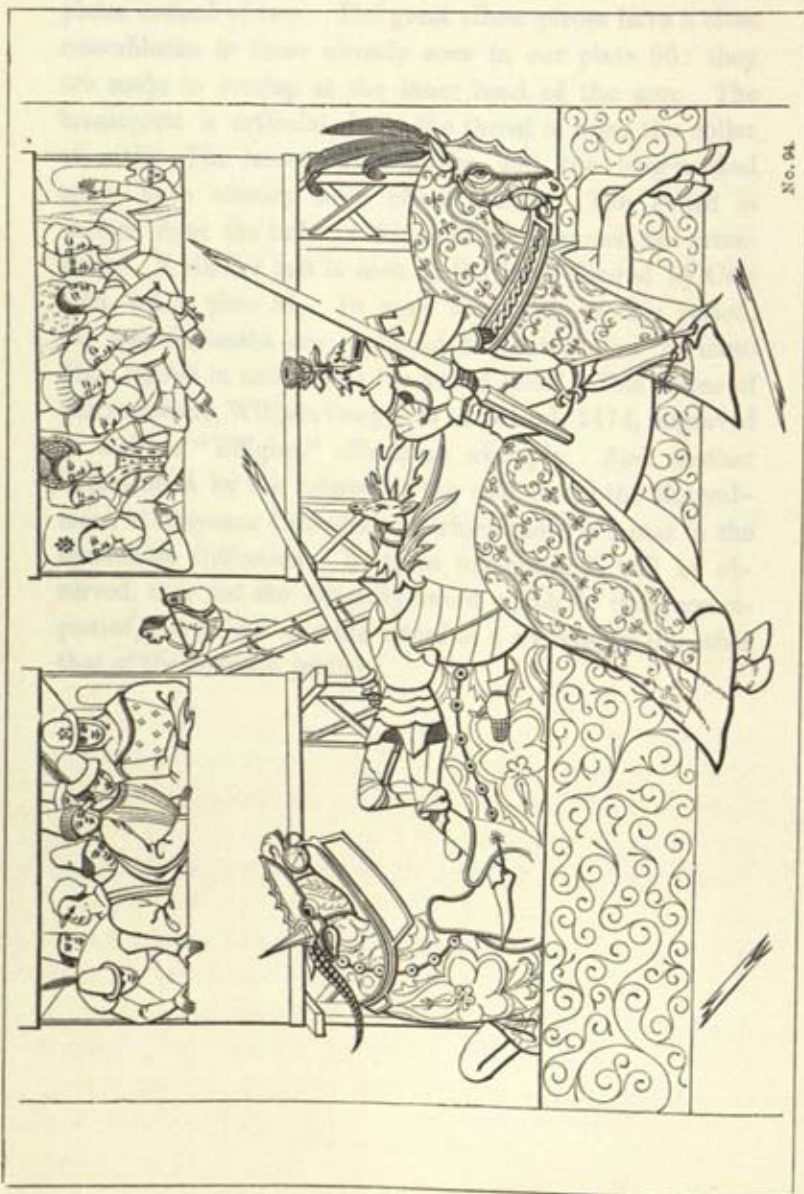


PLATE 94.

KNIGHTS jousting, from Cotton MS., Nero, D, ix., the *Histoire de Jehan de Saintré*, written about 1480. The volume contains fifteen large and fine illuminations illustrative of military exploits, jousts, pole-axe fights, battles, &c. The subject here given is from folio 39, and the colours are as follows:—*Near knight*: armour, iron-colour; feet, black; crest, red flower with gold leaves; saddle, bridle and stirrup-leather, red; trapper of horse, blue marked with darker blue and lined with white fur. *Far knight*: armour and feet as before; crest, gold with red feathers; saddle, buff; trapper, dark with black markings; bells, gold. Chanfreins of both, ridges and spike, gold, the rest iron: the bits have bosses of gold. The barrier is red marked with deeper red. It will be observed that, except the helm, the whole armour differs in nothing from the usual war suit. But we have already seen, in the extract from the *Tourney-book of René d'Anjou* (p. 493), that different countries had different modes of arming; and we may add that the tilt itself gradually became diversified to such an extent that at length, in the Emperor Maximilian's time, it was found necessary to write an elaborate treatise to distinguish the various modes; where we have the Italian joust, the German joust, the *joûte à la haute barde*, the *joûte au harnois de jambe*, the *course italienne*, the *course appelée Bund*, the *course à la targe fûtée*, the *course à l'elme*, *au pavois*, *à la poêle*, *de camp*, *à la queue*, *au bourrelet*, &c., all characterised by some special practice and armament. Hefner's plates 138 and 109 afford curious illustration of the tourney and joust of the fifteenth century. And a very clear view of the whole subject may

be obtained by consulting the *Mémoires du Sire de Haynin*, the "Justes at Bruges" (*Archæologia*, xxxi. 326), the Tourney-book of King René, the Beauchamp Pageants (*Horda*, vol. ii.), the *Excerpta Historica*, p. 171 seq., the "Account of the Jousts at Westminster" (Leland's *Collectanea*, vol. v. p. 356), and Mr. Way's paper on the Jousts of Peace in the fourth volume of the *Archæological Journal*. The French fashion for the *jouste à plaisance* in the fifteenth century was to let the foot encounter precede the mounted contest, "quar maintefoiz aux armes à cheval sount telz encoubrees, q' cellez de pie sount delassees." (*Excerpta Historica*, 220.) The helms worn by our knights are of the usual single-cleft form of this century. That singular variety, in which a disc is fixed by a stem to the back of the helm, now first appears, and may be seen in the picture by Uccello in the National Gallery, the Battle of Sant' Egidio*. The plumed courser is frequently found at this period. Examples are offered by the Great Seals of Edward IV., Richard III., and Henry VII., by the figures of Lahire and Joan of Arc (Sommerard, *Les arts au Moyen-âge*, series iv. plate 9), Hefner's plate 80, and Strutt's *Horda*, vol. ii. plates 12, 17, 21, 40, 46 and 54. The horse on the left hand, his rider being dismounted, affords a good opportunity of examining the construction of the saddle and the fashion of the double-reined bridle. The gilt bells decorating that horse are again found in the Bruges Tournament*, where we have "xii. coursers of a sute in cremesyn velvet, enrampleshid w^t great campaynnes of fine gold." And compare *Excerpta Historica*, pp. 205 and 206. The spike on

* No. 583. Uccello died in 1479.

* *Archæologia*, xxxi. 326.

the chanfrein was not always permitted—at least, in the Joust of Peace. Thus, a “squyer of Almayne” bringing his horse “armed and enforced with iii. long daggers, oon before and ii. on the sides,” the Duke of Burgundy “ordeyned the seide harneise to be avoided.” (*Excerpt. Hist.*, 200.) It would appear that champions were sometimes tied in their saddles. See the work last cited, p. 203, and compare the Warwick Pageants (*Horda*, ii. p. 125, No. xxxvii.) For the provision of sand and gravel for the lists, see a curious paper in Rymer, x. 828, and compare *Excerpt. Hist.*, 203, and Leland’s *Collectanea*, v. 356.

PLATE 95.

MINIATURE from Harl. MS., 4,374, fol. 161; a volume of the French translation of Valerius Maximus, written and illuminated about 1480. The arms of Philippe de Comines are frequently delineated in the borders, and there can be no doubt that the book belonged to this well-known chronicler. There are nine large and eighty-one small illuminations in the two volumes, very brilliant examples of the art of the period; among them several good illustrations of knightly and military exploits. At folio 171 of the second volume (No. 4,375) is an excellent picture of a pole-axe fight in lists. The javelin-man is but rarely found in pictorial representations of this time. The one here given is by far the best ever observed by the writer. A somewhat similar example is furnished by Cotton MS., Nero, D, ix. fol. 109. The predilection of the Spaniards for the javelin has already been observed (p. 66). In a letter remissory of 1480 its Spanish home is still prominently noticed, being there named a "*javeline ou genetaire, autrement appelée javeline d'Espagne*." At the siege of Rouen by Henry V. in 1418, Monstrelet tells us, "*ledit Roy avoit en sa compagnie grand quantité d'Yrlandois, dont la plus grand partie alloient de pied, un de leurs pieds chaussé et l'autre nud, sans avoir brayes, et pauvrement habillez, ayans chacun une targe et petits javelots, avec gros cousteaux d'estrange façon. Et ceux qui alloient sur chevaux, n'avoient nulles selles*", et chevauchaient tres-habillement sur bons petits chevaux de montaigne. . . .



No. 96.

Lesquels Yrlandois souvent couroient le pays de Normandie et faisoient maulx infiniz, ramenant a leur ost grans proyes. Et mesmement lesdits Yrlandois de pied prenoient petits enfans en bers, liets et autres bagues, a tout lesquels montoient sur vaches, portans lesdits petits enfans et bagues devant eux sur lesdictes vaches; et furent par plusieurs fois trouvez des François en tel estat." (Chap. 196.) The body-armour of the figure before us presents a curious mixture of fabrics: the arm-defences appear to be of quilted work, the two skirts of brigandine and chain-mail, while the cuirass may be of iron or cuir-bouilli. The leg-armour with the articulated polaines offers nothing new to us. The bowed shield with boss is a good example of this defensive equipment, a portion of the soldier's outfit of which the varieties in the second half of the century are almost infinite. The helmet is a plain *salade*, made in one piece.

PLATE 96.

MINIATURE from Harl. MS., 4,375, fol. 123; about 1480. This manuscript is the second volume of the transcript of Valerius Maximus, described in the preceding sketch. The weapon carried by the soldier is one of the many forms of the partizan. A similar arm (that is, notched at the back) occurs in Cotton MS., Nero, D, ix. fol. 58, and again on fol. 138 of Harl. MS., 4,425. Roy. MS., 18, E, v. presents us with a variety having a hook at the back, the use of which was to pull down breastworks of fascines or any similar obstruction. (fol. 174.) In Additional MS., No. 15,277, ff. 48, 73 and 75, are others which have a spike at the back, parallel to the blade of the pertuisane itself. In Willemin's *Monumens inédits*, vol. ii. plate 184, another kind appears, having the back on a line with the staff and the cutting edge of an ogee form. Plate 16 of Hefner's *Trachten* contributes a further diversity: in this weapon a leaf-shaped head has on each side near the staff a hook or beak. It would not be difficult to enumerate other varieties, but the above are those which present the most marked characteristics. The costume of the figure before us is somewhat unusual: a collar of mail is at the throat; the upper-arm has a defence of brigandine, expressed in the original by gold spots on a coloured ground; the salade and body-armour are iron-colour; the gloves buff, the feet red. The foot soldiery armed with the humbler weapons, the partizan, the bill, the halbard and the javelin, were still named *brigans*, as in the earlier ages; and, like the routiers of the fourteenth century, they occasionally banded together



No. 96.

in times of public calamity to make war on any party from which they might hope to obtain a good booty. During the long siege of Rouen in 1418, which gave an opportunity for successful depredation, "regnoit sur les Marches de Ponthoise, l'Isle Adam, Gisors, et aussi sur les Marches de Normandie, un capitaine de brigans, nommé Tabary, qui tenoit la partie de Bourgongne, et estoit de petite estature, boiteux, lequel souvent assembloit quarante ou cinquante paysans, une fois plus, l'autre moins, armez et habillez de vieux haubergeons, jaques, vieilles haches, demies lances où il y avoit massues au bout, et autres habillemens de pauvre estat: à tout lesquels s'en alloient les uns sur meschans chevaux et jumens, et les autres à pied, embuscher és bois, vers où se tenoient les Anglois. Et quand ils en pouvoient aucuns prendre, ledit Tabary leur coup-poit les gorges; et pareillement faisoit à ceux tenans la partie du Dauphin. Et ainsi en fait à plusieurs, dont grandement estoit hay des dessusdictes parties." (Monstrelet, vol. i. chap. 195.)

PLATE 97.

CROSSBOW-MEN from Roy. MS., 14, E, iv., folio 210: circa 1480. This fine work, the *Chroniques d'Angleterre*, was made for King Edward IV., and in the first illumination we have a picture of the author presenting his book to the king. The volume abounds in military subjects, and is especially valuable for the early representations of cannon which it contains. The arbalesters here portrayed shew us, what a thousand other evidences confirm, that at this time there was no pretension to clothe troops in a uniform costume. The foremost figure wears a short-sleeved coat of mail, over which is placed a short surcoat, a visored salade forms the head-defence, and the legs are without armour of any kind. The left-hand figure has the old camailed bassinet, the body is defended by a brigandine, reinforced with plate. The short sleeves of mail seem to imply that a further arming may exist under the brigandine. The manner of expressing the chain-mail in this miniature, and elsewhere in the manuscript, is worthy of remark. In the badge figured on the bolt-case will be recognised the Burgundian device of the fire-steel. Other pictorial representations of the crossbow-man of this century will be found in Roy. MSS., 20, C, vii., 20, C, viii. and 18, E, v., and Add. MS., 10,043; in the pictures in the National Gallery, the Martyrdom of St. Sebastian and the Battle of Sant' Egidio (Nos. 292 and 583); in Strutt's *Horda*, vol. ii., plates 42, 43 and 46; in Valturius, *De re Militari*, cap. 10; Hefner's *Trachten*, pl. 161; Strutt's "Dress and Habits," vol. ii. pl. 133; M. Viollet-le-Duc's *Architecture Militaire*, and our illustration, No. 101. Juvenal des Ursins tells us,



No. 97.

under 1411, that in the united army of the King of England and the Duke of Burgundy there were four thousand crossbow-men, "chacun garny de deux arbalestres et deux gros valets, dont l'un tenoit un grand pennart et l'autre tendoit l'arbalestre, tellement que tousjours y en avoit une tendue." (p. 462.) The Francs-archers instituted by Charles VII. of France in 1448, were armed partly with the long-bow and partly with the cross-bow. In the ordinance for raising this corps, the Commissioners are directed to seek out "le plus habille et propre pour se aider d'arc ou de arbalestre." If approved, "sera receu ledit Archier de soy entretenir en point de hucque de brigandines ou de jaques, de sallade, d'espée, de dague, d'arc et de trousse, ou d'arbalestre garnie, ainsi que l'on ordonnera." Their pay is to be "quatre francs pour homme par chacun moys qu'ilz Nous serviront." And they are to be free of taxes: hence their name of Francs-archers. See vol. xiv. p. 1 *seq.* of the *Collection des Ordonnances*, for the whole of this instrument. The English in this, as in the preceding age, had but little esteem for the cross-bow in the field. Among the 10,500 men led out of England by Henry V. in 1415, there were only ninety-eight arbalesters, of which eighteen were horsemen². For the mounted crossbow-men of this time, compare Comines, pp. 20 and 291 (ed. 1580), and Rymer, vol. x. p. 149. Figures of crossbow-men are frequent in manuscripts of this age. See also Jubinal's *Tapisserie de l'Eglise de la Chaise Dieu*, plate 2, and De Vigne's *Vade-mecum*, vol. ii. plates 80, 81 and 84. Some further notes on this subject will be found under our No. 101.

² Collections for Rymer's *Fœdera*, Sloane MS., 6,400; printed at the end of Nicolas' "Hist. of the Battle of Agincourt."

PLATE 98.

GROUP of Archers from the same manuscript as the preceding illustration. The miniature occurs on folio 252, shewing "Comment les anglois entrèrent en la ville de bayonne." A similar diversity of armour is here seen to that of the crossbow-men. The central figure is curious from shewing the hood thrown back, to give place to the helmet during action. The Sire de St.-Remy, who was present at the field of Agincourt, gives a particular account of the costume of the English archers at that fight:—"lesquels archers estoient, la plus grant partie, sans armures à leur pourpoint: leurs chausses avallées, ayant haches et cognées pendants à leurs ceintures, ou longues espées, les aulcuns tout nuds pieds, et les aulcuns portoient hamettes¹ ou capelines de cuir bouilli, et les aulcuns d'osier, sur lesquels avoit une croisure de fer." (Chap. 62, p. 9, ed. Buchon.) At the entry of Charles VII. into Rouen in 1449, forty archers of the Count of Clermont had "brigandines et harnois de jambes, et leurs salades, pour la plus grande partie, garnies d'argent, et si portoient des auctons rouges sans croix." The "Grande garde du Roy, archers et crennequiniens, de cent à six vingt," had, on the same occasion, "auctons tous chargez d'orfèverie, et leurs espées et harnois de jambes garnies richement d'argent."

¹ Armets?

² Shields also in this age were sometimes made of wicker-work. The version of Vegetius, written in 1408, directs the tyro in the military art to practise with "a shelde made of twiggos somewhat

rounde, and therwith they sholde have maces of tree." (Note of Mr. Way in *Promptorium Parvulorum*, voce Fanne.) Shields of cane-wicker are still common in the East.



No. 98.

(Mathieu de Coucy, *Hist. de Charles VII.*, p. 593.) The value of the English Archers, so prominently conspicuous in the fourteenth century*, had not diminished in the present: their sturdy thews and sinews still cleared the battlefield or the city wall with a rapidity and a completeness which, were it not for the concurrent testimony of a crowd of witnesses, would seem incredible as an Arabian tale or a Romance of the Round Table. The battle of Agincourt is a striking example of their power against a body of men-at-arms, that is, men clothed in complete armour. Monstrelet tells us:—"Premierement, leurs archiers (English), dont il y en avoit bien treize mille, commencerent à tirer à la volée contre iceux Francois d'aussi loing qu'ils povoient tirer de toute leur puissance. . . . Leurs chevaux (French) estoient tellement navrez du traict des archiers Anglois qu'ils ne les povoient tenir ne gouverner: et ainsi par iceux fut ladicte avantgarde desordonnée, et commencerent à cheoir hommes d'armes sans nombre, et les dessusdits de cheval pour paour de mort, se meirent à fuyr arriere de leurs ennemis: à l'exemple desquels se departirent et meirent en fuyte grand partie des dessusdits Francois. Et tantost apres, voyans les dessusdits Anglois ceste division en l'avantgarde, tous ensemble entrèrent en eux et jetterent jus leurs arcs et sajettes, et prindrent leurs espées, haches, mailles, becs-de-faulcons, et autres bastons, frappant, abattant et occisant iceux Francois; tant qu'ils vindrent à la seconde bataille: et apres lesdits archiers suivoient et marchaient ledit Roy Anglois et ses gens d'armes¹." Comines speaks in high terms of eulogium of the bowmen of his time. At the battle of Montl'hery in

* See page 18.

¹ Compare St. Remy, pp. 10, 11.

1465, he tells us, "tous les Archiers dudict Comte (de Charoloys) marchoyent à pied devant luy, et en mauvais ordre; combien que mon advis est que la souveraine chose du monde ès batailles sont les Archiers: mais qu'ils soient à milliers, car en petit nombre ne vallent rien; et que ce soyent gens mal montez, à ce qu'ils n'ayent point de regret à perdre leurs chevaux, ou que du tout n'en ayent point. Et vallent mieux pour un jour, en cest office, ceux qui jamais ne virent rien que les bien exercez". Et aussi telle opinion tiennent les Anglois, qui sont la fleur des Archiers du monde." (Page 11, ed. 1580.) The English archers at Agincourt and elsewhere, in order to combine a defensive with an offensive equipment, carried stakes six feet in length, to plant before them. Thus, Saint-Remy:—"Chacun archer anglois avoit un peuchon, aiguisé à deux bouts, qu'ils mettoient devant eux, et dont ils se fortifioient." (Page 7.) The account given in the document printed by Sir H. Nicolas (Battle of Agincourt, page 160) has:—"Therefore the king gave orders through the whole army that each archer should provide and equip himself with a square or round pole or staff, six feet in length, and of a sufficient thickness, and sharp at each end; directing that whenever the French army should approach to battle, and begin breaking through their ranks with troops of horse, each one should fix his pole before him in front, and those who were behind, other poles intermediately; one end being fixed in the ground towards them and the other sloping towards the enemy, higher than a man's waist from the ground; so that when the

* This is in allusion to those old soldiers of whom we sometimes read in ancient chronicles, in whose eyes a cer-

tain love of life is not considered incompatible with the fulfilment of military duties.

horsemen should come to the charge, they would either retreat affrighted at the sight of the stakes, or, regardless of their own safety, both horses and horsemen be in danger of being thrown on the stakes." In 1465, at Montl'hery, writes Philippe de Comines, "Nous trouvâmes tous les archiers deshoussez, chacun un pal planté devant eux, et y avoit plusieurs pipes de vin deffonsées pour les faire boire." (Page 10.) We have already seen that a portion of the Francs-archers established by Charles VII. were armed with the long-bow. The body-guard instituted by Louis XI. in 1474 consisted of a hundred lances (men-at-arms) and two hundred archers. (Daniel, *Mil. fran.* ii. 100.) But in 1475, the king separated these troops and gave to the archers an establishment of their own—"la petite Garde de son corps." (Daniel, ii. 102.) The "Yeomen of the Guard" in England, instituted by Henry VII. at his coronation in 1485, consisted of fifty Archers under the command of a Captain*. In the fortified towns of the continent there were "Companies" of archers, whose functions, as observed by their historian*, were threefold: the defence of the city to which they belonged, the service of the king beyond their walls, should occasion require it, and the maintenance of their skill by frequent exercise and public displays of their prowess, in the games and shooting-matches which were always so attractive to their neighbours and fellow-citizens. In their decadence, remarks their "historiographer," it is in discharge of the last-named function that they are chiefly found to appear. (p. 61.)

* Lord Bacon's "Hist. of Hen. VII.," p. 7; Pegge's *Curialia*, part iii. p. 3.

* M. Victor Fouque, whose volume, *Recherches historiques sur les Corpo-*

rations des Archers, des Arbalétriers et des Arquebusiers, contains much curious information relating to those societies.

The *Confrérie d'Archers de la ville de Paris* obtained a charter and privileges from Charles VI. in 1411: they were to be chosen from the best archers of the city, and their special duties were to be the defence of the king's person and that of the city of Paris. (p. 57.) The brotherhood of the Archers of Nevers in 1488 obtain a charter of confirmation and extension of privileges, among the clauses of which we find them authorised to assemble "une foiz par chascun an, et tirer au papegay, et d'icelluy qui l'abattra, en faire leur maistre et principal archer, et l'appeler *Roy*; auquel, touchant le fait de tirer de l'arc, ils obéiront pour la dite année. Et voulons que le dit maistre roi archer, qui abattra, et ses successeurs qui abattront, le dit papegay, soient durant leur dite année, dores en avant et perpétuellement tenus francs et quittes de toutes tailles, aides, gabelles," &c. (p. 59.) In war levies the juxtaposition of fighting men with the learned members of the service is sometimes very odd: in the list of the retinue of Henry V. in 1415 we find named "Master John de Bordin, Clerk, Doctor in Laws, with one Clerk and two Archers." Again: "Mr. Nicholas Colnet, Phisitian, with three Archers." (Nicolas, pp. 97 and 100.) The price of bows in England is regulated by Statute of 22 Edw. IV., 1482; where it is stated (cap. iv.) that the dearness of bows has driven the people to leave shooting and practise unlawful games, though "the King's subjects are perfectly disposed to shoot:" ordered therefore that "no bowyer nor other shall sell or put to sale any Long Bow or Bows of Yew above the price of three shillings, four pence a bow." Yew bows *under* that value are to be sold as the purchaser and vendor may agree. (Statutes, ed. of Record Comm., vol. ii. p. 472. And compare Statute of 3 Hen. VII., 1487, p. 521.)

Provision of bowyers and bow-staves was made by royal Writ. Thus, in the 3 Hen. V., Nicholas Frost, bowyer, is ordered to "provide, elect and take" as many "*Bowyers ac alios operarios, artifices et laboratores, ad misteram de Bowyers pertinentes, quot pro operatione et emendatione Arcuum nostrorum sufficere poterunt, tam in civitate nostrâ Londoniæ quàm alibi,*" &c. "*Necnon ad maeremium vocatum Bowestaves, pro arcubus prædictis et ad omnia alia pro eadem mistera necessaria et oportuna, in singulis locis, feodo Ecclesiæ excepto, de tempore in tempus, pro denarii nostris in hac parte rationabiliter solvendis, necnon Caria-gium pro maeremio et omnibus aliis supradictis, similiter capiendum et providendum,*" &c. (Rymer, ix. 224.) By Statute of 1472, bows having become scarce and dear, all "*Merchant Strangers*" and others sending to England "*any merchandise in carrack, galley or ship, of the city or country of Venice, or of any other city, town or country, from whence any such Bowstaves have been before this time brought,*" are to send four bowstaves for every ton of merchandise imported; two persons being appointed at each port, to examine the staves so sent, and to "*mark the staves that be not good and sufficient.*" ("*Stat. of the Realm,*" 12 Edw. IV., p. 432.) The arrowmakers had protection in respect of the wood they employed in their mystery. The pattenmakers, it seems, used the same material: the king, therefore, steps in between the patteners and the fletchers, and by Statute enacts "*That the patenmakers in the Realm of England from henceforth shall make no patens nor clogs of timber called Aspe, upon pain to pay to the King a hundred shillings at every time the said patenmakers make any patens or clogs of the said timber.*" (Statutes, vol. ii. p. 196.) In the 4 Edw. IV.,

the patteners having complained of the hardship thus entailed upon them, they obtain license to employ such aspe as is "not fit for arrows." (Vol. ii. p. 416.) Even so small a matter as the goose-feather for fledging the arrow is made the subject of royal enactments. In 1417 the king sends his briefs to the various Sheriffs of counties, requiring a speedy supply of this material.

"Rex vicecomiti Kantie salutem, &c.

"Nos, considerantes qualiter, inter gratiarum donationes, nobis à Deo, nuper, dum in partibus illis ex hac causa eramas, varie collatas, idem Deus nobis, non nostris meritis, set sua ineffabili bonitate, inter cæteros, per Sagittarios nostros, suis Sagittis, gratiam atque victoriam inimicorum nostrorum multipliciter infudit,

"Ac proinde de sufficienti stuffura hujusmodi sagittarum, cum ea celeritate, qua commodè fieri poterit, et pro meliori expeditione præsentis viagii nostri, provideri volentes,

"Tibi præcipimus quòd statim, per Ballivos tuos ac alios, quos ad hoc nomine tuo duxeris ordinandos et deputandos, in singulis villis et aliis locis Comitatus tui, de quacumque Auca (præter Aucas Brodoges vulgariter nuncupatas) sex pennas alarum suarum, pro Sagittis ad opus nostrum de novo faciendis magis congruas et competentes, pro denariis nostris, de exitibus Comitatus tui provenientibus, in hac parte rationabiliter solvendis, cum omni festinatione possibili capi et provideri, ac Pennas illas usque Londoniam, citra xiv. diem Martii duci et cariari facias." &c. (Rymer, ix. 436.) In the next year, 1418, letters patent are again issued to the various counties for a supply of goose-feathers.

Gloucestershire is to provide	-	-	-	40,000 penn.
Northamptonshire	-	-	-	60,000 "

Staffordshire	-	-	-	-	30,000	penn.
Oxfordshire and Berkshire	-	-	-	-	60,000	"
Yorkshire	-	-	-	-	60,000	"
Lincolnshire	-	-	-	-	100,000	"
Kent	-	-	-	-	100,000	" &c.

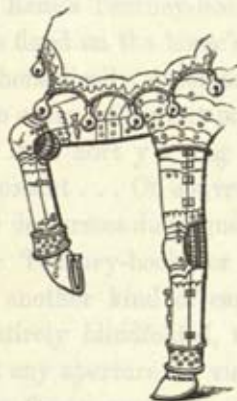
(*Rymer*, ix. 653.)

In the Retinue of Henry V. on his expedition into France in 1415, there were six Bowyers and six Fletchers for repair of the arms during the campaign. (*Rymer Collections*, Sloane MS., 6,400, printed at the end of *Nicolas' Batt. of Agincourt*, p. 100.) It may at first seem paradoxical to derive the modern Enfield rifle from the cloth-yard shaft of the old English bowman. Yet the author of the *Scloppetaria*⁷ tells us:—"As the deflection from the original line of flight was an inconvenience to which arrows were not found so liable as bodies projected from fire arms, it naturally led to an inquiry how that could arise. The prominent feature in an arrow's flight is to spin with considerable velocity all the time of its flight, and therefore the attention was directed towards attaining the same advantage for the fire arm." (p. 52.) Pictorial representations of the archers of this century will be found in Burney MS., 169, ff. 128, 139 and 142; in Roy. MS., 18, E, v. ff. 34, 138, 179, 310 and 319; Harl. MS., 2,278, fol. 60; Roy. MS., 16, G, viii. f. 189; Valturius, *De re militari*, cap. x.; *Archæologia*, vol. xxi., from a MS. at Ghent; Strutt's *Horda*, vol. ii. plates 13, 42 and 46; Hefner's *Trachten*, plate 169; the *Livre du cuer d'amour* of René d'Anjou, plate 21 (ed. Paulin-Paris); De Vigne's *Vademecum du peintre*, ii. plate 71; and Jubinal's *Tapestries*,—of Berne, pl. 6, of Aulhac, *passim*.

⁷ This work on the Rifle, now become scarce, published anonymously in 1812, was written by Colonel Beaufoy.

PLATE 99.

HORSE armour of plate, from the picture, painted in 1480, in the Imperial Arsenal at Vienna, representing the *Harnischmeister* of the Archduke Maximilian of Austria: "er sitzt auf einem bis auf die Hufe verdeckten Hengst." The armour consists of innumerable pieces, rivetted together, and following very closely throughout the form of the horse. At the sides alone are two apertures in the defence, about the length and breadth of a man's foot, to permit the rider to make use of his spurs. To the peytrel and flanchards are appended bells (seen in our sketch), and they are further decorated with heraldic devices. The armour-master himself wears a mentonnière of singular construction, which seems to form one piece with the breastplate. The whole picture is engraved as the frontispiece to Von Leber's *Wiens kaiserliches Zeughaus*. The Archduke Maximilian forms the subject of the companion picture, of the same date, but the horse here has no armour on the legs. This portrait is also engraved by Herr Von Leber, in the second volume of the work named above. In the fifteenth century there was much diversity of horse armour. We find it of plate, of mail with plate, of quilting, of cuir-bouilli, and in the tournament, even of straw. Under 1411, Juvenal des Ursins tells us:—"pource que le comte de Saint-Paul avoit des archers bien tirans, du pays de Picardie, et aussi de Paris, et d'ailleurs y avoit arbalestriers et archers, les Gascons avoient sur leurs chevaux coulpointes, pour doute du traict." (p. 463.) The Italian mode, we learn from Paolo Giovio, was to arm their horses with leather (*cuir-bouilli*?) At the entry of Charles VIII. into Rome in 1494, a large



No. 90.

body of French lances accompanied the monarch. "Equi eorum robore ac magnitudine præstantes, jubis auribusque desectis, quòd ita decere Galli existiment, ferociore apparebant, verum ex eo minus erant conspicui, quod tegumentis recocto è corio confectis, *uti nostris mos est*, magna ex parte carebant*." The trapper of mixed mail and plate appears in our Nos. 54 and 61, and is found very frequently throughout the century. Sometimes the steed has no further armour than the chanfrein, as in Hefner's Plate 80. The defence bolstered with straw is both pictured and described in King René's Tourney-book. It has the form of a crescent and is fixed on the horse's breast: above it is worn a mantling heraldically decorated. "Ce hourt est fait de paille longue entre toilles fort porpointées de cordes de fouet, et dedans ledit hort y a ung sac plain de paille, en façon de ung croissant . . . On couvre le dit hourt d'une couverture armoyée des armes du seigneur qui le porte," &c. See plate 7 of the Tourney-book for the figures of the various parts. In another kind of caparison for the tilt, the courser was entirely blindfolded, the housing for the head being without any aperture for vision. See Plate 109 of Hefner's *Trachten* for an example. Considerable diversity of horse-armour will be found among the Beauchamp Pageants, engraved in vol. ii. of Strutt's *Horda*. Bells appended to the courser's trappings are often seen in this century. We have them here affixed to the peytrel. They were also worn round the neck, as in Hefner's Nos. 138 and 109; in a row from the head to the tail, as in our illustration, No. 94; or singly behind the saddle, as in Hefner's plate 1, and plates 12, 28 and 38 of Strutt's *Horda*.

* Lib. ii. f. 24, ed. 1553. And compare the horse for the joust "covered with bardes of courbuly," in the *Excerpta Historica*, p. 207.

PLATE 100.

FIGURE of the Esquire* of Richard Beauchamp, Earl of Warwick, as he is seen attending his master in a joust held in honour of the queen of Henry IV. The miniature of which this forms part, is one of the Beauchamp Pageants (Cotton MS., Julius, E, iv., fol. 203^b). "Here shewes how, atte coronacion of quene Jane, earl Richarde kepte juste for the quenes part ageynst all other commers, where he so notably and so knyghtly behaved hymself as redounded to his noble fame and perpetuall worship." From other pictures in the same work we see that the device of the Ragged Staff was borne on the front of the dress as well as behind. The date of the manuscript is about 1485, for, in a Pedigree at the end by the same hand (John Rous, the "Warwickshire antiquary"), Richard the Third is mentioned, and the author died in 1491. It has already been noticed that neither in the fitments of the men-at-arms nor the dress of the foot troops was there any uniform costume for the whole: nevertheless a distinctive badge or livery was common at this period, and this badge was sometimes that of the king of a realm, sometimes only the family cognizance of some private chieftain. In 1449, we learn from the *Historiographie de France*, Jean Chartier, that "le Sire de Lussi, tenant le party des Anglois, menoit six cent combatans, portans tous la croix rouge." (*Hist. de Charles VII.*, p. 166.) At the Battle of Barnet in 1471, "a strange Misfortune happened to the Earl of Oxford and

* The fact of this horseman bearing the earl's device of the Ragged Staff is not inconsistent with his holding the rank of an esquire, for in the fortieth Pageant we

have "the empressse taking the erle's livery, a bere, from a knyghtes shuldre, and setting hit on her shuldre."

^b See also Strutt's *Horda*, vol. ii. pl. 11.



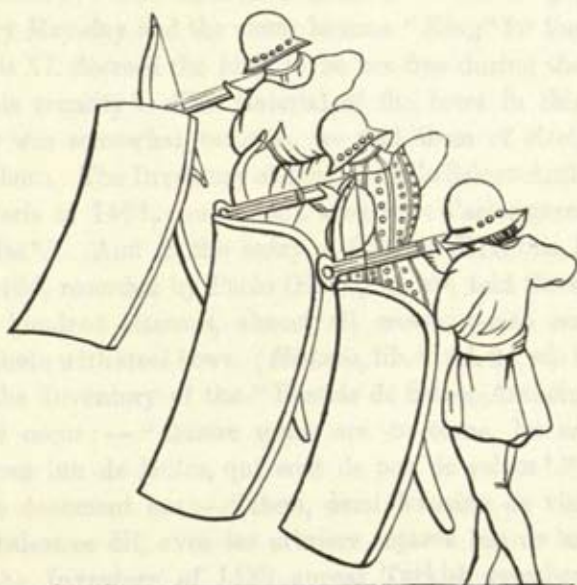
No. 100

his Men, for they having a Star with Streams on their Liveries, as King Edwards Men had the Sun, and the Earl of Warwick's Men, by reason of the Mist, not well discerning the Badges so like, shot at the Earl of Oxford's Men, that were on their Part." (Baker's Chron., p. 211.) In 1488, at the battle of Saint-Aubin, Sir Edward Wydeville, joining the Bretons against the French, was slain with all his countrymen and 1,700 Bretons, the latter having adopted the white coats and red crosses of the English in order to deceive the enemy. (Lingard, Hist. of England, p. 296.) In the "Paston Letters," Sir John Paston writes:—"Iff ye knowe any lykly men, and ffayr condycyoned and good Archers, sende them to me, thowe it be iiijj., and I wyll have them, and they shall have iiijj. marks by yer and my Levere." (vol. ii. page 140.) For further pictorial illustration of retainers wearing badges, see Strutt's *Horda*, plates 16, 21, 31, 32 and 40, and Hefner's *Trachten*, plate 16.

PLATE 101.

GROUP of Crossbow-men with their mantlets, from the same manuscript as the preceding illustration. The figures appear on folio 219. They are French soldiers, engaged in the defence of Rouen, to which the earl of Warwick has laid siege. "Then brought he up vessels by water to Reone, and then by his policy was it beseged both by londe and by water." The mantlets are supported by props, and differ in no degree from the more modern hide mantlets, of which examples may be seen (of the close of the last century) in the Tower Armory. The men are armed with the salade, and the central figure has a coat of brigandine: the others do not disclose any body-armour. The arbalisters of Rouen were established, according to the tradition of their "College," in the reign of Philip Augustus, and possessed considerable privileges, which were confirmed through a long succession of monarchs down to the time of Louis XI.* The rules of their fraternity and that of various of the French colleges, as they appear recapitulated in the statutes of confirmation, furnish many curious particulars as to the usages of this urban militia. By letters patent of Charles VI. in 1411, the crossbow-men of the city of Mante are empowered to elect annually one of their body "pour estre leur maistre ou capitaine:" when they were employed beyond the city precincts, horses were allowed them at the cost of the community, and each man had three sols a-day, with sustenance for himself and his horse. They were required to provide their own arms; but these, though their own property, they were not allowed to sell, to exchange, or even to lend. The last

* *Recherches historiques sur les Arbalétriers, &c.*, p. 39.



No. 101.

article of their charter permitted them to wear constantly defensive equipment under their ordinary clothing:—"de porter le jour et la nuit des armes à couvert pour leur défense^a." In 1412 the *Confrérie des Arbalétriers* of the "ville et chastellenie de Waurin" is to consist of sixty members, their chief officer to be a Constable, their body to be divided into companies, each commanded by a Dozener (*Dizenier*)^b. The arbalesters of Laval shot at the popinjay every May-day and the victor became "King" for the year. Louis XI. decreed the king to be tax-free during the year of his regality^c. The material of the bows in this century was somewhat various: we find them of steel, yew and horn. The Inventory of the "Bastille Saint-Anthoine" at Paris in 1463, names "xii. arbalestes d'acier garnies de tigoles^d." And at the entry of Charles VIII. into Rome, in 1494, recorded by Paolo Giovio, we are told there were five hundred Gascons, almost all crossbow-men carrying arbalests with steel bows. (*Historia*, lib. ii. fol. 24, ed. 1553.) In the Inventory of the "Bastide de Saint-Anthoine" in 1428 occur:—"Quatre grans ars de corne, les arbriers separez lun de lautre, qui sont de peu de valeur^e." The same document has:—"Item, demi douzaine de vielz ars d'arbalestres dif, avec les arbriers separez lun de lautre." In the Inventory of 1430 appear Turkish crossbows:—"Item, six arbriers grans pour arbalestres de Turquie^f." In that of 1463:—"Quatre arbalestres grosses, dit de Romenie, qui furent gaignées à Rouen^g."

^a Ibid., p. 46.^b Ibid., p. 48.^c Ibid., p. 49.^d Printed at the end of the *Études sur l'Artillerie* of the Emperor of the French, vol. I.^e Ibid., p. 351.^f Ibid., p. 353.^g Ibid., p. 358.

PLATE 102.

BILLMAN, from the same manuscript as the preceding subject, folio 225. The soldier appears to be armed in a coat of mail, having a brigandine jacket over it, the legs encased in plate, and the head defended by an open casque of steel. His principal weapon is the bill, an arm of which we have traced the existence from a very remote period¹. The bill, however, with its kindred weapon, the halbard, was now rapidly growing into disfavour, and the Pike taking its place. This change was brought about by the Swiss, who had found that the flock of the halbard embarrassed them by catching in the garments of their comrades, and that, moreover, the arm was not long enough in the staff to act with effect against a charge of cavalry. They therefore made the pike the strength of their armament, retaining a few halbards for service in the mêlée; where, in its turn, this weapon had the advantage². The Swiss had this mixed armament of pikes and halbards at their famous victory of Morat in 1476. In 1492 we find the English still employing both billmen and halbardiers in their armies. Indentures between the king and his nobles and others in that year are preserved in Rymer's *Fœdera* (xii. 478). The Earl of Surrey undertakes to serve "with v. Men, himself comprised, every of them having his custrell and page, xii. Dimi Lances, xx. Archers on Horsback, xlvi. Archers on Foot, and xiii. Billes on foote." Sir Wm. Courteney, knight, to serve "with one Spere, namely himself, having his custrell and page, vi. Di. Lanc.,

¹ See vol. i. pp. 57, 58 and 324.

² See *Études sur l'Artillerie*, liv. i. ch. 2, and the authorities there cited.



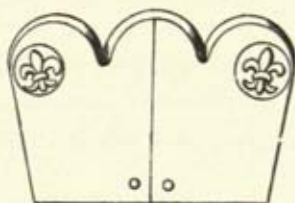
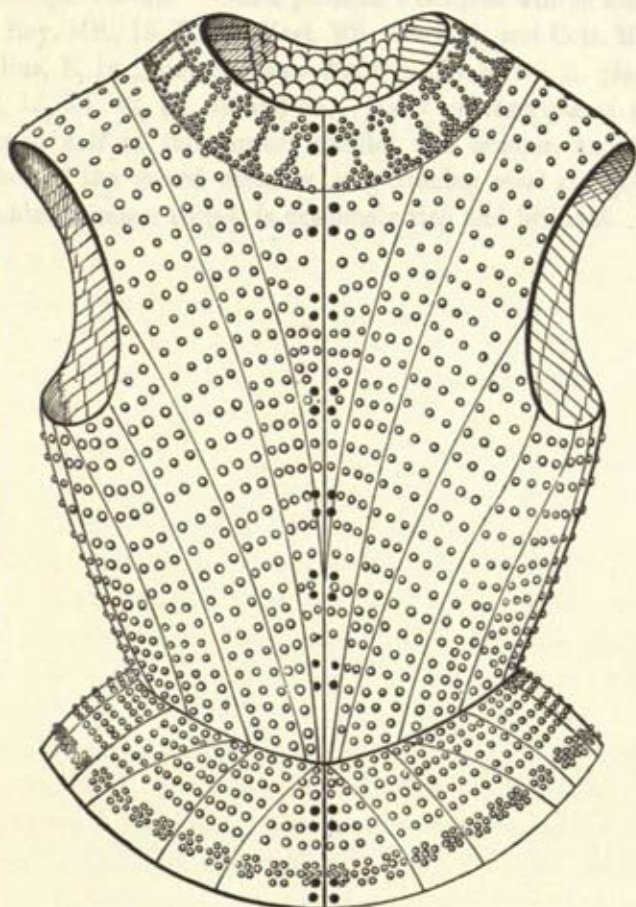
No. 102.

viii. A. H., xxxii. A. F., and iv. Billes on foot." John Crokker, squier, to serve "with one man, viz. the said squier, having his custrell and page, xvi. archers on foote, and iv. billes." Viscount Welles is named to appear "with iii. men, eche having his custrell and page, xx. Di. Lances, xv. Archers on horseb., xlv. A. on foote, and xx. Halberdes on fote." We have here lances, demi-lances, mounted archers, foot archers, billmen, halbardiers, and swordsmen (custrels). Figures of billmen and of bills of this time may be seen in Strutt's *Horda*, vol. ii. plates 5, 14, 15, 19, 22, 23 and 24; and in Hefner's *Trachten*, pt. ii. pl. 171. The halbard and halbardiers of the day are found in our Plate 52, in Hefner's Plates 91 and 158, in the Tapestry of Beauvais (Jubinal, *Tapisseries historiées*), and in the curious drawing by Martin Schongauer, engraved in Westwood's *Paleographia Sacra*.

PLATE 103.

BRIGANDINE Jacket, of the second half of the fifteenth century, from the original preserved in the museum of the Grand Duke at Darmstadt*. This "Panzerjacke" is of red velvet lined with steel scales overlapping each other: these are fastened with brass rivets, of which the gilt heads form an ornament on the outside of the velvet. The scales are angular at the sides of the garment, rounded at the back and breast. They are made of pure steel, which has been tinned to preserve it from rust. The whole coat is perfectly flexible. Underneath the jacket is engraved a scale from the back, of the natural size. Most of the scales are stamped, as this is, with the fleur-de-lis, and hence the garment has been considered to be of French manufacture. The holes down the front show that the jacket has been fastened by lacing. Real specimens of this kind of armour will be found in the Tower collection. The examples marked $\frac{1}{2}$ and $\frac{3}{4}$ closely resemble the one before us, though they are *portions* only of brigandine jackets. Nos. $\frac{1}{4}$ and $\frac{3}{8}$ are of the same construction, but faced with silk instead of velvet. These rich facings of velvet and silk of course imply a wearer of distinction: the humbler archer and bill-man would be content with the less costly cloth or canvas. We have already, in plates 92, 96, 97, 98, 101 and 102, seen examples of various kinds of soldiery wearing defences of brigandine; and the tourney-book of René d'Anjou has acquainted us that this defence was even used in the tournament:—"et aussi peult-on bien tournoyer en brigan-

* From Hefner's *Trachten*, pt. ii. pl. 62.



dines qui vueult." Other pictorial examples will be found in Roy. MS., 15, D, iii., Harl. MS., No. 326, and Cott. MS., Julius, E, iv.; and compare Strutt's *Horda*, vol. ii. plates 12, 13, 14, 42, 44, 46 and 54. Many manuscripts of the second half of the century exhibit this armour, and the effect of the mixed costume, of glistening steel and gold-studded crimson velvet, is extremely rich and brilliant.

PLATE 104.

WE have here the prototypes of a kind of troop and of a military implement which at a later time came into general employment: of the Dragoon, or horse-soldier acting with a fire-arm; and of the Rest, which, allied with the arquebus and musquet*, was in common use during the sixteenth century. Not that the names "dragoon" and "rest" are to be found in the writings of the period now under examination, but the objects themselves are clearly before us. The miniature is from a manuscript in the *Bibliothèque de Bourgogne* (at Brussels), engraved in De Vigne's *Vade-mecum du peintre*, vol. ii., Appendix, *Armes à feu*. On comparing the weapon with that figured on our plate 88, and with the earlier example in Hefner's Tannenberg volume, it will be seen that the form is in all nearly identical. This differs chiefly in being provided with a ring for suspension. The Rest also has a ring, and it is clear that when the fire has been given, the "gonne" would be let fall with its muzzle downwards at the side or back of the soldier, while the rest would at the same time fall upon the horse's shoulder in front of the saddle. In his hand the horseman holds the lighted match-cord for exploding his piece. The gonne, it will be observed, is still without lock. The body-armour in this subject presents nothing new to us. The earliest recorded employment of mounted arquebusiers is in a combat in the Abruzzi, where Camillo Vitelli, an Italian captain in the service of France, used them against Ferdinand of Naples

* See our plates 119 and 120.



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and his Spanish troops. "Ea die solopettarios equites quos Camillus suopte militari ingenio nuper instituerat, tum primum in aciem et felici quidem periculo productos fuisse constat." (Paolo Giovio, *Historia*, lib. iv. p. 71, ed. 1553.) The fashion soon spread: in 1510, the Swiss acting in Italy had five hundred horsemen, of which half carried fire-arms. (See Guicciardini, lib. ix.) It was not, however, till the second half of the sixteenth century that hand fire-arms made any serious progress as an armament for the field of battle. In the caparison of the horse, as it is here represented to us, it is not easy to discover if any defence of metal is borne by the animal. And this is a difficulty which, it seems, is not confined to the modern student, but was sometimes felt by those who shared in the scenes which we are considering. Thus, when Lord Scales had overthrown his antagonist in the jousts at Smithfield in 1467, it was affirmed that his success was owing to some "falseness in the furniture of his horse." The gallant Wydeville therefore hastened to shew that his steed not only had no provision of "advantage or malingyne," but that it was not even defended by chanfrein or peytrel of steel. "Then the Lorde Scales rode streight and light before the Kyng, and made take of his trapper, shewyng that his hors had no chamfron nor peser of steele." (*Excerpta Historica*, p. 209.)

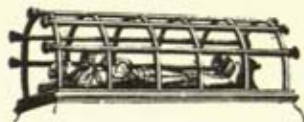
PLATE 105.

THIS group, which has already illustrated many points in the fashion of armour during the second half of the fifteenth century, and in which we have the *type* of the defensive equipment of a man-at-arms at that period, is taken from one of the wall-paintings discovered a few years ago on the restoration of the chapel of Eton College. The visored salade, the articulated cuirass, the hoop-like tassets with their appended tuilles, the great shoulder-pieces of plate, the gauntlets with broad strips across the fingers, the sollerets with their pointed toes, will at once be recognised as the ordinary component parts of the knightly harness at this time. The skirt of mail accompanying the tuilles is not so frequently found as the plate alone. Instances in which both occur may be seen in our No. 91, A.D. 1475; again in the brasses figured by Cotman, vol. i. plates 37 and 46, of the years 1490 and 1499; and in the sculptured effigy of Sir Giles Daubeney, 1507, in Westminster Abbey. The sword with cusped blade is an unusual form of that arm. In Cotton MS., Nero, E, ii. fol. 2, and in the *Horda*, vol. ii. pl. 5, are examples in which the back of the blade is similarly cusped, the weapons in those instances being scymetars. The scymetar, in the second half of the fifteenth century, becomes a common form of the sword. It has generally a plain cross-guard, as in the Tapestry of Bayard (Jubinal), the Tapestry of the *Eglise de la Chaise Dieu*, plates 29 and 31, the Tapestry of Aulhac *passim*, Hefner's pl. 161, and the Nuremberg Chronicle, 1493. In other cases, it has a *finger-guard*; that



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is, the cross-piece, forming an angle in front, is continued in a parallel line with the grip. Examples are furnished by the Tapestry of Berne (Jubinal, pl. 6), the *Speculum Conversionis Peccatorum* in 1473, in plate 46 of vol. ii. of the *Horda*, and in several of the woodcuts of Dibdin's *Bibliotheca Spenceriana*. But this finger-guard does not yet join the pommel. In Harl. MS., 4,425, the well-known transcript of the Romance of the Rose, the angle of the cross-piece takes a contrary direction, rising in front of the blade, the purpose of which is not very apparent. See ff. 32 and 59 for examples. It must be borne in mind that the knightly war-sword has not the branch over the fingers: it still retains the old cross-guard. Enriched specimens of the knightly sword of the close of the fifteenth century occur in the fine brass at Lullingstone, Kent, of Sir William Peché, 1487; and in the real weapon of Duke Christopher of Bavaria, 1493, the hilt of which is of chased silver set with rubies, and the sheath of silver richly chased in a pattern of grapes and vine leaves. The last-named relic, a beautiful example of the armorer's art at this period, is preserved at Munich, and has been well engraved in Hefner's fine work on Medieval Costume.



No 106.

SIXTEENTH CENTURY.



No. 107.

PLATE 107.

IN the first half of the sixteenth century, three powerful and chivalric monarchs gave to the period a strong military impress. The Teutonic prince, following a medieval bent, delighted in jousts and tournaments, and employed the best artists of his nation to reproduce their stirring scenes and incidents in a series of costly volumes. The French king, influenced by a classic turn of mind, delighted in fostering the higher art of the Italian school, and, when reconstructing his armies, took for his model the Legions of Ancient Rome. Henry, combining something of both feelings, rivalled Maximilian in his love for the contests of list and barrier, and emulated Francis in the display of military power and the patronage of foreign art. Among the works which the Emperor caused to be produced, there are four of especial interest to the student of military and knightly lore, the "Triumphs of the Emperor Maximilian," the *Ehrenpforte*, the *Weiss Kunig*, and the poem of *Teurdannckh*. In the numerous woodcuts illustrating these, every scene of the soldier's life is presented to us, and with a rough vividness which gives to every page and to every picture the impress of the most scrupulous truth. The subject before us represents the meeting of the Emperor and Henry the Eighth. Maximilian wears the imperial crown, the English king has an open crown of trefoils. The group forms part of the 22nd print of the *Ehrenpforte* or "Triumphal Arch of the Emperor Maximilian," a work for which the designs are said to have been furnished by Albert Durer. The Emperor dying in 1519, had not the satisfaction of seeing its completion. The publication did not take place till

1559. In the print from which these two figures are copied, the monarchs are accompanied by their knights and guards. The Emperor wears over his armour a rich surcoat with slashed sleeves and plaited skirt. The King has his breastplate uncovered, but beneath wears the plaited skirt called, in the language of the day, *bases*. The breastplate has the globose form characteristic of this time. To the shoulder-pieces are fixed the upright neck-guards already seen in our plates 83, 86 and 91. The sollerets have the broad toes so striking in all the monuments of this period, and which required that the stirrups should be of a proportionate extent of span. Many of these stirrups are in the Tower collection, and nothing can be imagined more unshapely. In the helmets worn by both princes we recognise a new type—the close helmet. It consists of three principal parts; the skull-piece, which closely follows the shape of the head, the visor, and the beaver. Before, however, the close helmet was attained, there was a transitional kind, forming a link between it and the older *salade*. This consisted of a skull-piece with articulations at the neck behind, and a visor; which latter did not, however, enclose the chin. This visor, which moved upon pivots at the sides, was either single or in two parts. See, for examples, Hefner's *Trachten*, pl. 40, and real helmets in the Tower. This transitional shape belongs to the earliest years of the century. The close helmet, (which was next adopted,) by following the curve of the chin and neck, completely encased the head in steel. There were two chief forms of this helmet; in the one, the face defence consisted of a single piece, as in the examples before us; in the other, there was a division just below the eyes, as in figures of

Maximilian's "Triumph." Many varieties occur, among which the most curious is that of the rich suit of Henry VIII. in the Tower (No. 4), which is composed of six pieces, all fitting one into another without hinge or rivet. There was yet, however, a weak point in the close helmet, ingenious as it was. A lance or partizan could still penetrate at the spot where the casque joined the body-armour. To obviate this danger, a new contrivance was imagined: the upper edge of the gorget was made to project in a "bead" (or half-round), and the lower part of the helmet had a hollow rim, to fit over the bead; so that when the two pieces were joined together, the head could move freely to the right or left, without leaving the neck unprotected. This helmet was called a *burgonet* (*bourguignotte*), a name which seems to refer its invention to Burgundy. The *burgonet* is usually made in three parts, as in the examples engraved by Grose, pl. 3, and Hefner, pl. 82. In other cases, it is in four parts, the chin-piece in this variety opening from the centre on side hinges, the visor moving on pivots in the usual manner. Specimens of both kinds will be found in the Tower. The horse armour in the subject before us is entirely of steel: from the decorations seen on that of the Emperor's steed, it may be inferred that the defence represented is silvered and engraved, as in the Tower suit, No. 4 (our plate 124). The circular ornament on the peytrel is a boss, a common fashion of this time. Its purpose seems to be, to turn off the thrust of an adverse weapon. The spiked chanfrein has already been seen in the previous century. (Pl. 94.) The double-reined bridle is of a very rich pattern: the chain would probably be gilt. The bridle of the King has, in lieu of tassels, a row of little bells.

PLATE 108.

KNIGHTLY figure from the same work as the last illustration. It represents the Emperor, who, in the original, is surrounded by a variety of weapons, cannon, &c., in addition to the helmets which we have copied. The plate is the thirty-third of the series. The breastplate is globose, with an embossed ornament in front; both embossed and fluted armour being in high favour at this period. The skirt presents an arrangement which has not yet occurred in our series. In lieu of tuilles affixed to the lowest hoop of the tassets, we have a series of overlapping plates; and these plates are held together by sliding rivets, which enable them to play freely one over the other. It is to this kind of rivet that the term, "Almayne rivet," so often found in inventories and other documents of this time, is generally considered to refer. The No. $\frac{2}{3}$ in the Tower affords a real example of this description of armour. The incomplete defence of mail beneath the tassets would be compensated by the strong steel front of the saddle. The sollerets have the usual broad toes of the period. The pauldrons have the neck-guards already noticed, which, from actual suits of this date, we find were not made in a continuous piece with the shoulder-plate, but affixed to it by screws or rivets. In real armours it is not unusual to find one shoulder only provided with the upright guard; but, on examining such suits, it will be seen, by the holes drilled in the steel, that a second has originally existed. The arm-defence is of mail, reinforced with plate on the outside, because, as



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King René tells us, "les coups des masses et des espèces descendent plus volentiers ès endrois dessus-dis." The helmet is of the kind already described, in which the face-defence is formed in a single piece. The elaborate decoration of plumes is characteristic of this time. Similar examples are supplied by the figures in the "Triumph," and again in the bas-reliefs of the Hotel de Bourgtheroulde at Rouen, reproduced in the Renaissance Court at Sydenham. The knightly sword still maintains its old form, the blade double-edged, the pommel round, the guard a plain cross-piece. At the feet of the Emperor are examples of the various headpieces of the time; the *salade*, the close war-helmet, the helm for tilting with the lance, and the barred helm for tourneying with rebated sword and mace. In the war-helmet will be remarked a cluster of holes, to facilitate hearing. The tilting helm has the aperture on the left side guarded by a prolongation of the cheek-plate, for it was on the left side that the knights passed each other in their career. Real armour shows us that the particular thus recorded was neither a fancy of the artist nor a slip of his pencil.

PLATE 109.

SUIT of armour in the Ambras Collection*, of the early part of the sixteenth century. It was formerly exhibited as the harness of Albert, Elector of Brandenburg, who died in 1486, and under this name appears (plate 19) in the *Waffen und Rüstungen* of Schrenck von Notzing. Hefner, who has also engraved the figure, assigns it to its proper period, and has these very sensible remarks on the subject of its misappropriation: "We would observe generally that the suits preserved in collections of ancient armour, and which are referred to the fourteenth and fifteenth centuries, belong usually to the sixteenth century; for but little exists of the fifteenth age, and almost nothing of the fourteenth. These mistakes, which originated at a time when specimens were not examined very minutely, have even found their way into works treating specially on the subject, and have thus been continued to our day." (Pt. iii. pl. 41.) Our illustration is copied from Hefner's print. The suit is principally curious from the mask visor of the helmet and the skirts of steel wrought in folds imitating the cloth *bases* of the civil dress. Mask helmets were not uncommon at this time: their employment was

* This collection, formerly kept in the old castle of Ambras, near Innsbruck, is now deposited in the Lower Belvidere Palace at Vienna. The museum was formed about 1560 by the Archduke Ferdinand, son of the Emperor Ferdinand I., who obtained from various European monarchs and others inclined to assist him, suits of armour and objects remarkable

for their art or antiquity, many of which had belonged to persons of renown in the different states from which they were procured; and many, it must be conceded, had been assigned to heroes who had not even lived in the century of their construction. The entire museum occupies seven apartments, of which three are filled with armour for man and horse.



no doubt confined to the fanciful pageants of the day. The masks are found in the form of human faces, of animals, and of grotesques. Of the first kind, several examples are in the Ambras collection: in one case, the crown of the casque is made to represent a curly head of hair. (See Schrenck, plates 23, 29, 40 and 107.) In the Madrid Armory is another helmet, of which the visor and crown have the form of a human face and hair. It is engraved in the *Armeria Real de Madrid*. In the *Musée de l'Artillerie* at Paris are two helmets with face visors; one of which is figured by M. Allou in the eleventh volume of the *Mém. de la Société des Antiquaires de France*, and the other described under No. 311 of the Paris catalogue. Plate 30 of Carré's *Panoplie* gives us the armour of the "Chevalier aux Lions," preserved at Chantilly; of which "le timbre du heaume, la mentonnière, les ventail et nazal, est formé du mufle d'un monstrueux lion, dont les crins flottent en place de crête et tombent sur le derrière^b." For the pieces at the sides of the helmet compare our plate 88. The plaited steel skirt is of very rare appearance: it occurs in the rich suit of Henry VIII. in the Tower (our plate 124). In the figure before us will be remarked a provision for affixing a continuous piece in front of the skirt: the addition of this piece would adapt the harness for a foot conflict, as the absence of it permits the wearer to act on horseback. The armourer has not been content to imitate the cloth skirts of the civil costume, he has reproduced in steel the silken puffings and slashings of

^b The two in the Tower Armory are not genuine. One of them, formerly in the Bernal Collection, consists of part of a true helmet to which an imposture visor has been added. The other, pur-

chased from an Oxford-street dealer, and stated to have been procured "from Florence," has been pronounced by competent judges to be a forgery throughout.

the garments of the day. Examples of this kind of armour will be found in the Tower Collection (No. $\frac{5}{2}$). In the Tower also may be seen specimens of the ingeniously-constructed arm-defences, where the articulation in numerous narrow strips gives to that part almost the pliability of a buff-coat*. The breast-plate is of the usual globose form of the period. The figures engraved upon it are those of Saint Barbara and Saint Catherine. The back-plate is also engraved: the subject there, a lady and gentleman joining hands, is given by Hefner (pl. 48) as a striking illustration of the civil costume of the time.

* Nos. $\frac{3}{2}$ and $\frac{3}{1}$; and compare Grose, pls. 19 and 20.



No 110.

PLATES 110 & 111.

MONUMENTAL brasses in Westminster Abbey and Great Saint Helen's Church, London, of Sir Humphry Stanley, 1505, and John Lementhorp, Esquire, 1510. In the first of these, the shoulder-defence for the sword-arm is of a lighter construction than that on the opposite side, an arrangement of which examples have been seen in the preceding century. In the later figure, they are of equal size, a fashion generally found as the century advances. Occasionally the pauldron with upright neck-guard appears on the left side only, while the right has a gusset of plate; as in the figure given on plate 114 of Hefner's "Costumes." The morion-shaped elbow-pieces of the Stanley effigy bear much resemblance to those of the armour in our plate 93. The ridged globose breastplate here seen, is frequent in the early years of the century: the sculpture of Sir Giles Daubeney in Westminster Abbey and the statuette of Saint George on the tomb of Henry VII. offer good examples. The chain skirt with tuilles overlying, is often worn at this date. Among many instances that might be given, we may name the statuette noticed above, the "tournoyeurs à pied" of Maximilian's "Triumph" (plate 42), the beautiful figure of Saint George in painted glass in Cologne Cathedral, copied in the Kerrich Collections, Add. MS. 6,728, and several of the brasses engraved by Cotman. The mail skirt of No. 110 is divided in front, for convenience of riding: the shorter one of No. 111 has no such division. In both figures, the large, pointed plates above and below the knees have given way to pieces of much smaller di-

mension. The old fashion, however, seen in plates 92, 93 and 96, is still often found at the beginning of the century.

In the Lementhorp brass we see that the war-sword is accompanied on the opposite side—not by a dagger, as in so many former instances, but by a stabbing-sword or *estoc*, the sheath of which appears at the knees. On the breastplate is the lance-rest, turning on a pivot, so as to lie close to the cuirass when not in use. The helm, with its crest, wreath and mantling, is behind the head. Fixed to the inside of the helm, at this time, is not unfrequently seen a portion of chain-mail, passing beyond the edge of the helm; the purpose of which was to defend that part of the neck where the headpiece and the gorget came in contact. The



No. 111

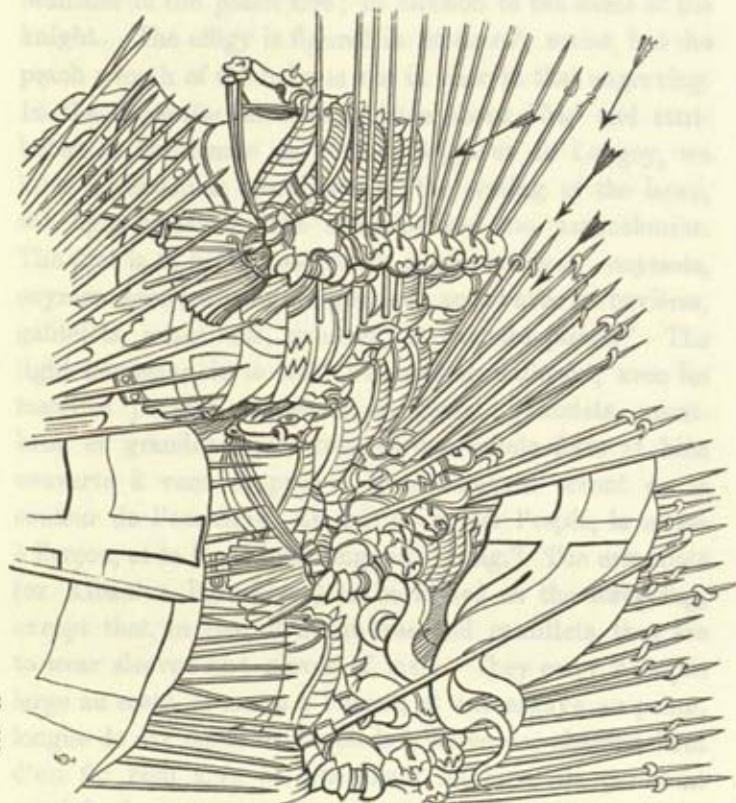
monumental statue of Sir John Peché, at Lullingstone, Kent, furnishes a good example. The crest of the Stanleys is a very singular device, an infant in the claws of an eagle. A tradition of the family records that an ancestor of their house, having in infancy been carried off by an eagle, and afterwards safely recovered, the event was considered of good augury and its remembrance perpetuated in the family crest. Of whatever weight or antiquity the tradition may be, it is certain that the crest of the "Eagle and Child" is seen on the helm of a knight of the Stanley family, habited in armour of the fourteenth century, in the church of Elford, Staffordshire. The device is engraved in Newton's "Heraldry." The brass of Lementhorp well ex-

emphases an entanglement of composition into which the latteners of this and the preceding century had fallen, in their endeavours to satisfy all claims upon their art. The recumbent *statues* of warriors had usually for pillow the knightly helm; while, crouched at the feet, was the emblem of strength, the Lion, or of fidelity, the Hound. The latteners gave to their knights an erect position, by placing beneath their feet a mound covered with herbage and sprinkled with flowers. Stanley thus appears, a graceful portraiture and in perfect keeping throughout. But who shall explain the process by which Lementhorp, standing upon *his* mound, retains his helm pillow, bedecked with its crest and mantling! And, if we are thus perplexed in dealing with the helm, to what straits are we reduced in disposing of the emblem of fidelity, the Hound!

PLATES 112 & 113.

THE first of these subjects has been chosen, to shew the manner of a charge of Lances or men-at-arms. It is taken from the *Weiss Kunig* or Life of the Emperor Maximilian, the designs for which were by Hans Burgmair. The men-at-arms themselves differ in nothing from the band of mediæval knights, except in the small change in the *fashion* of their costume. They are still armed from head to foot, their weapon is still the lance, and their "destriers" yet exhibit the armorial trapper and the steel chanfrein. It is the last century in which this ancient band maintains the prominence it has so long enjoyed: in the next age, fire-arms and the pike reduce it to a state of nullity, and after a faint struggle as an "old-fashioned" soldiery, the body of men-at-arms, or lancers armed cap-à-pie, disappears altogether from the military stage. The cavalry troops in the first half of the sixteenth century were the lance or man-at-arms, the demi-lance or *estradiot*, the light-horseman, the harquebusier, the pistolier or *Reiter*, the archer, the custrel, and the Hungarian light-horseman. The *lance fournie* of the French *Compagnies d'Ordonnance* in 1530 comprised six horses: four for the man-at-arms, his page and varlet, and two for his archers. In the "retinewe of speres" instituted by Henry VIII. as a body-guard, every man-at-arms was to be accompanied by a page, custrel, and two archers, all on horseback⁴. The costume of this body is preserved in the monument of their Captain, Sir

⁴ Cott. MS., Titus, A, xiii.; Grose, i. 113, ed. 1801; and Pegge's *Curialia*, pt. ii. p. 6.



John Pechey, at Lullingstone, Kent. Over his harness he wears a tabard of arms. The statue is further curious from the fanciful design of the wreath on the helm. In lieu of the usual circlet of twisted colours, it is formed of twisted branches of the peach tree; in allusion to the name of the knight. The effigy is figured in Stothard's series, but the peach wreath of the helm is not in view in that engraving. In the *Discipline Militaire*, written about 1540 and attributed to Guillaume du Bellay, Seigneur de Langey, we have a particular description of the arming of the lance, the light-horseman, the estradiot and the harquebusier. The first is to have "soullerets, grèves entières", cuysots, cuyrasse avec les tassettes, gorgerin, armet avec les bavières, gantelets, avant-bras, goussets, et grandes pièces." The light horseman is to wear "haussecol, hallectret, avec les tassettes jusques audessous du genou, gantelets, avant-bras, et grandes espaulettes, et une salade forte et bien couverte à veue coupée¹: leurs cazaques seront de la couleur de l'enseigne: ils doivent porter l'espée, la masse à l'arçon, et la lance bien longue au poing." The estradiots (or Albanian light-horse) to be armed as the foregoing, except that, in lieu of avant-bras and gauntlets, they are to wear sleeves and gloves of mail. They carry "l'espée large au costé, la masse à l'arçon, et une zagaye au poing, longue de dix ou de douze pieds², ferrée par chacun bout d'un fer bien aigu et tranchant; ou bien, ils porteront aussi la lance comme les autres." Their cazaque to be short, without sleeves, and of the colour of the ensign. The harquebusiers to have armour like that of estradiots,

* The greaves did not always encircle the whole leg. See the armour of Henry VIII. in the Tower, No. 3.

¹ See plate 101.

² The spear of the lancier was eighteen feet long.

except that, in place of a *salade*, they shall have a *cabasset* (open casque), in order to be able better to take aim, and to have the head more at liberty. The *harquebus* to be carried at the saddle-bow in a case of *cuir-bouilli*, the length of the arm to be 2 feet or $2\frac{1}{2}$ feet, or 3 feet at the farthest; and let it be light. A mace is on the other side of the saddle-bow, and a sword completes the equipment. (Chap. 6.) A company of English demi-lances joined the army of Henry II. of France in 1552 "for their pleasure." They were about 400 in number, "desquels la plupart estoit à cheval sur guildins et petits chevaux vistes et prompts, sans estre fort armez, vestus de juppons courts, avec le bonnet rouge à leur mode, et la lance comme une demie picque, dont ils scavent fort bien ayder," &c. (François de Rabutin, *Commentaires*, liv. 2.) This is exactly the English light-horseman seen in the print of the Siege of Boulogne, published by the Society of Antiquaries, and we there find what is meant by the phrase, *sans estre fort armez*, for, while the soldier wears a body-armour with brassards of plate, the legs are encased in boots alone, which extend beyond the knee. Brantome says of the Albanian light cavalry, "ils nous ont apporté la forme de la cavallerie-légère, et la méthode de faire la guerre comme eux. Les Vénitiens appelloient les leurs, *Estradiotz*, qui nous donnerent de la fatigue à Fornouë. Ils les appelloient aussi *Corvals*, à cause de la nation. Les Espagnols appelloient les leurs, *Genetaires*." (Capitaines Franç.:—De Fontrailles.) The appointments of the *harquebusier* are seen in the notice by Rabutin in 1552 of the army of Henry II. "De *harquebusiers* à cheval y en avoient de douze à quinze cens, armez de jacques et manches de maille ou cuirassine, la bourguignotte ou le morion,

l'arquebuz de trois pieds de long à l'arçon de la selle, montez sur bons courtaux, chacun selon sa puissance." (Liv. 2.) The German Reiters or pistoliers^h came into prominent notice in the second quarter of the century. Their characteristic arm, the wheel-lock pistolⁱ, is considered by Hefner to have been common in Germany in 1512. (Pt. iii. pl. 71.) The Reiters were called also "Noirs harnais," from the colour of their armour:—"ainsi appelez pour ce que les harnatz qu'ilz portent sont noirs, avec manches de maille et certains morions couverts: ils ont des pistolets d'environ deux palmes de long, et des espieux dont ilz se scavent ayder en plusieurs sortes." (Loys d'Avila, *Commentaires*^k, liv. 1.) Brantome says:—"I have heard the late Monsieur de Ferrare declare that these Reiters fear nothing so much as the Turks, so that 2,000 Turkish horse make no account of beating 10,000 Reiter horse; which I told him seemed very strange to me, the Reiters being armed to the teeth and so well provided both for offence and defence with their pistols, while the Turks came into the field without body-armour, carrying only lance, shield and scymetar. It is all one for that, said he; adding that he knew it from his own personal experience when serving with the army of his brother-in-law, the Emperor Maximilian." (Vol. vi. p. 212, ed. 1787; and compare pp. 204 and 213 seq.) The mounted archers are found constantly throughout the first half of the century. The Ordinance for the body-guard of "speres and archers" of Henry VIII., already noticed, requires that

^h See plate 127.

ⁱ The wheel-lock is commonly called fire-lock in documents of this century. This should be borne in mind by the student, for the term fire-lock is apt to suggest the idea of an apparatus of flint

and steel. There are but two kinds of pistol-locks until the days of percussion arms,—the wheel and the snaphance or flint.

^k Trad. de Math. Vauchier, Auvers, 1550.

"every of the aforesaid men of armes shall furnyshe and make redy twoo good archers, well horsed and harnessed, and bring them to muster before the King's grace," &c. The horse archer of this date is seen in the pictures at Hampton Court, of the Battle of the Spurs, the meeting of Maximilian and Henry VIII., and the Field of Cloth of Gold; and again in the bas-reliefs of the last-named scene in the Hotel de Bourgtheroulde at Rouen¹. In 1544, Henry proceeding to the siege of Boulogne, "the King's majestie was in the myds of his pikemen, then followed the men of armes, also alooff off there were fiftie archers on horsebacke on the right side, and on the left side as many gonners on horsebacke." (Rymer, xv. 53, and Pegge's *Curialia*, Pt. iii. p. 23.) The equipment of the Custrel is named in the Ordinance for the "speres" of Henry VIII. "Evry of the said gentlemen shall have . . . his coustrell, with a javelyn or demi-launce, well armed and horsed as it apperteyneth." The Hungarian light-horse are very exactly described by Louis d'Avila in his "Commentaries." "Le roy admena neufz cents chevaulx hongrois, que à mon jugement sont des meilleurs chevaulx-légiers du monde. Les armes qu'ilz portent sont longues lances creuses et assez grosses, ilz portent des escuz ou targes, estant par bas larges jusques à lendroit du milieu, et de là elles vont estroississant par devant en poincte, laquelle leur passe pardessus la teste, et sont si tornées comme pavois. En ces targes ilz portent painctes devises à leur mode. Aucuns d'iceulx Hongrois portent jaques de maille, et plusieurs portent cymitarres, et jointement estocz, et certains marteaulx à longues manches dont ils s'aydent très bien."

¹ Noticed under No. 108.

The group of men-at-arms on foot (No. 113) is given to shew the absence of uniformity in the arming of the troops. Some wear the close helmet, some the visored salade. Some have feathers in their casques, others have no such ornament; some wear surcoats which nearly cover the whole harness, others have a deep skirt only over their armour; and others again no more than a short, slashed sleeve. Some have daggers buckled to their waists, others are without this weapon. It was usual, in ordering the troops for action, to place the best-armed in front. The standard is charged with the well known device of the house of Burgundy, the Flint and Fire-steel. The third figure in the nearest file furnishes a good example of the knightly lance of this period. The subject is taken from the *Weiss Kunig* of Burgmair.



PLATES 114, 115 & 116.

THE foot-troops of the first half of the sixteenth century were archers, bill-men, halbardiers, partizan-men, swordsmen, pike-men, crossbow-men and harquebusiers. The German *Landsknechte*, who were frequently employed as mercenaries, usually carried those long-handled weapons which in England were called "staves," and by the French *armes blanches*, such as bills, halberds, and the like. The ancient Serjeant-at-arms is still found, accompanied by his characteristic mace. The Yeomen of the Guard, of whom we have recorded the institution at a previous page^m, still continued to surround the English monarch. Throughout the century there was an obstinate struggle between the arrow and the bullet, and the advocates of the first had a clear advantage on the side of eloquence and ingenuity; but in the field the "shot" made a steady advance, and at length the Bow, that weapon which had decided victories from the beginning of the world, and of late had constantly won them almost single-handed, was driven from the battle-field and its place supplied by the musquet and the caliver.

In the first half of the age, however, the archer maintained his position. His appearance at this time, wearing his steel sallet, and distinguished as an English soldier by the Cross of St. George (which was figured both upon his breast and back), is seen in the miniature here given, from the print of the Departure of Henry VIII. from



No. 115.

^m Ante, p. 529.



No. 114.

Calais, 1544, published by the Royal Society of Antiquaries. Statutes for the encouragement of archery were from time to time enacted in England, as in the 3rd Henry VIII., and in the 33rd of the same reign. By the statute of 4 and 5 Phil. and Mar., cap. ii., all temporal persons having estates of a thousand pounds or upwards, are required to furnish, among other munitions of war, thirty long-bows, thirty sheaves of arrows, and thirty "steale cappes or sculles." The English archers did good service at Flodden, and it will be remembered that the body of the Scottish king was found among the slain, pierced with an arrow*. In 1518 the aid agreed to be furnished from England to the Emperor was six thousand archers*.

Hall's Chronicle makes frequent mention of the prowess of the English archers: see, among many other instances, those recorded at pages 524, 528, 540, 556 and 569 (ed. 1809). In 1514, "Prior Jhon, a great capitayne of the Frenche navy, with his Galeys and Foystes charged with great basylskes and other greate artillery, came on the border of Sussex and came a land in the night at a poore village called bright Helmston, and or the watch coulde him escrye, he sett fyer on the towne: then the watche fyled the bekyns and people began to gather; whiche seynge, prior Jhon sowned his trompett to call his men aborde, and by that tyme it was day. Then vi. archers whiche kept the watche, folowed prior Jhon to the sea, and

* Pinkerton's Scotland, ii. 104. The account of this battle by Lord Thomas Howard contains several curious particulars. The English army was formed "en deux batailles, avec ii. elles (ailes) en chacune bataille." The Scottish host "estoit divisee en cinq batailles, et chacune bataille loing l'un de l'autre environ

ung traict d'arc; et partie d'eulx estoient en quadrans, et autres en maniere de pointe." We have here the ancient cuneus again reproduced. See the whole letter of the earl in Appendix to Pinkerton, vol. ii. p. 456.

* State Papers, 31—4. Lingard, vol. vi. chap. 2.

shott so faste that they bett the galymen from the shore, woundyng many, and prior Jhon was shott in the face with an arrow, and was likely to have dyed, and therefore he offered his image of wax before our lady at Bolleyn, with the English arrow in the face for a myracle." (Hall, p. 568.) In 1542 a levy of troops is ordered "for the werres in to Scotland," when the city of Norwich is called upon to furnish forty "tallest and most apte and able men, wherof xix. ar good and able archers redy trymmed, w^t hernes, bowes, arrowes, swords, and daggers, and xxi. are able men w^t bills redy trymmed, w^t billes, hernes and daggers". In 1543 the king's letter to the mayor and sheriffs of Norwich "lets them to witte that they are apoynted to ffurnysshe, for a royall armye to invade the realme of Ffrance, xl. able ffotemen, whereof viii. to be archers, evry oon furnysshed w^t a gode bowe and a cace to carye it inne, w^t xxiiii. goode arowes, a gode sworde, and a dager, and the reste to be billemen well harnessed, evry of them w^t a goode bill, a gode sworde and a dager⁹." Orders are given accordingly for the men to be sought and arrayed by the constables, and instructions are issued for the attire of those approved. "Fyrste, every souldier to have a cote of blewe clothe garded w^t redde, aft^r suche ffacon as all ffotemen be made at London, and the left sleve to be trymmed after suche sorte as shall please the captayne to devise, p^rvyded always y^t no jentilman nor other weare eny maner of sylke upon the garde of his cote, save only upon his left sleve, and that no yoman weare eny maner sylke upon his seid cote, nor noe jentilman nor yoman weare any man' of badge.

"Item. Evry man to p^rvyde a payer of hose for evry of

⁹ Norfolk Archaeology, vol. i. p. 35.

⁹ Ibid., p. 36.

his men, the right hose to be all redde and the left hose to be all blewe, with one strype of iii. ffyngars brode of redde upon the outsyde of his legge from the stokks downewardes.

"Item. Evry man to hav an armyng doblet of ffustyean or of canwas.

"Item. Evry man to provide a capp to put his scull or sallett inne, after such sorte as I hav devysed, whiche Willm. Tailours, capper of London, dwellynge withinne Ludgate, dothe make for me, wer ye shall hav as many of them as ye will for viii*d*. a pece^{*}."

We thus see that the motley costumes of the soldiery at this time were not always mere caprice: that while, for instance, the general colours of the dress might be the heraldic tints of a powerful leader, the particular contingents might be distinguished one from another by the colour or trimming of a sleeve. The provision of arrows for each bowman, as noticed above, is twenty-four. In the curious manuscript belonging to Grose, and printed in his "Ancient Armour," p. 272, it is recommended that, of the "fower and twentie arrowes, to be kept in a case of leather defensible against the rayne, eight should be lighter than the residue, to gall or astonye the enemye with the hailshot of light arrows, before they shall come within the danger of their harquebuss shot^{*}." Every archer to have "a brigandine, or a little cote of plate, a skull or huskyn, a mawle of leade of five foot in lengthe, and a pike^{*}, and the same hanging by his girdle with a hook, and a dagger." A good figure of a German archer of this period, from an altar-picture of the Martyrdom of Saint Sebastian, will be found in Hefner's work on Costumes (Pl. 117, A.D. 1514).

^{*} Norfolk Archaeology, vol. i. p. 37.

gunners before the bullets can touch the archers.

^{*} Thus, the arrows are to reach the

^{*} The "archer's stake."

That example shews also the bracer, or guard fixed on the left wrist, to prevent the chafing of the bowstring. A singular accident has preserved to us a few examples of the English long-bow of this time. In 1545, the ship of war, the *Mary Rose*, "being before the Isle of Wight with the rest of the Royall Navy, to encounter the French Fleet, with a suddain puff of wind stooped her side, and tooke in water at her Ports in such abundance, as that she instantly sunck downeright and many gallant men in her*." In 1841, diving operations were undertaken upon the wreck, and among many other stores recovered, several of the bows belonging to the archers of her crew were rescued in a very perfect state†. Two of them are deposited in the Tower Armory. They are made each in a single piece, in length 6ft. 4½ inches. The string-notch is cut in the wood itself. The prices of bows and arrows in 1559 were as follows:—"A bowe of yewgh, 2s. 8d.; bowe-strings, a doz. 6d.; liverie arrows, the sheyf, 22d." As late as the Civil Wars an attempt was made to raise a body of Archers. In 1643 the Earl of Essex issues a Commission, desiring "all well-affected persons in and about the City of London to bring in Bows and Arrows, if they have any, or what Sum of Money they please," not doubting but success "will still attend the use of that Honourable and Ancient Weapon, heretofore found of good use in this Kingdom." (Rushworth's Collections, pt. III. vol. ii. p. 370.)

The Bill-man, armed with his bill, sword, shield, sallet

* Sir Walter Raleigh: "Select Essays," &c., published in 1650, and dedicated to his son.

† For the armament of this vessel, see

Grose, Hist. of the Eng. Army, vol. i. p. 125.

‡ *Archæologia*, xxvii. 478.

and hallicret*, is seen in our illustration, No. 114. We have already found him included in the Norwich levies of 1542 and 1543 quoted above:—"able men, well harnessed, with good bille, sworde and dager." By the Statute of 4 & 5 Phil. and Mary, estates of £1000 or upwards are rated to supply, among other furniture of war, "twenty black bills or halberts," and so on with the less wealthy classes. The villages, as well as the towns, were rated to a supply of men and arms of this kind: thus, in 1569, the parish of Yoxhall in Staffordshire is called upon to furnish "Pikemen 3, Bilmen 5, Harquebuz 9*." A Survey of stores in the Tower in 1559, noting as well those in hand as others to be bought for the next year's requirements, reports the number of "Black bills to be bought at 16d. the piece" at 7,900. In the "Brief Discourse of Warre," written by Sir Roger Williams and published in 1590, we have some curious particulars of the old English bill. After speaking of musquetiers, he says:—"There ought to bee, amongst 1000 pikes, 200 short weapons, as Holberts or Bills; but the bills must be of good stuffe, not like our common browne bills, which are for the most part all yron, with a little steele, or none at all; but they ought to be made of good yron and steele with strong pikes at the least of 12 inches long, armed with yron to the midds of the staffe, like the holberts . . . Both Bills and Holberds ought to have corslets with light Millain murrians, the fore parts ought to be of the prooffe of the caliver." The length of the bill, according to Silver in his "Paradoxes of Defence," 1599, should not exceed six feet. "The battle-axe, halberd and black-bill ought to be five or six feet long, and may

* Light body-armour: the Corslet.

* Grose, Eng. Army, i. 124.

not well be used much longer, because of their weight; and being joyned close together, may thrust, and strike sound blowes, both strong and quicke." There was a variety of the weapon which had a diagonal spike at the back: examples of it are engraved by Grose, "Ancient Armour," plate 28, figs. 6 and 8. The bill at this time formed also part of a ship's armament. The Queen's ship, the *Elizabeth*, 600 men, is armed with 200 harquebuses, 50 bows, 280 pikes, and 170 bills^b. Grose tells us that with the Sheriff's bill-men it was no unusual thing to "chalk the edges of the bills, to give them the appearance of having been newly ground^c." Real examples of the old English brown bill are very rare, far more so than its kindred weapon, the halberd; and the reason is not difficult to find: the form of the implement made it useful for many domestic and agricultural purposes, so that, when no longer required for war, it finished its career at the hedge-row or the wood-stack.

The Halberd has already been found in several of the enactments cited above, as a weapon to be employed conjointly with the bill. But it was a much more costly arm; for, while the bill could be had for 16 pence, the price of the halberd was 6s. 8d^d. To the halberdier was therefore confided the defence of the colours, with other special duties. Thus, in a manuscript cited by Grose^e, we read that "Captaines of halbarts or black billes, chieflie those halbartes bearinge corseletts gardinge the Ensignes, wearinge swordes and daggers, meryteth more wages then others bearinge blacke bills, usuallie called the slaughter or

^b Peck's *Desid. Curiosa*, lib. ii. p. 22; Grose, *Eng. Army*, vol. i. p. 125.

^c *English Army*, i. 124. ^d *Archæologia*, xxxv. 357, xxxvii. 478. ^e *English Army*, i. 124.

execution of the *battaile*," &c. There is a fearful significance in this last phrase—the *slaughter or execution of the battle*—and which exactly describes the duties of the troops carrying the bill and similar *menues armes*; whose province it was, when the adverse ranks had been broken by the efforts of the archers or the "shot," or by a charge of cavalry or of pikemen, to advance among the disordered mass and slay all who came within reach of their terrible weapons. This was a duty that could not be performed by the pikes, the arm being too long. Langey, *Discipline militaire*, has a passage exactly in point:—"Les piques servent pour arrêter les chevaux, mais elles sont inutiles quand les rangs se joignent. Donc les Suisses, pour éviter cet inconvénient, mellent, de trois en trois rangs de Piques, un rang de Hallebardes," &c. (Liv. i. chap. 16.) The halberds with long, slender spikes were, it appears, the French fashion, while the Italian halberd had a broad head for the thrust. Sir Roger Williams, in the work already cited, writes:—"Because the Frenchmen make their halberds with long-neckt pikes, and of naughtie stuffe, like our own common browne bills, divers of our nation condemn Halberdes; but let the halberds be of goode stuffe, and stronglie made, after the Millaine fashion, with large heads to cut, and broad strong pikes, both to cut and thrust, then no doubt the Halberd is nothing behinde the Bill for all manner of service, and armes a souldier fairer than the bill." We here see that in the sixteenth century there was not only a strong contention maintained between the advocates of the bow and the musquet, but a similar rivalry between the friends of the halberd and the bill. For representations of the Halbardier of this time, see our plates 114 and 117, Strutt's *Horda*, vol. iii. plate 2 (from the very curious

volume in the Cotton collection, Augustus, 3, said to have belonged to King Henry VIII.), Maximilian's "Triumph," the pictures at Hampton Court of the Meeting of Henry VIII. and Maximilian, and the Battle of the Spurs (Nos. 520 and 517), Hefner's plates 83, 94, 106 and 111, and the *Trattato di Scienza d'Arme* of Camillo Agrippa, where, on fol. 60, are two halbardiers engaged in a duel with their halbards.

The Partizan (*pertuisane*) is of great variety of form; the blade being long or short, broad or narrow, with wings or without, of plain steel or richly decorated with chasing, painting and gilding. We have already found it named in the passage from Sutcliffe's "Practice of Arms," and it constantly appears in the military Inventories of this age. It is figured in Cotton MS., Augustus, 3 (*Horda*, vol. iii. pl. 3), where one of the partizan-men carries a shield, and both have swords; in the Roll of the Entry of Charles V. into Bologna in 1530; and a variety of it in the woodcut at the foot of this paper. Many real examples are in the Tower collection, of which some are early in the century and curiously decorated with engraved figures of saints or mythological beings, coats of arms, or arabesques. No. 322 has the Tudor royal arms, France and England quarterly, supported by the Lion and Red Dragon. Many have the device of the Rose alone; and they have been formerly gilt. These appear to be the arms mentioned by Hentzner as being in the Tower in his time, 1598:—"hastæ multæ et splendidæ, quas *Partisan* vulgò appellant, et quibus ad defensionem regii corporis in bello satellites utuntur." (p. 193.) The saints most in favour for the decoration of these and similar weapons are Saint George, St. Sebastian, St. Alban, St. Christopher, St. Barbara and St. Catherine.

The Boar-spear and Spetum may be considered as varieties of the partizan: arms for the thrust only, not for striking. As its name indicates; the boar-spear had a broad head, leaf-shaped and double-edged, like the hunting implement from which it was derived¹. Many real examples of this time will be found in the Tower. The name, *Spetum*, is from the Italian; *spedo*, a spit: hence the characteristic of the weapon: but a variety had the blade of a broader fashion. It had usually wings: see Grose, "Ancient Armour," pl. 33. The Tower example, No. $\frac{1}{100}$, is an early specimen, and engraved with a crowned spread-eagle. No. 881, from Malta, has the wings sharp on both edges.

Besides the arms here named, there were several others in use by the infantry at this period. The *couteau-de-brèche* was in its simplest form a sword-blade fixed at the end of a staff, and in this fashion it is still employed among the Chinese. Generally the class may be considered to include all the "staves" whose blades have a single edge and blunt back. See Goodrich Court Armory (Skelton), vol. ii. pl. 85. A variety has a diagonal spike at the back, as in the specimens in the Tower, Nos. $\frac{1}{100}$ *seq.*; from the ancient Armory of the Knights of Malta. The Pole-axe continued in use. The survey in the possession of the Royal Society of Antiquaries, taken in the 1. Edw. VI., has, among the Tower stores, "Short poleaxes plain, 100: two-hand poleaxes, 4: poleaxes with gones in th'endes, 27: without gones, 2: poleaxes gilte, the staves covered with cremysyne velvet, fringed with silke of gold, 4." Some of these are probably still in the Tower: see No. $\frac{1}{100}$ *seq.* And compare Grose, "Ancient Armour," pl. 34. The Lochaber axe

¹ See Stradanus, *Venationes*, 1578.

had a broad blade, and frequently at the back a hook for pulling down fascines, &c., or a "bridle-cutter," that is, a small beak with a concave edge for dividing the reins of a mounted antagonist. Hence the horsemen sometimes provided themselves with reins of iron. See Grose, plate 28. The Pike-fork is of several varieties: two-pronged, three-pronged, and with or without hooks for pulling down fascines. Examples of all are in the Tower; some of them from the Armory of the Knights of Malta. The weapon is mentioned in the old poem on the Battle of Flodden:—

"Some made their battle-axes bright,
Some from their bills did rub the rust,
Some made long pikes and lances light,
Some pike-forks, for to join and thrust."

The Morning-star or "Holy-water Sprinkle" was a weapon of the mace kind, but the head was furnished with a number of radiating spikes, after the manner of a curled-up hedgehog. There were two principal kinds: one fixed at the end of a staff; the other fastened to a chain, which itself was attached to a staff. The first sort is figured in Kùchler's Pageant on the marriage of Duke Frederic of Würtemberg in 1609, plate 18*. The second is seen in De Vigne's *Vade-mecum du peintre*, vol. ii. pl. 100, an example of the sixteenth century. They are named in the Tower Survey of 1547, cited above:—"Great holly water sprinckles, 118: Holly water sprinckles with gonnies in th'ende, 7: Little holly water sprinckles, 392: Holly water sprinckle with three gonnies in the topp, 1." This last is, no doubt, the arm afterwards called King Henry the Eighth's Walking Staff, and still preserved in the Tower. See also

* *Repräsentatio der Fürstlichen Auffzug und Ritterspil*, &c. Datum Schwäbischen Gemündt, Anno 1611.

the Tower examples, Nos. $\frac{7}{8}$ to 900. "Hercules-Clubs" were in use for defence of a breach. Thus, in the "Commentaries of Sir Francis Vere," we are told that, at the siege of Ostend in 1601, "we had firkens of ashes, to blind the enemy, quadrant tenter-nails^b, stones and brick-bats, hoops bound round with squibs and fire-works, hand grenadoes, and Clubs which we called Hercules-clubs, with heavy heads of wood, and nails driven into the squares of them." (page 170.) Even Slings were employed in this age. Grose, who has omitted wonderfully little that tends to throw light on ancient military usages, has recorded in a note to his "Treatise on Ancient Armour," that "slings were used in 1572 at the siege of Sancerre, by the Huguenots, in order to save their powder: D'Aubigné, who reports this fact, says they were thence called Sancerre harquebusses." (p. 274.)

The Pikemen seen in our illustration, No. 114, do not appear to wear any body-armour, but usually they have corslets similar to the soldier carrying a bill, and for head-defence a sallet or morion. Other representations of pikemen occur in the "Triumph" of Maximilian (among the Camp followers); in the *Horda*, vol. iii. pl. 4; in the picture at Hampton Court, the Meeting of Maximilian and Henry VIII.; in the print of the Encampment at Marquison, published by the Royal Society of Antiquaries; and in plate 110 of Hefner's *Trachten*. Compare also the later example in our plate 131. In the Statute of 1557, all temporal persons having estates of £1000 or upwards, are to provide, among other munitions, "forty corslets furnished, forty almaine rivetts, or instead of the almaine rivetts, forty coats of plate, corseletts or brigandines furnished,

^b Calitrops.

forty pikes," &c. The length of the pike was not uniform. Paolo Giovio reports those of the Swiss at the entry of Charles VIII. into Rome as being ten feet in length. From Zurlauben, cited by Müller, iv. ch. 6, it appears that, at the combat of Arbedo, the Swiss pikes measured eighteen feet. Sutcliffe, in his "Practice of Arms:"—"The pike I would have, if it might be, of Spanish ash, and betwixt twenty and twenty-two feet long," &c. The manner of using this arm also varied: it was either held near the middle, the Swiss mode, or at the end, the custom of the German Landsknechte. Thus, in the *Commentaires* of Montluc, we read:—"Si nous (les Français) prenons la pique au bout du derrière et nous combattons du long de la pique, nous sommes défaits, car l'Allemand est plus dextre que nous en cette manière; mais il faut prendre les piques à demy, comme fait le Suisse, et baisser la teste pour enfermer et pousser en avant." (Liv. ii.) Davies, in his "England's Trainings¹," says:—"The pikeman ought to have his pike at the point and midst, trimmed with handsome tassels, and a handle, not so much for ornament, as to defend the soldier's body from water, which in raine doth runne downe alongst the wood." These tassels for shelter of the arm are seen in Rutz, plate 28, and in Jost Aman, pl. 265, ed. 1599.

The Swordsman of this century is found in our plate 118 and described under that number.

The Crossbow was still used for the defence of towns and castles, and of ships. It does not appear in any of the pictures of the battles of Henry VIII., nor is it named in the Statute of 1557. The Companies of Arbalesters were

¹ Printed as an Appendix to Grose's Hist. of the English Army, p. 127.

still kept up in the continental cities, and they not only continued their prize contests, but discovered the ingenious device of awarding the victory to an absent competitor. Lord Mountjoy at Tournay in 1516 writes to Henry VIII. in London:—"Abowte the second day of Marche, there is a gret shoting at the popyngay, by a broderhod of Saynt George. And furst thay shootithe oon for yo^r grace, and afterwards all other (of the) felowship. The last yere I appoynted the provost of the towne to shoote for yo^r grace: he strake the popyngay, and soo yo^r grace was Kyng of the Popyngay for that yere. This yere I appoynted sir John Tremayle to shoote for your grace, (who had) before approved hymself a (skilful) shooter in the crosbowe. He strake hit downe in likewise, And soo is yo^r grace King of the Popyngay for this yere. And yf soo be, hit be stryken by any man for yo^r grace the next yere, yo^r grace shallbe Emperor, wherunto ther longgithe many gret roialties." (*Excerpta Historica*, 286.) Pictorial examples of the crossbow-man will be found in *Tewerdannekh*, woodcut 87, in the Tapestry of Dijon (Jubinal, pl. 1), and in Hefner's *Trachten*, plate 117. The feathered quarrel or bolt for the crossbow is very clearly shown in the frontispiece to Holbein's *Costumes Suisses*.

For the Harquebusier of this century see our plates, Nos. 119, 120 and 132, and the particulars there given.

The German *Landsknechte* did not wear armour, though a corslet and casque are sometimes seen on the persons of their captains. Good examples of these troops are furnished by Hefner's plates 83, 94, 106, 109, 110 and 111. They are variously armed with the halberd, the pike and the sword. Plate 110 gives us the figure of a chief of foot-soldiers, wearing casque and corslet.

The Serjeant-at-arms of this century is seen in one of the figures of Cotton MS., Augustus, 3; engraved in Strutt's *Horda*, vol. iii. plate 3; and again in the brass formerly at Broxburne, Herts., dated 1531, of which a facsimile is in the British Museum.

The English "Yeoman of the Guard" is represented in our plate 121, which see, with the notice of this soldiery there given.

Little is to be added in illustration of the wood-cuts immediately before us. In No. 116 the figure carrying sword and spear has a body-armour of a construction not commonly found, but which is exactly reproduced in a horse-armour in the Tower; No. 4 of the Catalogue. The scale-armour on the slain soldier is also of unusual occurrence: the material of such a defence would probably be stout buff leather.





PLATE 117.

Swiss Halbardier of the first half of the sixteenth century, from Holbein's *Costumes Suisses*. This figure is one of three in the same work, of which two wear body-armour and the third has no defensive equipment. This mixture of armed and unarmed troops is well shewn in the plan of a batallion copied from Chantereau in the *Études sur l'Artillerie* (i. 163); where the two front ranks and the two rear ranks alone, with a few men in the flank files, are provided with corslets. The prominence of the Swiss mercenaries at this period—those *dompteurs de princes*, as they were pleased to call themselves, is attested by every page of the war chronicles of the time. Brantome, after noticing their exploits at Granson and Morat, writes:—"Certainement, depuis ce temps-là, ils ont fait de beaux exploits d'armes et de grandes preuves de vaillance; comme ils firent à Novare contre Monsieur de la Trimouille, dont ils en vindrent si rouges et si insolents qu'ils méprisoient toutes nations, et pensoient battre tout le monde: et de nostre temps, à la bataille de Dreux ils firent très-bien; aussi furent-ils bien battus . . . Enfin, comme la fortune ne rit pas tousjours aux gens de guerre, ils ont fait quelquefois bien, quelquefois mal: pourtant, ne leur faut desrober qu'ils ne soient très-braves et vaillants gens de guerre. Or, ces 'dompteurs de princes' furent domptez par ce Roy (François I.); et par ses armes et par la composition que fit le Roy avec eux, qui luy protesterent toute amitié et alliance si bonne, qu'ils l'ont tousjours inviolablement gardée, entretenue, et très-bien et fidelement servy nos Roys; de

sorte que j'ay veu en nos armées, quand nous avions un gros de Suisses, nous nous estimions invincibles, ce nous sembloit." (Vol. v. p. 230.) Their only dread was the artillery of the enemy:—"e dicono che non hanno altro nemico alle guerre che l'artiglieria¹." The first care of their advanced troops, therefore, was to capture if possible the batteries opened against them^m. On the other hand, where they were employed as mercenaries, the care of the cannon was specially confided to them. "Les Suisses ont la garde de l'artillerie, et ne sont tenus ni aux corvées ni aux assauts, comme sont les François," writes the Sieur de Langey. The exemption of the Swiss from the duties of the storming party is elsewhere mentioned. Montmorency in 1522 having breached the walls of Novara, ordered them to proceed to the assault, which they declined. "Admonnestez par le seigneur de Montmorency d'aller à l'assault, ils luy firent response qu'ils estoient prests de combatre en campayne, et que ce n'estoit leur estat d'assaillir les placesⁿ." Brantome gives them as good a character for steadiness of conduct as for bravery. "Estant bien polissez et réglez comme ils sont, ils achètent tout, ils vivent modestement, ne faisant aucunes pilleries ny ravages. Ils ayment à faire bonne chere et à boire tousjours de ce bon *Piot*, quand il devroit couster un escu le pot^o."

The halbardier in our print wears the light armour called the corslet. The breastplate shews on its upper edge a prominent ridge or *bead*, the purpose of which was to turn aside the thrust of a weapon. Thus, a spear point, impinging on the globose cuirass, would glide over its surface, and when reaching the bead at the top, would be carried

¹ Carlo Passi: trad. di Domenichi.

^m As at Novara: see Fleurange, liv. 37.

ⁿ Martin du Bellay, 1522: l. 327, ed. Petitot.

^o Vol. vi. p. 425.

off in a lateral direction without harm to the wearer. Many real armours in the Tower collection exemplify this contrivance. The sword worn by our halbardier furnishes an early instance of the finger-guard uniting the cross-piece and pommel. The colours are as follows:—*Right arm*, light orange over crimson: *left arm*, green over crimson: *right leg*, as left arm: *left leg*, as right arm: *hose*, light brown: *cap*, pink: *feathers*, crimson, yellow, and green: *dagger* and *sheath*, gilt.

Other pictorial examples of the Swiss soldier of this century may be seen in Hefner's *Trachten*, plate 92 (a Standard-bearer), Holbein's *Costumes Suisses* (various troops), and in Add. MS., 18,285, *Helvetiae Descriptio*, 1607, a volume full of fine drawings of Swiss soldiery of every kind.

PLATE 118.

SWORDSMAN, from the "Triumph" of the Emperor Maximilian; in his left hand a buckler. The "sword-and-buckler fight" was a favourite mode of contest in this century till superseded by the rapier. The sword of our figure is of the same fashion as that in the preceding example. The Swords of the first half of the century exhibit considerable variety in the construction of their guards, a variety not easily traceable without the aid of many engravings. They may, however, be generally classed under the following types. The ancient cross-sword, which is still of very frequent occurrence. See our illustrations, Nos. 108, 110, 111 and 112. Its form was recognised as partaking of the sacred character of the Christian emblem. Brantome tells us that Bayard when struck with his death-wound, "prit son espée par la poignée, et en baisa la croisée, en signe de la croix de Nostre-Seigneur, et dit tout haut: *Miserere mei, Deus.*" (*Éloge de Monsieur de Bayard.*) Another hand-guard often seen at this time was that taking the form of a letter S, of which examples are offered in several figures of Maximilian's "Triumph" (see the pikemen among the "Soldiers of Merit" and the wounded pikeman among the Camp followers), in Hefner's plate 29, in Jost Aman, plate 281, in Schrenck von Notzing's *Armamentarium*, plate 87, in the Madrid Armory, plate 23, and in our No. 119 (though not a very complete specimen). A real example of this guard will be found in the Tower collection, No. $\frac{2}{a}$. The other kinds may be thus described:—3. Finger-guard not joining the pommel: 4. Finger-guard joined to the pommel: 5. Cross and side-ring: 6. Cross and finger-loop: 7. Cross, finger-



loop and half-ring at the side: 8. All these three combined with finger-guards of both kinds: 9. Double branch: 10. Basket-guard.

Examples:—3. *Weiss Kunig*, pl. 176, Hefner, pl. 106, tapestry at Hampton Court, figures engraved on the suit of Henry VIII. in the Tower, No. 1. 4. Our plates 117 and 118, Strutt's *Horda*, vol. iii. pl. 2, Hefner, pl. 140. 5. Our plate 127, Hefner's 1, 80, 84 and 140. 6. *Weiss Kunig*, pl. 122, Madrid Armory, i. pl. 26, and Agrippa, *Scientia d'Arme*. 7. Hefner, pls. 94 and 38, portrait of the Earl of Surrey at Hampton Court. 9. Our plate 121, Holbein's *Costumes Suisses*, the pictures at Hampton Court of "The Battaile of Spurs," the Embarkation of Henry VIII. at Dover, and the Field of Cloth of Gold. 10. Hefner's *Trachten*, plates 110 and 111. This last, the basket-hilted sword, does not appear till the middle of the century. It is often called by old writers the "Swiss sword."

Designs for the hilts of swords and daggers by Holbein are in the British Museum: Add. MS., 5,308. Figures of swordsmen are given in Hefner's plates 106, 109 and 140.

The Sword of defiance sent from the Emperor to the King of France, is a singular symbol for these days, seeming to belong rather to the wild times of Charlemagne than to the age of *renaissance*:—"une espée, d'un costé forgée à flambes, et de l'autre esmaillée de rouge; qui estoit signifiante de guerre mortelle, à feu et à sang." (*Mémoires de Guillaume Du Bellay*, ii. 437, A.D. 1536.) For some notice of the Swords of the second half of the century, see No. 128.

PLATES 119 & 120.

THE harquebus in the sixteenth century was of two principal kinds: that discharged without a Rest, and that fired from a Rest which the gunner carried about with him, as seen in our illustration, No. 120. The first kind appears in our No. 119, taken from the Emperor Maximilian's "Triumph," and of this sort of hand-gun we have already had many notices. Of the harquebus with rest, the first appearance and subsequent spread are very clearly traceable. In 1521 the combined forces of the Pope and the Emperor met those of France in the Milanese, on the plain of Ghiara; a spot, says Martin Du Bellay, who has chronicled the events of this time, which, though inundated in wet seasons, became on the return of dry weather a level arena, where might be held the most delightful skirmishes, both by foot and by horse: "*une plaine nommée la Ghiara, en laquelle les inondations sont grandes en temps pluvieux, mais en temps sec, n'y a que beau sablon, où se faisoient ordinairement des plus belles escarmouches qu'il est possible, tant à pied qu'à cheval. De ceste heure là furent inventées les arquebouzes qu'on tiroit sur une fourchette*." In 1530 we obtain an exact and very minute representation of the harquebus with its rest, and of the soldier who employs this arm. The Roll of the Entry of the Emperor Charles V. into Bologna furnishes this evidence: our figure, No. 120, is carefully copied from it¹. In 1567,

¹ *Mémoires de Martin Du Bellay*, ed. Petitot. 2^e liv., p. 347.

¹ This very curious Roll appears, by an inscription upon it, to be an Italian

work. It is on the model of Maximilian's "Triumph," but the figures are not nearly so well drawn. Being large, however (our print is from a tracing exactly





Brantome tells us, *gros mousquets* (for such was the name they had now obtained from Spain) were first used in the north by the Duke of Alva against the Flemings:—"dans la guerre contre les rebelles, qui se faisoient appeller *les Gueux*: il fut le premier qui leur donna (à ses soldats) en main ces gros mousquets, et que l'on vit les premiers en la guerre et parmi les compagnies. . . . Et ces mousquets estonnerent fort les Flamands, quand ils les sentirent sonner à leurs oreilles; car ils n'en avoient veu, non plus que nous (les François): et ceux qui les portoient, on les nommoit Mousquetaires*." The same writer acquaints us that it was Philippe Strozzi, Colonel General of the French Infantry under Charles IX., who in 1573 first employed this arm in France:—"C'a esté le premier qui a mis l'usage des mousquets en France, et certes avec une tres-grande peine; car il ne trouvoit soldat qui s'en voulust charger: mais, pour les gagner peu-à-peu, luy-mesme au siege de la Rochelle (1573) en faisoit porter tousjours un à un Page où à un laquais. Je vis, et plusieurs avec moy, ledit Monsieur de Strozze tuer un cheval de cinq cent pas avec son mousquet, et le maistre se sauva*." The appearance of musquet and musquetier in 1586 may be seen in our plate 133. The locks of the harquebus are of three varieties. In the first, the serpentine is fixed between the pan and the muzzle; thus, moving *towards* the gunner when the trigger is drawn. See our plate 132. In the second, the serpentine moves *from* the gunner, as in our

reproduced), they are valuable for costume. The procession includes men-at-arms, pikemen, halbardiers, harquebusiers, musicians and others. The Emperor appears under a canopy of state, and Antonio de Leva is carried in a litter. We are

indebted for this illustration to the kindness of R. Porrett, Esq., who possesses the only copy of this curious Roll ever seen by the writer.

* *Œuvres*, tome 4^e, p. 64. ed. 1787.

* *Ibid.*, tome 7^e, p. 432.

plate 120. In the third kind the serpentine, instead of being advanced with a gliding motion, is propelled with a snap. An example of this last mode will be found in the Tower, No. 7, dated 1562. The serpentine itself is of three varieties: the match-cord is held by a simple cleft, or it is fastened in the cleft by a screw, or the end of the metal is formed into a short tube, through which the cord is drawn. The pan has a sliding cover, which is pushed over it when not in use, to prevent the ashes of the match from exploding the piece. See our woodcut, No. 135. The necessity of keeping the match a-light was generally considered disadvantageous, because the movement of troops by night could thus be discovered. But from evils the skilful captain contrives advantages. At the attack on Parma in 1521, a "captain of harquebusiers," being sore pressed by the assailants, "*voyant qu'il estoit temps de faire sa retraite, usa d'une grande ruse pour n'estre suivy; car à tous ses arquebouziers fait couper un bout de leur corde allumée, et leur fait coucher ladite corde sur le rempar, aux lieux où ils avoient accoustumé de faire leur garde, et par intervalles; de sorte que noz ennemis, pensans encores noz gens estre à leur gardes accoustumées, n'en eurent cognoissance qu'il ne fust une heure de jour.*"

The barrels are of several varieties: breech-loading and muzzle-loading, bell-mouthed and cylindrical. Two examples of the breech-loading arm, both of which appear to have belonged to King Henry VIII., are in the Tower collection. One of these, No. 7 of the Catalogue, has the royal initials, H. R., and a Rose crowned, supported by Lions, chased on the barrel; where also is the date 1537.

¹ *Mémoires de Martin Du Bellay*, 2^e liv., p. 348, ed. 1821.

The No. 4 has the Rose and Fleur-de-lis carved on the stock, and it is remarkable that the moveable chamber which carries the cartridge has exactly the form of that in vogue at the present day. These two examples appear to be the arms named in the Tower Inventory of 1679:—"Carbine, 1 and Fowling Peece, 1, said to be King Henry VIII." The first-named is figured in the *Archæologia*, vol. xxxi. p. 492. The plain, cylindrical barrel is seen in our plate 119, and again in the *Weiss Kunig*, woodcut 62^a. Our No. 120 gives us the bell-mouthed harquebus. A further variety has the muzzle chased in the form of a monster's head, resembling the gargoyles of the old cathedrals. The No. 4 in the Tower, a German example dated 1546, affords a good illustration. The stock in the early part of the century is either straight or moderately bent. The first kind is found in our plate 119, in *Herr Tewr-dannekh*, woodcut 79, in woodcut 62 of the *Weiss Kunig*, and in the Dijon tapestry (Jubinal, plate 3). The curved stock appears in our plate 120, in the "Encampment at Marquison," before noticed, and in plate 2 of Strutt's *Horda*, from Cotton MS., Augustus, 3. The Rest, it will be remarked, in its earliest form had a rectangular head: later it became rounded, as in our plate 133. Brantome furnishes some interesting particulars relating to the various places of manufacture of the hand-firearm. Metz, Abbeville, Pignerol and Lucca are amongst the towns he names; but it is to the gunsmiths of Milan that he gives the preference above all others; and among *them* it is "Maistre Gaspar de Milan qui a esté le meilleur forger qui jamais sera^x." The bandiliers, or small cases for holding in

^a And compare p. 138 of the same book.

^x Vol. vii. pp. 425 seq. and 434.

readiness the measured charges, were worn either round the neck, as in our No. 119, or across the body, as in plates 133 and 136. Some of the men used the flask for the charge, as our No. 120; and in other figures of the same Roll we see the primer, a small horn (of bugle form). The bullet-bag is carried at the right hip, as shewn in No. 119, where the purse is closed by a string. In the later examples seen in plates 137 and 138, the bag is secured by a button.



No 121

PLATE 121.

THE aspect of the Yeoman of the Guard in this and the following centuries is preserved to us in a very complete series of cotemporary monuments. The figure before us is from the picture of the "Field of Cloth of Gold" at Hampton Court. The mounted yeoman of the same date, armed with the long-bow, is seen among the sculptures of the Hotel de Bourgtheroulde at Rouen, figured by Fragonard, and reproduced in relief in the façade of the Renaissance Court at Sydenham. In 1568 we have the very curious brass at East Wickham Church, Kent, the full-length picture of "William Payn, late youman of the Garde." In a plate of the *Diversarum gentium Armatura equestris* of Vischer, published in 1617, and re-engraved by Grose, vol. i. p. 176, we again obtain a picture of the mounted yeoman, now armed with a harquebus. In 1630 a second monumental brass supplies a further example: this is in Winkfield Church, Buckinghamshire, the memorial of "Thomas Mountague, borne in this parishe, where also he died, when he had lived almost 92 yeares, and had bene a good part therof a Yeoman of the Guard and a freinde to the poore." In this monument the yeoman is represented carrying a halbert in one hand and with the other bestowing bread on poor peasants, who are also pictured in the brass. And it is further to be noted that, in this composition, the ancient custom of giving to the chief personage a pictorial preponderance is kept up, the yeoman being twice as large as the recipients of his bounty. From a comparison of these various delineations we find that the Yeoman of the Guard had no settled costume, but his dress followed the changes of the times. In the figure before us

he has the small, low cap, the slashed garments, and the square-toed shoes of Henry the Eighth's reign: in the Wickham brass the shoes are sharp-pointed and the slashings have disappeared: in the picture of Vischer the horseman wears a tall hat with plume, a broad frill, and great top-boots; while the mounted soldier in the Rouen sculpture has a plain low cap, tight hose with shoes, and a dress fitting close at the neck. The arms, too, were subject to similar change: we find in succession the bow, the halbert, the partizan and the harquebus. But there is one particular of the costume which is maintained throughout: on the breast and on the back of the coat is always seen the royal badge of the Rose ensigned with a Crown. Hentzner, in his travels in 1598, mentions the Rose on the *backs* of the yeomen as he saw them serve the Queen at dinner "bare-headed and clothed in scarlet." These badges, and probably the whole coat, were richly decorated; for a warrant of 1553, quoted in Pegge's *Curialia*, part iii. p. 27, commands the delivery "to Peter Richardson, maker of the spangles for the rich Coats of the Queen's Highness's Guard, the sum of one thousand pounds." Again: "to Peter Richardson, goldsmith, for 7,175 ounces of spangles gilt, delivered to the Queen's *embroiderers* for embroidering the coats of Her Majesty's Guard, footmen and messengers." The embroidery of the coat is very clearly seen in the figure before us and in the Winkfield brass, but in the latter example the pattern is somewhat different and the Rose is placed between the royal initials, C. R. For a further account of the Yeomen of the Guard, see the collected notices in Pegge's *Curialia*, and compare Hall's *Chronicles*, pp. 539, 598, 643 and 707, ed. 1809.

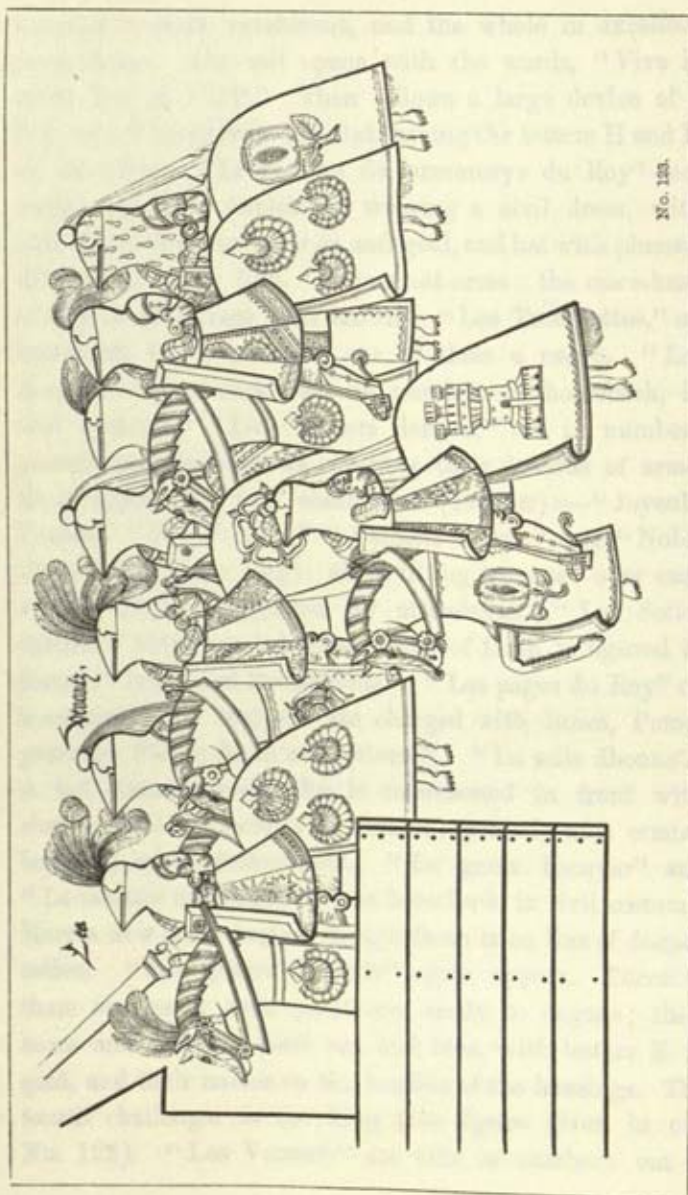
* Ibid., p. 28: both from Harl. MS., 643.



PLATES 122 & 123.

From the Tournament Roll of King Henry VIII. preserved in the Herald's College. The first subject represents the King, under the name of *Cœur loyal*, tilting with one of the knights composing the band of "Venantz," or accepters of the challenge. The Queen, with the ladies of her court and a company of noblemen in rich collars of gold, occupies the standing beyond the barrier, which itself is richly decorated with arras, hangings of cloth-of-gold, and a fretted covering of roses and portcullises. The king's armour is silvered, the saddle-front, chanfrein and crinet of the horse are also silvered. The bases of the king are in stripes; alternately letters K (for Katherine, the queen) in gold on a blue ground, and crimson cloth-of-gold. The trappers are blue with the device of *Cœur loyal* and the letters K in gold. Spurs, stirrups, bit and bosses of bridle gilt. The horse is black. The coats of the esquires are parti-coloured; dexter, yellow, sinister, violet: the hose, vermilion: hats, black with gold cording: the last has his hair confined in a crespine of crimson and gold. Massive golden chains are worn by both. The second subject represents eight of "Les Venantz," the ninth being engaged with the king. All the armour is silvered, except that of the last knight, which is gilded, with purple *guttae*. All the cointises are white marked with a delicate tint of lilac (kerchiefs of pleasance?). Wherever there is a flowered pattern, on the bases, &c., it is of crimson cloth-of-gold. The original Roll is 14½ inches broad, the figures of the knights and others are 7 and 8 inches high: the

material is stout parchment, and the whole in excellent preservation. The roll opens with the words, "Vive le noble Roy H. VIII^e." Then follows a large device of a Rose and Pomegranate impaled, having the letters H and K on the sides. "Le maistre de larmurerie du Roy" succeeds: he is on horseback, wearing a civil dress, with gold chain, crespine of green and gold, and hat with plumes. Attendants follow him. Serjeant-at-arms: the mace-head is formed of a large gold crown. "Les Trompettes," on horseback, six in number, one of them a negro. "Les Gorgyas de la Court," six in number, on horseback, in civil costume. "Les Officiers d'armes," six in number; poursuivants and heralds, wearing their tabards of arms. Next appear the four challengers (*Tenantz*):—"Joyeux Penser," "Bon Vouloir," "Vaillant Desyr," and "Noble Cœur Loyal" (the king): all in tilting harness: over each a "pavillion," supported by attendants. "Les Selles d'armes:" these are led horses: one of them is figured in Shaw's "Dress and Decorations." "Les pages du Roy" on horseback: the trappers are charged with Roses, Pomegranates, Fleurs-de-lis and letters K. "La selle dhonne." A led horse, armed: he is caparisoned in front with cloth-of-gold bordered with ermine; behind, with ermine bordered with cloth-of-gold. "Le grant Escuyer" and "Le maistre des Pages" are on horseback, in civil costume. Here a new scene begins, though there is no line of demarcation. "Les quatre Tenantz" again appear. Three of them are under their pavillions, ready to engage; their bases and trappers parti red and blue, with letters K in gold, and their names on the borders of the housings. The fourth challenger is the king (the figure given in our No. 122). "Les Venantz" are nine in number: one is



tilting with the king: the remaining eight are copied in our plate No. 123. It is singular that this band also, the opponents of the king and his fellow-challengers, should exhibit on their trappers the devices of the royal pair, the rose, castle, and pomegranate. A third scene follows:—"Le son des Trompettes. A l'hostel." This was the signal to quit the field. "Lyssue du Champ." A company of horsemen in civil dress. "Le heaulme du Roy:" this is carried on a truncheon by a richly-clad officer on horseback. The helm is silvered and at the neck has a border resembling the circle of a crown, elaborately ornamented with gold, pearls and coloured stones. It is surmounted by a royal crown of rich character, but unaccompanied by any mantling or other decoration. "Le Roy desarmey" presents us with a picture of the king in a civil costume. He wears over a splendid dress a broad, richly-jewelled collar, and carries part of a broken lance in his hand. This figure is given in Dallaway's "Heraldic Inquiries." Near the end of the roll again appears the Queen with her court, in a gallery; and the whole concludes with a copy of verses in praise of the king, in which the monarch is cited as the tenth Worthy of a band composed of Hector, Cæsar, Judas Maccabæus, Joshua, Charlemagne, King Arthur, Alexander, David, Godefroi de Bouillon, and Henry VIII.*

The splendid character of the knightly dress and of the trappers of the coursers at this time is witnessed by many cotemporary evidences. Hall the Chronicler has a rich abundance of such testimonies, and appears to have taken

* These verses are printed in the first volume of the *Vetusta Monumenta*, where also is engraved a reduced copy of the roll itself. The groups forming our Nos.

122 and 123 have been copied by the writer from the original roll in the Herald's College, by the kind permission of Sir Charles Young.

an especial delight in recording the glitter of the spangles and the costliness of the cloth-of-gold. In 1509, "the trompettes blew to the feld (for 'a justes') the fresh young galantes and noble menne gorgeously appareled, with curious devises, of cuttes and of embrouderies, aswell in their coates as in trappers for their horses, some of gold, some in silver, some in tynsels, and diverse other in goldsmithes worke goodly to behold." Other joustes had "riche plumes, and other devises on their hedde peces, their bases and trappers of tissew, clothe of golde, silver and velvet^a." In 1516, at a *solempne justes* held in honour of the king's sister, the apparel of the challengers and their horses "was blacke velvet, covered all over with braunches of hony suckels of fine flat gold of damaske, of lose worke, every lefe of the braunche moving, the embrouderie was very conning and sumptuous^b." In 1517, the king jousted, having his bases and bardes "one halfe clothe of silver, the other halfe blacke tinsell, on the silver a curious lose worke of white velvet embrauderied with golde: on the blacke tynsell side was blacke velvet embrauderied with golde and cut, and every cut was engrayled with flat gold of Damaske. The base and barde were brouderied with greate letters of massy gold bullion, full of pearles and stones, merveilous riche. The kyng had on his hed a ladies sleve full of Diamondes^c."

Some of the "devises" worn on these occasions are of a puerility which is scarcely credible. "In the moneth of Marche (1522) came certain noble men from the Emperor to the King, which the more to solace theim enterprised a justes. He himself was chief on the one side. His

^a Hall, p. 511, ed. 1809.

^b Ibid., p. 584.

^c Ibid., p. 591.

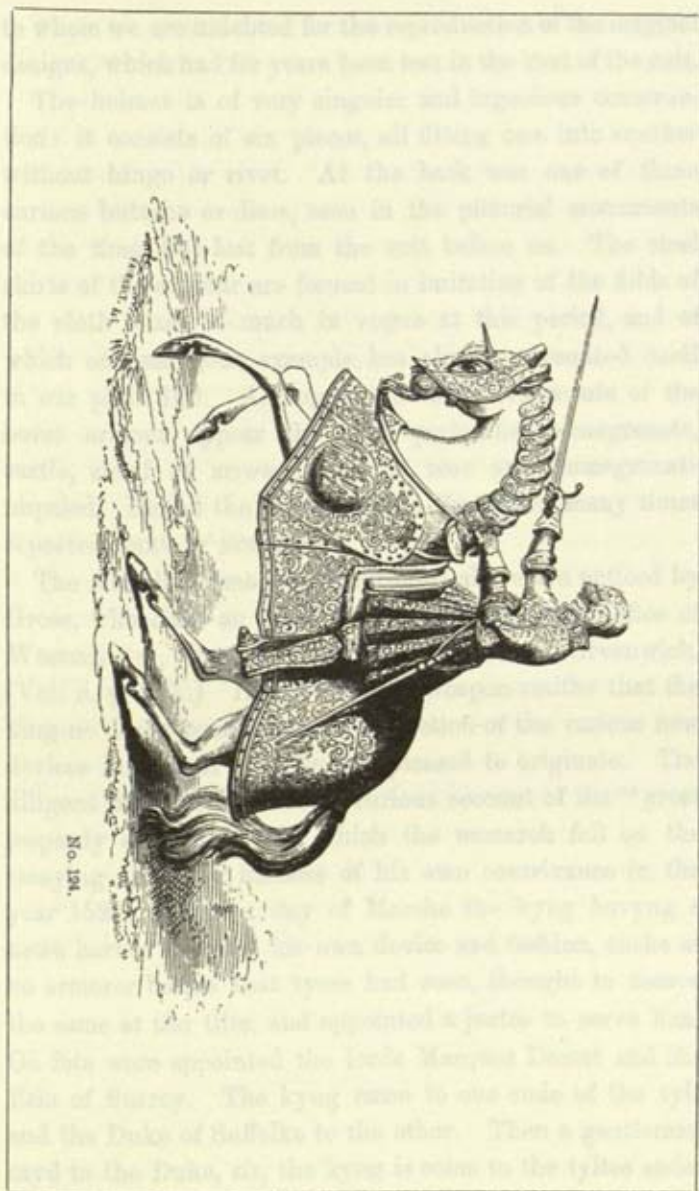
courser was barded in cloth of silver of Denmarke, embroidered with L. L. L. of golde, and under the letters a harte of a manne wounded, and greate rolles of golde with blacke letters, in whiche was written, *mon navera*. Put together, it is, *ell mon ceur a navera*, she hath wounded my harte^d." This example is selected, not because it is the most absurd, but because it is short. Singularly ridiculous as are these devices, they are not the extent of the knightly follies of this age. One requires to read twice or thrice the records of the time before one can feel assured that the chronicler has really told us that a peer of the realm of England proceeds to a tournament in the inside of a Red Dragon, a fellow peer accompanying him inside of a "Mountain of green," on the summit of which rides a young lady pleasantly beseen. "Eftsoones the trumpets blewe up the field in goodly manner of warre; and anone came out Guillam de la Rivers in his pavilion, in a goodly *Shippe*, borne up with men, himselfe riding within in the midst. The Lord William of Devonshire in a *Red Dragon* led by a Gyant and with a great Tree in his hand. Thearle of Essex in a great *Mountaine of greene*, the which served for his pavilion, with many Trees, Rocks, Hearbes, Stones and marveyulous Beasts upon the sides: on the Height of this Mountaine there was a goodly young Ladye in her Haire pleasantly beseene^e." The manner of these strange vehicles is admirably shewn in the curious work of Balthasar K  chler, the pictorial record of the festival on the marriage of the Duke of W  rtemberg and the Margravine of Brandenburg; where we find exactly reproduced the travelling mountains and itinerant dragons of Tudor times.

^d Hall, p. 630.^e Justs in 1501; Leland's *Collectanea*, v., 358.

PLATE 124.

BODY-ARMOUR and horse-armour of King Henry VIII., preserved in the Tower of London. This is one of several suits repositied in the Tower which undoubtedly belonged to this monarch. The harness before us is engraved over its whole surface with subjects from saintly legends, heraldic devices, and scroll-work. The Tudor cognisances, the rose, the portcullis, and the red dragon appear in various parts of the suit, interspersed with those of Queen Katherine of Arragon, the sheaf of arrows and the pomegranate; while, on the edge of the skirt are the initials of the king and queen, H. and K., united by a "true-lovers-knot." The figures in the legendary groups afford good illustration of the civil and military costume of the period, and in their treatment are strikingly characteristic of the school of Albert Durer and Burgmeir. The suit appears to have been made for the king on occasion of one of the numerous pageants held in honour of his marriage with Katherine of Arragon. It is clearly of German manufacture, but whether made in Germany or by some of the "Almaine armourers" employed by Henry in London, it is not possible to ascertain. The ground of the armour has been silvered, the engravings being added subsequently. This is the exact process followed:—the steel was first hatched throughout in very fine lines; then the whole surface was covered with beaten silver; and finally, the engraving was added. Most of these engravings have been figured in the *Archæologia*¹, from drawings by the late G. Lovell, Esq.,

¹ Vol. xxii.



to whom we are indebted for the reproduction of the original designs, which had for years been lost in the rust of the suit.

The helmet is of very singular and ingenious construction: it consists of six pieces, all fitting one into another without hinge or rivet. At the back was one of those curious buttons or discs, seen in the pictorial monuments of the time, but lost from the suit before us. The steel skirts of the armour are formed in imitation of the folds of the cloth bases so much in vogue at this period, and of which an analogous example has already presented itself in our plate 109. Among the heraldic ornaments of the horse armour appear the rose, portcullis, pomegranate, castle, sheaf of arrows, and the rose and pomegranate impaled. Round the lower edge is the motto, many times repeated, DIEU ET MON DROIT.

The *Almaine* armourers mentioned above are noticed by Grose, who cites an entry in the Remembrance Office at Westminster, shewing that they worked at Greenwich. (Vol. ii. p. 251.) It was to these weapon-smiths that the king no doubt confided the construction of the various new devices in armour that he was pleased to originate. The diligent Hall has preserved a curious account of the "great jeopardy of death" into which the monarch fell on the essaying of a new harness of his own contrivance in the year 1524. "The x. day of Marche the kyng havynge a newe harnes made of his own devise and fashion, suche as no armorer before that tyme had seen, thought to assaye the same at the tilte, and appointed a justes to serve him. On fote were appointed the lorde Marques Dorset and the Erle of Surrey. The kyng came to one ende of the tylt and the Duke of Suffolke to the other. Then a gentleman sayd to the Duke, sir, the kyng is come to the tyltes ende.

I see him not, sayd the Duke, on my fayth, for my head piece taketh from me my sight. With these wordes, the kyng had his spere delivred him by the lorde Marques, the visier of his headpece beyng up and not doune nor fastened, so that his face was clene naked. Then the gentleman sayd to the duke, sir, the king commeth: then the duke set forward and charged his spere, and the kyng likewise unadvisedly set toward y^e duke. The people perceivying the kynges face bare, cryed hold, hold: the duke neither saw nor heard, and whether the kyng remembred that his visier was up or no, few could tell. Alas what sorrow was it to the people when they saw the spleters of the dukes spere strike on the kynges hedpiece: For of a suretie the duke strake the kyng on the brow right under the defence of the hedpece on the verye coyffe scull or bassenetpece whereunto the barbet for power and defence is charnelled, to whiche coyffe or bassenet never armorer taketh hede, for it is evermore covered with the visier, barbet and volant pece, and so that pece is so defended that it forseth of no charge. But when y^e spere on that place lighted, it was great iepardy of death, insomuche that the face was bare, for the dukes spere brake all to shyvers and bare the kynges visier or barbet so farre backe by the countre buffe that all the kynges headpece was full of spleters. The duke incontinently unarmed him and came to the kyng, shewyng him the closenes of his sight, and sware that he would never runne against the kyng more. But the kyng sayd that none was to blame but himself^e."

^e Hall, p. 674, ed. 1809.

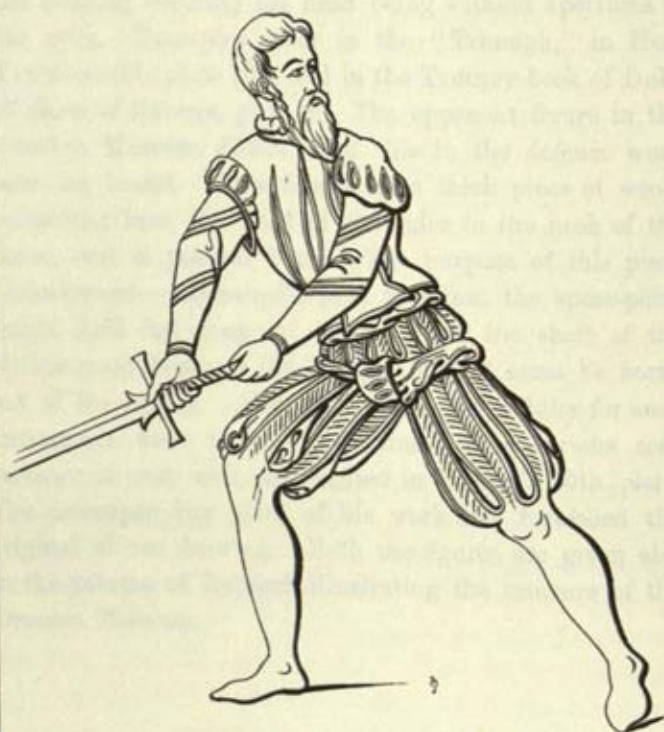


No. 125.

PLATE 125.

ONE of two figures in the Dresden Museum. They bear the names of Augustus I. Duke of Saxony, and Albert Duke of Austria, and the armour worn by them is said to be that used at a joust in 1557. The figure before us is the one representing the Duke of Saxony, whose arms, it will be seen, are on the trapper of the horse. This arming was employed for the tilt with sharp spears (*Scharfrennen*), and the champion has a double set of defences throughout. In front of his salade is the reinforcing piece called the *grande-garde*, apertures for sight existing on the right side only. This piece descends as low as the waist. While the left side is thus strengthened by the *grande-garde*, the right is additionally protected by the great vamplate of the lance (*Brechscheibe*), of which a portion projects in front in the form of a tube, and through that the lance is passed. The leg has the defence called *Knieplatte*, which on some occasions was fixed to the saddle by screw or rivet, at other times was attached merely by straps. Good examples of both modes will be found in the Tourney-book of Duke William IV. of Bavaria, and real specimens are in the Tower collection. In the Tower also are examples of the vamplate of this fashion, Nos. $\frac{1}{2}$ and $\frac{3}{4}$; and another, engraved and gilt, is in the Royal Military Repository at Woolwich. The butt of the lance, it will be seen, is supported by the piece called the *queue*: this was of iron, and made fast to the body-armour by screws. See the Tower specimen, No. $\frac{1}{2}$. Figures thus armed with sharp lance, great vamplate and knee-plate, are found like-

wise in the "Triumph" of the Emperor Maximilian. Over the armour below the waist the champion wears bases of embroidered cloth. The horse, in addition to his trapper, has a collar of bells or *grelots*. It may be remarked that occasionally the horse was entirely blindfolded, the part of the housing covering his head being without apertures at the eyes. Examples occur in the "Triumph," in Herr Tewrdannekh, plate 101, and in the Tourney-book of Duke William of Bavaria, plate 2. The opponent figure in the Dresden Museum differs from this in the defence worn over the breast. It is formed of a thick piece of wood, extending from the head of the rider to the neck of the horse, and is painted black. The purpose of this piece (*Schutzwand*—*manteau-d'armes*) was that the spear-point might hold fast upon it; when, either the shaft of the striker must break or the stricken knight must be borne out of his saddle. And to this end, the saddles for such encounters were made low behind. This curious contrivance is very well represented in Hefner's 75th plate. The accompanying plate of his work has furnished the original of our drawing. Both the figures are given also in the volume of Reibisch illustrating the armours of the Dresden Museum.



No. 126.

PLATE 126.

THE two-hand sword was never in such high favour as during the sixteenth century. It was now employed by the high and the low; by the royal combatant in the lists and by the humble mercenary of the mountains. The Swiss were especially celebrated for their adroitness in the use of the weapon, and the Scotch appear to have held it in much esteem. This was a natural result of the conformation of the arm itself, for while the harquebus and cross-bow, and even the axe and the halberd, might be successfully wielded by any soldier of moderate strength, the *spadone* could only be employed with effect by men of superior force and the greatest agility. It soon, however, fell into disuse, for there is a fashion in weapons as in most other human inventions, and as the short axe of the fourteenth century had given way to the pole-axe of the fifteenth age, so the two-hand sword was in its turn superseded by the rapier, and the duello of the rapier eventually supplanted by that of the pistol. The two-hand sword is very rarely seen after the close of the sixteenth century. The combatant in our plate is from a Fencing-book in the Royal Library of Munich, and has been engraved in Hefner's *Trachten*, where also is given his antagonist, similarly armed and clad. Other pictures of the two-hand swordsman occur in the "Triumph" of the Emperor Maximilian, in Holbein's *Costumes Suisses*, in the *Trattato di Scienza d'Arme* of Camillo Agrippa in 1553, in Jost Aman's *Künstbuchlin*, plates 114, 115 and 281, and in Hefner's work, plates 10 and 23. Examples of the sword alone are figured in Hefner's plate 8, in Grose's "Ancient Armour,"

pl. 22, and in Wilson's "Annals of Scotland," p. 684. A very fine specimen of the fighting two-hand sword will be found in the Tower Armory, No. $\frac{7}{8}$ of the Catalogue: it was formerly in the collection of the Earl of Shrewsbury. Of the two-hand Sword of State, there are several very good examples in the Tower. The variety of the *espadon* which had a wavy blade was called the *flamberge*. This weapon was not usually provided with a scabbard: it was carried over the shoulder in the manner of a bill or halberd, and to this end the lower part of the blade was covered with leather. King Henry VIII., to whom no weapon seems to have come amiss, amused himself occasionally with the two-hand sword. "The same yere, in the feast of Pentecoste holden at Grenewyche," writes Hall, "hys grace, with two other with hym, chalenged all commers to fighte with theim at the barriers with the targot and casting y^e spere of viii. fote long; and that done, his grace with the sayde two aydes to fight every of them xii. strokes with twohanded swordes; where the kyng behaved hymselfe so wel, and delivered himselfe so valiauntly by his hardy prowes and greate strength, that the prayse and laude was geven to his grace and his aydes; notwithstanding that divers valyaunt and strong persons had assayled hym and his aydes^b." A singular entry occurs in the "Inventory of the Regalia of King James I. in the secrete jewel-house within the Tower of London," printed in the "Kalendars and Inventories of the Exchequer," vol. ii. p. 306:—"Item, one greate Twoe handed Sworde garnyshed wth sylver and guylte, presented to King Henry the viiith by the Pope."

^b Chron., p. 515, 2nd of Henry VIII.



PLATE 127.

FIGURE of a *German Reiter* or Pistolier of the middle of the sixteenth century; from a cotemporary pattern-drawing for glass-painters, engraved by Hefner, plate 71. We have already, under No. 112, taken some notice of this horse-soldier, who, as we have there seen, was sometimes provided with defensive armour. The figure before us has a hat of beaver, which at this time was frequently worn in battle in lieu of casque or morion. Compare plate 140 of Jost Aman. The gloves are of quilted-work, having an aperture in the palm through which the fingers might be passed, for the more convenient management of the weapon. Besides his pair of wheel-lock pistols, the soldier carries a sword and dagger. The pistolier's arming differed in various countries, both in his body-defence and weapons. In the Instructions of the Privy Council to the citizens of Norwich in 1584 for raising troops, "their honors think it expedient that the light horseman shall *now rather bee furnished* his case of pistolls, light horsmans staffe, swoord, and dagger, a jack of plate or a cote of plate, with a skull for his head with cheekes covered with cloth, or such like; or, in place thereof, a burgonet with a corslet." His "sadle to bee light, accordyng to those of the northern light horsemen, and yet suche as a case of daggs¹ may bee fastened to the pommell thereof^k." In Sutcliffe's "Practise of Armes" in 1593, we read, "Upon the borders betwixt us and the Scots, horsemen have staves^l, and for their armes jackes of male. The Dutch^m reitres, although

¹ Another name for pistols.^k Norfolk Archaeology, vol. i. p. 22.^l Spears.^m German.

well armed for the most part, yet seldome use lances or staves, or other weapon than pistoles, and mazes at their saddle-bowe." The "Almayne reiters" were occasionally intermingled with the foot (*Landsknechte*) on the field of battle. Thus, Martin du Bellay, under 1544:—"Pendant laditte charge, les batailles des lansquenets imperiaux, et celles des Suisses et François, s'aborderent. Or avoient les François mis, entre le premier rang et le second, un rang d'arquebouziars, et les Allemands un rang de pistoliers, lesquels tiroient par entre ceux du premier rang^a." The ordinary mode of attack of pistoliers was by advancing close to the enemy, when the first rank delivering their fire wheeled off to the right and left and hastened to form again and to reload in the rear. As their arms made openings in the adverse ranks, the horsemen dashed in, and the combat "came to hand-strokes," as the term was. Thus, Gaspard de Saulx in his *Memoirs*:—"Ils ne chargoient jamais à fond, mais, arrivés près de leurs ennemis, le premier rang tourne à gauche, descouvre le second, qui tire de mesme, et le tiers semblablement, l'un après l'autre faisant *un limaçon* et s'éloignant à main gauche pour recharger." And in the "Commentaries of Sir Francis Vere," speaking of the "Action at Turnhoults" in 1597, the writer tells us that the pistoliers charged the enemy's pikemen, "not breaking through them at the first push, as it was anciently used by the men-of-arms with their barded horses, but as the long pistols, *delivered at hand*, had made the ranks thinne; so thereupon the rest of the horse got within them," &c.^b

The pistol itself at this time had usually a circular

^a Vol. iii. p. 509, ed. Petitot.

^b Page 291.

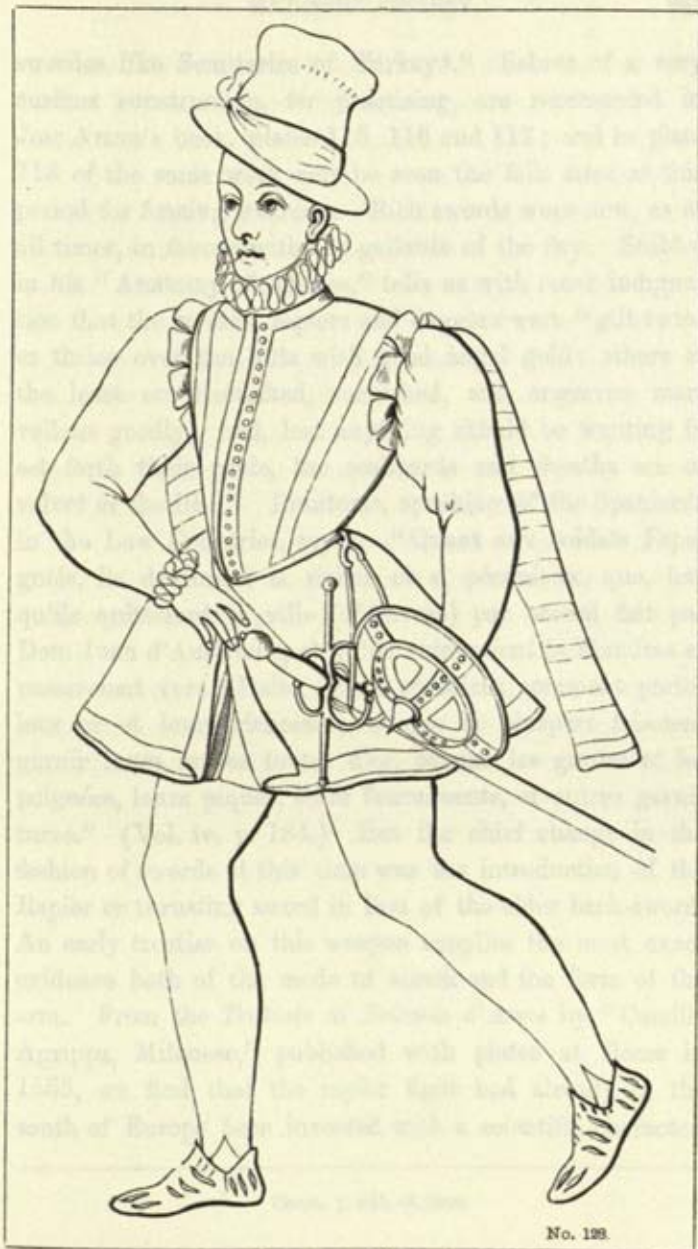
^c Page 79, ed. 1657.

pommel, as in the drawing before us. It was sometimes double-barrelled. No. 2 of the Tower collection is a good example, the barrels being placed *vertically*: it was made at Nuremberg, where, we are told, the invention of the wheel-lock originated. Besides the double-barrelled arm, we find at this date a pistol from whose single barrel two, or even three balls might be fired in succession. This was effected by having two (or three) locks and as many touch-holes, the charges being divided in the barrel by a wad only. See Tower collection, Nos. 2 and 3. The pistol was also combined with other weapons—with the axe, the mace, the spear, the sword, &c. Examples are in the Tower museum. The price of the ordinary wheel-lock pistol in 1559 was 16s. 8d. (*Archæologia*, xxxvii. 478;—and compare *Archæol.*, xxxv. 357, in 1574.) Other figures of the pistolier of this time will be found in Jost Aman, plates 140 and 141, and in the Kerrich Collections, Add. MS., 6,729. See also, for the weapon alone, *Archæologia*, vol. xxxi. plate 21, and our No. 135, both from originals in the Tower of London.

Towards the close of the century the flint-lock (*Schnapphahn*) begins to appear. The earliest notice of this invention ever observed by the writer is that printed in the first volume of the "Norfolk Archæology," the record of a payment by the Chamberlain of Norwich in 1588 "to Henry Radoe, smyth, for making one of the old pistolls with a snapphance and a new stock for it." (Page 16.) This German name of *Schnapphahn* borne by the flint-lock in its earliest days, pretty clearly shews that the invention was a German one.

PLATE 128.

UNDER No. 118 some notice has been offered of the swords of the first half of the sixteenth century. Those of the second half may now be examined. All the varieties of guard found in the previous period are continued through the present. In addition we have:—1. Cross-piece with small side-shell: 2. Side-shell and finger-guard: 3. Scroll finger-guard: 4. Finger-guard, cross, finger-loop and shell beyond: 5. Cup guard (for rapier). Other forms exist, but it is quite impossible without many drawings to give an exact idea of their contrivance. Some of the more striking of these last will be found in Schrenck von Notzing's *Armamentarium*, plates 18, 53, 107, 110 and 119, the *Armeria Real* of Madrid, vol. i. plates 8, 18 and 26, and Hefner's *Trachten*, plates 66, 77 and 141. Examples of those named above:—1. Von Notzing, pl. 25, Jost Aman's *Kunstbüchlin*, pl. 175: 2. Hefner, pl. 43, Jost Aman, pl. 175: 3. Hefner, pl. 2: 4. Portrait of Sir Charles Blount, 1602 (Print Room, Brit. Mus.): 5. Madrid Armory, vol. ii. pl. 22, dated 1604. It should be observed that the guards with complex branches are of the next century. Some other kinds of swords may be mentioned: the sabre is seen in Jost Aman, plates 25, 41 and 112, and in Add. MS., 18,285, *Helvetiæ Descriptio*, A.D. 1607. The scymetar is figured in Jost Aman, plates 89 and 92. At Théroutenne, Hall tells us, "among the Frenchmen were certaine light horsmen called Stradiotes with shorte styropes, bever hatts, small speres, and



swerdes like Semiteries of Turkey⁹. Sabres of a very curious construction, for practising, are represented in Jost Aman's book, plates 115, 116 and 117; and in plate 116 of the same work may be seen the foils used at this period for fencing exercise. Rich swords were now, as at all times, in favour with the gallants of the day. Stubbs, in his "Anatomy of Abuses," tells us with much indignation that the swords, rapiers and daggers were "gilt twice or thrice over the hilts with good angel gold: others at the least are damasked, varnished, and engraven marvellous goodly: and, lest anything should be wanting to set forth their pride, the scabbards and sheaths are of velvet or the like." Brantome, speaking of the Spaniards in the Low Countries, says:—"Quant aux soldats Espagnols, ils devinrent si riches et si pécunieux, que, lors qu'ils quitterent la ville (d'Anvers) par accord fait par Dom Juan d'Austriche, et qu'ils vuideroient la Flandres et passeroient vers l'Italie, ils ne sçavoient comment porter leur or et leurs richesses; si que la pluspart faisoient garnir leurs espées toutes d'or, comme les gardes et les poignées, leurs piques, leurs fournements, et autres garnitures." (Vol. iv. p. 184.) But the chief change in the fashion of swords at this time was the introduction of the Rapier or thrusting sword in lieu of the older back-sword. An early treatise on this weapon supplies the most exact evidence both of the mode of attack and the form of the arm. From the *Trattato di Scientia d'Arme* by "Camillo Agrippa, Milanese," published with plates at Rome in 1553, we find that the rapier fight had already in the south of Europe been invested with a scientific character.

⁹ Chron., p. 543, ed. 1809.

We there see the duel with single rapier; that with the "case of rapiers," where each combatant holds a sword in each hand; with rapier and dagger; and with rapier and mantle (*cappa*), the mantle held in the left hand, to serve as a shield. Stow fixes the introduction of the rapier fight into England to the year 1578:—"The mode of fighting with the sword and buckler was frequent with all men till that of the rapier and dagger took place, when suddenly the general quarrel of fighting abated, which began about the 20th. of Elizabeth." The "*rondelle à poing*" was sometimes used with the rapier: it was very small, "*et ne servait que pour garantir la main des coups de dague ou de rapiere*." An example of this singular implement will be found in the Tower collection, No. 4.

The swordsman with buckler figured in our No. 128 is from the work of Caspar Rutz, *Omne pene gentium Imagines*, published in 1557, and represents the "*plebeij adolescentis in Angliâ habitus*." A very similar figure of a young Englishman, armed with sword and buckler, occurs in the *Habiti antichi* of Vecellio, published at Venice in 1589.

Armeria Real de Madrid.



No. 129.

PLATES 129 & 130.

PLATE 129 is the figure of a knight armed cap-a-pie, from a manuscript volume in the Heralds' College (Vincent, No. 220). The date of the armour about 1560. The breastplate, in the second half of the sixteenth century, affords a useful index to the date of the whole suit. About 1550 it is characterised by having a projecting point near the centre; later, the projection is brought lower down; and eventually the profile assumes that singular form which has obtained for this fashion of cuirass the appropriate name of "the peascod breastplate*." Our knight still wears the bases found in previous monuments. The sollerets have returned to proportions more in conformity with nature. Among the inventions of the armourer of this century, the locking gauntlet was one of the most singular. It is wrought in the form of a closed hand, the fingers being made to fasten by hook and staple. The right hand of the champion is thus enclosed in a sort of iron box, in which are two apertures only, to allow the passage of the handle of his weapon. The object of this contrivance was to prevent the weapon being struck out of the hand. Thus, a sword could not be dislodged, on account of the projecting crosspiece above and the pommel below. Examples are found in the Tower suits, Nos. 1 and 2, and a third specimen is preserved in the Hall of the Armourers' Company. The tassets, when the great bombasted garments came into vogue, were made in two parts; the upper to

* See plate 131.

overlie the bombast, the lower to fit close to the leg and join the knee-piece. Good illustration of this fashion is offered by the figures of the Hertford tomb, 1568, of which a cast is in the Sydenham collection. And compare the Tower suit, No. 4. The tomb-sculptures named above have also similar scarfs to that worn by our knight, and, being fully reproduced, exhibit with minute accuracy the form and arrangement of this adjunct. We have a curious cotemporary account of the particulars of a suit of armour bought about this time for the "Capitaine des enfans de Paris;" printed in the *Revue Archéologique*¹, from the original in the Archives of the Hotel de Ville of Paris. "Achat d'une armure par la ville, à l'entrée du roy." (Charles IX.) — "Charles Poille, marchand armurier, demeurant Rue de la Heaulmerie, confesse avoir vendu à Messieurs les Prévost des Marchans et eschevins de la Ville de Paris ung harnoy d'homme d'armes, complet, garny de Corps de cuirasse, tassettes, brassars, ganteletz, habillemens de teste, deux morions, l'ung commung, et l'autre carré, une rondache, trois armures de selles de cheval, et trois chanfrains; le tout à bandes dorées, le champ noir remply de crottesque dorée, le tout bon, loyal et marchant; (&c.) pour servir au Cappitaine des enfans de Paris à l'entrée du roy . . . Ceste vente faicte moyenant la somme de 260 escuz soleil."

In the figure here given, from a monumental brass at Margate, of the close of the century, we have a variety of the tassets, in which they are articulated from the waist to the knees. The warrior further exhibits the novel and unknighly appendage of a starched frill. The horse-

¹ Vol. v. p. 661.

furniture, seen in our No. 129, is very characteristic of the period at which we have arrived, the whole scheme of it shewing a wide departure from the medieval models and a strong impress of the art of upholstery. A variety of similar extravagancies is seen in the *Kunstbüchlin* of Jost Aman. In some of those examples the trappers have large bosses in the form of lions' heads, with great rings in the lions' mouths, and immense tassels appended to the rings. (See No. 228.) In others, the horses have not only feathers on their heads and necks, but even their tails are abundantly decorated with plumes. Similar instances occur in the *Tourney-book* of Duke William of Bavaria. Steel muzzles elaborately wrought in open-work, forming arabesques, heraldic and other devices, are also of this time. Sometimes letters were intermixed with the other open-work ornaments, as in the example in the *Tower Armory*, No. 130. It has figures of the imperial eagle and fleur-de-lis, the date 1572, and the letters I W D Z B M G D H G G, all in perforated steel. The import of the initials has not been ascertained. Such initials are sometimes those of the knight's motto. Thus, figures designed for regulating the costume of the retainers of the Duke of Saxony in 1524*, bear on the sleeve the letters V D M I Æ, a combination not less perplexing than the one given above. Referring to the Duke's motto, however, the difficulty at once vanishes:—"Verbum Domini manet in æternum."



No. 130.

PLATE 131.

PIKEMAN, with his "pyke trayling," from one of the groups of "Cyttizens of London practised in armes," in the Roll of the Funeral Procession of Sir Philip Sydney, 1586*.

The missile arm and the hand-arm which in the middle-ages formed the "strength of the battle" were the bow and the spear; but in the course of the sixteenth century these were superseded by the harquebus and the pike. At a later time, when the fire-arm had, by the addition of the bayonet, become a *defensive* as well as an offensive weapon, the pike fell into disuse, and the musquet alone formed the armament of the main body—that is, of the infantry. As in all times of transition, there was a certain degree of rivalry between the advocates of the different arms, and, as usual in such cases, the old captains looked with little favour on the innovating weapon. The eulogium of the Pike† by Sir William Waad, who was Clerk of the Council under Queen Elizabeth and afterwards Lieutenant of the Tower, places in a clear light the merits of this arm. "Now, to say somewhat by the way touching your armed Pikers; the only body, strength, and bulwark in the field; it is not a little to be lamented to see them so generally decayed in this land, giving ourselves so much to that French order of shot, whereby we have so wonderfully weakened ourselves, as it is high time to look to the restoring of them again. And yet, touching the use of

* By Thomas Lant. Copies are in the Herald's College, and Brit. Mus., C. 21. f.

† Written in 1596. It is contained in a tract among the Birch MSS. in the

Brit. Museum, No. 4,122: "Concerning the Defence of the kingdom against invasions." Printed in *Archæologia*, vol. xiii. p. 169.



No. 131.

shot, as it is a singular weapon, being put into the hands of the skilful and exercised soldier (being the pillars and upholders of the pikes, and without which there is no perfect body), so no doubt, on the contrary part, committed to a coward, or an unskilful man's handling, it is the pre-viest thief in the field; for he robbeth pay, consumeth victuals, and slayeth his own fellows in discharging behind their backs. And one thing even is as ill as this, he continually wasteth powder, the most precious jewel of a prince. Whereof I would wish captains not only to reject such as are altogether unapt, but also greatly to commend of them that discharge but few shot, and bestow them well; for it is more worthy of praise to discharge fair and leisurely, than fast and unadvisedly, the one taking advantage by wariness and foresight, whereas the other looseth all with rashness and hast. But to return to the pike again: myself being in the Low Countries and in the camp, when these great armies were last assembled, and perusing in every severall regiment the sorting and division of weapons, as well as their order and discipline, there were two nations (the French king's, one) that had not between them both a hundred pikes; whereof I much marvelling, and desiring greatly to know the cause that had moved them to leave the pike, which in my conceit I always judged the strength of the field; happening afterwards in the company of certain French captains, some of them antient in years, and such as were of the religion, I demanded the reason that had moved them to give over that defensible weapon, the pike, and to betake them altogether to shot? Not to any disliking, or other cause, said they, but for that we have not such personable bodies as you Englishmen have, to bear them: neither have we

them at that commandment as you have; but are forced to hire other nations to supply our insufficiency; for of ourselves we cannot say we can make a complete body.

"Moreover they affirmed, that in the time of Newhaven, if we had let them have but 6,000 of our armed pikes, they would have marched through all France; so highly esteemed they of the pike, who nevertheless in our judgment seem to have given over the same, or to make small account thereof."

Brantome also speaks highly of the pikemen, and particularly commends some of them for resisting the allurements of higher rank and pay, in order to remain among their old comrades of the corslet and morion. "I have known among our Bands," he writes, "an infinity of such; and they were not the less honoured and esteemed for this fancy of theirs. I have heard from divers captains and soldiers, who had seen him, that there was in the Spanish Bands a pikeman more than a hundred years of age, who had served in all the old wars of the Emperor, and in other campaigns, who would never accept a place of command, so pleasant in his eyes was the life of a simple soldier. Yet in such esteem was he held, that the Prince of Parma constantly called him to be of his Council, and sought his advice even in the conduct of his sieges. And most frequently his advice was followed, much to the advantage of the Prince and the other captains. What a fancy of this honest and brave old soldier, in his simple corslet, which he always wore, and his pike in his hand, to offer counsel to the greatest commanders! Possibly he did this for glory's sake, for in glory doth the Spaniard greatly delight^{*}." A duel with the pike, strange as such

^{*} *Œuvres*, vol. vii. p. 302, ed. 1787.

a contest may appear, was not altogether unknown. At the siege of Mesières, after a challenge sent by one of the Imperialists to a French knight, "le Seigneur de Lorges (on the French side) pensant estre chose honteuse qu'un homme d'armes françois fust provoqué par un alleman, et qu'on laissast l'homme de pied françois comme n'estant pareil à l'alleman, demanda aussi s'il y avoit homme qui vousist combatre de la pique, et qu'il seroit le champion pour l'attendre. Le Seigneur de Vaudray, surnommé Le Beau, du camp imperial, soudain s'y presenta. Le Seigneur de Lorges se trouva sur les rangs au lieu nommé, et ce seigneur et le Seigneur de Vaudray donnerent les coups de piques ordonnez, sans gaigner advantage l'un sur l'autre. Ce faict, chacun se retira en son lieu*." Possibly, to adopt the phrase of Brantome, this was done for glory's sake, for in glory doth the Frenchman greatly delight.

A Norwich document of 1588 gives us the price of the pike at this time:—"Payed to the Queenys pikemaker, for five score pikes, at iij*s*. viij*d*. a peyce, £xviii. vis. viii*d*.^b"

The same account supplies the prices of corslets, curats and morions in the same year. "To Rich. West of London, for x. whight corseletts, at xliiii*s*. a peyce. To Thos. Hurst of London, armourer, for vii. blacke corseletts, at xlvi*s*. a peyce. For iii. curats without hedpiecys, xxx*s*. For xx. playne moryons or hedpieces, at vs. xd. a peyce^c." The pikeman in our illustration wears a curat, that is, an armour comprising only back and breast plates; the latter piece being of the peascod form common at this period. The corslet with its tassets may be seen in our plate 139.

* Martin du Bellay, i. 317, A.D. 1521. ^b Norfolk Arch., vol. i. p. 11. ^c *Ib.*, p. 10.

PLATES 132 & 133.

THE "arquebusery" of the second half of the century differed but little from that of the earlier period. There were still two kinds of hand-guns used for military purposes; but the smaller was now commonly called the Caliver or *arquebuse de calibre*, because the bore of the arm, hitherto under no general regulation, but left to the caprice of each captain of a band, was of a determinate size, so that the common stock of bullets might fit every piece in a regiment. This is very clearly shewn in the Rules for the better Defence of the City of London drawn up by order of the Privy Council in 1588 by Edmund York, and printed in Maitland's "London⁴:"—"I remember, says the old soldier, when I was first brought up in Piemount, in the Count of Brisack's Regiment of Old Bandes, we had our particular Calibre of Harquebuzes to our Regiment; both that for one Bullet should serve all the Harquebuzes of our Regiment, as for that our Collonell would not be deceived of his armes. Before the Battell of Mountgunter (*Moncontour*—in 1569), the Prynces of the Religion caused seven thousand Harquebuzes to be made, all of one calibre, which was called *Harquebuzes du calibre de Monsieur le Prince*." It was Philippe Strozzi, Colonel-General of the French Infantry under Charles IX., who, according to Brantome,

⁴ Vol. ii. p. 1229, ed. of 1772. At sea, the disorder appears to have been still greater, for Sir Richard Hawkins, in his "Voyage to the South Sea," in 1593, writes:—"In the warres of Fraunce, in the time of queen Mary, and in other

warres, as I have heard of many auncient capitaines, the companie had but the fourth part (of prizes), and every man bound to bring with him the armes with which hee would fight." (p. 164, ed. 1847.)



No. 132.



No. 133

introduced into that service "la façon et l'usage des belles harquebuzes de calibre qu'on porte aujourd'huy. Bien est vray que Monsieur d'Andelot l'y façonna un peu, lors qu'il vint de prison du chasteau de Milan, ou il les apprit des Espagnols*." It would appear, therefore, that it was the Spaniards who originated this great improvement in the hand fire-arm. In the Tower collection are two harquebuses of this period (about 1595), the one a caliver, the other a musquet, which shew us exactly what these arms were. They were procured from Penshurst Place, Kent, where they formed part of a considerable number of similar fashion, some of which are engraved with the date, 1595. The length of the caliver is 4 ft. 10 in., that of the musquet 5 ft. 5½ in. Both are figured in the *Archæological Journal*, vol. x. p. 67. Their numbers in the Tower Catalogue are # and #. Compare the figures of a musquet and caliver in our plate 138. The caliver appears to have had a further recommendation, that it could be discharged much more rapidly than the musquet. Sir Roger Williams, in his encomium of the latter arm, does not deny the quicker fire of the former. "The calivers may say they will discharge two shot for one, but cannot denie that one musket shot doth more hurt than two calivers' shot'." London appears to have been the mart for the supply both of calivers and musquets to the rest of the kingdom. In 1588 the citizens of Norwich purchase a variety of arms and armour for their soldiery. Among the items in the account of payments we find:—"For xi. Englishe musketts, at xxviii. a piece, with the Rest, flask and toucheboxes†,

* *Œuvres*, vol. vii. p. 425; and compare page 429.

† *Brief Discourse of War*, 1590.

‡ The touch-box contained the fine powder for priming.

£xiii. xviii. Item, to Gyles Bechell of London, alien, for xxii. Dutche musketts wth rests and bandeleres, £xxii. Item, to John Cork, alien, for iiiii. guilt musketts wth the rests, at xxiiiis. iiiid. a piece. Item, for xi. playne muskets, at xiiis. ivd. a piece. Item, for vii. calyvers wth flasks and toucheboxes, at viiis. vid. a pece^a. Item, for ix. calyvers without flasks, at vs. a pece. Item, at Smart's key, for wharffage, xiiid. Item, for a sugar chest, to pack in y^e musketts, iis. vid." (Norfolk Archæology, vol. i. p. 11.) In Lord North's Household Book, 1577, we have the payment, "To Stanton of Tower Hill, for xl. calivers furnished, xxvii. xiiis. iiiid." Of gilt harquebuses we again hear in the Tower Survey of 1559, published by Mr. Cooper in the *Archæologia*, and it is satisfactory to find in that entry a memorandum testifying to the excellence of the English gun-makers of Elizabeth's reign. "Guilt harquebuts (in store) 397: to be new bought within the realm, 400: the peeces made within the realm are double as good as any other." (Vol. xxxvii. p. 477.) The smaller harquebus or caliver is figured in our illustration, No. 132, from the Roll of the Funeral Procession of Sir Philip Sydney in 1586; in Jost Aman, plates 145 and 148; in Hefner's *Trachten*, pl. 77; in Add. MS., 18,285, fol. 74; and compare the similar arms, though for the chase, in Stradanus, 1578.

The figure from the Sydney roll (132) is named a "Hargibuzire." It will be observed that, while the "Muskater" in the same procession wears the Collar of Bandiliers, the harquebusier carries the Flask only. In the Norwich document cited above we also find the caliver accompanied by the flask: "calyvers with flasks and touche-

^a "Harquebush complete, viiis." *Archæologia*, xxxv. 357 (in 1574). "Harquebutt complete, viiis." *Ibid.*, xxxvii. 478 (in 1559).

boxes." And again, at page 19 of the same work, "Item, to Henry Rade, for a flask and touchebox for a calyver, iis. vid." The musquets, however, have sometimes the "flask and touch-box" in lieu of the bandiliers. (*Ibid.*, p. 11.) The much-curved stock seen in our example, No. 132, appears to have been "the French fashion," while the straight stock was the Spanish mode. Sir Roger Williams (speaking of musquets) says:—"for the recoyling, there is no hurt, if they be streight stocked, after the Spanish manner: were they stocked crooked, after the French manner, to be discharged on the breast, fewe or none could abide their recoyling; but being discharged from the shoulder, after the Spanish manner, there is neither danger nor hurte." Brantome mentions with more approval the curved stocks, and even announces himself the inventor of them. "Davantage, sans un honneste Gentil-homme, que je ne nommeray point, de peur de me glorifier, qui trouva la façon à coucher contre l'estomac, et non contre l'espaule, comme estoit la coustume alors," &c. (*Eloge de Strozzi*, vol. vii. p. 429.)

The musquet of this time is very distinctly represented in the Sidney figure, No. 133, with its serpentine overhanging the priming-pan, and its great trigger, to be pressed by the whole hand. In some instances, the barrel has a sight in the form of a short tube, as may be seen in the vignette at the end of this division (No. 135). Other pictorial examples of the musquet will be found in Jost Aman, plate 149, and in the subjects illustrating the Duke of Alva's administration in the Low Countries, 1566-8 (Add. MS., 6,729, fol. 37). Our "Muskater," it will be seen, has two flasks besides his bandiliers. The "great muskett flask" is to keep the reserve store of loading

powder, the smaller one in front is for the priming powder. Of the former, there are several in the Tower collection. The latter are very rare: there is one in the Lichfield Museum. A Norwich document of 1589 has:—"Item, for iii. great muskett flasks, ixs." (Norfolk Archaeology, i. 19.) In the same account:—"Item, for ii. bullett baggs of the best, iiis." The match-cord, in both our prints, is carried at the girdle. Occasionally it was fastened round the arm, as in the figure on fol. 74 of the *Helvetice Descriptio* (Add. MS., 18,285). And it was sometimes wound round the hat¹.

A singular missile was used at this period with the musquet—the musquet-arrow. An early notice of it occurs in "Thaccount of Robert Goldman, Chamberlayne of the Citie of Norwiche, for provysyon of Armo^r and Munycon," &c., in 1587:—"Item, for a dozen arrow heds for musketts, iis. ^k" In 1589 the same Robert Goldman records the payment "to Willm Fforde, ffletcher, for a dozen arrowes

¹ Of the smuggling of arms and gun-powder into England at this period, the chief smuggler being no less a personage than Sir Thomas Gresham, the receivers the Queen's ministers, and the "smugglers' cave" the Tower of London, see Burgon's *Life and Times of Sir T. Gresham*, i. 286, 288, 293, 318, 329 and 477; the original documents being in the State Paper Office, *ad an.* 1559-60. These contraband goods were shipped under the name of silks, satins and velvets. "You shall undyrstand, writes Gresham, that every piece of doble geyne velvet is one thousand weight of corrin powdyr (corn powder), and one piece of velvet of pill and a halfe ys 1 M. waight of serpentyne powder. You must devyse some waye wherby the thinges maye be secretly conveyed to the Tower. If it is dis-

covered (at Antwerp) there is nothing short of death with the searcher and with him who enters it at the custom-house." (p. 321.) About this time Gresham imported "18,000 coralets, at 26s. 8d. each; 16,000 corriers (curats) at 16s. 8d.; 16,000 morrions at 6s. 8d.; 8,000 pickes (pikes) at 3s.; 16,000 Collen (Cologne) staves at 2s.; 15,000 handguns at 7s.; 18,000 dagges (pistols) at 16s. 8d.; 260,000 of serpentine powder at 3℔. the cwt.; 160,000 waight of corne powder at 3℔. 6s. 8d. the cwt.; 1,790 bundles of bowstaves at 11℔. the cwt.; 6,000 pike heads at 3℔. the cwt.; 2,000 coats of mail at 33s. 4d. each; 2,000 sleeves of mail at 10s. each; 200 van playttes at 4s. each; with saltpetre, sulphur, &c., amounting altogether to 108,956℔. 13s. 4d." (*Life*, vol. i. p. 478.)

^k Norfolk Archaeology, vol. i. p. 11.

fethered and heds for musketts and a case for them, *xxd.*¹" In 1593, Sir Richard Hawkins, in the account of his voyage to the South Sea, writes:—"General Michael Angell demanded for what purpose served the little short arrowes which we had in our Shippe, and those in so great quantitie. I satisfied them that they were for our muskets. They are not as yet in use amongst the Spaniards, yet of singular effect and execution, as our enemies confessed; for the upper worke of their shippes being musket prooffe, in all places they passed through both sides with facilitie, and wrought extraordinary disasters." The enemy, witnessing these marvels, sought to imitate the attack of their assailants; but herein they failed, "for that they wanted the tampkins, which are first to be driven home, before the arrow be put in; and, as they understood not the secret, they rejected them as uncertaine, and therefore not to be used. But, of all the shot now a-dayes, for the annoying of an enemy in fight by sea, few are of greater moment for many respects, which I hold not convenient to treat of in publique^m." In 1595 a royal commission appointed to ascertain the strength of the navy, and the military stores in hand at divers stations, finds at the Tower, "Musket arrowes, 892 shefe, 13 arrows, and one case full for a demi culvering:" at Woolwich, "Musket arrowes, with 22 shefe to be new *fethered*, 24 shefe 18 arrowes:" at Rochester, "Musket arrowes, 983 shefe, 6 arrowes: musket arrowes with fier woorkes, 109 shefe 4 arrowes." These last were for burning the sails of ships. Lord Verulam mentions them also, calling them "sprights." "It is certain, he says, that we had in use at one time for

¹ Norfolk Archaeology, vol. i. p. 19.^m Page 235, ed. of 1817.

sea fight, short arrows, which they call sprights, without any other heads save wood sharpened, which were discharged out of muskets and would pierce through the sides of ships." What Lord Verulam expressly affirms seems to be implied by all the extracts we have given, namely that the musquet-arrow was used for naval service only. Its form is very distinctly seen in the subject from Valturius, copied in Dibdin's *Bibliotheca Spenceriana*, iv. 47. The instrument from which it is propelled, indeed, is not in that instance a musquet, but a larger description of "gonne;" but even this small deviation confirms the general evidence to be derived from the example, for we have seen that part of the arrows in the Tower store were "for a demi-culverine."

It may be further noted that in the sixteenth century the weapon-smiths had a particular delight in combining the gun with various other arms. Thus, we have the "pole-ax with gonne," the "slaugh-sword with gonne at t'handle and crosse;" and with the gun was also united the two-hand mace, the axe, the spear, the horseman's-hammer, the saddle-bow mace, the tuck, and the military-fork. Examples of most of these will be found in the Tower Armory; where too may be seen the union of the fire-arm and the shield—"clypei ex quibus quater ejaculatur," as Paul Hentzner describes them on his visit in 1598 to the royal "Armamentarium."



No. 134.

PLATE 134.

AFTER the lapse of eighteen hundred years, we have still before us the Ancient-Roman *parmatius*; the light-infantry soldier equipped with sword and target (*parma*), and unprovided with body-armour. The figure is from the same source as the preceding two, and represents one of the "Cyttizens of London practised in armes"—a "Targiter." The use of the target (*rotella*—*rondache*) though rapidly declining, had nevertheless the countenance of several of the greatest captains of the age; especially of Prince Maurice of Nassau, who even caused an elaborate work to be printed, with engravings illustrating the exercise of the Targetiers, as practised by his own body-guard^a. Montgommery, in his *Milice françoise*, says:—"Je ne puis oublier le brave prince Maurice de Nasseau, estant pres de lui, en 1600, lorsqu'il prist les forts de Crève-Cœur et de Saint-André sur le Wal et sur la Meuse. Son expérience est que cent Rondeliers rompront deux cents Piquiers. Il est de cette opinion pour combattre de l'infanterie: Je voudrois que mes trois premiers rangs fussent moitié picquiers, moitié rondeliers, ayant des escoupettes en escharpe. Et aussi étoit-ce l'opinion de Don Gonzalès Fernando de Cordoua, lequel en a discoursu dans le *Tratado de re militari*." (p. 127.) Montluc gives evidence of the usefulness of the target, from his own ex-

^a "Maniement d'Armes de Nassau avecq Rondelles, piques, espées et targes, représentez par figures, selon le nouveau ordere du très illustre prince Maurice de Naasau," &c. It will be borne in mind

that the target differed from the buckler in this, that, while the latter was held at arm's-length by the hand only, the former was borne upon the fore-arm by two straps.

perience in the "camisade ° de la Basse-ville de Boulogne." "Cinq ou six Anglois vindrent à moi, ils me tirèrent quelques coups de flèches, et m'en donnèrent trois dans la rondelle, et une au travers de la manche de mailles que j'avois au bras droit; lesquelles, pour mon butin, je portai au logis". In 1562, in a sortie from the fort of Saint-Catherine, the leader carried a rondelle covered with green velvet^a. Suteliffe, in his "Practice of Arms," published in 1593, writes:—"Of the targettiers, those in the first rankes have targets of prooffe, the rest light targets. These should be made of wood, either hooped or barred with yron, in form ovall, three foote and a halfe in length, and two foote and a halfe in breadth. Against archers, targets are a very sure defence, and dangerous to the enemy after that men come to close. They are now disused, though most excellent in all services, save against horsemen in the plaine field. Targettiers are very effectual against shot, and mortal to pikemen. As only the first rankes of shot discharge, as the first targets be of prooffe, if once they come to reach shot with their swords, they put great numbers out of the fielde." The "rondeliers" were employed at the siege of Saint-Jean d'Angeli in 1621; on which occasion the French king (Louis XIII.) signified to his Grand-Master of the Artillery his intention to revert to the use of the target, judging it to be of great service. It does not appear, however, adds Daniel, who has recorded this circumstance, that the project was ever carried into effect^b. The Scotch highlanders, it is well known, maintained till a very late period their armament of sword and target. They employed these arms in the

^a Night attack.^b Daniel, *Mil. frua.*, i. 392.^c *Ib.*, p. 393.^d *Ib.*, p. 393.

memorable expedition of '45; and even later: "I remember, says Grose, many private men of the old highland regiment in Flanders in the years 1747 and 1748, armed with targets, which, tho' no part of their uniform, they were permitted to carry." The appearance of the Scotch soldiery at the close of the sixteenth century may be seen in the 200th plate of Kùchler's *Auffzug und Ritterspil*¹. Rich targets, of which examples are to be found in all extensive museums of armour, appear to have been occasionally used in action, though probably, for the most part, employed on ceremonial occasions. At the siege of Ostend in 1601, the troops of Sir Francis Vere, after a contest with the Spaniards, "brought in gold chains, Spanish pistols, buff jerkins, Spanish cassocks, blades, swords, and targets; among the rest, one wherein was enameled in gold the seven Worthies, worth seven or eight hundred gilders." In the Tower are preserved specimens both of rich and plain targets of this time, including those of the Scotch. And it is not unworthy of notice that, in the ornamentation of their shields, the highlanders retained the old patterns of interwoven bands familiar to us in the works of the Anglo-Saxons.

The cost of the soldiers' coats at this period was very variable. In the Norwich accounts of 1587 and 1588 we have them at 5s. 8d. each, at ten shillings, and a drummer's^x coat at a pound. "Item, for ocl. souldiers coats at

* Ancient Armour, p. 308.

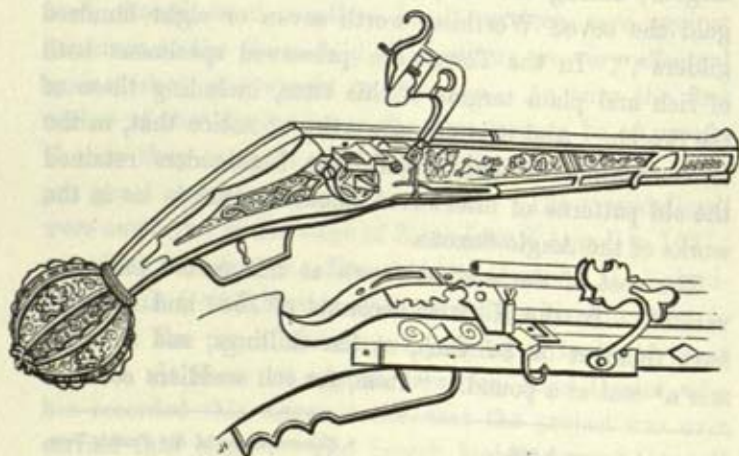
¹ The music accompanying these highlanders consists of drum and pipes. The drum is exactly like that of the present day, but the wind-bag of the pipes has the form of a goat—horns, beard, legs and all included.

* Commentaries of Sir Francis Vere, p. 174.

^x Pictures of the Drummer and Fifer may be seen in Jost Aman's *Kunstbüchlin*, plates 111, 146 and 290. And compare Kùchler, plate 110.

vs. viiid. apece, lxx£. xviii. viiid." "For the chargys of xxv. souldiers appoynted for her Ma^y servyce, viz. for ev'y one a coat, xs." &c. The drummer's coat was made of "grene carsey," embellished with eleven yards of lace and "vi. yards of poynting." Other coats of the Norwich contingent were of "bayes and carseys," the bill including a charge "for whight yncle to laye upon the same coats'." The same accounts give us the price of the ordinary sword and dagger of the infantry. *Ad an.* 1588:—"Item, for xii. swords and daggards of the worst sort, at viis. the sword and daggard, iiiii£. iiiis." (page 6.)

† Norfolk Archaeology, vol. i. pp. 6, 13, 15 and 17.



SEVENTEENTH CENTURY.



PLATES 136 & 137.

MUSQUETIER and Caliver-man, from the work published by command of Maurice, Prince of Nassau, the designs by Jacob de Gheyn. This curious volume, first printed in Dutch, was in 1607 translated into English and republished with the original plates, under the title of "The Exercise of Armes, for Calivers, Muskettes, and Pikes; After the ordre of his Excellence Maurits Prince of Orange," &c.; and this ordre, we are told in the preface, is that which "his Princely Ex^{ty} doth observe as the perfectest and best patterne in the using of the Calivers, Muskets and Pikes." The equipment of the Musquetier consists of musquet, rest, bandoliers, primer (or "touch-box"), bullet-bag (or purse), match-cord, and sword. The bullet-bag is not seen in the subject before us, but appears in the group at page 701, copied from the same work; where also is well shewn the comparative size of the musquet and caliver. From the volume of Hexham, "Principles of the Art Militarie, practised in the Warres of the United Netherlands," published in 1637, we learn that the most *sturdy* men were preferred for the musquetiers. In raising a company, he tells us, the captain "ought to make choise of the taller and abler men for his pikes, and of the shorter, stronger, and well set, with good legges, for his muskettiers; yea, such as may be able to endure both hardship and labour." And the same author judiciously advises "the good muskettier" to the "avoyding antique and dancing postures, which heretofore have beene taught by some officers, but now is growne ridiculous, not beseeming and becomming the grave comportment and carriage of a souldier." (p. 9.)

From another curious book of this time, "England's Trainings," by Edward Davies, published in 1619, we learn that Milan still held the first place for the manufacture of guns. "Make choice of a Myllan peece, for they be of tough and perfect temper, light, square, and bigge of breech, and very strong where the powder doth lie, and where the violent force of the fire doth consist, and notwithstanding thinne at the end. Our English peeces approach very neare unto them in goodnesse and beautie (their heaviness only excepted), so that they be made of purpose, and not one of those common sale peeces with round barrels," &c. Of flasks and bandoliers this writer says:—"Those souldiers which in our time have beene for the most part levied in the low countries have used to hang upon their neckes, upon a baudricke or border, or at their girdles, certaine pipes, which they call charges, of copper and tin, made with covers, which they thinke in skirmish to bee the more readie way. But the Spaniard, dispising that order, doth altogether use his flaske. The Frenchman both Charge and flaske. But some of our English nation *their pocket*; which, in respect of the danger of the sparks of their match, the uncertaine charge, the expence and spoile of powder, the discommoditie of wet, I account more apt for the show of a triumph than fit for the field in a day of service in the face of an enemy." The musquet-rest is to have "a string, which, tied and wrapped about his wrest, yeelds him commoditie to traine his staffe after him, whilst he in skirmish doth charge his musket afresh." "His flaske and touch box must keepe his powder, his purse *and mouth** his bullets." "Some, contrary to the

* It was even a point of honour to mouth; where, on service, they were allowed to march with bullets in the placed to be "in a readiness." Thus, on

lawes of the field, use chaine-shot, and quarter-shot, which is good in the defence of a breach, to keep a fortresse, or upon ship-board; but, being daily used, it will gaule a peece within and put it in hazard to breake." The manner of these musket chain-shot we learn from Sir Richard Hawkins, who names them in his "Voyage to the South Sea,"—"small shott, joyned two and two together with peeces of wyer of five or sixe ynches long, which, shot out of muskets, are of good effect, for tearing the sayles or cutting the tackling." (Section lxii.) Both musquet and caliver are to be fired, not from the shoulder, but from the breast. Thus, in the instructions of Prince Maurice: In firing, the muskettier is "to set the musket hard against the brest; for it is so, more gracefull; besides, he shall not lay his cheeke to the stocke before he have set the musket to his brest, because it hath other wayes no grace," &c. Plate 12 of the *Musquetiers* and Plate 11 of the *Caliver-men* illustrate this mode of discharging the piece. On the march, during rainy weather, the soldier is advised to have a case for his musquet, and for the match an "artificiall pipe of pewter hanging at his girdle, as the coale by wet or water go not out." (Davies.) This pipe is figured by Ward (p. 394), and described by him as "of tinne or latten, made like an elder pipe, about a foot long, with divers holes on eyther side, like the holes of a flute, to let in the ayre to keepe the match from extinguishing." This instrument, he says, was invented by the Prince of Orange, for a night attack, "to carry the light matches in, so that the sparks of them might not be discovered."

the surrender of Reading in 1643, the garrison is to march out with "lighted match, bullet in mouth, drums beating, and trumpets sounding." (Rushworth's

Collections, pt. III. vol. II. p. 266: and compare pp. 297 and 638—Articles of Surrender of Fort Stanford and of the City of York.)

The equipment of the Caliver-man consisted of flask, touch-box, bullet-bag, match-cord, sword, and dagger. Sometimes, however, he carried a bandolier in lieu of flask. Thus, in figure 22 of De Gheyn:—"How he shall open the charge of the flaske; or els, if he doe weare a bandolier," &c. For the caliver itself, see our No. 138.

From a passage of Davies, it appears that the "shot" were sometimes clothed in armour, a practice that he emphatically condemns. Being loaded, he says, "with a heavie shirt of male, and a burganet, by that time they have marched in the heat of sommer, or deepe of the winter, ten or twelve English miles, they are more apt to rest than ready to fight." The "shirt of male" he holds to be especially dangerous, "if a number of those small peeces should bee driven into a man's body by a bullet." The caliver seems to have gone out of fashion soon after 1630, for Hexham, in 1637, says, "forasmuch as of late yeres there are now noe Callivers in a foote Companie," &c.

The *orgue* or engine formed of a group of musquet barrels fixed in a frame, so as to be discharged in a volley, was still in repute. It is described by Ward, 1639, and called by him a "Frame of musquets," its purpose "to defend a breach, being fired with a train." In a MS. Survey of the Tower in 1679, we have:—

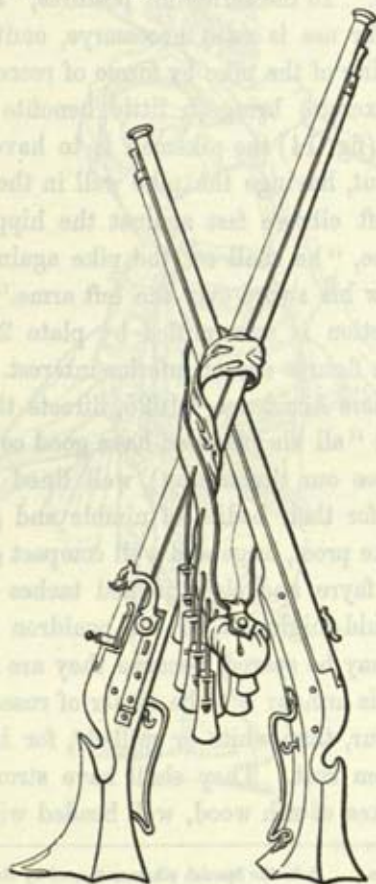
"Engin with 6 musquets in an old carriage 1.
Engin of 160 musquet barrels, with travelling and standing carriage . . . 1."

An engraving of the *orgue* is given in St. Remy's *Artillerie*.

The prices of the musquet and its appurtenances, according to "the Gunmakers Rates" of 7 Car. I, are:—"For a new musket with mould, worm and scowrer, *xvs. vid.* For a new barrell of a muskett, only forged and bored, fower foote in length, the bore according to the bullet of ten in



the pound standing, and twelve rowleing, viiis. For a muskett rest, *xd.* For a new bandalier with twelve charges, a prymer, a prying wire, a bullet bag, and a strap or belt of two inches in breadth, *iis. vid."* (Rymer, *Fœdera*, xix. 314.) The stocks were of walnut or beech: the price of the former, with its heel-plate of iron, was *2s. 6d.*; of the latter, with similar plate, *1s. 8d.*



No. 136.

PLATE 139.

FIGURE of a Pikeman of 1607, from the same work as the preceding; and which represents "the right manner and fashion of the arminge of his Ex^{tes} owne Garde, as it is at this tyme." In the series of "postures," is given only "that which for use is most necessarye, omitting diverse maners of tossing of the pike by forme of recreation, which in militarie exercise bringeth little benefite or profite." In the charge (fig. 14) the pikeman is to have "the right arm stretcht out, havige the pike well in the right hand, setting the left elbowe fast against the hippe." On an attack by horse, "he shall set the pike against the right foote, and draw his sword over the left arme." The manner of this action is exemplified by plate 25. The remainder of the figures are of inferior interest. Markham, in his "Souldiers Accidence," 1625, directs the captain to be careful that "all his pikemen have good combe-caps for their heads (see our illustration), well lined with quilted caps, curaces for their bodies of nimble and good mould, being high pike proof, large and well compact gordgetts for their neckes, fayre and close joyned taches (tassets), to arme to the mid-thigh: as for the pouldron or the vant-brace^a, they may be spared, because they are but cumbersome^b. All this armour is to be rather of russet, sanguine, or blacke colour, than white or milled^c, for it will keepe the longer from rust. They shall have strong, straight, yet nimble pikes of ash wood, well headed with steel, and

^a The arm-defences.

^b In the Spanish pikeman figured by Rutz they are worn.

^c "White and milled" means bright and burnished or glazed.



No. 139.

armed with plates downward from the head, at least foure foote, and the length of every pike shalbe fifteene foote besides the head. These pikemen shall also have good, sharpe, and broade swords (of which the Turkie and Bilboe are best), strong scabbards, chapt with iron, girdle, hangers, or bautricke of strong leather. And lastly, if to the pikeman's head peece be fastened a small ring of iron, and to the right side of his back peece (below his girdle) an iron hooke, to hang his steele cap upon, it will be a great ease to the souldier, and a nimble carriage in the time of long marches." As we have before seen (page 695) the "taller and abler men" are to be chosen for the pikes, while the shorter and more sturdy are assigned to the fire-arms. Hexham, in 1637, gives to the captains two various armings, one for battle and one for the march:—"for a Captaine marching, a light Armour pistoll prooffe, but upon service, an Armour and a Head peece of high prooffe, falling on with his pike."

The price of the pikeman's armour and weapon, according to the Rates of 7 Car. I., was:—"for the whole Corslet, or Footman's armour, russetted; viz. breast, back, tassets, comb'd head-peece lyned, and gorget lyned, £1 2s. The pike, viz. staffe, head, socket, and for colouring, 4s. 6d." (Rymer, xix. 314.)

The ordinary pikeman being assailable by the enemy's shot before his own weapon could be brought into play, it was sought to give him the advantage of a missile action by uniting the long-bow to the pike. William Nead, the inventor of this arm, published in 1625 the postures of the exercise and a treatise on the advantage to be derived from it. A few of the figures are copied by Grose, vol. i. page 354. Ward, in 1639, gives an engraving of an

analogous implement, adding: "questionlesse, in the time of stormie wet weather, these Bowes would doe great service, when the Musquet cannot be discharged for wet." And in the "Military Observations" by Captain Venn, in 1672, we read:—"As the Musquetteer is secured by the gallant invention of the Half-Pike; any strange eye would think it very unjust that such Numbers of the Pike-men should be slain by the shot, and not able to resist and offend again; I could therefore say much for the Long Bow to be joyned with the Pike, how their showers of Arrows will gaul and terrifie the Horse, wound and hurt the Souldier, both on Horse and Foot; So if this should be duly performed, all hands would be fighting, and all in a readiness for self-preservation." (p. 39.)

Another combination with the pike recommended at this time was the "revolver." This is very clearly described by Ward in his "Animadversions of Warre:" it is to be a pike with three petronel barrels and one lock, "the touch-holes of these Barrels to turne to the locke one after another." Other pikes were "armed with wild-fire," and these were "for defence of breach, port, or bridge." (Ward.)



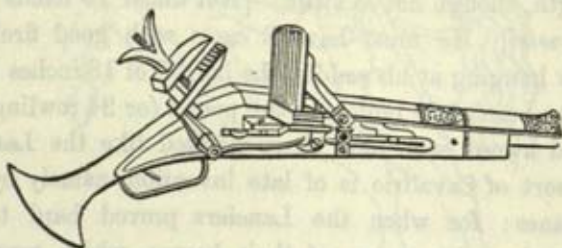
No. 140.

PLATE 140.

FIGURE of a Pistolier, Cavalier or Cuirassier, from Captain Cruso's "Militarie Instructions for the Cavallrie," 1632. The pistolier was the heavy-armed horseman who, when the lance fell into disuse, took the place of the ancient man-at-arms. He is the more modern representative of the medieval knight. Cruso, who furnishes this picture of the cuirassier, gives us also a very clear account of his origin and arming:—"The Cuirassier is to be armed at all points, and accoated with a buffe coat under his arms, like the Launce. His horse not inferiour in stature and strength, though not so swift. [Not under 15 hands high—in note.] He must have 2 cases with good firelock^d pistols hanging at his saddle, the barrell of 18 inches long, and the bore of 20 bullets in the pound (or 24 rowling in), a good sword stiffe and sharp pointed like the Lancier. This sort of Cavallrie is of late invention, namely by the Germanes: for when the Lanciers proved hard to be gotten, first, by reason of their horses, which must be very good and exceedingly well exercised: secondly, by reason their pay was abated through scarcitie of money: thirdly and principally, because of the scarcity of such as were practised and exercised to use the lance, it being a thing of much labour and industry to learn: the Cuirassier was invented, onely by discharging the lancier of his lance. He is to have a boy and a nagge, to carry his spare arms and oat sack, and to get him forrage. He is to weare a skarf [of the Princes colour whom he serveth—chap. xx.].

^d That is, wheel-lock.

He is to have his bridle made with a chain, to prevent cutting, and he must be very carefull to have all his furniture strong and usefull." (Chap. xxiii.) Plates 1 to 17 exhibit the exercise of the cuirassier with the wheel-lock pistol, while in plates 18 to 21 we have the exercise with the "snap-hane pistoll." That the "firelock" meant the wheel-lock in these times, there is abundant evidence to prove. This passage of Ward ("Animadversions," ch. cvii. p. 293) may suffice:—"The firelocke is surest to give fire, and not so apt to be out of kilter; besides, they will *indure spand* 24 houres together without hurting them." The flint-lock pistol or "snap-hane" (German *Schnapphahn*) is here shewn in its early form, from an example in the



No. 141.

Tower. It is of German manufacture and has the Nuremberg stamp on the barrel: its date about 1640. It will be observed that the Steel does not cover the pan, but with its furrowed face stands ready to throw down its shower of sparks into the open pan, when struck by the flint.

The earliest notice of a flint arm observed by the writer is that already quoted from the first volume of the "Norfolk Archæology," the record of a payment by the Chamberlain of Norwich in 1588 "to Henry Radoe, smyth, for making one of the old pistolls with a snapphance and

a new stock for it." (page 16.) It appears again in the Hengrave Inventory of 1603, published in Gage's "Antiquities of Hengrave:" the entry is of "two snaphaunces and two little pocket dagges*." (page 30.) The earliest real flint arm yet noticed is that lately preserved in the Royal Military Repository at Woolwich, but now placed in the Tower Armory, No. 4. It is dated 1614, is richly chased and ornamented, and from its size and the devices upon it of the rose and thistle (inlaid in silver), appears to have belonged to Prince Charles, the son of James I.

The pistol in the hand of our cavalier, it will be observed, is a wheel-lock. In his attack, (reverting to the "Instructions" of Cruso,) having discharged his pistols, the Cuirassier is to employ his sword; "whereof the best manner of using is to place the pummell of it upon his right thigh, as is shewed in the posture 22 (this is copied by Grose, i. 364). Being past hisemie, he is to make a back blow at him, aiming to cut the buckle of his pouldron[†], whereby he disarmeth one of his arms," &c. Ward, 1639, recommends an onslaught upon the enemy's bridle. "The principall thing required is to disable your adversary by hacking a two the Raynes of his bridle, or the Buckles of his Pouldrons, whereby he shall be disabled from making any resistance." (p. 301.)

The price of the cuirassier's body-armour, including the head-piece—a "close caske lyned,"—according to the Rates of 7 Car. I., was £4 10s. The pair of wheel-lock pistols with appurtenances is set down at £3; the pair of horseman's flint pistols, at £2. (Rymer, xix. 314.)

* Pocket pistols.

† Shoulder-piece.

PLATE 142.

FIGURE of a Harquebusier of 1632, from the same work as the last illustration. The author, Captain Cruso, describes as well as pictures this light horseman. "The harquebusier," he writes, "was first invented in France, at the time of the warres of *Piedmont*; whom *Melzo* and *Basta* would have either not armed (though they confess themselves contradicted therein by others), or but slightly (onely with a head-piece and breast), and those but some few of the formost. But the printed edict of the States of the united provinces expresly commandeth, that every Harquebusier be armed with an open cask, gorget, back and breast, of the horse-man's furniture; and Captain *Bingham*, in his Low-countrie exercise, appointeth him a cuirasse pistoll prooffe: which condemneth the late practice of our trained Harquebusiers to be erroneous, which have wholly left off their arms, and think themselves safe enough in a calfs skin coat. Moreover, by the late orders resolved on by the counceel of warre, the Harquebusier, besides a good buffe coat, is to have the back and breast of the Cuirassier's arming, more than pistoll proof, the head-piece, &c. For offensive arms, he must have the harquebuse of two foot and a half long, (the bore of 17 bullets in the pound, rowling in,) hanging on a belt by a swivell, a flask, touch-box, and pistols like the cuirassiers (as some writers have it). His horse should not be under 15 hand high, being swift and well managed." (Chap. xxiv.) On reference to our plate, it will be seen that the arm is a wheel-lock, and by the side of the soldier hangs the "key" or spanner by which the mechanism was wound up.



No. 142.

This spanner was often combined with the primer or touch-box, as noticed by Sirtori:—"et la clef luy servira (à l'arquebusier à cheval) de petit flasquet pour le pulverin ou allumette." (p. 17.) Examples will be found in the Tower collection under the Nos. $\frac{1}{2}$, $\frac{3}{4}$ and $\frac{1}{4}$. Sometimes it was allied with a poignard (see Willemin, vol. ii. pl. 282,) and occasionally the powder-flask similar to the one in our print was contrived to serve as a winder by having a square aperture made near its broad end. "The harquebuse differeth nothing from the carabine in length, but only in the bore," says Cruso (chap. xxx). The relative size and nature of the carbine, harquebus and musquet of this time will, however, be best shewn in a tabular view^{*}.

	Length of barrel.	Number of bullets to the pound.	Nature of lock.
Musquet .	4 ft.	10	match.
Harquebus .	2½ ft.	17	wheel.
Carbine .	2½ ft.	24	flint.

According to the Rates of 7 Car. I., the "prices of the parts of the armour for a Harquebuzier on horseback russetted" were as follows:—"Breast of pistoll prooffe, ix*s*. Backe, vii*s*. Gorgett, iii*s*. Headpeece with great cheeks, and a barr before the face, xi*s*." "For a harquebuze with a firelock and belte, swivell, flaske, key, mould, worme, and scowrer, £1 16*s*." (Rymer, xix. 314.)

It may be here remarked that the device of rifling barrels began about the commencement of this century. The earliest patent in the Patent Office of London is dated 24 June 1635. The gunsmith undertakes "to rifle, cutt out, and screwe barrels, as wide or as close, or as deepe or as shallowe, as shalbe required, and with great ease."

^{*} The authorities are the Rates of 7 Car. I., and Cruso, chap. xxiv. and xxx.

PLATE 143.

DRAGOON with pike, from Cruso's "Militarie Instructions," 1632. The Dragoon was to the infantry what the Horse Artillery became to the field ordnance: improved strategy requiring a more rapid movement of troops, it was imagined to accomplish this object by mounting a portion of the musquetiers and pikemen on horses of little price, so that the double advantage might be obtained of a quick transmission of forces and of the soldiery being brought to the point of attack unwearied by a previous march. It is curious to note how entirely the dragoon has changed in the lapse of time: from a foot combatant, he has merged into a cavalry soldier: his musquet and pike have disappeared, and the sword has become his principal weapon. The ingredient of his special usefulness—rapidity of movement—has itself undergone a change not less striking. It is no longer a troop of fleet steeds that secures to an army the advantage of superior celerity: it is the railroad. So great, indeed, is the benefit derivable from this source, that an army acting on a line furnished with railways against an adversary not similarly supplied, may be considered as strengthened by that circumstance alone to the amount of an entire *corps d'armée*; and it will probably soon become a maxim of war, never to contend with an enemy in strategical combinations till you have drawn him out of his network of railways.

"The Dragoni," says Cruso in 1632, "is of two kindes; Pike and Musket. The pike is to have a thong of leather about the middle of the pike, for the more commodious



No. 143.

carrying of it. The muskettier is to have a strap or belt fastned to the stock thereof, almost from the one end to the other, by which (being on horseback) he hangeth it at his back, keeping his burning match and the bridle, in the left hand. His horse is of the least price, the use thereof being but to expedite his march, allighting to do his service." (Chap. xxv.) He is, however, occasionally to attack from the saddle:—"The muskettier must exercise himself to give fire on horseback, as the Harquebusier. Being come to guard a passage or to do any other the like service, they are to allight, and to demean themselves as Infanterie; every of them casting his bridle over the neck of his side-mans horse, in the same order as they marched: keeping them so together, by the help of such as are thereunto especially appointed:"—"so that, when tenne men allight, the eleventh holdeth their horses; so that to every troope of 120, there is 132 men allowed." (Ward, p. 294.)

On the authority of the *Regole militari* of Melzo^b, Daniel refers the origin of the dragoon to the Marshal De Brissac, when commanding the French forces in Piedmont. The usefulness of the arm being soon recognised, similar bodies were formed by the Spaniards and other nations¹. Walhausen; who wrote about the same time, and whose book (in German) was translated into French in 1615, says:—"Pour Drageons tu choisiras la moitié des musquetiers et l'autre de piquiers. Il a le moindre cheval qu'on peut avoir, dont aussi n'est de trop grand prix; de sorte que s'il est question de mettre pied à terre et le quitter, la perte n'en est trop grande. Il ne se chargera de bottes et esperons, car elles lui seroient plustot dommageables que profitables, quand il sera besoin de mettre pied à

^b Published in 1611.

¹ *Mil. fran.*, ii. 498.

terre." Markham, in his "Souldiers Accidence," 1645, says:—"The armes defensive of the dragoons are an open head-piece with cheeks, and a good buffe coat with deepe skirts: for offensive armes they have a faire dragon, fitted with an iron worke, to be caryed in a belt of leather, which is buckled over the right shoulder, having a turnill of iron with a ring, through which the piece runnes up and downe. And these dragons are short pieces of sixteen inches the barrell, and full musquet bore, with firelocks or snaphaunces^k: also a belt, with a flaske, prying box, key^l, and bullet bag, and a good sword. These dragoons in their marches are allowed to be eleven in a rank or file, because when they serve, it is many times on foote, for the maintenance or surprizing of straight wayes, bridges, or foords," &c. The name of these troops seems clearly to be derived from the weapon they carried, the "faire dragon" named above; and not, as we have been told, from the *draconarii* of the Romans, or from their resemblance to the fiery dragon of the fables, or from their dragon-like character, or from their piece having its muzzle in the form of a dragon's head (which it never had). Just as a cannon was called a Serpent or a Falcon, and a large harquebus a Musquet (from *muschetto*, a bird of prey of the hawk kind), was this arm named a Dragon, simply to give to it one of the unappropriated names significant of maleficence.

A manuscript "Treatise of War," of 1649, cited by Grose^m, has:—"Each dragoonier should carrye at his girdle two swyn feathers or foot pallisados, of 4½ ft. length, headed with sharp forked iron heads of 6 inches length,

^k i. e. wheel-locks or flint locks.

^l To wind up the wheel-lock.

^m Harl. MS. 6,008; Grose, i. 111.

and a sharp iron foot to stick into the ground for their defence against horse."

The transition from infantry to cavalry is easily traceable. Melzo tells us that the musquets given to the dragoons on their first institution were soon found to be inconvenient, from the embarrassment caused by the lighted match-cord to men on horseback. They, therefore, received in lieu, wheel-lock arquebuses. From the Manual for the English troops, published by royal command in 1682, we find that the dragoon of that day had fusil^a, bayonet (to be put *into* the barrel^c), cartridges^d, primer, and sword. About 1720, Daniel gives us a plate of the dragoon of his time: he is armed with fusil and bayonet, and carries at his saddle-bow a pistol and a hatchet^e. (Vol. ii. pl. 7.) In the "Military Dictionary," printed in 1737 at the end of the English version of the Memoirs of the Marquis de Feuquières, the dragoons are still "Musqueteers mounted, who serve sometimes on Foot, and sometimes on Horseback, as Occasion requires. In a Battle or upon Attacks, they are commonly the Forlorn Hope, being the first that fall on." In 1786 Grose contributes an engraving of this soldier: he carries his fusil slung by a broad belt over his left shoulder. (Vol. i. p. 112.) In the plates to Colonel Koehler's English translation of General Warnery's "Remarks on Cavalry," engraved about 1800, we have several representations of the English dragoons of that day. The Light Dragoon carries sword and fusil and wears a "helmet" with crest of bear-skin. (Pates 2 and 11.) The Heavy

^a The flint-lock arm.

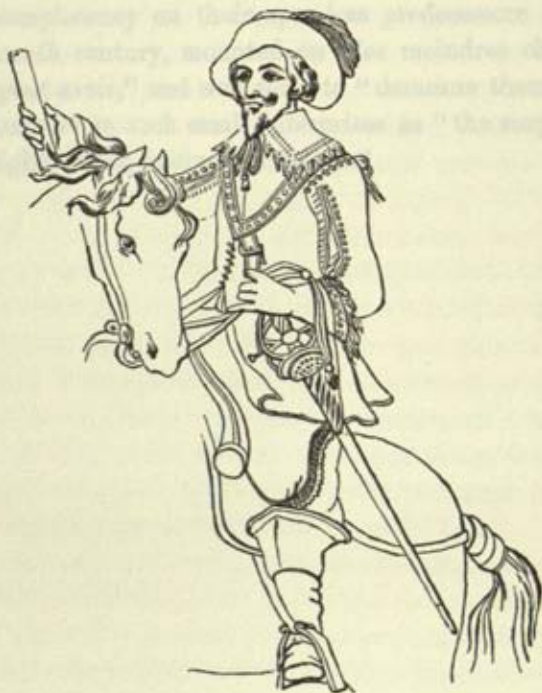
^b See wood-cut, No. 149.

^c In this manual, the dragoon and grenadier have cartridges, while the mus-

quetier retains the bandoliers.

^d The *hache de dragon* is figured by St. Remy, vol. i. pl. 91.

Dragoon has sword and fusil, and wears a cocked hat with feather. The "Light Dragoon *carbine* with bayonet" of 1808, may be seen among the arms in the Tower (No. 33). Our cavalry regiments still carry fire-arms (both carbines and pistols), but the sword is their weapon of strength, and the ponderous troopers of to-day probably look with little complacency on their spur-less predecessors of the seventeenth century, mounted on "les moindres chevaux qu'on peut avoir," and sent forth to "demeane themselves as infanterie" in such small enterprises as "the surprizing of straight wayes, bridges, or foords."



No. 144.

PLATE 144.

PORTRAIT of Count Pappenheim, the celebrated imperial general, slain at Lutzen in 1632^{*}. In this costume we see the last phase of the defensive equipment of steel, as employed by cavalry leaders. Nothing here remains of the old cap-à-pie harness of the knights but the gorget. With it, however, is worn the sturdy buff-coat, a loyal defence against a sword cut. A similar arming is seen in the figure engraved in Strutt's *Horda*, vol. iii. pl. 17, of the year 1642; and again in Lodge's "Portraits," vol. iii. pl. 9, vol. iv. pl. 12, vol. v. pl. 5, vol. vi. pl. 5, and vol. viii. pl. 16. A buff-coat of this time is figured in detail in Grose's "Ancient Armour," plate 39. The crusade against body-armour had, however, begun at a much earlier period. In the sixteenth century we find the cuirass set at naught by many of the bolder spirits of Northern Europe; though, as usual, there was much diversity of opinion as to the propriety of the change. A passage of the "Observations of Sir Richard Hawkins in his Voiage into the South Sea anno Domini 1593" describes quaintly the feeling of the old captains in favour of casque and corslet. "I had great preparation of armours," he tells us, "as well of prooffe, as of light corsletts, yet not a man would use them; but esteemed a pott of wine a better defence than an armour of prooffe. Which truely was great madnesse, for if the Spaniard surpasseth us in anything, it is in his temperance and suffering; and where he hath had the better hand of us, it hath beene, for the most part, through our own folly, for that we will fight unarmed with him being armed. Besides that the sleightest armour secureth the parts of a

^{*} From Hollar's print, Print Room, Brit. Museum.

man's body from pike, sword, and all hand weapons, it likewise giveth boldnesse and courage. Therefore, in time of warre, such as follow the profession of armes, by *sea* or by *land*, ought to covet nothing more than to be well armed. Wherein the Spanish nation deserveth commendation above others, every one, from the highest to the lowest, putting their greatest care in providing faire and good armes. He which cannot come to the price of a corslet, will have a coat of mayle, a jackett, at least a buffe-jerkin, or a privie coate. And hardly will they be found without it, albeit they live and serve, for the most part, in extreame hott countries. Whereas I have knowne many bred in cold countries, in a moment complaine of the waight of their armes, that they smoothen them, and then cast them off, chusing rather to be shott through with a bullet, or lanced through with a pike, or thrust through with a sword, then to endure a little travaile and suffering*."

In our No. 145, the picture of the Portuguese general, Mathias de Albuquerque, from the *Livro do Estado da India Oriental*, dated in 1646[†], we have an example of the pertinacious arming of the peninsular heroes so much approved by our gallant sea-captain; and from other evidences we learn that both the Italians and the Spaniards retained their men-at-arms longer than the other nations of Europe. The corslet of Albuquerque is of bright steel with gold border. From the close helmet at his foot, we may infer that this defence was to be donned before going into action. Nearly a hundred years later than the philippic against the *miles nudus* by Sir Richard Hawkins, we find Lord Orrery in his "Treatise of the Art of War" still

* Page 216, ed. 1847.

† Sloane MS., 197, fol. 46.



No. 145.

maintaining the efficacy of defensive armour. He recommends that at least the front and flanks of every troop should be armed, "namely, with back, breast, and pott." "Nor do I much value," he adds, "what our young Gallants may say, that in their Doublets they will charge as far as any in their Armor; since the business is, not who dares go to be kill'd, but who dares venture his Life on the best terms to obtain the Victory." (p. 33.) In Markham's "Souldiers Accidence," 1645, we have a description of the arming of the various Officers of cavalry, framed in the view of a retention of the more full equipment. "Now for the arming of the superior Officers, you shall understand that a *Captaine of Cuirassiers* may be armed at all peeces, cap a pe, in such sort as I showed for the Gentlemen at armes, only he shall have no launce nor battle axe, but only his pistols and sword. His own head, his horse's head, and his horse's buttocks, may be plumed: he may lead his men with a white truncheon charged on his right thigh. His place is on the head of his troope before the trumpet," &c.

"The *Lieutenant* may be armed to the knee like the captaine, and his own head and his horse's plumed. His place is the reare, and in marches he may carry a truncheon, but of a thicker size than that of the captaine.

"The *Cornet* shall be armed and horst in all points like the Lieutenant; onely, instead of the truncheon, hee shall carry charged on his right thigh, his Captaine's Cornet, &c.

"The *Captaine of the Hargobussieres* shall be armed, horst, and accoutered, at all points, like the Lieutenant of Cuirassieres; and the *Lieutenant of the Hargobussieres* like the Cornet of Cuirassieres; and the *Cornet of Hargobussieres* like a private gentleman of the troope of Cuirassieres.

“The *Captaine of Dragons* shall be armed like the Lieutenant of the Hargobussieres; the *Lieutenant of Dragons* like the Cornet of Hargobussieres, the cornet and pistols excepted (for he shall carry the weapons of his owne troope); and the *Guydon of the Dragons* shall be armed like a private gentleman of the hargobussiers. And here it is to be noted, that the difference betwixt the cornet and the guidon is much; for the guidon is the first colours that any commander of horse can let flie in the field: this guydon is of damask fringed, and may be charged either with the crest of him that is the owner thereof, or with other devise at his pleasure. It is in proportion three foot at the least deepe in the top, next the staffe, and upon the staffe, and so extendeth downe narrower and narrower to the bottome, where the ende is sharpe, but with a slit divided into two peaks a foot deepe: the whole guidon is sixe foote longe, and shoulde be carried upon a lance staffe. If the captaine (owner of this guidon) shall doe a good daies service, or produce from his vertue something worthy advancement, so that he is called to a better command, as to lead hargobussieres or cuirassieres, then the general or officer in chiefe shall with a knife cut away the two peaks, and then it is made a cornet, which is *longer one way than another*: if (after that) hee doe anything worthily, whereby he is made by the King or supreme, either bannaret or baron, then shall his cornet be made *just square* in forme of a banner, which none may carry in the fieelde on horseback, under those degrees. Now if these noble customs be neglected, and that men out of ambition, usurpation, ignorance, or connivance, take to themselves other liberties; let those great knowledges which have command of armies reforme it; or else vertue will sit mourninge at the

ladder foote, because shee hath not one true round left to mount by."

The change that soon took place in these regulations we learn from Turner's *Pallas Armata*, written in 1670:—"In former times," he tells us, "a Captain marched at the head of his Company with a Head-piece, a Corslet, and a Gorge, all high Proof, and so did the Lieutenant in the Reer. But you may now travel over many places of *Christendom* before you see many of those Captains and Lieutenants. The difference of the Armour was none, but that the Captains Helmet was decorated with a Plume of Feathers, the Lieutenants not. The Feathers you may peradventure yet find, but the Headpiece for most part is laid aside." (Chap. xi. p. 222.)

In the annexed sketch of a commander, we have the



armour and plumes of the old ordinance in all their integrity. It is from the engraved title-page of Ward's "Animadversions of Warre," published in 1639.

The sword of Count Pappenheim has the guard formed with cross-piece, finger-loop, branches and pierced shell. The sword-hilts of this century underwent new modifications as the age wore on, but in the first half of it most of the forms common in the preceding period are still found side by side with the more recent fashions. The *complex guards*, of which so many real specimens have come down to our times, are among the most striking of the novelties; and of these a rich series of cotemporary examples will be found among Vandyke's Portraits—the *Icones Principum*. Hilts of pierced and cut steel were much in favour in the second quarter of the century, and the ornamentation of these is sometimes of great beauty. A rapier in the Tower Armory (No. 4), formerly in the Duke of York's collection, is a striking example of this decoration: the hilt is Milan work, the blade of Toledo: the guard is of cup form, and not only are that and the grip richly chased and pierced, but the *inside* of the cup is also elaborately decorated with cut-steel in concentric bands of foliage. Another form characteristic of the time is that of the Cromwell sword engraved in the *Archæological Journal*, vol. ix. p. 306, and again exemplified in the Tower specimen, No. 11. Another variety has two branches, one in front of the hand, the other at the side, both sweeping from blade to pommel. Basket-hilts are also in favour: see the Tower examples, 12 *seq.* The thumb-ring sword is found from the early part of the century, the hilts embracing the usual varieties of the shell, the complex guard and the plain finger-guard. In the Tower is a good

series — from No. 3 to 10. A singular combination is found in some Spanish swords of about 1650; the guard being formed of a shell, side-rings and double cross-bar. See Tower numbers, 15 to 17. The loop-and-shell guard, in which the object was that the finger, when thrust through the loop, to hold more securely the sword, might be defended from a cut by the shell beyond, in its latest modification became a mere meaningless adjunct; for the loop was made so small that the finger could not be placed within it. We may add that the Rapiers of the time partook of the diversity in the form of the guards already described; and in the contrivance of the patterns of interlacement and the combinations of chased medallions with twining arabesques, the “weaponers” of the day shewed a wonderful fertility of invention. Without numerous drawings, it is quite impossible to follow out the various devices of these inventive sword-smiths, and we merely offer this rough outline of the subject for the student to fill up at his leisure.

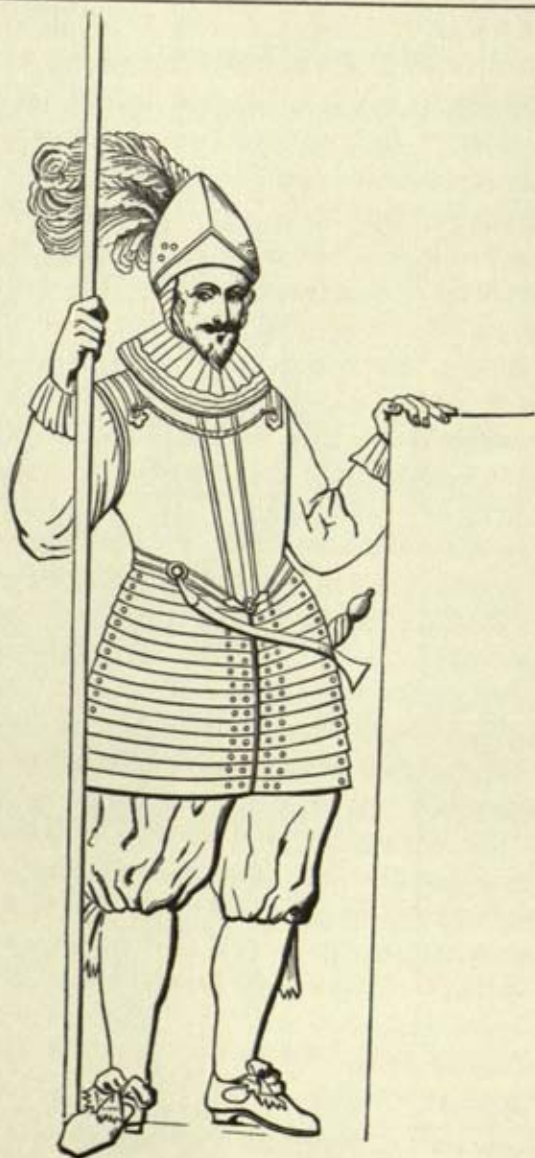
PLATES 147 & 148.

MUSQUETIER and Pikeman, from Colonel Elton's "Complete Body of the Art Military," 1668. The musquetier has still his matchlock arm, which continued in use to the end of the century, though, as we shall see, the flint-lock was also occasionally given to the musquet. He has the "Collar of bandoliers," the musquet-rest with its "string," the match-cord lighted at both ends, and a sword. His defensive equipment is a buff-coat and iron headpiece. The frill with its laced edge is characteristic of the time. The pikeman still carries the steel corslet with its tassets, the headpiece with ample rim, and for offensive arms has the pike and sword. The manner in which the back-piece is attached to the breastplate by a shoulder-band, secured by staple and hook, is very clearly shewn.

From the Statute of 13 and 14 Car. II. (1662), cap. 3, we obtain the particulars of the arming of both these soldiers. "A Musqueteer is to have a Musquet, the Barrel whereof is not to be under three Foot in Length, and the Gauge of the Bore to be for twelve Bullets in the Pound, a Collar of Bandealers, with a Sword. Provided that all Muster-Masters shall for the present admit and allow of any Musquets already made, which will bear a Bullet of fourteen to the Pound: but no Musquets which henceforth shall be made are to be allowed of, but such as are of the Gauge of twelve Bullets in the Pound. . . At every Muster and Exercise, every Musqueteer shall bring with him half a Pound of Powder", at the Charge of such Person or Persons as provide the said Foot-soldier with Arms." . . .

* Stat. 15 Car. II., cap. 4:—"half a Pound of Powder, and half a Pound of Bullets, and three Yards of Match."





"A Pikeman is to be armed with a Pike made of Ash, not under sixteen Foot in Length (the Head and Foot included), with a Back, Breast, Head-piece, and Sword: Provided that all Muster-Masters shall for the present admit and allow of any Pikes already made that are not under fifteen Foot in Length; but no Pikes which shall be hereafter made to be allowed of, that are under sixteen Foot in Length."

Much curious information relating to our subject is contained in the *Pallas Armata* of Sir James Turner, "Military Essayes written in the Years 1670 and 1671." In his fifth chapter he treats of the musket and its appendages. "Now, room for the Musket, and room it hath largely gotten, for it hath banish'd from the light-armed Foot, Darts, Slings, Long-bows, Cross-bows, and the Harquebusses too: Our present Militia acknowledging no other Weapon for the light-armed Infantry, but the Musket and the Sword; and this last I have seen sometimes laid aside for a time, that it might not impede the managing the Musket by its Embarras. And indeed when Musketeers have spent their Powder, and come to blows, the Butt-end of their Musket may do an enemy more hurt than these despicable Swords, which most Musketeers wear at their sides. In such Medleys, Knives whose blades are one foot long, made both for cutting and thrusting, (the haft being made to *fill the bore* of the Musket) will do more execution than either Sword or Butt of Musket . . . The longer a Musket is (so it be manageable) the better, for she shoots the further and the stronger, her Chamber being able to contain the more Powder; and experience daily teacheth what advantage a long Musket hath of a short one." (p. 175.) In the same work, we find the flint-lock recom-

mended for the musquet. "It is impossible to hide burning Matches so well in the night-time, especially if there is any wind, (though there be covers made of white Iron, like extinguishers, purposely for that end) but that some of them will be seen by a vigilant enemy; and thereby many secret enterprizes are lost." It is therefore proposed that for such occasions the "Captain of Arms of each Company" should keep a store of "flint-locks," to be "clapt on by the Gun-smith of the Company." The Earl of Orrery, in his "Treatise of the Art of War," 1677, also gives the preference to the flint-lock, for "five reasons" assigned in detail, one of which is that, in rain, the pan being open for awhile, the rain often "deads the powder, and the match too;" and in wind, the powder is blown away before the match can touch the pan, or else sparks are blown into the pan, firing the piece before the soldier is ready, who "either thereby loses his Shot, or wounds or kills some one before him; whereas in the Firelock the motion is so sudden, that what makes the Cock *fall on the Hammer*, strikes the Fire and *opens the Pan* at once." Though called fire-lock, this is clearly the flint-lock; and it should be remarked that this same name of firelock, formerly applied to the wheel mechanism, has now been transferred to the flint lock, which was before called snap-hance*. The flint-lock gun here named is called by St.-Remy the *fusil ordinaire*, and he describes the particular service for which the arm was employed, thus explaining why we find the matchlock musquet and the fusil in use at the same period. "Les fusils ordinaires sont de mêmes longueur et calibre. Ils servent pour les

* See page 657.

soldats qui vont en parti, et se mettent à la tête du Bataillon ou de la Compagnie. À ces fusils on met, lorsqu'on le veut, des bayonettes, disposées de la manière que le représente la figure *." It is a socket bayonet formed of a steel rod surmounted by a spear-head. (Plate 80.) Daniel states that it was in 1699 and 1700 that, in the French armies, the fusil was substituted for the match musquet. (*Mil. fran.*, ii. 594.) In the English Manuals for the troops published by royal command, we find exact details of the soldier's armament. That of 1682 assigns to the musqueteer a matchlock musquet, bandoliers, primer and sword. The pikeman has pike and sword[†]. In the manual of 1690, the musqueteer is armed as above: Instruction 24:—"Take with your right hand some of the Wad that sticks between your Hatband and your Hat, tell slowly 1, 2, and bring the same, as you did the Bullet, to the Muzzel," &c. The pikeman is furnished as in 1682[‡]. The match musquet of 1697 is given in plate 79 of the work of St.-Remy, with details of the lock, both inside and out. And compare the real examples in the Tower collection, of the time of King William III., Nos. 33 seq. Lord Orrery, in 1677, tells us there were two sizes of musquets, "the bigger for the stronger, the lesser for the weaker Bodies." (p. 29.) Turner says, "all the Muskets of one Army, yea, under one Prince or State, should be of one Calibre." And Orrery complains that, not being so, some-

* *Mémoires d'Artillerie par le Sieur Surirey de Saint-Remy*, written in 1694 and published at Amsterdam in 1702.

† Captain has pike; Lieutenant has partizan; Ensign has pike when on the march; Trooper has carbine, pistols and sword; Dragoon fusil, bayonet, cartridges, primer and sword; Grenadeer has "Pouch

of Grenados," match, fusil with bayonet, and hatchet.

‡ To the Ensign is allotted "Colours or Half pike;" the Serjeant is to carry a spear; Grenadeer has "Pouch of Grenados," match, "fire-lock" with bayonet (the bayonet enters the barrel and has "guard"), cartridges and primer.

times in fight "the Soldiers were forced to gnaw off much of the Lead, others to cut their Bullets." "If there be two Sizes of Muskets and Shot," he adds, "care should be taken to write *Lesser* and *Bigger* on both ends of the Barrels" (of balls). (p. 29.) The conversion of the musquet into a club was a common practice of this time—and remains so to the present, though not now, as then, an item in the manual. The operation was called "Club Musquet," and is named with encomium by Orrery:—"I would also propound, That in all Field Engagements, especially in those where we intend not to cheapen an Enemy, but to fall on merrily, the Musketeers would load their Muskets only with five or six Pistol Bullets, which will do great Execution, especially fired near, and then to fall in at Club Musket: I have experimented this, and found it attended with great Success." (p. 30.) Harford, in his "Treatise of Arms," 1680, has:—"The (English) Foot make but little use of their Swords; for, when they have discharged, they fall on with the Buts of their Muskets." (p. 134.) And in the manual published by royal command in 1690, the 42nd evolution is "Club your Muskets."

The use of Cartridges for musquets, instead of bandoliers, seems to have been first adopted in Germany; for Turner (*Pallas Armata*) tells us in 1671:—"It is thirty years ago since I saw these (bandoliers) laid aside in some German Armies, for it is impossible for Soldiers, especially wanting Cloaks, (and more want Cloaks than have any) to keepe these flasks from snow and rain, which soon spoils them, and so makes the Powder altogether useless. Besides, the noise of them betrays those who carry them, in all Surprizals, Anslachts, and sudden Enterprizes. Instead of these, let

Patrons be made, *such as Horsemen use*, whereof each Musketeer should be provided of a dozen: these should be kept in a bag of strong leather, or the skin of some beast well sow'd, that it be proof against rain. This bag he may carry about his neck in a Bandelier, or if the weather be extremely rainy, in one of his Pockets, and in the other a horn with Priming Powder, and his Cleanser tyed to it." Thus "he hath no more to do but to bite of a little of the Paper of his Patron, and put his charge of Powder and Ball in at once, and then ram both home. . . . If this were try'd at home with us, as it is by some abroad, our Powder flasks would be sold cheap." (p. 176.) Lord Orrery, 1677, writes:—"I am also, on long experience, an Enemy to the use of Bandeleers, but a great Approver of Boxes of Cartridges; for then, but by biting off the bottom of the Cartridges, you charge your Musket for service with one Ramming. I would have these Cartridge Boxes of Tin, as the Carabines use them, because they are not so apt to break as the Wooden ones are, and do not in wet Weather, or lying in the Tents, relax." (p. 31.) It should always be remembered that, as the chemist's art advanced, the strength of the powder became augmented. Thus, the author of the *Pallas Armata* contrasts the powder of his day with that of a more remote time:—"Powder having now a double or a treble force more than when it was first found out, a Piece requires a proportionable fortification of her metal, to resist the violence of the Powder." . . . for instance:—"a Culverine that shot 16 pound of Iron had but a 100 pound of metal allow'd for every pound of her shot, and so she weighed then but 1600 pound; but now and long before this, she weighs 4300 pound, and consequently hath the allowance of near 270 pound of metal for

every pound of her shot." (p. 189.) However scientific our author may be in the matter of powder, he is scarcely so philosophic on the subject of shot. Bullets, he tells us, "may be of any metal you please, yea, of Gold or Silver: the first is too costly; the second, some fancy to be able to pierce such as are (by some black art or other) hard, or Bullet-proof." (p. 192.)

The Musquet-rest appears to be dying away in 1671: thus, Turner:—"Musket-Rests were used a long time, and in *some places are yet*, to ease the Musketeers in discharging their Guns, and when they stood Centinel. But in the late Expeditions in most places of Christendom, they have been found more troublesome than helpful, a Musketeer in any sudden occasion not being well able to do his duty with Musket, Sword and Rest, especially if you give him a Swedish Feather to manage with them." (p. 175.) Of the Swedish feather (or hand palisado) the same writer gives us a good account:—"I think I may in this place reckon the Swedish Feather among the defensive Arms, tho' it doth participate of both defence and offence: It is a Stake five or six foot long, and about four finger thick, with a piece of sharp Iron nail'd to every end of it. By the one (end) it is made fast in the ground in such a manner that the other end lyeth out, so that it may meet with the breast of a Horse, whereby a body of Musketeers is defended as with a Pallisado. I have seen them made use of in Germany, and before I left that War, saw them likewise *worn out of use*. When the Infantry by several Regiments or Brigades are drawn up in Battel, and the Pikes and those Stakes fixed in the ground, they make a delightful show, representing a Wood, the Pikes resembling the tall trees, and the Stakes the shrubs." (p. 169.)

In the Tower Survey of 1675 appear—

"Hand pallizados with Rests	11.
Ditto without Rests	3."

The Swedish feather was sometimes combined with the musquet-rest: see *Pallas Armata*, page 175. The musquet was also made defensive by being united with a "half-pike." This contrivance is recommended by Captain Venn in his "Military Observations," 1672 (p. 39); and compare Grose, vol. ii. p. 339, ed. 1801.

But the chief improvement, that which gave to the musquet not only a defensive character, but which invested it with a second offensive power,—perhaps more effective than the first,—was the invention of the Bayonet. The earliest notice of this arm is to be found in the *Instructions Militaires* of the Seigneur de Puysegur. In his eighth Chapter, on the "Ordre que doit tenir une Armée pour passer une riviere," he writes:—"Quand je commandois dans Bergues, dans Ypres, Dixmude et Laquenoe, tous les partis que j'envoyois, passoient les canaux de cette façon. Il est vrai que les soldats ne portoient point d'épées, mais ils avoient des bayonettes qui avoient des manches d'un pied de long, et les lames des bayonettes étoient aussi longues que les manches, dont les bouts étoient propres à mettre dans les canons des fusils pour se défendre, quand quelqu'un vouloit venir à eux après qu'ils avoient tiré." (p. 306.) The period to which the writer refers was the years 1646 and 1647: see his *Mémoires*, vol. ii. pp. 16 and 24. In a previous extract from Turner, 1671, we have read of the "knives whose blades were a foot long, with hafts to fill the bore of the musquet." In the same year we find the French "Regiment of Fusiliers" armed

with a similar weapon*. In the English manual of 1682, both Dragoon and Grenadier have fusils with plug bayonets. In 1684, Mallet in the *Travaux de Mars* tells us of the "bayonnettes données aux mousquetaires, pour mettre dans leurs canons, quand ils seront attaquez de la cavalerie, et faire l'effet des piques, dont peut-être l'usage sera ainsi rejeté." They were in fact abandoned at the close of the century. In the English manual of 1690 the fusil of the grenadier* has the plug bayonet as before. But about this time an improved arm appears. In Mackay's "Memoirs" it is stated that the defeat of the English troops at Killcrankie having been caused by the delay consequent upon unfixing the plug bayonet, the general ordered that all his bayonets should be so formed that they might be fixed upon the barrel without stopping it up; that thus his men might be able to receive a charge the very instant after firing^b. Grose has a similar account from Flanders, but gives no particular date. (Vol. ii. p. 341.) This arm may have been either the Ring bayonet or the Socket bayonet. The first is very clearly described in the *Art de la Guerre* of Marshal Puysegur^c. He writes:—"Avant la paix de Nimegue^d, j'ai vû un régiment qui portoit des épées qui n'avoient que la poignée, et, au lieu de garde, il y avoit un anneau de cuivre et un autre auprès du pom-

* Daniel, *Mil. fran.*, ii. 592.

* The origin of Grenadiers is thus given by Marshal Puysegur:—"Comme Louis XIV. a fait bien des sieges, dans les commencemens on demandoit des gens de bonne volonté (volunteers) pour jeter des grenades. C'est ce qui a occasioné au feu roi de former des compagnies pour les employer à cela: ils avoient des grenadières pour mettre les grenades, et de petites haches pour s'en servir à des

attaques de chemin couvert ou autres, pour couper des palissades, et enfoncer des portes." *Art de la Guerre*, i. 222. Compare Daniel, ii. 434, and St.-Remy, i. 289.

^b Mackay's *Memoirs*, ad an. 1689, and Macaulay's *Hist. of England*, iii. 371.

^c He was the son of the "Seigneur de Puysegur" named above.

^d 1678.

mean, dans lesquels on passoit le bout du canon du fusil ; ce qui tenoit ferme et faisoit le même effet que font aujourd'hui nos bayonnettes à douille." (Vol. i. p. 220.) Grose gives an account of "two Horse grenadiers riding before Queen Anne's coach with fixed bayonets: these bayonets were of the dagger kind, having handles originally intended for screwing into the muzzles of the pieces; which handles then had two rings fixed to them for the admission of the barrel of the piece." (Vol. ii. p. 342.) The Socket bayonet (*bayonette à douille*) is also mentioned by Marshal Puysegur:—"Durant la guerre de 1688 on avoit proposé au feu Roi (Louis XIV.) de supprimer les piques et les mousquets: il fit même faire une épreuve de *bayonnettes à douille*, à peu près comme celles d'aujourd'hui, sur les mousquets de son régiment. Mais comme les bayonnettes n'avoient pas été faites sur les canons, qui étoient de différentes grosseurs, elles ne tenoient pas bien ferme; de sorte que dans cette épreuve, qui fut faite en présence de S.M., plusieurs bayonnettes en tirant tomboient; à d'autres, la balle, en sortant, cassa le bout. Cela fit qu'elles furent rejetées. Mais peu de tems après, des Nations contre lesquelles nous avons été en guerre, quitterent les piques pour les fusils avec des bayonnettes à douille, ausquelles nous avons été obligés de revenir." (Vol. i. p. 148.) This passage is curious, not alone as describing the first days of the Socket bayonet, but in its shewing us that even in the King's regiment the arms were not of uniform pattern. The form of the Plug bayonet may be seen in our woodcut, No. 149, from an example in the Tower. Both that and the Socket bayonet are figured in the *Mémoires d'Artillerie* of St.-Remy in 1694. (Plates 80, 88 and 92.)

The musquetiers appear sometimes to have worn armour. Thus, in the *Pallas Armata*:—"Many have thought it fit to give Musketeers some defensive Arms, as a Head, Back and Breast-piece, and truly I wish that custom were continued." (p. 169.) Good pictorial examples of the musquetiers of this period are furnished by the painting at Hampton Court, of King Charles II. embarking from Holland, at the Restoration. They have headpieces of iron, their under-coats are yellow, the remainder of the dress is red.

The proportion of musquets and pikes most fit for effective co-operation was a subject on which great captains were by no means unanimous. Lord Orrery in 1677 says:—"Our Foot Soldiers generally are two thirds Shot and one third Pikes, which I have often lamented; for methinks the Pikes should be at least half. Without dispute, the Pike is the usefulest Weapon for the Foot: and a good Stand of them, assisted by Shot, if the Angles be well guarded, are not easily broken by Horse and Shot united. The Swissers, generally and justly esteemed excellent Foot, have more Pikes than Shot; which, possibly, as much as their Valor, Discipline, and the strength of their Bodies, has contributed to their Glory." (p. 24.)

The various fire-arms in use at the close of this century are enumerated and figured by St.-Remy. There were wall-pieces (*mousquets de rempart*), both match and flint lock: (Remy, pl. 82:) the match-lock musquet (*mousquet ordinaire*—pl. 79): fusil* (pl. 80): rifled carbine with flint

* "Le fusil a 5 pieds de long, et la bayonnette un pied et demi, sur quoi il faut diminuer quatre doigts pour passer le bout du canon dans la douille de la

bayonnette; ce qui fait 6 pieds 2 pouces de long pour le fusil avec la bayonnette." Puysegur, *Art de la Guerre*, i. 145.

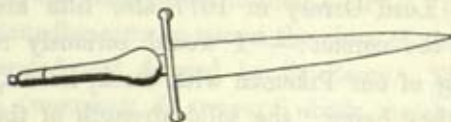
lock (*carabine rayée*) for cavalry (pl. 83): *mousqueton*, of same length as carbine, (4 ft.,) smooth bore, with flint lock (pl. 84): flint pistol, 14 inch barrel (pl. 85). And, in addition, an arm invented in 1692 by Marshal Vauban,—the *fusil-mousquet*. It combines the flint-lock and the match-lock, the latter to be in readiness should the flint cease to give sparks. In order to admit the fire of the match-cord, a hole is contrived in the pan-cover; this hole being closed by a sliding lid when the flint is used. The arm is figured by St.-Remy, pl. 81, and real examples will be found in the Tower collection, No. 4, and in the Royal Military Repository, No. 686.

The Pike, as we have already seen, was during the second half of the century falling rapidly into disfavour. Already in 1671 Turner laments the pikeman having lapsed into the degradation of a *nudus miles*:—"This is a great defect of our Modern Militia, of which most Nations are now guilty; for tho' in all their Constitutions of War there is an appointment for heavy armed Horse and Foot, yet when we see Batallions of Pikes, we see them everywhere naked, unless it be in the Netherlands, where some, and but some Companies represent the ancient Militia." (p. 169.) Lord Orrery in 1677 also lifts his voice in favour of the corslet:—"I would seriously recommend the arming of our Pikemen with Back, Breast, Pott and Tases,"—they being "the solid strength of the Infantry of an Army in a day Battel." (p. 28.) The English royal manuals of 1682 and 1690 still give the exercise of the pike, but the "Gentleman's Dictionary," published in 1705, describes it as a weapon *formerly* in use. It was in 1703 that this arm was suppressed in France: the king in that year, by the advice of Marshal Vauban, "fit une

Ordonnance par laquelle toutes les piques furent abolies dans l'Infanterie et on y substitua des fusils¹." That is, the pike was displaced by the bayonet.

Of the bayonet itself, the varieties have become very numerous, but our captains are by no means yet agreed as to the best form to be given to this instrument. Recently, in the plains of Lombardy, that ancient battle-field of Europe, where every step of the traveller is upon the grave of a soldier, a new character has been conferred on the bayonet-fight, and warm advocates have arisen for the cut-and-thrust weapon as opposed to the old thrusting arm. Zealous friends, however, still raise their voices in favour of the more ancient implement; and that this contention may long be limited to the "voices" and to the pens of the disputants, is the hearty prayer of the writer, as it will be that of every reader through the whole length and breadth of **MERRIE ENGLAND**.

¹ Daniel, ii. 591. And compare Puysegur, vol. i. pp. 106 and 118.



No. 149.

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* "*Bipennis*, twyhill." *Alfred's Vocab.*, p. 36; ed. Wright. "*Bipennis*, stan-ex;" *Ibid.* p. 84.
 "*Bipennis*, twybyl." *Vocabulary of fifteenth century*, p. 196.

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⁴ "Galea, leberhelm, Cassis, iren helm." *Alfric's Vocabulary*, p. 35.

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² "*Sica*, litel-sword." Alfric's Vocab. p. 35. "*Sica*, litel sword, oððe hand-sax." Ibid. p. 84.

² "*Funda*, lyðre: *fundabulum*, staf-liðere." Alfric's Vocabulary, p. 35.

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