

1 Introduction: The Study of Trajan's Column

1. For bibliographies of the column see FLORESCU, 1969; 1971; RICHMOND, 1982; KOEPPPEL, 1982a; COLONNA, 1988 and the present work.
2. The term 'scene' is used to denote logical divisions in the composition of the spiral. Their numbering system employing latin numerals was devised by CICHORIUS, 1896; 1900 and it is used here following his text. A further system of individual human figure numbering has been devised by the present writer whereby human heads in each scene are numbered from left to right and, when they coincide vertically, from bottom to top. Thus every human figure may be referred to by a latin scene number and an individual arabic number. PETERSEN et al., 1896 similarly numbered the Marcus Column figures but in rather arbitrary order within scenes.
3. DAVIES, 1920,. 4-5.
4. KEPPIE, 1984, 12 quite properly made a point of not citing Trajan's Column out of period.
5. Helmets based directly on the column appear in the films Quo Vadis?, Spartacus, The Robe, Ben Hur and The Fall of the Roman Empire, and in the television series Jesus of Nazareth. Renaissance and later paintings of 'The Stations of the Cross', 'The Passion' etc. commonly employed models taken from the column and the practice continues.
6. This is mainly due to the work of H.R. Robinson (ROBINSON, 1972; 1974; 1975).
7. The situation has not substantially changed since it was characterised by RICHMOND, 1935, 1. For summaries of scholarship since the 1870s see FLORESCU, 1971; BECATTI, 1982.
8. The comments of WARD-PERKINS, 1980, 325 are particularly apposite here: 'It must be admitted that we have come up against a good deal of resistance from the forces of conservative art-historical scholarship. The notion that a sarcophagus, for example, can usefully be studied as an object of commerce, or indeed that its evaluation as a work of art may be affected by the type of marble from which it was made, these are notions that are positively repugnant to many of the traditionalists, who prefer to deal with matters of iconography and style'. This scholar in particular has revolutionised the study of sculptural materials and techniques.
9. Notably by LEHMANN-HARTLEBEN, 1926; GAUER, 1977, but even for these commentators the actual sculpture^{ing} was peripheral to the identification of individual 'masters' and 'artists'.
10. ROCKWELL, 1981-83. The present writer's research interests lie principally with Roman military equipment and sculpture but he is conscious of the major disadvantage of not himself having 'hands-on' sculpting experience.

11. Complete sets of casts, including the pedestal reliefs are located in the Victoria and Albert Museum (London), the Casts Museum (Berlin) and the National Museum (Bucarest). The spiral and one side of the pedestal are in the Museo della Civiltà Romana (E.U.R.). Only those in Bucarest and E.U.R. are disassembled and thus of use for close study. A short assembled section of the shaft, cast in bronze, resides in the fosse at the Musée des Antiquités Nationales (Saint Germaine-en-Laye). Odd casts are at present in private collections, in the substructures of the Forum Traiani excavations, and a painted section in the Soprintendenza Archéologia di Roma offices. The E.U.R. set was originally exhibited in the Museo Lateranense. After the closure of that museum it was moved to the Giardini Vaticani and subsequently donated to the Museo della Civiltà Romana by Pius XII. The Bucarest set was made and set up in 1967. All of these sets and odd casts were made from the 1861-62 matrices. Fragmentary casts also survive from the François I and Louis XIV endeavours at the Ecôle des Beaux Arts (Paris), in the Palace at Versailles, the Rijkmuseum van Oudheden (Leiden) and in the Biblioteca Ambrosiana (Milan). See FROEHNER, 1872-74, xx; REINACH, 1886, 15-20, 23-5; CICHORIUS, 1896, 3; RICHMOND, 1935, 1; FLORESCU, 1971, 207; MOSTRA, 1983, 109, 156; COLONNA, 1988, 261-73.
12. CICHORIUS, 1896; 1900; LEHMANN-HARTLEBEN, 1926 (Lateran, later E.U.R. set); FLORESCU, 1969 (Bucarest set). MONTI, 1981 and NARDONI, 1986 used the column for the majority of their illustrations plus a few Lateran D.A.I. archive prints, but they did not attempt full coverages of the spiral.
13. LEHMANN-HARTLEBEN, 1926, 145-6 and taken up by GAUER, 1977, 7-8, 45-8, Fig.1.
14. CICHORIUS, 1896; 1900; PETERSEN, 1899; 1903.
15. RICHMOND, 1935.
16. HAMBERG, 1945, 135-41 dealt with the adlocutiones and RYBECK, 1955, 109-13 was concerned with suovetaurilia scenes.
17. The clay wash may have been applied during Sixtus V's 1587 restoration programme, see MARTINES, 1980, 59-61; COLONNA, 1988, 295-8.
18. For an examination of sources of information for the study of Roman military equipment and their limitations see BISHOP, 1986b, 18-46.
19. HOPKINS, 1978 outlines some of the pitfalls of literary evidence.
20. COULSTON, 1983.
21. Occasionally pieces are produced by Tiber dredging. Pers. comm. Mr P. Arthur.
22. BISHOP, 1986a; forthcoming b.

23. BISHOP, 1983a; 1985a; DAWSON, 1987; COULSTON, 1988a; VAN DRIEL-MURRAY, forthcoming.
24. Free access and keys to the scaffolding enclosure of both columns were granted by special permission of Prof A. La Regina in March 1984. Scaffolding was erected in 1941 to shield Trajan's Column from air-raid damage (ROMANELLI, 1942) and presumably also in 1861-62. Prior to that, platforms may have been lowered on tackle from the balcony to facilitate study.
25. New excavations were planned for the 1980s in the Forum Traiani and along the line of the Via dei Fori Imperiali so that a vast archaeological park would stretch uninterrupted from the Piazza Venezia down the Via Appia (COLONNE, 1984, 24-33; BENEVOLO, 1985). Funds were withdrawn and the plans shelved. The first important publication associated with the restorations concerns the Arch of Severus in the Forum Romanum (NARDI, 1982-84).
26. Periodically a furore blows up over car exhaust fumes and legal action is threatened to clear the centre of traffic. Via dei Fori Imperiali has been closed from time to time with this in mind and in premature preparation for excavation. See MARIOTTI, 1986.
27. For the process of atmospheric erosion on marble monuments in general see SKOULIKIDIS, 1976; MASSA & PARIBENI, 1982; ROSVALL, 1986. For the Marcus Column and the Arches of Severus and Constantine: NARDI, 1981-82; NYLANDER, 1988; specifically for Trajan's Column ARMSTRONG, 1983. For the effects of earthquakes on the column see MARTINES, 1983.
28. In fact ongoing surface erosion may be observed in the period between the making of the 1670 and the 1861-62 casts (COLONNA, 1988, 281-94).

2 The Function of the Column

2.1 The Architectural Setting

1. LUGLI, 1946, 278-99; FLORESCU, 1969, 19-24; ZANKER, 1970, 520-3, 537-8, Fig.1, 4, 54; LEON, 1971, 31-5; KRAUS, 1974, 119-22; WARD-PERKINS, 1981, 86-9; AMICI, 1982; ANDERSON, 1984, 145-54; BOATWRIGHT, 1987, 74-94. For the Forma Urbis see RODRIGUEZ-ALMEIDA, 1981, Pl.XXI.
2. POLLEN, 1874, Fig.1; AMICI, 1982, Fig.111, 123, 125-6, 146-7; PACKER, 1983a, Pl.21-2.
3. SMALLWOOD, 1966, No.22. See ZANKER, 1970, 504; LEON, 1971, 38-50.
4. C.I.L. VI,960 = I.L.S. 294 = SMALLWOOD, 1966, No.378. See FLORESCU, 1969, 28-37; OHLSEN, 1981.
5. Dio, LXVIII,16,3. See LEON, 1971, 43-4; STROCKA, 1981, 310-11; AMICI, 1983, 47-52; BOATWRIGHT, 1987, 82. Hadrianic stamps occur

on loose bricks from the area leading RICHARDSON, 1977, 106 and ANDERSON, 1984, 146, 153-4 to postulate building under Hadrian.

6. C.I.L. VI,966 = 31215 = I.L.S. 306.
7. FARINELLA, 1981, Fig.2; STROCKA, 1981, Pl.XVa; AMICI, 1982, Fig.126, 145.
8. Measurements are taken from the cross-sections in AMICI, 1982, Fig.125-6.
9. Angles are calculated from ibid., with the viewer standing as far back as possible with an eye level at c.2m.
10. Reconstruction with an open colonnade ZANKER, 1970, Fig.4; AMICI, 1982, Fig.123; with a single entrance ibid., Fig.125.
11. Ibid., Fig.126 reconstructed them with two storeys but this was seriously doubted by PACKER, 1983b, 571; BOATWRIGHT, 1987, 82.
12. R.I.C. II, Trajan, No.577-8; BELLONI, 1973, No.372-7; ZANKER, 1970, 503-4, 542; BLAKE & BISHOP, 1973, 17; GAUER, 1977, 47, 74-5; WARD-PERKINS, 1981, 87; BOATWRIGHT, 1987, Fig.16.
13. WARD-PERKINS, 1976, 348-52. Dismissed by AMICI, 1982, 76, n.2.
14. See BOATWRIGHT, 1987, 80-94 for a complete discussion in support of a Hadrianic date. SHA, Hadrianus 10,9 explicitly attributes the temple to Hadrian and the temple inscriptions were massive and surely structurally integral (ZANKER, 1970, Fig.64). See also Gell., Noct. Att. XI,17,1.
15. BOATWRIGHT, 1987, 90-91. The comments of PLOMMER, 1974, 126-7 on the purely hypothetical reconstructions of the temenos wall are relevant in this question.
16. ZANKER, 1970, 537, Fig.62-3; GNOLI, 1971, 43-4, 122; WARD-PERKINS, 1976, 350-1; BOATWRIGHT, 1987, 74-7.
17. For Italic forum-basilica development and plans see WARD-PERKINS, 1970, 7-13, Fig.2-11; MARTIN, 1972, 914-5; BOETHIUS, 1978, 145-56, Fig.139. For Republican basilicae as models for the Basilica Ulpia see BANDINELLI, 1970, 238-9.
18. For the functions of the Basilica Ulpia and its enigmatic Atrium Libertatis see LANCIANI, 1899, 109; FLORESCU, 1969, 23; ZANKER, 1970, 522-3; LEON, 1971, 32-3; RICHARDSON, 1977, 104-5; COARELLI, 1980, 116, 127.
19. BONI, 1907, 410-14; WAURICK, 1973, 115-8 (Tombs); BOATWRIGHT, 1987, 85-6, Fig.17 (insula and open space).
20. GAUER, 1977, 47; BOATWRIGHT, 1987, 87-8. The writer is grateful to Dr J. Onians for some stimulating discussion of this aspect.
21. BONI, 1907-8, 400-7, Fig.36. For an elevation of the column in

relation to the Quirinal see ibid., Fig.1. The original contours of the area have been reconstructed (LUGLI, 1965, 237). Dio, LXVIII,16,3 was probably influenced by the pedestal inscription. For the 'mons' problem see LEHMANN-HARTLEBEN, 1926, 6; HAMBERG, 1945, 121-4; BECATTI, 1960, 25-6; FLORESCU, 1969, 31-3; ZANKER, 1970, 531-2; LEON, 1971, 34; BLAKE & BISHOP, 1973, 16.

22. RICHARDSON, 1977, 106; ANDERSON, 1984, 155-9, discussing an idea first put forward by GROH, 1925.
23. Especially ZANKER, 1970, 505-6, Fig.5-6; LEON, 1971, 33-4.
24. For discussions of coin depictions of the column and their dates see PANVINI ROSATI, 1958-59; BECATTI, 1960, 26-31; FLORESCU, 1969, 57-60; GAUER, 1977, 76-7; ANDERSON, 1984, 157. For Trajan's Column seen as a military standard see GAUER, 1981, 182.
25. Dio, LXIX,4,1. See 4.2, n.2.
26. For early principia development from civic architecture see VON PETRIKOVITS, 1975, 140-1. WARD-PERKINS, 1970, 7, addressing the Forum of Trajan antecedents problem directly, concluded that both the principia and the imperial period fora developed from common Italian forum-basilica models.

2.2 The Column as Historical Document

1. Dio, LXVIII,6; 8-14, 32; Pliny, Ep. VIII,4,2; Pan. 56,7-8; 82,4-5; Pausanias, V,12,6; Procopius, Buildings IV,6, 11-7; Prisc., Inst. Gram. VI,13 (Trajan). Sources for Trajan's reign are collated and summarised by PARIBENI, 1926, 1-44; SMALLWOOD, 1966; CISEK, 1983, 26-65; STROBEL, 1984, 19-22.
2. SMALLWOOD, 1966, No.20 (fasti Ostienses); C.I.L. VI,1444 = I.L.S. 1022; S.E.G. IX,101.
3. SPEIDEL, 1970.
4. CICHORIUS, 1896, 3-5; STUART JONES, 1910, 439; LEHMANN-HARTLEBEN, 1926, 114-6; ROSSI, 1971a, 18; GAUER, 1977, 41-5.
5. In particular CICHORIUS, 1896; 1900; PETERSEN, 1899; 1903; STUART JONES, 1910; DAVIES, 1917; 1920; PARIBENI, 1926. To be fair, DAVIES, 1920, 4-5 did sound a note of caution with unrestrained interpretation of detail.
6. Considering not just the content of the frieze but its artistic background and its contexts within the monumental rôle of the column. Notably STRONG, 1926, 153-89; PALLOTTINO, 1938, 49-55; BANDINELLI, 1938-39; LUGLI, 1943; 1960; HAMBERG, 1945, 108-19; PICARD, 1957, 389-91.
7. LEHMANN-HARTLEBEN, 1926, 116-7; STRONG, 1926, 155, 187-8; RICHMOND, 1935, 3-5.

8. For example, PATSCH, 1937, 62-134; CHRISTESCU, 1937, 11-32; C.A.H. XI, 226-31; ROSSI, 1971a, 130-212; CISEK, 1983, 296-333; BECATTI, 1985, 554-74. GAUER, 1977, 24-41 and SCHEIPER, 1982, 154-85 take positive stances whilst STROBEL, 1984, 23, 26-31 is cautious but, nevertheless, employs the frieze throughout.
9. RICHMOND, 1935, 3; LEHMANN-HARTLEBEN, 1926, 116-7. For reviews of the historical content literature see HAMBERG, 1945, 104-7; FLORESCU, 1971, 209-15; GAUER, 1977, 3-5.
10. Dio, LXVIII,8,1; 10,3-4; Pliny, Ep. VIII,4,2; Prisc., Inst. Gram. VI,13.
11. Dio, LXVIII,8; FROEHNER, 1872-74, 5; CICHORIUS, 1896, 54; PETERSEN, 1899, 17; DAVIES, 1917, 84-5; CHRISTESCU, 1937, 17; VULPE, 1963a, 224-6; 1963b, 53; 1969, 214; ROSSI, 1971a, 136; GAUER, 1977, 24.
12. For example FROEHNER, 1872-74, 14; REINACH, 1886, 50-1; CICHORIUS, 1896, 294-6; PETERSEN, 1899, 69-70; LEHMANN-HARTLEBEN, 1926, 100; PARIBENI, 1926, 216; PATSCH, 1937, 61; ROSSI, 1971a, 162; GLODARIU, 1974, 151; SPEIDEL, 1975, 214; GAUER, 1977, 29; CISEK, 1983, 307; STROBEL, 1984, 151; HANNESTAD, 1986, 160.
13. Dio, LXVIII,9,3-4.
14. Dio, LXVIII,9,5. See GAUER, 1977, 19-20.
15. Dio, LXVIII,14,4. 'Loot' in the form of dishes, paterae and other vessels is clearly depicted loaded on a pair of pack-animals.
16. SPEIDEL, 1970, 150.
17. GAUER, 1977, 17-8.
18. FROEHNER, 1872-74, 10; CICHORIUS, 1896, 179-83; PETERSEN, 1899, 49-52; STUART JONES, 1910, 438; C.A.H. XI, 227; VULPE, 1969; 1971; 1979; ROSSI, 1971a, 146-56; GAUER, 1977, 26-8; BECATTI, 1982, 556-7; CISEK, 1983, 300-6; STROBEL, 1984, 178. Opposed by POULTER, 1986, 519.
19. Amm., XXXI,5,16. See VULPE, 1963a, 234; 1969, 206; GAUER, 1977, 26-7; STROBEL, 1984, 178. Opposed by POULTER, 1986, n.4.
20. For convenient summaries of the literature on geographical identifications see STUCCHI, 1960, 17-21; CLAIRMONT, 1975, 26-35; GAUER, 1977, 32.
21. See CICHORIUS, 1900, 262; PETERSEN, 1903, 100; LEHMANN-HARTLEBEN, 1926, 118-9; ROSSI, 1971a, 196-7; GAUER, 1977, 38; STROBEL, 1984, 214-5.
22. Dio, LXVIII,14,5. See CICHORIUS, 1900, 298; PETERSEN, 1903, 105-6, 110; PARIBENI, 1926, 303-4; CHRISTESCU, 1937, 30; ROSSI, 1971a, 200, 205; GAUER, 1977, 40; CISEK, 1983, 327; STROBEL, 1984, 216.

23. SPEIDEL, 1970, 149-51. The head was thrown down the Gemonian Steps in Rome (SMALLWOOD, 1966, No.20). See also GOSTAR, 1977; STROBEL, 1984, 217.
24. Dio, LXVIII,8,1. For this identification see FROEHNER, 1872-74, 9; REINACH, 1886, 45; CICHORIUS, 1896, 116-7; LEHMANN-HARTLEBEN, 1926, 93-4; PARIBENI, 1926, 248; PATSCH, 1937, 64-5; C.A.H. XI, 227; HAMBERG, 1945, 118; ROSSI, 1971a, 142; VULPE, 1971; GAUER, 1977, 25; CISEK, 1983, 299-300; STROBEL, 1984, 175-6.
25. Dio, LXVIII,6-14; Prisc., Inst. Gram. VI,13. For the kingdom see CONDURACHI & DAICOVICIU, 1971, 98-106; BERCIU, 1978, 35-52; FERENCZI, 1978; STROBEL, 1984, 13-4, 41-55.
26. These are, from west to east, the Iron Gates, Keys of Teregov, Vulcan Pass and Red Tower Pass. See PATSCH, 1937, endmap; GAUER, 1977, Fig.2; STROBEL, 1984, endmaps. A major problem for early reconstructions of the wars was the confusion between Decebalus' capital, Sarmizegetusa Regia, with the Roman town of Colonia Ulpia Traiana Sarmizegetusa. Compare CICHORIUS, 1896, 333, endmap; PETERSEN, 1903, 134; DAVIES, 1920, Fig.1; PATSCH, 1937, endmap with GAUER, 1977, Fig.2; STROBEL, 1984, endmaps. For large-scale coverage of the war zone see T.I.R., L34, Budapest; L35, Bucarest. For specific pass identifications see CICHORIUS, 1896, 234, 256; PETERSEN, 1899, 62, 93-4; DAVIES, 1917, 74; 1920, 7-11, 23; PATSCH, 1937, 75; C.A.H. XI,228; ROSSI, 1971a, 158; GAUER, 1977, 28-9, 36; CISEK, 1983, 307, 323-4; STROBEL, 1984, 168-74, 212-4.
27. Prisc., Inst. Gram. VI,13: Traianus in I Dacicorum: inde Berzobim, deinde Aizi processimus. For references to other sources for these place-names see T.I.R., L34, Budapest, s.v. 'Aizizis', 'Berzobis'.
28. For these invasion bases see T.I.R., L34, Budapest, s.v. 'Viminacium', 'Lederata', 'Drobeta'. Cf. n.32, 35 below.
29. The assignation of place-names to forts and camps in scenes VIII-XXII was an extreme manifestation of the literalist approach. See CICHORIUS, 1896, 75, 78, 82, 86, 90, 92, 97, 102-3, 108, Fig.11-12; PETERSEN, 1899, 17, 20-4; STUART JONES, 1910, 442; DAVIES, 1917, 79-81; ROSSI, 1971a, 136-40.
30. GAUER, 1977, 13-23.
31. See Dio, LXVIII,13-14.
32. In particular GAUER, 1977, 14-15, 48, Fig.1 who saw a vertical relationship between the two scenes. No amphitheatre is known at the site of Drobeta. KOEPPPEL, 1979, 369 accepted vertical correspondence but not the 'topographical programme' which Gauer drew from it.
33. For the treatment of scenery see STUART JONES, 1910, 439; LEHMAN-HARTLEBEN, 1926, 135; HAMBERG, 1945, 108-9; TURCAN-DÉLÉANI, 1958, 161-8; BONANNO, 1976, 69; GAUER, 1977, 22-3, 42-5; STRONG, 1980, 151. ROSSI, 1980, 182, Pl.56 goes too far in attempting to identify scene CXLIX, consisting of trees, water and a boar with a

lake site in northern Romania.

34. Dio, LXVIII,13; Procopius, Buildings IV,6,11-7; John Tzetzes, Chiliades II,34 (literature); R.I.C., II, Trajan, No.569, Pl.X.188; BELLONI, 1975, No.355-9; FLORESCU, 1969, Fig.70 (coins); BĂRCĂCILĂ, 1966 (archaeological remains). See also TURCAN-DÉLÉANI, 1958, 150-5; BANDINELLI, 1958, 477; TUDOR, 1968, 60-72; STROBEL, 1984, 204-5.
35. Not assured from the structural point of view but Dio, LXVIII,14,1 unequivocally states that Trajan crossed his Danube bridge at the start of the second war. The sculptor's inattention to obvious detail so soon after the fine bridge depiction in XCIX is of interest and similarly flimsy timber bridges on a relief on the Villa Medici facade (CAGIANO DI AZEVEDO, 1951, No.40; KOEPPEL, 1985, No.13) and on the Arch of Benevento (HASSEL, 1966, Pl.13) have also been identified as the Danube bridge.
36. Juv., Sat. IV,40.
37. C.I.L. IX,5894 = I.L.S. 298 = SMALLWOOD, 1966, No.387; HASSEL, 1966, 1. For the dating problem with regard to Trajan's Column see LEPPER, 1969, 255-6.
38. REINACH, 1886, 53; CICHORIUS, 1900, 18-22; PETERSEN, 1903, 11-2, 20-2; STUART-JONES, 1910, 444-5; PARIBENI, 1926, 280-1; PATSCH, 1937, 95-6; C.A.H. XI,230; TURCAN-DÉLÉANI, 1958, 155-61; STUCCHI, 1960, 24-9; LEPPER, 1969, 256; ROSSI, 1971a, 174; GAUER, 1977, 14, 32; MONTI, 1980, 9, 15; STROBEL, 1984, 206. LEHMANN-HARTLEBEN, 1926, 134, 141 denied the identification, and the placing of the location at Ravenna has been revived by MAZZARINO, 1979; 1982, 46-52.
39. A review of the literature identifying Salona and a full discussion of the problem may be found in CLAIRMONT, 1975, 26-35. See also TURCAN-DÉLÉANI, 1958, 155-61 for the buildings depicted.
40. See STUCCHI, 1960, Fig.1-2 for maps plotting various itineraries.
41. Caes., B.G. V,12-4. See STUART JONES, 1910, 447-8 for comment.
42. LEHMANN-HARTLEBEN, 1926, 7, 11-108, 116-7.
43. Ibid., 63-88, 116.
44. Traditionally, scene XLV has been interpreted as showing Roman prisoners being tortured by Dacian women (FROEHNER, 1872-74, 10; CICHORIUS, 1896, 179-83; PETERSEN, 1899, 49-52; STUART JONES, 1910, 438; C.A.H. XI, 227; VULPE, 1979; ROSSI, 1971a, 156; CISEK, 1983, 305-6). This has been credibly challenged by GAUER, 1977, 26-8 who reversed the identifications. Roman prisoners still in the hands of the barbarians after a supposed Trajanic victory hardly redounded to the greater glory of emperor and army. It would have been out of step with the propaganda programme of the frieze and worked better as Dacians being tortured in stark contrast with Romans being rewarded (see LEHMANN-HARTLEBEN, 1926,

119).

45. Dio, LXVIII,9. For discussion see CICHORIUS, 1896, 363-4; PETERSEN, 1899, 81-91; DAVIES, 1917, 89-97; LEHMANN-HARTLEBEN, 1926, 59; PARIBENI, 1926, 262-4; PATSCH, 1937, 84-5; C.A.H. XI, 229; HAMBERG, 1945, 112-5; DAICOVICIU, 1959, 313-4; DAICOVICIU & DAICOVICIU, 1966, 30-1; ROSSI, 1971a, 171-2; GAUER, 1977, 19-20; CISEK, 1983, 310; STROBEL, 1984, 198-200.
46. LEHMANN-HARTLEBEN, 1926, 43-50, 58-9, Plates A-K.
47. Ibid., 117-8. SPEIDEL, 1970, 150 was convinced that the discovery of Ti. Claudius Maximus' stela gave a fillip to belief in the column's detailed accuracy.
48. PINKERNEIL, 1982, 35-6; KUNZL, 1983, 64-5. For barbarian suicides in Roman art see ANDREAE, 1956, 41-6, 55-6, 60-5.
49. XXXVIII,11; LXVI,36; CXII,3; CLI,7.
50. R.I.C. II, Domitian, No.257, 284, 317, 344, 361; Trajan, No.208-9, 534-45; BELLONI, 1973, No.333-45.
51. BANDINELLI, 1970, 242, 249; PINKERNEIL, 1983, 81.
52. See, for example, Tac., Ann. IV,49; Jos., B.J. III,331; VII,389-97. In art see LEHMANN-HARTLEBEN, 1926, 118; ANDREAE, 1956, 45-6, 55-6, 60-5; KUNZL, 1983, 64-5.
53. LEHMANN-HARTLEBEN, 1926, 111-4, 145.
54. GAUER, 1977, 45-8, Fig.1. Followed by FARINELLA, 1981; SCHEIPER, 1982, 252-4; BRILLIANT, 1984, 94-100, 103-8; HANNESTAD, 1986, 167.
55. GAUER, 1977, 17, 48, Fig.1; KOEPPPEL, 1980, 301-2.
56. GAUER, 1977, 48, Fig.1.
57. Ibid., 13-23.
58. AMICI, 1982, Fig.145.
59. FROEHNER, 1872-74, xx; REINACH, 1886, 15-20, 23-5; CICHORIUS, 1896, 3; RICHMOND, 1935, 1; FLORESCU, 1971, 207; MOSTRA, 1983, 109, 156; COLONNA, 1988, 261-73. The plates used to illustrate CICHORIUS, 1896; 1900; LEHMANN-HARTLEBEN, 1926; RICHMOND, 1935; 1982; FLORESCU, 1969 were photographed entirely from casts, as are some even for MONTI, 1980; NARDONI, 1986.
60. Notably RICHMOND, 1935, 1; WARD-PERKINS, 1981, 87; BRILLIANT, 1984, 90-4; HANNESTAD, 1986, 167.

2.3 The Column as Propaganda Monument

1. In describing the Forum of Trajan with its decoration of military

signa, Gell., Noct. Att. XIII,25,1 records the monumental inscription, EX MANUBIIS.

2. On the senatorial dedication and financing of monuments see HASSEL, 1966, 3-5.
3. LEHMANN-HARTLEBEN, 1926, 89-90; RICHMOND, 1935, 2; ROSSI, 1971a, 98-9; GAUER, 1973, 320; 1977, 55-60; SCHEIPER, 1982, 194; PINKERNEIL, 1983, 90; STROBEL, 1984, 240-5; HANNESTAD, 1986, 165.
4. For Victory figures in general see HÖLSCHER, 1967, and for the Brescia statue HÖLSCHER, 1970.
5. PICARD, 1957, 390-1; SCHEIPER, 1982, 192-3; PELIKÁN, 1982, 41-2.
6. LEHMANN-HARTLEBEN, 1926, 15, 54, 89; STRONG, 1926, 185-6; HAMBERG, 1945, 109; PICARD, 1957, 389-91; ZANKER, 1970, 525-6; ROSSI, 1971a, 127-9; GAUER, 1973, 321-4; 1977, 35, 67-71; BONANNO, 1976, 69-70; ANDREAE, 1977, 206; SCHEIPER, 1982, 185-7; CONDURACHI, 1982, 13-4; CAMPBELL, 1984, 47, 64, 74, 76-7.
7. Pliny, Pan. 13,1.
8. R.I.C. II, Trajan, No.208-9, 534-45; BELLONI, 1973, No.333-45.
9. Spear: IX, XVI, XVIII, XXIV, XXV, XXVII, XXX, XXXV, XXXIX, XLII, L, LI, LII, LXXII, CIV, CV, CXLI. Sword: X, XII, XIV, XX, XXXVI, XL, XLIV, LIV, LXI, LXIII, LXVI, LXVIII, LXXIII, LXXV, CXIV, CXVIII, CXXIII, CXXV, CXXX, CXXXVII.
10. LEHMANN-HARTLEBEN, 1926, 15, 120-1, 151; HAMBERG, 1945, 135, 138; WARD-PERKINS, 1951, 287-8; BRILLIANT, 1963, 118-27; BONANNO, 1976, 69-70; GAUER, 1977, 9, 60; STRONG, 1980, 151.
11. SPEIDEL, 1970, 150. HANNESTAD, 1986, 164 saw no certainty in this.
12. For the identification of these and other personalities see BONANNO, 1976, 72-4; GAUER, 1977, 60-5.
13. See Dio, LXVIII,9,2; 15,3-6; 16,1 (P. Licinius Sura); 8,3; 32,4-5 (Lusius Quietus); S.H.A., Hadrianus 3; C.I.L. III,550 (Hadrian). Other important figures included Claudius Livianus, Laberius Maximus and Q. Sosius Senecio (Dio, LXVIII,9,2; 9,4; 16,2). For the roles of these personalities see SYME, 1958, 35; 1971a, 247-8; PETERSEN, 1968; JONES, 1971; STROBEL, 1984, 62-80.
14. XXXIII, XXXIX, XLIV, XLVI, L, XCI, XCVII, XCIX, C. Occasionally the emperor facing down the spiral is not significant in this respect (VIII, IX, XVI, CIII, CXIV).
15. X, XXVII, XLII, LI, LIV, LXXIII, LXXVII, CIV, CXXXVII. For military adlocutiones see CAMPBELL, 1984, 69-88.
16. IX, XXVII, C, CLI. The more ethnographic 'labels' which could be quoted the more glorious the war or diplomatic success. See, for example, res gestae divi Augusti 26,4-5; 27,2-3; 30,2; 31-3

- (Augustus); C.I.L. VI,920 (Claudius). I.L.S. 986 is a fine example of a governor's achievements in diplomacy in the Danubian theatre. Dio, LXVIII,15,1 records embassies to Trajan from peoples as far east as the Indi.
17. XII, XVI, XX. Choice of camp-site by the commander often appears in senatorial literature (e.g. Tac., Hist. II,5; Ag. 20; Pliny, Ep. VIII,4).
 18. Acclamations in scenes LXXVII, CXXV, identified and discussed by CICHORIUS, 1900, 282-3; PETERSEN, 1903, 103-4; PARIBENI, 1926, 300-2; LEHMANN-HARTLEBEN, 1926, 11; PATSCH, 1937, 110, 120; HAMBERG, 1945, 140-1; HANSLIK, 1965, 1066, 1076-8; ROSSI, 1971a, 199; GAUER, 1971; 1977, 21, 39; BELLONI, 1973, xliii-iv; CISEK, 1983, 312, 326; STROBEL, 1984, 201, 205.
 19. For celebrations of Trajan's pietas see I.L.S. 283; Pliny, Pan. 72; SCHEIPER, 1982, 189-90; HANNESTAD, 1986, 165-6.
 20. See CAMPBELL, 1984, 59-69.
 21. Pliny, Pan. 14-5. See HANSLIK, 1965.
 22. For coins advertising Concordia and Fides, and their propaganda significance see R.I.C. II, Trajan, No.439; BELLONI, 1973, No.4, 25, 201-2; HAMBERG, 1945, 45-7; SCHEIPER, 1982, 88-9, 92.
 23. For the literary tradition, and its distortion in favour of Trajan, contrasting with Domitian's treatment, see C.A.H. XI, 200-1; SYME, 1958, 36-7; WATERS, 1969, 285-7.
 24. Some building work, such as the restoration of the Circus Maximus, would have had great public impact and careful choice of architectural and social munificence was made for coin issues. See R.I.C. II, Trajan, No.145-6, 246, 255-7, 266-7, 463, 469, 471, 569-78, 630-2, 636-41, 654; BELLONI, 1973, No.49, 124-5, 127-9, 136, 183, 194, 264-6, 268-9, 352-77, 382-4, 387-9, 417, 424-8, 432-3, 437-45; WATERS, 1962, 402-3; PENSA, 1969-70; SCHEIPER, 1982, 198-202, 231-6. For games and the circus see Pliny, Pan. 51; Dio, LXVIII,10, 2, 15.
 25. A very expressive phrase coined by Tiberius (Suet., Tiberius 25,1).
 26. Referred to by Pliny, Pan. 6,1-2; Dio, LXVIII,3,3. See DURRY, 1938, 378; 1954, 1609; C.A.H. XI, 196; SYME, 1958, 10; CAMPBELL, 1984, 45. These events may have influenced Tacitus' account of Otho whipping up the praetorians against Galba (Tac., Hist. I,38; SYME, 1958, 153-6).
 27. Dio, LXVIII,5,4.
 28. Pliny, Pan. 18,1,3; 34,2.
 29. DURRY, 1938, 61; PASSERINI, 1939, 55; SPEIDEL, 1965, 91-2. The stationing of legio II Parthica at Albano near Rome by Severus may

have had a similarly political motive. On the other hand, SCHLEIERMACHER, 1984, No.23 suggests a Domitianic foundation of the equites singulares Augusti.

30. See CAMPBELL, 1984, 32-59.
31. Pliny, Pan. 13,2; 19,3. At the same time (13,3) the emperor inspects the tentoria of his commilitones and perhaps this is relevant to the frequent depiction of tents on the column (see 4.7.4).
32. XI-III, XV-XX, XXIII, XXXIX, LII, LVI, LX, LXV, LXVI, LXVIII-IX, LXXIII, XCII, XCVII, CXVII, CXXVII, CXXIX.
33. This encompassed the hundreds of military building inscriptions surviving from forts, towers, bridges, linear fortifications and intramural buildings all over the empire. Public buildings all carried monumental inscriptions which advertised the builder and benefactor in perpetuity.
34. Bridge-building was presented as a glorious feat in literature and on coinage: Caes., B.G. IV,17; VI,9; Tac., Ann. XV,9; Pliny, Ep. VIII,4; Dio, LXVIII,13; R.I.C. II, Trajan, No.569-70; BELLONI, 1973, No.355-9.
35. IV, XII, XIV, XVII, XIX, XXI, XLVIII, L, LVI, LVIII, XCII, XCVIII-IX, CI, CXXXI. The type of light timber-frame bridges seen on the column also occur in Trajanic sculpture on the Villa Medici Dacian panel (KOEPPPEL, 1985, No.13) and on the Arch of Benevento (HASSEL, 1966, Pl.13). For a major examination of the sculptural propaganda programme on the latter monument see FITTSCHER, 1972.
36. IV, XLVIII, XCVIII-IX, CI.
37. XXIV, XL, LXVI, LXXII.
38. LXX, XCVI, CXIII, CXV.
39. XXXVI, LVIII, LXXXIX, CII.
40. XXXVII, XL, CXLII-V.
41. I,1-4; XI,12-3; XXI,8; LXVIII,9, 11, 13, 15, 17; CVII,4; CIX,4; CXXVIII,1-3.
42. II,1-2; XXXIII,1-8; XXXV,1-7; XLVII,1-4; CVII,1-3, 5; CXXIV,2-4.
43. Notably FROEHNER, 1872-74, 4, 16; CICHORIUS, 1896, 90, 118, 131, 136, 158-9, 164, 178, 202-3, 205-6, 209, 227-8, 243, 250, 278, 284, 291, 354, 368-9; 1900, 56, 79, 90, 119, 130, 132, 165-6, 171-2, 181-2, 193, 222, 276, 284; PETERSEN, 1899, 9-11, 15-6, 55, 69; PARIBENI, 1926, 259; LEHMANN-HARTLEBEN, 1926, 67; RICHMOND, 1935, 7-8; DURRY, 1938, 199-200; ROSSI, 1971a, 105-8. In fact these identifications permeate the literature.
44. SPEIDEL, 1965, 84-5; 1970, 150; 1978, 16, 47-8.

45. GAUER, 1977, 55-60, heavily criticised by KOEPPEL, 1979, 369; SPEIDEL, 1980, 592. See also STROBEL, 1984, 240-5.
46. SPEIDEL, 1984, 33.
47. All praetorian: XXXIII, XL, XLII, LIV, LXXV, LXXVII, LXXIX, LXXXVI, LXXXVII, XCVIII, CII, CXIII, CXVIII, CXXIII, CXXXVII. All legionary: X, XXVI, XXVII, XLVIII, LXI, LXXXV, CXXV, CXXVIII. Mixed types: IV-V, VIII, XXIV, LI, LIII, LXIII, CIV, CVI.
48. Tac., Ag. 35.
49. Auxiliary 'atrocities' were recorded by Jos., B.J. V,550-3. Legionaries were also implicated. Severed heads appear with citizen troops in scene CXIII. Skulls found at Newstead (Rox.) may represent the continuation of Celtic head-hunting practices (Diodorus Siculus, V,69) by auxiliaries in the Roman army (BREEZE, 1982, 68).
50. For the taking of Decebalus' head and its display on the Gemonian Steps in Rome see SMALLWOOD, 1966, No.20; SPEIDEL, 1970, 149-51. The public display of bodies here after execution is recorded by Suet., Tiberius 53, 62, 75; Vitellius 17; Tac., Ann. VI,5, 9; Hist. III,74. Presumably some contrast is being drawn on the column between the romanitas of citizen troops and the less civilised habits of auxiliaries. Considering the mass-slaughters in gladiatorial displays this might seem hypocritical in modern eyes but a parallel contrast between public image and actual practice may be found in the taking of native heads as trophies by European troops in 19th-20th century African colonial wars.
51. Dio, LXVIII,8,3; 32,4-5 infers the presence of Moorish troops with Lusius Quietus in both Dacian Wars, but in any case these troops were commonly employed in the Danubian theatre during the 2nd to 3rd centuries A.D. (see 5.11).
52. XXIV, LXVI, LXX, LXXII, CXIII, CXV.
53. XXIV, XXXVIII, XL, LXVI, LXX, LXXII, CXV.
54. For a selection of irregular troop types see Hyg., de mun. castr. I,8-11.
55. HAMBERG, 1945, 132-3; ROSSI, 1971a, 19; BANDINELLI, 1970, 242; BONANNO, 1976, 75; STRONG, 1980, 151; PINKERNEIL, 1983, 81.

3 The Sculpting of the Column

1. For citizen troops these features are type of 'lorica segmentata', presence and types of helmets, presence or absence of sword, baldric, cingulum or apron, and type of shield blazon. For auxiliaries there are mail edging variants, presence or absence of zig-zag armour chiselling, presence or absence of baldric and

sword, type of shield carriage and blazon, helmet presence and type, and variants of tunic hem. Cavalry add details of horse harness. All of these features can have additional applied decoration and mistaken detail. Each type and variant of feature may be classified for all the 21 figure types to allow close examination of the incidence and distributions of details. 'Lorica segmentata' fittings have been classified into 26 types, helmets into 33 categories, shield blazons into 8.

2. With 20 items of information in all for each figure this gives 52,780 recorded variables. These were put onto file using Newcastle University's mainframe computer (Michigan Terminal System) and sorted by report generation programmes very kindly written for the writer by Dr M.C. Bishop. A great deal of general help has been given in this data handling by Dr Bishop and by Dr B.N. Rossiter of the University's Computing Department.

3.1 Preliminary Work

1. For the use of models by ancient architects see Cicero, ad Q. Frat. II,6; Vitruv., Arch. X,xvi,3; GAUER, 1977, 76-7; COULTON, 1977, 72. For a surviving model see WILL, 1985. MARTINES, 1983 presents a study of the column's proportions.
2. For Carrara marble quarries in general see BLAKE, 1947, 53; WARD-PERKINS, 1971b, 144-5; 1981, 22, 25, 43-4, 77; MANNONI, 1985, 201-45. The identification of the column as Carrara marble was made by ROCCHETTI, 1959, 756; BLAKE & BISHOP, 1973, 16-7; WARD-PERKINS, 1976, 348; 1981, 87. Parian marble was mistakenly advocated by BANDINELLI, 1970, 241; BONANNO, 1976, 69; STRONG, 1980, 141.
3. STRONG & CLARIDGE, 1976, 196.
4. Pers. comm. Dr N. Asgari. The writer is very grateful to Dr Asgari for her help in the study of material in Istanbul. Work had not been started on the spiral staircase in the Harmantaş drum but considering the early stage at which work was abandoned this is not surprising.
5. WARD-PERKINS, 1976, 348. Compare long shafts carved out of granite, a much more homogeneous material, for the Pantheon (11.56m) and the Column of Pius (14.89m).
6. The obelisk in Piazza del Popolo is 24m long whilst that in Piazza S. Pietro is 25.5m. For their transport by ship see MEIGGS, 1960, 292-3.
7. WARD-PERKINS, 1971b, 142; ASGARI, 1978, 476-80; DODGE, 1988, 72.
8. Similarly, sarcophagi were hollowed out to reduce their weight in transit. Smaller examples were even carved in pairs for ease of handling to be cut apart on arrival (WARD-PERKINS & THROCKMORTON, 1965, 208-9).

9. Transport: WARD-PERKINS, 1971a, 142-3, Pl.XI, XVI; MANNONI, 1985, 111-9. Luni: ibid., 201-6.
10. Basilica Ulpia use: BLAKE, 1959, 83. For marble-carrying ships and barges see Pliny, N.H. XVI,202; KAPITÄN, 1961; CASSON, 1965, 32; WARD-PERKINS & THROCKMORTON, 1965; VIERECK, 1975, 150-2; MANNONI, 1985, 133-4. Marble-carrying craft are figured on the base of a statue of the Tiber river god in the Louvre (LE GALL, 1944b, Fig.2; CASTAGNOLI, 1980, Fig.11).
11. For the land transport of marble see BURFORD, 1960; ORLANDOS, 1968, 21-9; WARD-PERKINS, 1971b, 533-4; MANNONI, 1985, 111-21. For the use of cars and carts Juv., Sat. III,254-8; VAN HOVE, 1987; MACDONALD, 1982, Pl.127 (Bardo mosaic, Tunis); ADAM & VARENE, 1980, Fig.1-2 (Stabia fresco, Italy).
12. See PLATNER & ASHBY, 1929, 327; NASH, 1981, I, 380-6; WARD-PERKINS, 1981, 86. The associated wharves were developed especially under Trajan (BLAKE & BISHOP, 1973, 37-8; CASTAGNOLI, 1980, 35-6).
13. LANCIANI, 1899, 245; PLATNER & ASHBY, 1929, 35-6; DUDLEY, 1968, 186; NASH, 1981, I, 102-3; KOEPPPEL, 1983a, 103, 108.
14. A possibility entertained by some scholars together with the idea that the column may have been erected elsewhere originally, and subsequently moved to its present position: GROH, 1925; LUGLI, 1946, 288; BLAKE & BISHOP, 1973, 17; ANDERSON, 1984, 155-8.
15. BLAKE & BISHOP, 1973, 17; ROCKWELL, 1981-83, 104.
16. Statues and some types of sarcophagi were transported in blocked out or quarry state to avoid damage to sculpted detail in transit. See n.7. Some monumental sculptures, such as the Cancelleria reliefs, were evidently not executed in situ but were lifted up into place (see HASSAL, 1966, 35).
17. ANDREAE, 1977, Fig.387; ADAM, 1984, Fig.94 (Haterii relief, Domitianic). For cranes in general see ORLANDOS, 1968, 36-44; RÜDER, 1975; ADAM & VARENE, 1980, 225-31, Fig.1-2, 8-14; MACDONALD, 1982, 160; ADAM, 1984, Fig.92-7.
18. For an open building site see BOATWRIGHT, 1982, 85-6; MEIGGS, 1982, 476.
19. For scaffolding in general see MEIGGS, 1982, 253; MACDONALD, 1982, 147-8, 156; ADAM, 1984, 85-9. It is well represented on the building site fresco in the Constantinian tomb of Trebius Iustus (CASALONE, 1962, Fig.4; ANDREAE, 1977, Fig.636; MACDONALD, 1982, Pl.130b; ADAM, 1984, Fig.181). The height of the column was not too great for wooden scaffolding to have stood under its own weight as may be shown by the frameworks which would have been used for the walls of such buildings as the Pantheon and the Basilica of Maxentius. Recently (1988) part of the interior of Hagia Sophia, Istanbul, has been scaffolded with wood up to the ceiling. An exact parallel to the column's scaffolding is provided

by a print of the early 19th century Vendôme monument in Paris which shows framework platforms and extraordinarily long ladders (COLONNA, 1988, Pl.89).

20. The Vendôme print (n.19, dating to A.D.1810) shows the scaffolding half dismantled after the spiral frieze had been completed. Later cleaning and repainting of the shaft (see 3.3.3) could have been carried out using a 'window-cleaner's' bench, lowered down from the balcony by ropes and tackle. This was done for study and photography in modern times, notably for measuring the entasis of the shaft (STEVENS, 1924, Fig.2), and on the Marcus Column (PETERSEN et al., 1896, 19).
21. For the types of tools employed see n.36 and for the entasis STEVENS, 1924, 146, Fig.16.
22. BACCHINI LEOTARDI, 1979, No.59, 99, 102 and pers. obs. at Portus in the area of the outer harbour.
23. DODGE, 1988, Fig.4.
24. Pers. obs. Although these are Hellenistic period temples they are important and relevant to this discussion because of their unusually unfinished state and their Roman remodelling.
25. HASELBERGER, 1985; COULTON, 1985.
26. HANFMANN, 1983, 2; HASELBERGER, 1985, 114. On the Stabia building site fresco a man is depicted chiselling the top of a column (ADAM & VARENE, 1980, Fig.2).
27. Markings also occur on Pantheon pilasters, on columns reused on the Arch of Constantine and on shafts protected by reuse undercover in churches such as S. Giorgio in Velabro and S. Maria in Cosmedin (pers. obs. and CLARIDGE, 1983).
28. XIV, XXXVII, LII, LXII, LXVII, LXIX-XX, LXXVI, LXXIX-XXX, XCIII, CXV, CI, CV, CX-XI, CXIII, CXV, CXVII, CXX-II, CXXVI-II.
29. V, XXIV, XXVII, XXXIII, XLII, LIV, LXI, LXIII, LXXXVI-II, XCIX, CV, CXXII, CXXV, CLVII.
30. XXVII, XLVIII, LIII, LXI. A tree crosses the divider from scene CXLI.
31. LEHMANN-HARTLEBEN, 1926, 112-4; BLAKE & BISHOP, 1973, 17; GAUER, 1977, 78; ANDREAE, 1977, 206; ROCKWELL, 1981-83, 101-2.
32. See HASSAL, 1966, 35; LEPPER, 1939, 259. Workmen painting modern scaffolding around the column (1984) used polythene sheeting in this way to protect the torus from falling drops of paint (bright orange).
33. See ROCCHETTI, 1959, Fig.1005; MARTINES, 1980, Fig.1, 4; FARINELLA, 1981, Fig.4, 5. Compare HAMBERG, 1945, Pl.18, 34-5 with Pl.31.

34. Measurements of spiral band heights taken by the writer and ROCKWELL, 1981-83, Fig.1, 5 confirm this.
35. VOGEL, 1973, 77-80; GAUER, 1977, 22-3.
36. ROCKWELL, 1981-83, 102-3 discusses tool-marks on the column from his own experience as a sculptor. COLONNA, 1988, 289-92 examines the preservation of such traces. For stone-working tools in general see RICH, 1947, 246-61; RICHTER, 1930, 143-5; BATTEN, 1957, 17-20, 58-63; ORLANDOS, 1968, 45-56; WARD-PERKINS, 1971b, 529-31; STRONG & CLARIDGE, 1976, 197-201; CLARIDGE, 1981-83, 113-5; ADAM, 1984, 32-41; MANNONI, 1985, 144-9.
37. LEHMANN-HARTLEBEN, 1926, 113; BANDINELLI, 1970, 241; GAUER, 1977, 78; ROCKWELL, 1981-83, 103.

3.2 Detailed Analysis

1. VIII, XXVII, XXVIII, LXII, LXV, LXXI, LXXXV, XCV, CIII, CVI, CVII, CX, CXI, CXIX.
2. IX, XVI, XL, LXXV, XCIV.
3. XI, XII, XVII-XXII, XXVIII, XLIII.
4. CIV, CV, CX, CXXIX, CXXXIV.
5. XXXIII, LXXXI, LXXXVI, C.
6. XI, XXIII, XXIV, XXXVI, XXXVII, XLIV, XLIX, LXI, LXII, XCIV, XCVII, CXVII, CXLII.
7. XLVII, LXIV, CVI, CXIII.
8. LXXI, LXXXI, XCIII, CXXV, CLII.
9. XXIV, CIV, CXVI.
10. X,24 and XI,1; XXIV,22 and 24; XXXVIII,1 and 3; LXI,8 and 10; LXVIII,6 and 9, 8 and 10; LXXI,15 and 16; XCII,6 and 8; CXV,11 and 14; CXXV,1, 2, 4; CXXVI,14 and CXXVII,1; CXXXVII,18 and 19; CXLV,12 and 13; CLI,1, 2, 3.
11. XXXVI,1 and 2; LVII,1 and 2; LXXXIX,8 and 9; CXLII,1 and 2; CXLIII,3 and CXLIV,1; CXLIV,2 and 3; CXLV,4, 6, 9.
12. ROCKWELL, 1981-83, 105. For the use of scenery and its problems with scale see LEHMANN-HARTLEBEN, 1926, 123-41; GAUER, 1977, 13-23.
13. CICHORIUS, 1896, 3-5 defined the division of scenes and their numbering which has been followed ever since with adjustments by LEHMANN-HARTLEBEN, 1926, 134 (and plates' scene numbering); GAUER, 1977, 42-5, 76.

14. Trees form 73 scene divisions, alone or in conjunction with rocks and/or buildings. They are noticeably absent in this role between scenes LXXII and XCI where architectural scenery is predominant. Trees were employed for the majority of divisions after CXII and almost exclusively in the last phase after CXXXI. Despite the convictions of LEPPER, 1969, 255, 257 and MEIGGS, 1982, 186-7 that the trees are oaks, many were too schematically rendered to allow or even have been intended to convey any botanical identification.
15. XV, XX, XXIII, LVI, LXVII, LXIX, LXX, XCVII, CXXVII. Shields are similarly cut off in scenes LXIX and CXXVII.
16. IV-V, X-XI, XVI-VII, XIX-XX, XLVI-VII, XLVIII-IX, LXXIX-XXX, LXXXIII-IV, LXXXIV-V, LXXXIX-XC, XCVIII-IX, CI-II, CXX-XXI, CXXI-II, CXXV-VI, CXLII-III, CXLIII-IV, CXLIV-V, CLIV-V. GAUER, 1977, 42 was mistaken in considering that the wars each comprise of 50 scenes (see also HAMBERG, 1945, 145).
17. VI, VIII, XVI-II, XVIII, XIX-XX, XXVIII, XXIX-XXX, XLII, XLVI-II, LI, LII, LIII, LXVIII, LXXXIII-V, LXXXVI, LXXXVII-III, LXXXIX-XC, CI-II, CIII, CV, CXXIII, CXXX, CXXXVII, CXLI?, CXLVII.
18. XI-II, XXI, XXXI, XXXII, XXXVII, LXIV, LXVI-II?, LXX, LXXVIII, XCII, XCIII, XCIV, CXX-II, CXXXIV, CXXXI, CXXXIX, CXLVIII, CL, CLI, CLII.
19. X, XXVII, LI, LIII, LIV, LXI, LXXIII, LXXV, LXXVII, CIV, CXVIII.
20. XLIV, XCIX, C.
21. XIV, XXIV, XXV, XL, LXVI, LXXII, LXXIX, LXXXI.
22. XXXIII.
23. XXXV, XXXVI, L, LVIII, LXIII, LXXXIX.
24. XCVII, CXIV.
25. Central position: XCIII, CXXXV, CXXXIX, CXLVII. Figures ahead to the right LXXV; at the head of movement CXLV.
26. X-XI, LXI-II, CXVII-VIII, CXXVI-VII, CXXXVII-VIII.
27. XXIV, LXV, LXVIII, CXI.
28. ROCKWELL, 1981-83, 103.
29. Cramped CV; empty LV, LXV, CI, CII, CXX.
30. For the grouping of human figures see LEHMANN-HARTLEBEN, 1926, 143-4; HAMBERG, 1945, 111-6; GAUER, 1977, 78-9, 81-2; ROCKWELL, 1981-83, 103-4.
31. XIV,3-5; XXIV,25, 26; XXXI,18, 19, 22; LVII,5-7; LX,6, 10, 13; LXII,13, 14, 19, 20; LXIII,10, 12, 14; LXV,1-9; LXVIII,9, 11, 13,

- 15, 17; LXXI,16-20; LXXIV,1-7; XCVII,2, 4, 6; CXI,1-3; CXIII,1, 2; CXXXI,1-12; CXXXVI,13-16. Shields in scenes LXIX and CXXVII also fill up space. BANDINELLI, 1970, 250 observed that mounds of dead Dacians fulfilled a primarily space-filling function.
32. LEHMANN-HARTLEBEN, 1926, 43-50, 58-9, Plates A-K. A very similar phenomenon is seen on the Pompeii amphitheatre riot fresco which dates to A.D.59-79. The same figure pose of weight resting on one leg and one arm raised to strike is reproduced no less than eight times (PICARD, 1970, Pl.XLIII; WARD-PERKINS & CLARIDGE, 1976, 35).
33. Similar poses LXX, LXXI, CXLII; alternating poses XL, LIV, CXII, CVI, CXLVIII; alternating figure types X; shield patterning XIII, LXII-III, LXX, LXXV, CXLVIII.
34. X, XXII, XXIV, XXXVI, XLII, XLIX, LIV, LXXII, LXXXV, XCVIII, CI.
35. XXVI,11; XLVIII,13; LXII,8; CVIII,21; CXIII,5; CXXIII,14.
36. LEHMANN-HARTLEBEN, 1926, 12, 15, 52, 59-60, 151; BRILLIANT, 1963, 118-27.
37. LEHMANN-HARTLEBEN, 1926, 141-2; HAMBERG, 1945, 108; TOYNBEE, 1951, 33; HASSEL, 1966, 32; BRILLIANT, 1967, 226-32; KOEPPPEL, 1969, 158-69; 1982b; PICARD, 1970, 23-4; RICHTER, 1970, 54; VOGEL, 1973, 71-7; BONANNO, 1976, 74-5; 1983, 77-83; ANDREAE, 1977, 206; GAUER, 1977, 78-9; STRONG, 1980, 146. Also see 4.8.
38. This is seen on the Arch of Titus ferculum relief (ANDREAE, 1977, Fig.395; PFANNER, 1983, Pl.54) and on some Arch of Benevento panels (HASSEL, 1966, Pl.6-8), in addition to the Great Trajanic Frieze (KOEPPPEL, 1985, No.9-12). In contrast, many, but not all earlier reliefs have their figures standing on the same level, as on the Ara Pacis (ANDREAE, 1977, Fig.271-3), the Claudian Louvre praetorians relief, and the Cancelleria reliefs (KOEPPPEL, 1983a, Pl.43.1; 1984, No.7-8). For a very clear discussion of these perspective modes see KOEPPPEL, 1982b.
39. LEHMANN-HARTLEBEN, 1926, 146-7; BONANNO, 1976, 70-1; GAUER, 1977, 60; ROCKWELL, 1983-85, 103.
40. Unconvincing not so much on the grounds of probability, Sura at least was a leading figure who might have been depicted, as on the recognisability of faces. Damage to the stone combined with many hands at work and modern ignorance of the personalities' actual facial features (the attribution of busts in sculpture collections to historical personages is a very subjective pursuit) conspire to nullify identifications on the column (see 2.3, n.12). Dio's comment that Hadrian was the first emperor to wear a beard (LXVIII,15,5) has unaccountably lead art historians to be surprised at the presence of beards on the column, ignoring the wearing of wispy beards by Nero and Domitian and a full beard on Cancelleria Relief A (KOEPPPEL, 1984, No.7, Fig.11.14). See BONANNO, 1976, 75-6.
41. LXXV,65; XCIII,26?; CXXXV,2; CXXXIX,4; CXLV,11; CXLVII (head). See

PANAITESCU, 1923; LEHMANN-HARTLEBEN, 1926, 151-2; BONANNO, 1976, 74; GAUER, 1977, 65-7; TOYNBEE, 1978, 103-4.

42. For example XXXII,14; XXXVIII,22, 24. See CICHORIUS, 1896, 190; VULPE, 1963a, 235-6, Fig.2; COLONNE, 1976, 69. For photographic distortion see the 'Mongoloid' Sarmatian (XXXVII,10) in MAENCHEN-HELFEN, 1973, Fig.12c. The Sarmatian peoples were caucasian Iranians (see 5.14).
43. See CXIII,20; CXV,3; CXLII,1, 2, 4; CXLV,1, 4, 6; CXLVI,2, 4, 6, 9.
44. Out of 118 auxiliaries in fighting poses only 3 are helmetless, and 5 out of 179 citizen troops in construction stances wear helmets.
45. RICHMOND, 1935, 26.
46. GAUER, 1977, 48, Fig.1 claimed a vertical relationship between scenes LXXVII and CXXXVII. For acclamatio identifications see 2.3., n.18.
47. Types 1 and 2 on spirals 2-6, with scene LXXXV as an outlier on spiral 12; Type 7 confined to spirals 15-17; Type 8 on 1-2; Type 10 on 14-15; Type 20 on 2-8; Type 21 on 17; Type 26 on 5-6, 8-9 with outliers.
48. XCV, XCVI, CIV, CIX.
49. Types 3, 4, 6, 8, 9, 12, 13, 15, 16, 19, 22, 26.
50. Types 1, 5, 17, 18, 23, 24.
51. XLV, LVI; XLII, XLIX.
52. LXVI, LXXII, LXXIII, XCVIII, CII, CIV, CVI, CVIII, CXIV, CXV.
53. IV, X, XIII, XXI, XXII, XXIV, XXVI, XXVII, XXXIII, XXXVIII, XL, XLVIII, L, LV, LXII, CVI, CXXIII, CXLVII.
54. XLII,10; LXII,14; LXV,2; LXVI,30.
55. CXVIII,22; CXLI,9.
56. The varying of oval shield blazons is particularly clear in scenes XXIV, XXXII, XL, XLII, LXVI, CXV-VI, CXVIII, CXLV, CLI-II.
57. XIV,3; XVIII,13; XXIV,52; XXXV,1; XXXVIII,21, 25; XL,23; XLII,7; XLIV,4, 10, 13; XLVI,1, 2; XLVII,4; LXII,13, 14, 18, 19; LXXIV,7; CXLV,3, 5; CXLVI,4, 6; CXLVIII,11, 12, 15, 19.
58. XVIII,4; XLII,23; XLIX,9, 13; LIV,1, 3, 7, 14, 20; LXI,7; LXVIII,17; LXXII,4, 5, 24, 29; LXXXIX,2; CII,1, 2; CXXXVII,2, 5, 8, 11, 15; CXLVI,1; CLII,2.
59. X,11, 15, 16, 19, 20-3.

60. XXXVII,6; CVI,7, 10, 13-15, 17, 19, 21, 23, 24, 26; CXLVI,1, 4.
61. XXI,6; XXII,9, 11, 13, 18; CXIII,1, 2.
62. LV,9; LXII,2; LXIII,6; LXVI,10, 12, 15, 24.
63. V,1; XXI,2, 4, 5, 9, 10; XXII,19; XXIV,18, 22, 30, 31, 33, 37, 45; XLII,1; LIII,21; LIV,7, 14; LXXII,4, 5, 24, 27, 29; XCIV,13; CXV,10-12; CXXIX,5; CXXXVI,14, 16; CXLV,13; CXLVI,9.
64. XXIV,2; XXXII,10, 17, 18; XXXV,4; XLVIII,2, 6, 8, 9, 11; LXII,2, 9, 10, 12; LXIII,7; LXV,26, 28; LXVI,1, 12, 14, 15, 18, 22, 30, 34; LXVIII,13, 17, 19; LXXI,16; LXXV,1; XCIV,14, 20; CVI,28; CXVI,15; CXXIII,6, 10; CXLII,1; CXLIII,2.
65. XXXVII,3-8; LII,6; LXXXVI,1, 4; CXXIV,4; CXXVII,11; CXXVIII,2.
66. Scenes XIII and XXVI are exceptions.
67. XII,1; XVIII,5, 9; XXVI,11; LXII,3, 12; LXVIII,2; CXXIII,1; CXXIX,3.
68. LII,12, 19; CII,19; CIV,15.
69. Work was carried out on the sets of casts in the Museo della Civiltà Romana, E.U.R., using the raking light of a torch to pick up mail chiselling which was already almost lost to erosion when the casts were produced. This was compared with a study made of the column's surviving mail chiselling in 1984.
70. For example X, XXIV, XLIV, LXVIII, XCV, CL, CLI.
71. IV?, V?, XVIII, XXI, XXXII, XXXIII, XLIII, LI, LXXVII, C, CIV?, CV, CVI, CIX?
72. LIX,9; CXII,15; CXIII,5.
73. VII,3; X,4; XI,12, 13; XIV,4, 5; XXIV,22, 45; XXXIII,2; LXXVII,8, 12, 15; XCVII,5; CXII,5; CLI,2; CLII,7; CLIII,2, 3.
74. XXVI,13; XXXVI,21; LXXVII,5, 8, 12; CXII,5, 15; CL,1.
75. In particular LXXII,6-11; CXXVII,2.
76. XXIV,52; XXXVIII,23; XL,42; LXX,13, 29; LXXII,18, 21, 28, 30, 33; C,2; CXII,13; CLI,9.
77. LII,12, 19; CII,19; CIV,15.
78. Citizens: LX,17; LXVI,19; CXXIII,4; CXLVII,1. Auxiliaries: XXIV,25; XXXIII,1; XXXVII,1; LXXIV,7.
79. Roman: X,10; XXI,8; XXV,5; XXXV,3, 5; XLVI,1; LVIII,1; LXXI,17; LXXII,4; LXXXVII,2, 6, 10; LXXXVIII,4, 5; CXI,3; CXIII,18; CXXVI,1, 2, 4, 5, 12; CXXXI,7; CXXXIV,10; CXLIII,2; CL,2; CLI,1;

- CLII,6. Dacian: XXIV,3; XXIX,10; XXXVIII,6, 9, 16; LXI,6; LXVI,37, 51, 52; LXVII,2, 3; LXXII,16, 18, 22, 23; XCIII,1, 8, 9, 20, 32; XCIV,3; XCVI,4; CXXXIV,4, 5.
80. XXVI,9?; LXI,9?; CVI,36; CVIII,21, 23.
81. XXVII, LI, LXXVII.
82. LXX,13, 17-22; LXXI,3, 4; LXXII,21, 22, 32-4; CXV,21, 23, 25, 29; CXXI,17; CXXII,3, 5, 6, 8, 11, 13, 16, 19, 22, 23.
83. Long IV-V; short VII-XXX; very short XXXIII, XXXV-VI, XXXVIII, XL, XLII, XLIV, LIV, LXXI, CIV, CXXVIII onwards.
84. XXIV,11, 12, 13, 15; L,4; LXXII,6-11, 15; LXXXV,24, 28; CVI,5, 12; CXXVII,2; CXLVII,1.
85. XXXVII,4, 9-11.
86. IV,3, 4, 8, 14; XXI,6, 7.
87. XXXII,9, 10, 11, 13, 17, 18; XLIX,2, 5, 21; L,5; LXXII,9; LXXV,25; XCIV,8; CL,1.
88. Moved boss XX,4; XXV,5. Squeezed blazons CIV,20, 24-6, 28, 30, 31.
89. XCVIII,7. Two are on end in LVI.
90. XLI,4; XCIII,21; CXVI,1.
91. See LEHMANN-HARTLEBEN, 1926, 147-8; RICHTER, 1950, 147-8; STRONG, 1980, 144; ROCKWELL, 1981-83, 102-3, 105. Presumably those inserts which were provided corroded away over time. It is unlikely that the relatively unrewarding task of robbing them was occasioned by the despoiling visit of Constans II in A.D.663 (LANCIANI, 1899, 124-5).
92. I,1-4; XI,12; XIII,2, 5, 7; XVIII,5; XXI,8; XLIII,2; CXLVII,1. In the cases of XIII,4; CXIII,2 stone shafted weapons were provided for men in the leaning pose.
93. XXIV,40; XXXVI,13; XXXVIII,1, 3, 10, 13; LXX,6.
94. XI, XV, XX, XXIII.
95. LII, LVI, LXVI-VIII.
96. Metal LXXVI; Stone XCVII; both LXIX, LXXIII, XCII, XCVI.
97. Stone XVI, XIX, XXXIX, LXV. Metal XII, XVII, LX.
98. XIII, XXVII, LXVI, CXIII-IV.
99. Especially XXXVIII,26; LXII,8; XCIV,6; CVIII,21.
100. Standards across the dividing band: XXVII,8; XLVIII,8, 9, 11;

- LIII,19, 21, 24; LXI,12. Scaled down standards: CVIII,25; CXIII,3, 4; CXXIII,14, 17.
101. Metal exceptions: LXXXVIII,2; CVI,25, 36; CVIII,21, 23; CIX,1.
102. GAUER, 1977, 48, Fig.1.
103. Ibid., 17, 48, Fig.1; KOEPPEL, 1980, 301-2.
104. GAUER, 1977, 19, Fig.1.
105. Ibid., 46, Fig.1. Following LEHMANN-HARTLEBEN, 1926, 145.
106. GAUER, 1977, 48, Fig.1.
107. IV, IX, XXXIV, XLIV, XLVIII, LXXV, LXXVIII, LXXIX, XCIX, CI, CXVIII, CXXX, CXXXI, CXXXVIII, CXLI, CXLV, CXLVII.
108. LXIV, C, CLI.
109. IV-X, XLVIII-LIV, CI-V.
110. GALINSKY, 1975, 83-4. A good example of a common theme is the series of scenes depicting episodes of the Odyssey on different walls of a room, from the Esquiline hill (STRONG, 1980, Fig.27-8; BRILLIANT, 1984, 59-60).
111. GALINSKY, 1975, 86-8, 113-9; LEHMANN-HARTLEBEN, 1926, 118-9; BRILLIANT, 1984, 53-89.
112. VII, XI-XXIII, XXV-VI, XXVIII-IX, XXXIX, XLVII, LI-II, LV-XIII, LXV, LXVII-IX, LXXI, LXXIV, CX, CXII, CXVII-IX, CXLVI, CXLVIII-CL, CLII-V.
113. VII, XXI, XXVI, LV, LVII-III, LXII-III.
114. A very close comparison may be made between the use made of these narrow spaces on the column and the narrow reliefs around the base of a statue of the personified Tiber in the Louvre. The latter was found in the Campo Marzio and its reliefs depict water deities, tower-like buildings and palisades, light river craft being loaded and pastoral scenes. The statue may be Hadrianic making it close to the column in date as well as provenance and relief content (LE GALL, 1944a; 1944b).

3.3 Sculpting and Composition

1. For the organisation of building projects see LEON, 1971, 22-5; MACDONALD, 1982, 141-5; LING, 1985, 14-5. The role of Apollodorus is discussed in 4.2. Like the Arch of Benevento, the column was a senatorial project. Presumably this fact bore on the financing of the work and perhaps on the patronage of particular subordinate architects and sculptural workshops, but the imperial direction and supervision of propaganda content is likely to have been very close (HASSEL, 1966, 3-5; LEPPER, 1969, 250-1; BURFORD, 1972,

127).

2. Sculptors and the division of work are examined by LEHMANN-HARTLEBEN, 1926, 144-54; BANDINELLI, 1938-39; 1970, 229, 238; GAUER, 1977, 76-86; ROCKWELL, 1981-83, 103-5.
3. GAUER, 1977, 78-81, Fig.3. He took issue with the view that design and execution were uniform processes, as proposed by LEHMANN-HARTLEBEN, 1926, 111, 146. The latter admitted many hands at work but only one overall master.
4. GAUER, 1977, 13-23, 45-8.
5. This edging is preserved on VI,6, 8; IX,2-4; X,2-3; XII,6, 8, 9; XVIII,6-8; XXIV,27; XXV,3; XXVIII,2, 4, 6; XL,30; L,7, 8; LI,13; LXI,3; LXVIII,16, 18; CXVIII,3-5; CXXIII,16, 19, 20; CXXX,1, 3. There is some correlation between mail and pteruges chiselling. Only in LI are pteruges, but not mail, tooled, whereas both occur together in IX, X, XII, XXIV, XL, LXI, LXVIII, CXVIII, CXXIII, CXXX; neither in XIV, XVI, CV, CVI, CVIII, CIX, CXXXVII, CCLI. Mail but not pteruges is chiselled in XVIII, XXVI, XXX, XXXV, XXXVI, XXXIX, XLIV, LIV, LXIII, LXVI, LXXII, LXXIII, LXXV, XCVI, XCVII, CXIV. This suggests that work on pteruges was separate to scene-sculpting proper, like mail chiselling, but that it was less important than mail and even less assiduously applied, probably at the same time.
6. DAVIES, 1920, 4; LEHMANN-HARTLEBEN, 1926, 146; RICHMOND, 1935, 3, 26; TOYNBEE, 1951, 15; TURCAN-DÉLÉANI, 1958, 162; ROCCHETTI, 1959, 759; HASSEL, 1966, 35; LEPPER, 1969, 251; BANDINELLI, 1970, 241; GAUER, 1977, 78; STRONG, 1980, 151; KOEPPPEL, 1980, 305-6; TOYNBEE & WILKINS, 1982, 246; HANNESTAD, 1986, 157. Significantly, the one commentator who discounted the use of detailed cartoons is himself a sculptor and has studied the original sculptures, rather than relying on casts and photographs (ROCKWELL, 1981-83, 104). The use of information conveying sketches between advisers and sculptors is certainly not discounted by the writer but this is quite different from postulating fully worked out cartoons for the whole frieze.
7. The writer is very grateful to Mr P. Rockwell for discussing this point by letter.
8. There is little evidence that volumina were illustrated in this way. The spiral nature of the frieze was a major difficulty in its early reproduction for antiquarian study, especially that by BARTOLI, 1672 (see COARELLI, 1980, 119-26; MONTI, 1980, 69-83; SCHEIPER, 1982, 158-81).
9. BIRT, 1907, 269-315, followed by HAMBERG, 1945, 129-32; BETHE, 1945, 81-2. This hypothesis is discounted by LEHMANN-HARTLEBEN, 1926, 3; BANDINELLI, 1970, 240; STRONG, 1980, 146. See also BECATTI, 1960, 21-4; BRILLIANT, 1967, 223-5.
10. See CLARKE, 1978, 153; BISHOP, 111, Fig.1.

11. There is some difference of opinion as to whether the incised drawings on the walls of the Temple of Apollo at Didyma (Turkey) were full architects' plans (HASELBERGER, 1985, 121-2) or just sketches used by architects to work up specific designs in detail whilst otherwise relying upon rules of proportion and modular planning (COULTON, 1985, 103-8). See also Vitruv., Arch. I,ii,2.
12. Contemporary shipwrights working on traditional wooden vessels in the Mediterranean are in mind here (SEVERIN, 1985, 35-6).
13. RICH, 1947, 271-8; STRONG & CLARIDGE, 1976, 202-3, Fig.332-3; PINKERNEIL, 1983, 264-10.
14. For taille directe see RICH, 1947, 263-8; BATTEN, 1957, 12-16. Sketching directly on the stone surface would have helped in the composition of large scenes and in consultations between sculptors and frieze organisers, but this is very different from working from cartoons or pattern books. Such a direct sketch on a plastered wall for a fresco of Laocoon survived at Pompeii (BANDINELLI, 1970, Pl.249).
15. The richness of detail has always impressed commentators to the extent that few have taken an over-view of the whole project. This is in part due to the form in which pictorial publication of the frieze has necessarily taken, a lineal sequence breaking up all the vertical relationships. RICHMOND, 1935, 1-3 denied historical content for the frieze beyond a basic chronological framework of events but was convinced of the accuracy of small details of equipment and scenery. Unfortunately his successors have been equally enamoured with the richness of sculpting and have ignored his valid first conclusion whilst uncritically accepting his flawed second.
16. See AMICI, 1982, Fig.125-6, 145.
17. GAUER, 1977, 78. See SCHEIPER, 1982, 247-8; BRILLIANT, 1984, 90-4 on height of relief and attempts to improve visibility.
18. For the dominating bulk of the basilica overshadowing the column court see AMICI, 1982, Fig.145, 148.
19. FROEHNER, 1872-74, xviii; LEHMANN-HARTLEBEN, 1926, 147; REUTERSWÄRD, 1960, 229-30; SCHEIPER, 1982, 248-52; COLONNA, 1988, 288-9.
20. ROCKWELL, 1981-83, 102.
21. Not surprisingly sculptures from tombs are the most likely to retain their polychromy, especially in arid regions. This applies to a certain amount of Palmyrene and Hatrene sculpture (GHIRSHMAN, 1962, Pl.90, 98; COLLEDGE, 1976, 118-20). A few pieces in the west retain paint (BLANCHET, 1924) but where coarse stones required a gesso layer before painting it is even less likely to survive (e.g. COULSTON & PHILLIPS, 1988, No.17, 88, 122, 514). Some sarcophagi from Rome have traces of colour and gilding, notably the Acilia Sarcophagus, Museo Nazionale (HAMBERG, 1945, 185;

- REUTERSWÄRD, 1960, 230-42; BRILLIANT, 1967, 223; SORRIES & LANGE, 1986). For the use of paint on the Marcus Column and the Arch of Constantine see PETERSEN et al., 1896, 103-4 and L'ORANGE & VON GERKAN, 1939, 193 respectively.
22. RICHTER, 1950, 148-58; REUTERSWÄRD, 1960, 181-247; STRONG & CLARIDGE, 1976, 204.
 23. LISSA-CARONNA, 1986, 30-7, Pl.VIII-XVI.
 24. Quite how much architectural decoration on Roman monuments was picked out in paint is not fully known. Perhaps full advantage was taken of the gleaming white of newly dressed marble surfaces to give buildings, especially triumphal arches, an even more imposing effect. However, figural sculpture at least would have been painted and traces of red have also been recognised on the Arch of Benevento (REUTERSWÄRD, 1960, 228). The restored paint on sculptures adorning medieval churches and Oxford colleges give some idea of the pleasing combination of natural stone and bright colours. Roman triumphal monuments would also have had glittering gilded statuary and inscriptions. The Arch of Constantine went even further and must have been a riot of colour with its purple porphyry veneering, its giallo antico columns and its bands of green Lacedaemonian porphyry.
 25. XXIV,62, 69; XXXVII,3-5; XLII,1; LVIII,1; LXXII,24; XCIV,14, 20, 22; CVII,4; CVIII,18; CXIII,7; CXV,17; CXLII,2, 3, 5; CXLIII,1, 3, 4; CXLIV,1-4; CXLV,1, 4, 8; CXLVIII,1; CLI,5.
 26. Similarly, battle sarcophagi, even more packed and confusing in their mêlée scenes than the column, would have benefitted from polychromy which would have been especially effective where naked barbarians were locked in combat with armoured Romans. HAMBERG, 1945, 177-8, Pl.38, 40-1, 43 similarly attempted to colour code figures in such scenes.
 27. It might be expected that gilding on statuary and paint on sculpture would have been renewed when an old building was restored (Codex Theodosianus XV, Title 1,15.19; 15.27). Whether or not such a large-scale undertaking as repainting the column was ever undertaken, especially after the 2nd century, is another matter.

4 The Sources of Information

4.1 Documentary

1. BIRT, 1907, 269-70; WICKHOFF, 1912, 124; HAMBERG, 1945, 105; DAICOVICIU, 1959, 222-3; DAICOVICIU & DAICOVICIU, 1966, 19; FLORESCU, 1969, 53, 55; ZANKER, 1970, 527-8; ROSSI, 1971a, 16, 19; FLORESCU, 1971, 210-1; GAUER, 1977, 4-5; ANDREAE, 1977, 206; SCHEIPER, 1982, 153-4; CISEK, 1983, 59-61; STROBEL, 1984, 20-2.
2. GAUER, 1977, 5.

3. SYME, 1958, 178; DUDLEY, 1968, 29-30; CAMPBELL, 1984, 47, 151-5.
4. See especially, Pliny, Ep. VIII,4; SYME, 1958, 177-90, 271-303; DUDLEY, 1968, 29-30; SHERK, 1974, 543; CAMPBELL, 1984, 62.
5. SYME, 1929, 133-7; CAMPBELL, 1984, 153-4.
6. The mechanism by which Roman texts were circulated after writing are unclear. Gift-giving and lending of manuscripts to friends and social peers may be envisaged, together with lodging them in the public libraries of the capital (DUDLEY, 1968, 30). Quite how many copies of any given work would have been laboriously copied up is an open question.
7. SYME, 1958, 282-5; DUDLEY, 1968, 29; SHERK, 1974, 536-7; SCHEIPER, 1982, 36-40; CAMPBELL, 1984, 148-9. Ibid., 62, 150; Dio, LIII,19,2-6 underline the difficulties in the capital for writers to acquire reliable information about events on the frontiers.
8. See Fronto, Ver. Imp. II,3,1; CHAMPLIN, 1980, 115; CAMPBELL, 1984, 155.

4.2 Specialist Knowledge

1. Vitruv., Arch. I,i, iii, v; X,x-xvi. See CALABI-LIMENTANI, 1958, 77-8; BURFORD, 1972, 102-7; MACDONALD, 1982, 137-42. For a very versatile agrimensor with the imperial entourage in Dacia see SHERK, 1974, 541-2.
2. For the career of Apollodorus and his possible involvement in the column project see LOWY, 1924; LEHMANN-HARTLEBEN, 1926, 144-5; BANDINELLI, 1938-39, 334; 1958; 1970, 238-40; ZANKER, 1970, 526; LEON, 1971, 26, n.1; ROSSI, 1971a, 19; FLORESCU, 1971, 209-10; GAUER, 1977, 76, 78; SCHEIPER, 1982, 152-4; MACDONALD, 1982, 129-37; STROBEL, 1984, 24, 29, 37, 204; HANNESTAD, 1986, 157; BOATWRIGHT, 1987, 31-2. The Poliorcetica is discussed and figured by BANDINELLI, 1958, 478-9, Fig.648; 1970, 239-40.

4.3 General Knowledge

1. In general see DAVIES, 1920, 2; HAMBERG, 1945, 16-7, 41-5; SUTHERLAND, 1959, 53-5; SCHEIPER, 1982, 6-36, 46-67; CAMPBELL, 1984, 142-8.
2. R.I.C. II, Trajan, No.45-8, 57-78, 81-90, 96-101, 128-35, 137-41, 147, 192-201, 206-21, 225-8, 234, 447-9, 521-50, 560-6, 569, 584-7, 620-3; BELLONI, 1973, No.45, 50, 52-3, 66, 88-90, 98-101, 104-7, 118-21, 129, 136, 139, 153-4, 270-9, 306-15, 328-44, 346-50, 355-9, 400-1, 418-23, 437-9.
3. See Dio, LXVIII,10,2; 15,1; II XIII,226.

4.4 Troops in Rome

1. DURRY, 1938, 43-5; 1954, 1608; PASSERINI, 1939, 44-9.
2. RICHMOND, 1927; PLATNER & ASHBY, 1929, 106-8; DURRY, 1938, 45-54; PASSERINI, 1939, 49-50; BLAKE, 1959, 14-5; COARELLI, 1980, 218, 228-9; NASH, 1981, I, 221-4.
3. DURRY, 1938, 77-89; PASSERINI, 1939, 44-8, 58-67 saw the praetorians as organised into cohortes quingenariae whereas KENNEDY, 1978 made a good case for cohortes milliariae at least as early as the Antonine period.
4. DURRY, 1938, 99-100; PASSERINI, 1939, 59, 69-70. For numbers see Tac., Hist. II,24.
5. PLATNER & ASHBY, 1929, 108; DURRY, 1938, 12-6; FREIS, 1967, 38-42.
6. REYNOLDS, 1926, 15, 23-4, 71-5, 82-3; DURRY, 1938, 16-20. For an armed vigil in military dress on a stela see AMELUNG, 1903, No.128d; REYNOLDS, 1926, 98, Pl.VI.
7. PLATNER & ASHBY, 1929, 105; DURRY, 1938, 29-34; COLINI, 1944, 314-7; SPEIDEL, 1965, 10-4.
8. S.H.A., Commodus 15,6; PICARD, 1970, Pl.XLIII; STRONG & CLARIDGE, 1976, 35 (vellaria); Dio, LXVII,8,2 (naumachia display under Domitian); PLATNER & ASHBY, 1929, 105, 108; DURRY, 1938, 23-5; STARR, 1941, 20-1, 23-4; KIENAST, 1966, 74-5; COARELLI, 1980, 167. The naumachia of Domitian was dismantled by Trajan, who also built a new one (SMALLWOOD, 1966, No.22; BLAKE & BISHOP, 1973, 34).
9. REYNOLDS, 1923; PLATNER & ASHBY, 1929, 105-6; DURRY, 1938, 25-9; NASH, 1981, I, 219-20.
10. CARCOPINO, 1956, 31; DUDLEY, 1968, 158.
11. If the cohortes praetoriae were cohortes quingenariae this would reduce the proportion to 1 in 88, still a high figure in terms of the publicly visual profile of troops in the capital.
12. For potentially armoured troops on public occasions see Tac., Ann. XII,56; Dio, LVII,8,2; LX,33; LXIII,1,3. A public decursio is figured on the Pius Column pedestal (VOGEL, 1973, Pl.9, 15). For armoured adlocutio audiences see R.I.C., Caligula, No.23-5; Galba, No.150; II, Domitian, No.288; Trajan, No.655-8.
13. Notably on the Arch of Benevento (HASSEL, 1966, Pl.18-22; ANDREAE, 1977, Fig.426-9; 1979, Pl.80-2) and the Arch of Titus (PFANNER, 1983, Pl.79-87). The triumphal frieze on the Arch of Severus in the Forum Romanum is exceptional in that armoured soldiers escort prisoners and booty (BRILLIANT, 1967, Pl.44-8).
14. Tac., Hist. II,89.
15. Although Jos., B.J. VII,116-57 is unspecific it seems very likely

that praetorians and a few legionaries, but no auxiliaries, marched in Titus' triumph.

16. DURRY, 1938, 114-7; PASSERINI, 1939, 74; DOMASZEWSKI, 1967, 25-6; MARSDEN, 1969, 184-5, 194; BURFORD, 1972, 158; SHERK, 1974, 549-50. See Tac., Ann. XII, 56 for praetorian artillery in Claudian displays.
17. PATSCH, 1937, 40; PASSERINI, 1939, 43-4; DURRY, 1954, 1609; KENNEDY, 1978, 283; SCHLEIERMACHER, 1984, No.23; STROBEL, 1984, 103-4; 1987, 441.

4.5 The Dacian Triumphs

1. There is some difficulty over whether formal triumphal processions were held at the end of each Dacian war. Dio mentions one at the end of the first war but only games of extreme duration after the second (LXVIII, 10, 2; 15, 1). On the other hand, Pliny mentions two triumphs (Ep. VIII, 4, 2). Whether or not a formal procession was held in A.D. 107, the games would have played up the triumphal imagery and involved barbarian prisoners, thus, would have supplied the column sculptors with good models for Dacian dress and equipment. So, for the purposes of this study, the writer has followed other commentators in referring to two triumphs (HANSLIK, 1965, 1083; BELLONI, 1973, xlv; STROBEL, 1984, 221). For the first triumph see MAZZARINO, 1978; 1982, 39-44.
2. See STRONG, 1926, Fig. 179-80; 1961, Pl. 31; HASSEL, 1966, Pl. 20.1; PFANNER, 1983, Pl. 54, 85.4; KOEPEL, 1983, No. 11; 1984, No. 4, 20; 1986, No. 44. Pliny, Pan. 17, 1-2 mentions barbarian arms and prisoners in Trajan's triumph. For depictions of triumphal processions in general see RYBERG, 1955, 141-62.
3. These are depicted on the Arch of Titus (PFANNER, 1983, Pl. 54, 81.1, 83.7) and on the Arch of Benevento (HASSEL, 1966, Pl. 20.2; 22.3. See also RYBERG, 1955, Fig. 50b). Another component of these triumphal friezes are men who may have been imperial heralds. They carry circular shields, are dressed in tunics and have a similar hairstyle to that worn by camilli (PFANNER, 1983, Pl. 79-83; HASSEL, 1966, Pl. 6-7, 18.1, 22). They are quite different in appearance from the soldiers present in the processions (RYBERG, 1955, 148).
4. For paintings carried in Republican and Imperial period triumphs and erected in the capital as static displays see Ovid, ex Ponto II, 1, 37; Appian, de bello Mithridato 116-7; Livy, XLI, 28, 8-10; Jos., B.J. VII, 139-47; Pliny, N.H. XXXV, viii, 22-3; Tac., Ann. II, 41; Herodian, III, 9, 12; S.H.A., Maximini duo 12. Triumphal paintings and their influence on sculpture are discussed by STRONG, 1926, 154-5; LEHMANN-HARTLEBEN, 1926, 2, 40, 91, 101-2; ZWIKKER, 1941, 7-8; HAMBERG, 1945, 125-9; TOYNBEE, 1951, 38-9; BRILLIANT, 1967, 223-4; PICARD, 1970, 13-7; ZANKER, 1970, 527; BANDINELLI, 1970, 114; HOLSCHER, 1980, 314; KOEPEL, 1982b, 515-6; SCHEIPER, 1982, 31-2; BONANNO, 1983, 71-2; CAMPBELL, 1984, 134.

5. LEHMANN-HARTLEBEN, 1926, 2.

6. HAMBERG, 1945, 128.

4.6 Illustrated Manuscripts

1. KOEPPPEL, 1980, 302-3.

2. Ibid., Fig.1-2; DILKE, 1971, 102.

3. CICHORIUS, 1896, 236-9, Fig.4; PETERSEN, 1899, 60; 1903, 64, 66; TURCAN-DÉLÉANI, 1958, 165. For pits with stakes (lilia) used as approach obstacles see WEBSTER, 1969, Pl.XXV.a; Caes., B.G. VII,73.

4. Veg., III,6; S.H.A., Alexander Severus 45. For military maps in general see SHERK, 1974, 558-61; DILKE, 1985, 112, 122.

5. KOEPPPEL, 1980, 306.

6. Notably the campaigns of Domitian's reign which opened up areas north of the Danube. Trajan's victory at Tapae (Dio, LXVIII,8,1) was foreshadowed by that of Tettius Julianus at the same spot (LXVII,10,2); T.I.R. L34, Budapest, s.v. 'Tapae'. For scouting and intelligence gathering see SPEIDEL, 1970, 148; SHERK, 1974, 534-43.

7. As is suggested by the list preserved from Trajan's commentarii in Prisc., Inst. Gram. VI,13, and by both the Antonine Itinerary and the Ravenna Cosmography (DILKE, 1971, 112; 1985, 125-8, 174-6). The parchment map from Dura-Europos, supposedly originally on a shield, adds more topographical detail (DILKE, 1971, 112; 1985, 120-2; SHERK, 1974, 560, Pl.VII; REBUFFET, 1986). The manuscript maps used by Renaissance Spanish tercios moving up from Italy to Flanders form a very interesting parallel to Roman provisions, quoting as they did place-names and march-distances with a minimum of topographical conventions (PARKER, 1972, Fig.11-2).

8. LEPPER, 1969, 255, 257; DILKE, 1971, 68, 101, 153, 172; 1985, Pl.9-11, 14, 22-3, 25; VOGEL, 1973, 77-80; SHERK, 1974, Pl.IV-VI, VIII; KOEPPPEL, 1980, Pl.96; MEIGGS, 1982, 186-7.

9. XXV, XXIX, LI, LIX, LXII-IV, LXXVI, XCIII, XCVI, CVI, CVIII, CXII, CXLVI, CL, CLIII.

10. III, XXVI, XXVIII, XLIII, XLVII, L, LVII, LIX-X, LXXII, CI, CIV, CIX, CXI, CXIV, CXIX, CXXVI, CXXXV-VI, CXL, CXLVIII.

11. VIII, IX, XXV, XLIV, L, LXIII, LXVI, LXXII, LXXXIV, LXXXVII, XC, CII, CXX, CXXIII, CXXX, CXXXV, CXLI.

12. XI-II, XX, XXXIX, LII, LX, LXV.

13. XXVI, LXXIV, CXXIV?, CXXXI, CXXXIII.

14. LVIII, LXIII, LXXXV, XCII, XCVIII, CII, CV, CVIII, CXXXVI.
15. See BRILLIANT, 1967, 223-5, 230-1, Fig.63-4, 70, Pl.61, 67, 77, 87; DILKE, 1971, 68, 101-2, 153-4, 171-2, Fig.32-3; 1985, Pl.9-12, 14, 16, 22-5; SHERK, 1974, Pl.III-VI, VIII-IX; KOEPPPEL, 1980, Fig.2, Pl.96. See also BECATTI, 1960, 21-4.
16. The Antonine Itinerary dates to the 3rd century, the Tabula Peuteringiana to the 4th and the Ravenna Cosmography to the 7th (DILKE, 1985, 113-20, 125-8, 174-6). None of the surviving maps or itineraries of practical use were military, with the exception of the Dura shield map (see n.7). This shows a coastal itinerary consisting essentially of place-names and distances between them around the eastern Black Sea coast. Roman troops had operated in the region for at least two centuries before the shield cover was painted and in any case the map was a private record, presumably painted after the journey had been made. All it really adds to itinerarium lists is a coastline. It may have been the type of itinerarium pictum in Vegetius' mind.
17. BANDINELLI, 1970, 240. It has been suggested that 5th century mosaics in S. Maria Maggiore, Rome, were directly modelled on Trajan's Column, especially scene XXX (CLEMEN, 1975, Fig.1-2). Caution must always be exercised when commentators project Late Roman material, such as manuscript illustrations, back into earlier periods.

4.7 Campaign Sketches

1. RICHMOND, 1935, 3.
2. Ibid., 4-5.
3. TURCAN-DELEANI, 1958, 161-7; JONES, 1975, 4-6, 29-30, 78, 82, 88-9, 92; HOBLEY, 1982, 234, 238, 257; HANSON, 1982, 172, 177; JOHNSON, 1983, 6, 43, 99.
4. Hyg., de mun. castr. 49-58; Veg., I, 23-5; BENNETT, 1980; FRERE & ST. JOSEPH, 1983, 19-31; WEBSTER, 1985, 169-74; KEPPIE, 1986, 25-31.
5. JONES, 1975, 2-3, 68-97; HOBLEY, 1982; JOHNSON, 1983, 56-66, 72-87, 97-102; WEBSTER, 1985, 175-84. These were winter quarters and administrative short-term bases for military units in the 1st-2nd centuries A.D., rather than permanent stations. Armies coalesced in the campaigning season, leaving the forts empty or attended by small detachments.
6. Camps: VIII, IX, XIII, XVII, XVIII, XXI, XXVIII, LIII, LVI, LXI, LXVI, XCIV, CIII, CIV, CV, CVII, CIX, CXIII, CXXXVIII, CXLI, CXLVII. Forts: XI, XIV, XVI, XVIII, XXII, XXIV, XXXV, L, LI, LXV, LXXIII, LXXV, LXXXV, LXXXIX, XCII, CVIII, CXXXI, CXXXIV, CXXXVII.
7. Sacrifice: VIII, LIII, CIII. Submission: XVIII, XXVIII, XXXIX,

LII, LXI, LXVI, LXVIII, LXXV, CXXX, CXLI. Adlocutio: X, LI, LXXII, CIV, LXXV, CXXXVII. Generalship: XII, XVI, XX.

8. ~~·XI, XVI, LXVI, LXVIII.~~
9. LXVI, XCVIII, CII, CX.
10. XI-II, XVI-VII, XVIII, XXI, CVII-III, CX?
11. XI, XIV, XXIV, XXXII, XLVI, LXXIII, CII.
12. Most graphically openwork frames with diagonal members appear on the Lunt fort gateway (Warwickshire), HOBLEY, 1982, Pl.12.6-7, 10. For British and German reconstructions on paper see ibid., Pl.12.7-19; BREEZE, 1982, Fig.15, 22, 24; JOHNSON, 1983, Fig.55.
13. LI, LXXXIX, XCII, CVIII. For comparative combinations of post-pits at fort gateways see HOBLEY, 1982, 12.6-20; JOHNSON, 1983, Fig.51-4.
14. For barrack blocks see JOHNSON, 1983, 166-76; PITTS & ST.JOSEPH, 1985, 162-77; MAXFIELD, 1986, 61-6. With the sculptors' confusion of stone walls with turf and timber fort features it is unclear whether the panel over the gate in LI was intended to be of stone or wood (see R.I.B. 1935).
15. The term is employed by Hyg., de mun. castr. 53. Those on the column are planned out by POLLEN, 1874, Fig.26.
16. TURCAN-DÉLÉANI, 1958, 166-7; JOHNSON, 1983, 50; WEBSTER, 1985, 174, Fig.28. Examples and their dates have been collected by LENOIR, 1977, to which may be added MONNERET DE VILLARD, 1941, Fig.2.
17. FRERE & ST.JOSEPH, 1983, 131; KEPPIE, 1986, 28-9.
18. XI, CIX-X, CXIII, CXXVIII-IX.
19. XLIX, LXXV, LXXXV, XCII, CIII, CXXXIV.
20. Timber or timber-laced earth siege platforms were recorded by Caes., B.G. II,12, 13; VII,17, 22, 24; VIII,41; Jos., B.J. V,263-5, 466-72, 522-3; VI,149-51; VII,306. They survive at Masada in Palestine (YADIN, 1966, 220-3) and Dura-Europos in Syria (ROSTOVTZEFF et al., 1936, Pl.XII).
21. RICHMOND, 1935, 19-20. See also JONES, 1975, 29-33, 68-74, 78-82. In many cases the turf actually acts as revetting for an earth or clay rampart, rather than composing the whole rampart structure.
22. XX, LX, LXV, LXVIII.
23. CICHORIUS, 1896, 60-2, Fig.8; 1900, Fig.16.
24. XI-III, XVII-XXII, XXVIII, XLIII, CIV, CVIII-IX, CXXIX, CXLVII.

25. LXXI, XCIII, CXIII-V, CXIX.
26. TURCAN-DÉLÉANI, 1958, 162.
27. BAATZ, 1983b, 136-7.
28. RICHMOND, 1927, 14, 16, Fig.2-3, 5, Pl.6, 8. These were made of mortared bricks topping a brick-faced concrete wall, and not one made of masonry.
29. REBUFFET, 1984, Pl.I-VI.
30. For 'pila muralia' and the defence of marching camps see BEESER, 1979; BENNETT, 1982; JUNKELMANN, 1986, 205-7, Pl.71.
31. JONES, 1975, 88-9, Fig.39; HOBLEY, 1982, 234, Fig.12.6-19.
32. The writer examined this relief in the Palazzo basement in 1982 and to his knowledge it is unpublished. The amphitheatre is viewed obliquely in the 'map' perspective technique and is surrounded on three sides by a gabled portico. On the broken left-hand edge appears an elephant's trunk.
33. LEHMANN-HARTLEBEN, 1926, 39-50.
34. XI-II, XX, XXXIX, LX, LXV, LXVIII, CXXVII. Roads: LVI, XCVII.
35. FUENTES, 1988, 59.
36. CURLE, 1911, Pl.LVII,1-5; MANNING, 1976, No.76-7; JUNKELMANN, 1986, 203-5, Pl.69-70; ALLASON-JONES & BISHOP, 1988, No.82, Fig.72. For vigiles with dolabrae see REYNOLDS, 1926, 98.
37. Jos., B.J. III,95. See also Veg., II,25. For the Trebius I^ustus fresco see CASALONE, 1962, Fig.4; ANDREAE, 1977, Fig.636; MACDONALD, 1982, Pl.130b; ADAM, 1984, Fig.181. This dates to the Constantinian period but the contemporary dress of the workmen and the empirical observation of small detail suggest that it is not influenced by earlier artworks. Even more interesting is the wicker basket carried in triumphal procession on the Arch of Benevento (HASSEL, 1966, Pl.18.1; ANDREAE, 1977, Fig.429). Baskets also appear on the Esquiline building scene fresco (LEHMANN-HARTLEBEN, 1926, Fig.8).
38. Forest: XV, XXIII, LII, LVI, LXIX, XCII, XCVII, CXVII, CXXVII. Ships: CXXXIII. Fortifications: XI-III, XVI-IX, LXV, LXVIII, LXXIII, CXXVII, CXXIX.
39. Mallets: XVI, LXV. Timbers: XI, XVI, CXVIII.
40. Dolabrae: XV, XXIII, LII, LVI, LXVI, LXVII, LXVIII-IX, LXXIII, XCII, XCVII. Wood chisels: XII, XVI-II, XIX.
41. For example, on the Bardo Museum building scene mosaic (MACDONALD, 1982, Pl.127; ADAM, 1984, Fig.164), a stela from Ravenna (BANDINELLI, 1970, Fig.96) and a fresco from Pompeii (LIVERSIDGE,

1976, Fig.262).

42. GOODMAN, 1964, 196-7; LIVERSIDGE, 1976, 160-1; GAITSZCH, 1979; GAITZSCH & MATTHÄUS, 1980.
43. XX, XL, XLV, LXVIII, CXXIX.
44. BREEZE, 1982, 85.
45. HOBLEY, 1982, Fig.12.4. Portage of several turves on a short section of plank would have been more labour-efficient and the blocks would have been less likely to break up perhaps. Ibid., Fig.12 does make it look as though wheel-barrows were used in the Lunt reconstruction!
46. PITTS & ST.JOSEPH, 1985, 60-77. See LANDER, 1984, 28-30, 35.
47. Ibid., 22-8; SCHÖNBERGER, 1985, 461-4.
48. Britain: JONES, 1975, 97-100; LANDER, 1984, 30-8. Wallachia: STEFAN, 1946-47, 117-9; GUDEA, 1979, Fig.5.47-9; STROBEL, 1984, 187-8; LANDER, 1984, 43-4.
49. MOCSY, 1974, 107; GUDEA, 1979, 82-3; JOHNSON, 1983, 66-70; LANDER, 1984, 60-6, 85-105; SCHÖNBERGER, 1985, 392-400.
50. Pers. comm. Mr J. Bennett. See CHIRILA et al., 1972, 13-4; GUDEA, 1979, 77-82; LANDER, 1984, 61-5, 85, 95.
51. LEHMANN-HARTLEBEN, 1926, Fig.8 (Esquiline); PARIBENI, 1927, Fig.16; ADAM, 1984, Fig.90 (Terracina).
52. WARD-PERKINS, 1981, 273; DODGE, 1984, 154-60.
53. PLATNER & ASHBY, 1929, 350-5; BLAKE, 1947, 137-40; BÜETHIUS, 1978, 104-5, 179, Fig.105, 170; COARELLI, 1980, 18-22; NASH, 1981, II, 104-16. The column stands very close to the course of the Republican wall and some stretches of these defences may still have been standing and visible in the vicinity whilst sculpting work was in progress (WAURICK, 1973, Fig.1, 3).
54. That is to say marble sheathing was generally used for interiors whilst travertine or marble opus quadratum exterior skins were applied on major building types such as mausolea, temples, amphitheatres and basilicae. See BLAKE & BISHOP, 1973, Pl.9, 11, 20-1; WARD-PERKINS, 1981, Fig.7, 15, 28-9, 53; ADAM, 1984, Fig.253.
55. BLAKE & BISHOP, 1973, 12-15; MACDONALD, 1982, 79, Pl.77. The forum-basilica complex was largely constructed of marble or tufa opus quadratum with the significant exception of the brick-built libraries.
56. For the decoration in general see ZANKER, 1970; LEON, 1971; AMICI, 1982. Fragments of friezes associated with the complex were examined with full references by KOEPPEL, 1985, No.9-50. The

Dacian statues have been thoroughly studied and catalogued by PINKERNEIL, 1983, 124-247.

57. For Domitianic building activities and continuity into Trajan's reign see WATERS, 1969, 402-3; WARD-PERKINS, 1981, 73-95; MACDONALD, 1982, 47-74; ANDERSON, 1983.
58. ROSSI, 1968, 44. The actual inscription is I.L.S. 5863.
59. ORLANDOS, 1966, 138, Fig.83; LING, 1976, 211; ADAM, 1984, 78-9. CICHORIUS, 1900, 129 suggested chalk-preparation for a road surface.
60. ADAM & VARENE, 1980, Fig.5; MACDONALD, 1982, Pl.127; ADAM, 1984, Fig.164.
61. ADAM & VARENE, 1980, Fig.2; ADAM, 1984, Fig.88; LING, 1985, Fig.24. See also LING, 1976, Fig.345; ADAM, 1984, Fig.522 for mixing on a stucco-working relief from Sens (France).
62. ADAM & VARENE, 1980, Fig.21; ADAM, 1984, Fig.163.
63. ADAM, 1984, 53-60. The use of clamps is most often revealed on standing monuments by the holes cut in to rob the metal during the Middle Ages. This may be seen on the Column itself (Fig.3), the Forum of Trajan's enclosure wall (MACDONALD, 1982, Pl.83), and, most spectacularly, on the Hadrianeum and Temple of Pius and Faustina (BLAKE & BISHOP, 1973, Pl.11.1-2).
64. For bricks and brick-faced concrete in general see MACDONALD, 1982, 149-54; ADAM, 1984, 157-63. Adam interpreted the blocks being handled on the Column as mud-bricks carried on hods (ibid., 84, Fig.177).
65. There is some dispute as to whether the exteriors of most brick-faced buildings were plastered, or just left bare. MACDONALD, 1982, 113-5 discussed this problem with reference to the Pantheon's rotunda walls. Brick-faced insulae at Ostia do not generally seem to have been plastered in the manner of post-Roman residential buildings in Rome. However, richer buildings may normally have been given exterior rendering. A good example of this is the Hadrianic complex surviving in the horti Sallustiani which has plaster surviving in a pseudo-ashlar scheme (BLAKE & BISHOP, 1973, 90, Pl.6.3; COARELLI, 1980, 224-5; pers. obs.).
66. MÓCSY, 1974, 107; BAATZ, 1976, 10-28; BREEZE, 1982, 61-5, 80; SCHÖNBERGER, 1985, 394.
67. BAATZ, 1974, Fig.6, 7, 10-12; FARRAR, 1980; BREEZE, 1982, Fig.8; KEPPIE, 1986, 37-8.
68. Veg., III,5; RICHMOND, 1935, 36.
69. Towers at Oberbieber, Meisenhof, Stefansturm and Zugmantel on the Taunus frontier in West Germany have been built with wooden balconies with diagonal cross-members (pers. obs.). See BAATZ,

1976, 35-42, Fig.29-30; BREEZE, 1982, Fig.9 for reconstructions on paper. The writer is very grateful to Mr J. Bennett for transport to the above-mentioned sites.

70. DAVIES, 1917, 83. See Dio, LXVII,7,4; LXVIII,9,5. It is also true that some Dacian strongholds exhibit Roman influence in building techniques, such as the provision of opus signinum-lined cisterns (DAICOVICIU, 1963, 26; CONDURACHI & DAICOVICIU, 1971, 103; MACKENDRICK, 1975, 58). This is beyond the already strong Hellenistic influence manifest in the use of Greek masons' marks on ashlar.
71. XIV, XVIII, XXII, LXIII, CVIII, CXI, CXXXV.
72. Pediment XXV, XCIII; arch LVIII; lintel LXIII, LXVII, LXXI, CXI, CXVI, CXXVI; timber tower CXI; stone tower XCIII, CXIII, CXIX, CXX, CXXIV; posts alone CXXVI.
73. Roman: XVIII, XXI, XXXV, XLIII, XCII, XCVIII, CVIII, CXIX, CXXXVII. Dacian: XXV, LXXVI, LXXXVI. Torched buildings: XXV, LVII, CXIX.
74. FROEHNER, 1872-74, 9; CICHORIUS, 1896, 126-7; PETERSEN, 1899, 29-30; PARIBENI, 1926, 251; RICHMOND, 1935, 36-8; GAUER, 1977, 26; STROBEL, 1984, 176.
75. XXV, LVII, LXIX, LXVII, LXX, LXXII.
76. Dio, LXVIII,9,3. See DAICOVICIU et al., 1960, 319-24; DAICOVICIU, 1963; MACREA & BERCIU, 1965; MACREA et al., 1966; CONDURACHI & DAICOVICIU, 1971, 102-4; STROBEL, 1984, 44-55.
77. ROSSI, 1971a, 169, 181; 1971b, 32.
78. DAICOVICIU, 1963, Fig.25; MACREA et al., 1966, Pl.35-6.
79. Ibid., Pl.40, 43.
80. DAICOVICIU, 1959, 321-2; 1963, Fig.5, 21; MACREA & BERCIU, 1965, 6-22; CONDURACHI & DAICOVICIU, 1971, 103; MACKENDRICK, 1975, 55-6; STROBEL, 1984, 44-5.
81. DAICOVICIU, 1963, 21, 39; MACREA & BERCIU, 1965, 231; CISEK, 1983, 325; STROBEL, 1984, 46-51.
82. DAICOVICIU, 1963, Pl.VI; ROSSI, 1971b, Fig.4.
83. DAICOVICIU, 1963, Pl.IV; ROSSI, 1971b, Fig.2.
84. See Dio, LXVIII,9,5; TURCAN-DÉLÉANI, 1958, 167-8; CONDURACHI, 1982, 8-9; VATAȘIANU, 1982, 57-8.
85. Masonry known variously as 'polygonal', 'Pelasgic' or 'cyclopean' and where it occurs in the eastern Aegean region as 'Lesbian'. See BLAKE, 1947, 71-104; ORLANDOS, 1968, 127-34; BOETHIUS, 1978, 115-21, Fig.110-2, 115-21; ADAM, 1984, 112-4, Fig.235-8.

86. It is well drawn out by PETERSEN, 1903, Fig.3.
87. ROSSI, 1971b, 34.
88. ANTONESCU, 1980, Fig.9-10.
89. DAICOVICIU, 1963, 36-7; 1965; 1971; ANTONESCU, 1980.
90. KOEPPPEL, 1985, No.16; CONDURACHI & DAICOVICIU, 1971, 104.
91. For example, WARD-PERKINS & CLARIDGE, 1976, No.9-11, 13.
92. BOETHIUS, 1978, 23. The thatched hut of Romulus was maintained in its primitive form on the Palatine right into the imperial period and it may have served as a model of architectural simplicity (ibid., 28).
93. II, XXXIII, LXXIX, LXXXI, LXXXVI, LXXXVIII, C.
94. The most obvious examples of engaged temples are those in the Fora of Caesar, Augustus and Domitian (Nerva). Porticoes enclosing horti included the Forum Pacis and various Campus Martius monuments whilst theatres were numerous in the capital (scene LXXXVI). See LUGLI, 1946, Pl.V; COARELLI, 1980, 102-3, 236, 242, 255; WARD-PERKINS, 1981, Fig.6, 20, 30.
95. KOEPPPEL, 1983b, No.12-3, 17, 25, 36, 37; 1984, No.21; 1985, No.4, 6, 8, 44-6, 50; 1986, No.1, 19, 24-6, 30, 32-3, 37-9, 43-4.
96. Apart from buildings and town walls this relief depicts trees, hills and a river. See STRONG, 1961, Pl.50; BANDINELLI, 1970, Fig.190.
97. BOON, 1972, 89-98; WAHL, 1977, 122-30; ROSSETTO, 1982-3, 17, Pl.VI.2.
98. Pers. obs. For timber amphitheatres at Fidenae and Rome see Tac., Ann. IV,62; XIII,31.
99. XII, XIV, XV, XVII, XIX?, XXI, L, LVI?, LVIII, XCII, CI, CVII?. CXXXI. The fording of a stream by Roman troops in scene XXVI is so unusual because there are so many bridges depicted at all stages of Roman advances.
100. In Italy pontoon bridges of the type seen in scenes IV and XLVIII were thrown across the Bay of Pozzuoli at Caligula's behest and across the Po during the Civil war (Dio, LIX,17; Suet., Caligula 32; Tac., Hist. II,34). Both cases involved military forces (DURRY, 1938, 365).
101. For Italian bridges see BLAKE, 1947, Pl.20-5; COARELLI, 1980, 312-3, 322. The remains of the Drobeta bridge were examined by BĂRĂCILĂ, 1966; TUDOR, 1968, 60-72. Flimsy timber-frame bridges on the Arch of Benevento (HASSEL, 1966, Pl.13) and on the Villa Medici Dacian relief (CAGIANO DI AZEVEDO, 1951, No.40) have also

been identified as the Danube bridge.

102. LE GALL, 1944b, Fig.2-6; MEIGGS, 1960, 293-6; CASSON, 1965.
103. XXXIII, XXXIV, XXXV, XLVII.
104. VIERECK, 1975, 84-5, Sk.74, Pl.51-5.
105. MEIGGS, 1960, 291-3; VIERECK, 1975, 146-50, Pl.61-9; WARD-PERKINS & CLARIDGE, 1976, No.252. The stern figure head was called a cheniscus (Appian, Metamorphoses 11).
106. STARR, 1941, 54, 133-5; VIERECK, 1975, 35-7, Sk.10, Pl.5, 6, 20, 32. For liburnae operating off the Italian coast during the Civil War see Tac., Hist. III,77. The classis Flavia Moesica undoubtedly played an important part in the Dacian wars, but it may be coincidence, rather than specific information about the Dacian shipping, which made Tiber models fit in with the campaign practice. Practically all that is known about fleet involvement comes from the Column (STARR, 1941, 133-5, 187; KIENAST, 1966, 76; STROBEL, 1984, 105-6).
107. STARR, 1941, 53-4; VIERECK, 1975, 35-7, Sk.11, Pl.18-9; MORRISON & COATES, 1986, xvi-ii.
108. VIERECK, 1975, Pl.5, 8-10, 18-20, 63-5. However, the scaling down of ships in relation to their crews is seen elsewhere, ibid., Pl.22, 55, 58, 61, 71.
109. Pack animals: XVI, XLIX, CVI-II. Carts: XLVIII, LXII, LXXXVIII, CVI-11, CXXIX.
110. See Juv., Sat. III,256-9.
111. ADAM & VARENE, 1980, Fig.4; ADAM, 1984, Fig.88, 164; GUERRINI, 1982, No.47.
112. SCHOBBER, 1923, No.105, 257, 263, Fig.182; G.R. III, Pl.XIV.1-2, XLII.1.
113. Tents: VIII, XII, XIII, XVII, XVIII, XXI, XXVIII, XLIII, LVI, LXI, LXII, LXVI, XCVIII, CII, CIII, CIV, CVII, CIX, CX, CXIII, CXXV, CXXVIII, CXLI, CXLVII. Large tents: VIII, XII, XVIII, XXI, LXI, LXII, CXLI, CXLVII. 'Hike-tent' reconstruction see MCINTYRE & RICHMOND, 1934, Fig.1, reproduced in WEBSTER, 1969, Fig.26.
114. XXXIII, XXXIV, XXXV, LXXIV, LXXXV, CVII.
115. MCINTYRE & RICHMOND, 1934; GROENMAN-VAN WAATERINGE, 1967, 77-105.
116. Pers. comm. Dr C. van Driel-Murray. For tent reconstructions see MAYES, 1980; JUNKELMANN, 1986, 207-11, Fig.12, Pl.64, 68. Hyg., de mun. castr. 1 gives dimensions. The walls of the Vindolanda tent are more than 1m high.
117. Ordinarily, perhaps, troops present for triumphs were given roofs

over their heads and even with what might have been an unusually great influx of troops under Vitellius these men were crowded into porticoes and other buildings (Tac., Hist. II,93). Guard units in Rome would certainly have had tents for active campaigning (see Hyg., de mun. castr. 6).

118. JUNKELMANN, 1986, 196-203, Pl.66. For a parallel to the satchel depicted in scene IV see ROBERTSON et al., 1975, Fig.28.39.
119. FUENTES, 1983, 14; JUNKELMANN, 1986, 200-2.
120. Veg., II,25; III,24; Maurikios, Strategikon XII,2, 6. See MARSDEN, 1969, 179-80.
121. The evidence for these smaller artillery-pieces is discussed by ibid., 177-90; BAATZ, 1974, 59-62; 1980.
122. MARSDEN, 1969, 23, 31; BAATZ, 1974, 62, Fig.13-5.
123. Dio, LXVIII,9,3; 9,5.
124. AMELUNG, 1903, No.128, Pl.26; MARSDEN, 1969, Pl.1; BURFORD, 1972, Pl.56; BAATZ, 1980, Pl.90.2.
125. CUMONT, 1926, Pl.XCVII; ROSTOVTZEFF et al., 1936, Pl.XXIV.2; BAATZ, 1966, Fig.1.7.
126. BAATZ, 1974, Fig.19.
127. Ibid., Fig.9.
128. RICHMOND, 1935, 14.
129. MARSDEN, 1969, 184-5.
130. REYNOLDS, 1926, 83, 97; DOMASZEWSKI, 1967, 10; MARSDEN, 1969, 193-4.
131. MARSDEN, 1969, 195-8; BAATZ, 1974, 66-9.
132. POLLEN, 1874, 168; CICHORIUS, 1900, 228-32; PETERSEN, 1903, 91-2; RICHMOND, 1935, 39; PATSCH, 1937, 109; ROSSI, 1971a, 194.
133. BANDINELLI, 1958, Fig.648.

4.8 Artistic Traditions

1. For 'continuous' Greek friezes see RICHTER, 1950, 129-32. A painted register depicting Hercules' life at Pompeii (House of Loreius Tiburtinus, 4th style) is 'continuous' by the standards of Trajan's Column (PICARD, 1970, Pl.LV). The term 'kontinuierende Stil' was coined by WICKHOFF, 1900, 111-3; 1912, 129-32. For narrative treatment on the Column see STRONG, 1926, 184-5; BANDINELLI, 1938-39, 332-3; HAMBERG, 1945, 131-2; BECATTI, 1960, 18-24; BRILLIANT, 1967, 219-20; PICARD, 1970, 17, 23; MALISSARD,

- 1976; 1985; STRONG, 1985, 144-5; BECATTI, 1985, 547-9.
2. The treatment of deities is discussed by HAMBERG, 1945, 116-9; KOEPPPEL, 1982b, 518. For their identifications see FROEHNER, 1872-74, 9, 23; CICHORIUS, 1896, 23, 185, 372; 1900, 379-80; PETERSEN, 1900, 379-80; VULPE, 1969, 211; ROSSI, 1971a, 132, 150, 174, 210; CISEK, 1983, 296, 303, 312.
 3. KOEPPPEL, 1985, No.9, Fig.No.16 (Great Trajanic Frieze); HASSEL, 1966, Pl.1.1, 6-9, 12-5 (Benevento).
 4. ANDREAE, 1977, Fig.271-3 (Ara Pacis); PFANNER, 1983, Pl.45, 54 (Arch of Titus).
 5. Even with such works as the Arch of Titus panels, the Great Trajanic Frieze, and the Cancelleria Reliefs there is some incongruity between the number of heads and the provision of corresponding feet.
 6. Perspective on the Great Trajanic Frieze was examined by KOEPPPEL, 1969, 158-61; 1982b, 513-5. For the use of perspective and the 'map' technique see 3.2, n.37.
 7. KOEPPPEL, 1982b, 516.
 8. ANDREAE, 1977, Fig.271-3 (Ara Pacis); KOEPPPEL, 1984, No.7-8 (Cancelleria); PFANNER, 1983, Pl.45 (Arcus Titi). Already on the latter heads were being raised up in parts of the ferculum panel (ibid., Pl.54).
 9. HASSELL, 1966, ranked Pl.2, 7.2, 8; on the flat Pl.1, 7.1, 9.1, 12-5.
 10. KOEPPPEL, 1982b, 523-5.
 11. BRILLIANT, 1967, Pl.61, 67, 77, 87. The possibility that their composition, unprecedented in monumental sculpture, was directly based on painted rectangular triumphal panels cannot be ignored (see ibid., 223-4; HAMBERG, 1945, 145).
 12. BRILLIANT, 1967, Fig.63; PICARD, 1970, Pl.XLIII; WARD-PERKINS & CLARIDGE, 1976, 35.
 13. LEHMANN-HARTLEBEN, 1926, 7-108.
 14. R.I.C. I, Caligula, No.23-5; Nero, No.61-72; Galba, No.150; II, Domitian, No.288; Trajan, No.655-8.
 15. LEHMANN-HARTLEBEN, 1926, Fig.8; ADAM, 1984, Fig.88, 118.
 16. ANDREAE, 1977, Fig.297-301.
 17. DUDLEY, 1967, Pl.58; ANDREAE, 1977, Fig.189; KOEPPPEL, 1983b, No.3-4, 33-4. All Julio-Claudian probably.
 18. RYBERG, 1955, Fig.11, 17, 21, 29-32, 36-8, 43-4, 51-3; KOEPPPEL,

- 1983b, No.11-5, 30-1; 1984, No.3, 7-8, 16-9. For profectio and adventus scenes on the column see KOEPPPEL, 1969, 175-9, and in general ibid., 190-4.
19. In addition to n.17 see ROBINSON, 1975, Pl.424; KOEPPPEL, 1983a, Pl.43.1; 1983b, No.6-7, 35; 1984, No.12-14, 25-6, 28-30. For armoured adlocutio coins: R.I.C. I, Caligula, No.23-5; Galba, No.150; II, Domitian, No.288; Trajan, No.655-8.
 20. BECATTI, 1960, 20, Pl.82; BANDINELLI, 1970, 235, Fig.258-9.
 21. LEHMANN-HARTLEBEN, 1926, 93-4; HAMBERG, 1945, 186-9; ANDREAE, 1956, 55-6, 60-5; GAUER, 1977, 73-4; STRONG, 1980, 151; RICHTER, 1982, 11-2.
 22. KÄHLER, 1965, Pl.1 (Aemilius Paulus), 23b; STRONG, 1961, Pl.14; ANDREAE, 1977, Fig.190 (Lecce); ROLAND, 1969, Pl.25-7, 39-43. For the personnel behind such patronage and influence see RAWSON, 1975.
 23. AMY et al., 1962, Pl.28, 93, 95 (Orange); LEVI, 1931, No.167; KOEPPPEL, 1983b, No.33.
 24. Especially XXIV, XL, LXVI, XCV-VI, CXII. Others, such as XXXVII-VIII, LXIV, LXX, LXXII, CXV, CLI, are composed in such a way as to clearly define the opposing sides.
 25. HELBIG, 1966, No.1748; DUDLEY, 1967, Pl.58 (Museo Capitolino); MINGAZZINI, 1973, Pl.88; ROBINSON, 1975, Pl.424 (Vatican).
 26. LEHMANN-HARTLEBEN, 1926, 118. A pose later reproduced on the Amendola sarcophagus (ANDREAE, 1977, Fig.503).
 27. Despite a sparsity of clothing ascribed to the Germans by Tac., Ger. 17, the common Roman depiction of naked or near-naked barbarians may have owed much to Hellenistic 'heroic' nudity which treated Galatians in this way. This is reflected on the more stylised Antonine battle sarcophagi where the Romans may also wear muscled cuirasses which bring them as close to nudity as possible yet remaining clearly distinguishable from their adversaries (ANDREAE, 1977, Fig.500-3). Similarly, the Parthian War monument at Ephesus has half-naked barbarians completely out of character with Eastern dress (ibid., Fig.5, 6). A statue of Trajan also survives, posed in heroic nudity (ibid., Fig.401).
 28. Objection to this may seem pedantic, but it is possible, even likely in many cases, that genre scenes of adlocutio, suovetaurilia, adventus etc. did not refer to any specific occasion in a way that is implied by the term 'historical'. Therefore, in this study 'historical' has been avoided and 'propaganda' has been preferred throughout.
 29. See BETHE, 1945, 80-1; TOYNBEE, 1951, 12-3, 33; CALABI-LIMENTANI, 1958a, 6-7; BANDINELLI, 1970, 35-8, 41-4, 114-9, 177-9; STRONG & CLARIDGE, 1976, 195-6; ANDREAE, 1977, 28-31, 44-7; STRONG, 1980, 11-2, 21-3, 14-5, 52; WARD-PERKINS, 1981, 43-4; RICHTER, 1982.

30. TOYNBEE, 1951, 18-26; CALABI-LIMENTANI, 1958a, 90; BANDINELLI, 1970, 40-9; BURFORD, 1972, 67, 180; RAWSON, 1975, 39-40.
31. MICHON, 1909, 221; TOYNBEE, 1951, 26; CALABI-LIMENTANI, 1958a, Cat.No.61; BURFORD, 1972, 213; KOEPPPEL, 1985, No.50.
32. CALABI-LIMENTANI, 1958a, Cat.No.52-77; 1958b, 873-5. See BURFORD, 1972, 213-4 for the rarity of signatures.
33. CALABI-LIMENTANI, 1958a, 58-9, 75-7; 1958b, 871; BURFORD, 1972, 78-80; RAWSON, 1975, 41; STRONG & CLARIDGE, 1976, 195; MANNONI, 1985, 142-9. A piece from Pozzuoli is signed ex officina Sextili Clementis (C.I.L. X, 1896). GNOLI, 1971, Pl.6 reproduces a view of an 18th century marble workshop which may have been similar to Roman officinae in appearance.
34. TOYNBEE, 1951, 17; CALABI-LIMENTANI, 1958a, 31-3, 38-55; BURFORD, 1972, 38-9, 51; STRONG & CLARIDGE, 1976, 195.
35. LANCIANI, 1899, 41-2; SQUARCIAPINO, 1943, 18-22, No.16-20, 24-6; TOYNBEE, 1951, 27; CALABI-LIMENTANI, 1958a, 50; BURFORD, 1972, 67.
36. WARD-PERKINS, 1951, 277-9; 1971a, 12-3; STRONG & CLARIDGE, 1976, 206; DODGE, 1988, 72-3.
37. BLAKE, 1947, 51-4; STRONG & CLARIDGE, 1976, 195-6; BOETHIUS, 1978, 137-9; WARD-PERKINS, 1981, 22, 25, 28, 43-4. Before the Carrara quarries were exploited Greek marbles were relied upon if a more luxurious material than travertine or stuccoed tufa was preferred.
38. LANCIANI, 1899, 42: 'In the spring of 1886, when the Via Buonarroti was being cut through in the direction of the Baths of Titus, a wall was discovered entirely built with the contents of the studio. There were statues of Jupiter, Juno, Pluto, Aesculapius, Cybele, Minerva Parthenos, Hercules; bacchic vases, fountains, mouths of wells, candelabra, figures of animals, bas-reliefs and other carvings; and nearly all the works were signed by one of the members of this artistic brotherhood from Aphrodisias - seventeen signatures in all. The fact that no essential portions of each work were missing shows that they were brought entire to the scene of destruction, and then broken up and thrown into a foundation wall.'
39. TOYNBEE, 1951, 17; CALABI-LIMENTANI, 1958a, 9-15, 75-8, 159; BURFORD, 1972, 97; STRONG & CLARIDGE, 1976, 195. This is despite the usual modern attempts to determine a system of static and exact latin terminology for artistic functions.
40. BISHOP, 1985b, 10-11.
41. BONANNO, 1976, 53. Similarly, some portraits on sarcophagi were blocked out at the quarry whilst the rest of the sculpting was finished. A customer's specific likeness could have been added later on sale (WALKER, 1985, 23, Fig.15; ANDREAE, 1977, Fig.504, 581).

42. BURFORD, 1972, 91.
43. HASSEL, 1966, 3-5, 30-5; LEPPER, 1969, 250-1; BURFORD, 1972, 38-9. The evidence for costing Roman imperial buildings and artworks is too fragmentary or non-existent to be of much use (CALABI-LIMENTANI, 1958a, 125-38).
44. MAGI, 1945, 37-54, 138-41.
45. STRONG & CLARIDGE, 1976, 202-3, Fig.333; PINKERNEIL, 1983, 204-10, Cat.No.1. See also WAELEKENS, 1985.
46. Quarry-state blocks and capitals with quarry inscriptions have been found under the Palazzo della Cancellaria and they are now housed in the basement (pers. obs.). The writer is very grateful to Miss A. Claridge for discussing sculptors' activities in this area.
47. Pliny, Ep. X,40,3. For the Greek origins of imperial period architects see TOYNBEE, 1951, 9-15; CALABI-LIMENTANI, 1958b, 576-8; BURFORD, 1972, 67; MACDONALD, 1982, 122-3.

5 The Figure Types

5.1 Cuirassed Officers

1. L, LII, LXXII, LXXIII, CIV, CXLI.
2. GUSMAN, 1914, III, Pl.139. For symbolism associated with spears see ALFÖLDI, 1969; ROSSI, 1985.
3. SNODGRASS, 1967, 92, 119, 122; ROBINSON, 1975, 147-52; CONNOLLY, 1981, 54-9.
4. VERMEULE, 1959; STEMMER, 1978.
5. References to figures on the Great Trajanic Frieze follow KOEPPPEL, 1985, 13-16. For Benevento see BONANNO, 1976, Pl.184. Only once does a low thorax appear on the Column (CIV, 4).
6. A relief in the Museo Irpino, Avellino, depicts an officer holding the bridle of his horse. He wears a muscled cuirass with pteruges and grips his sword (FRANZONI, 1987, 125). The horse has a heart-shaped pendant hanging down between its eyes. See also KEPPIE, 1984, Pl.5,a-d.
7. LEHNER, 1986.
8. For similar sleeves see KEPPIE, 1984, Pl.5d (1st cent. B.C.); ROBINSON, 1975, Pl.467 (1st cent. A.D.); STRONG, 1961, Pl.128 (3rd cent. A.D.)
9. Adamklissi metope numbering follows the inventory (FLORESCU, 1965,

Tables 50-1) because latin numerals employed by Florescu changed with successive editions of his work (FLORESCU, 1959; 1961; 1965)

10. ABDUL-HAK, 1954-55, Pl.IV, VI.
11. ROBINSON, 1975, Pl.467; BAUCHHENS, 1978, No.1. For the column figures CICHORIUS, 1896, 35 and RICHMOND, 1935, 8 favoured a centurial identification.

5.2 Citizen Troops

1. The term 'lorica segmentata' has no Roman basis but its modern origin, perhaps of Renaissance date, is obscure (ROBINSON, 1975, 174). Because it is not ancient, unlike the names lorica hamata or lorica squamata, it appears in inverted commas in this study.
2. See VON GROLLER, 1901, Fig.24; COUISSIN, 1926, Pl.IV-V; ALFS, 1941, Fig.49-55; ULBERT, 1968, Fig.27; WEBSTER, 1985, Fig.15-16.
3. Especially VON GROLLER, 1901, 96-114, Fig.24. See COUISSIN, 1926, 453-4; ROBINSON, 1975, 174. For the Coat of Plates see THORDEMANN, 1939, 285-328.
4. ROBINSON, 1971, 27-35; 1974, 8-11; 1975, 174-82; ALLASON-JONES & BISHOP, 1988, 97-100.
5. XII, 6; LVI, 6; XLIX, 28.
6. CURLE, 1911, 156-8; ROBINSON, 1975, 177-80; POULTER, 1988, 31-8.
7. LX, 19; LXXII, 15; CXXVII, 2; CXLVII, 1.
8. Fig. No.20. For later examples and design developments see ROBINSON, 1975, 184-5.
9. VON GROLLER, 1911, Fig.40-1, 44, 50, 58; ROBINSON, 1975, Fig.185-6; BISHOP, 1987, 120-22. An apparent Danubian weighting of the distribution has been suggested to the writer by Dr M.C. Bishop. For lobate hinges in general see ROBINSON, 1975, 120-1; ALLASON-JONES & BISHOP, 1988, passim.
10. IV, 15, 17; XI, 6, 7, 8; XII, 5, 7; XIII, 2, 5; XVIII, 5; CVI, 4.
11. ROBINSON, 1975, 161, Fig.170; GARBSCH, 1978, Fig.1-3.
12. ROBINSON, 1975, Fig.181. POULTER, 1988, 34-8 preferred buckled straps to pinning on the Newstead lorica.
13. For eyes see ROBINSON, 1975, Fig.184.
14. LV, 9; LXII, 3; LXIII, 63; LXVI, 10, 12, 15, 24.
15. VON GROLLER, 1901, Fig.24; COUISSIN, 1926, Fig.165-6, Pl.IV, 19; ULBERT, 1968, Pl.27; WEBSTER, 1985, Fig.15-16; ALLASON-JONES & BISHOP, 1988, Fig.109-110.

16. ROBINSON, 1975, 180-1.
17. ROBINSON, 1975, 174, 180. Corbridge redating ALLASON-JONES & BISHOP, 1988, 5-7; Newstead redating POULTER, 1988, 38-9.
18. ROBINSON, 1975, 180-2. For a different typological approach see BISHOP, 1987, 120-2. Robinson envisaged a progressive simplification of fittings over time with overlapping usage as old types continued in circulation until worn out. An alternative view favours different types being constructed at the same time without uniformity.
19. ESPÉRANDIEU, 1907-66, No.5822; BÜSING, 1982, Pl.39,6.
20. ESPÉRANDIEU, 1907-66, No.1344; ROBINSON, 1975, Pl.203.
21. For example, at Hod Hill (RICHMOND, 1968, Fig.56), Chichester (DOWN, 1981, Fig.8.28.2), Richborough (BUSHE-FOX, 1932, Pl.XII.2) and Longthorpe (FRERE & ST.JOSEPH, 1974, Fig.25-6) in Britain.
22. BISHOP, 1985, 7-8; 1986a, 721-2; ALLASON-JONES & BISHOP, 1988, 109-10.
23. Tac. Ann. III,46. See PICARD, 1980.
24. Versigny: PICARD, 1980, Fig.1. Alba Iulia: RUMĂNIEN, 1969, C63. For manicae see AURIGEMMA, 1926, Fig.86, 91-2; GRANT, 1971, Pl.4, 5, 7, 23, 25, 33.
25. Segmental armour: ROBINSON, 1975, 185-6; COULSTON, 1986, 62-3. Dendra: CONNOLLY, 1977, 12-13.
26. ROBINSON, 1975, 174. Articulated segmental armour, such as Renaissance European tassets and 'lobster' helmets worked on the same rivet and leather-strap principle (STONE, 1934, Fig.16, 42, 45, 523, 774.2-3).
27. COULSTON, 1988, 13. Scale armour was the least effective form needing continuous upkeep because thin copper alloy scales were easily damaged, wires which held them together would have snagged the backing garment and the weight was less easily relieved from the shoulders by a waist-belt.
28. COULSTON, 1988, 12-13; ALLASON-JONES & BISHOP, 1988, 102.
29. ESPÉRANDIEU, 1907-66, No.11. For the dating see OLDENSTEIN-PFERDEHIRT, 1984, 404. In the past this stela has commonly been dated mistakenly to the first half of the 1st century A.D.
30. HOFMANN, 1905, No.55; SCHÖBER, 1920, No.162.
31. These mainly belonged to auxiliaries. See ESPÉRANDIEU, 1907-66, No.5853, 6207, 6209, 6213, 6252, 6254. The usual convention was to depict the deceased as unarmoured. In the legionary discussion

officers' and standard bearers' armour provision is irrelevant (cf. MAXFIELD, 1986, 86).

32. ÉSPÉRANDIEU, 1907-66, No.5816.
33. ABDUL-HAK, 1954-55, Pl.V, VII.
34. SIMKINS, 1979, 17; CONNOLLY, 1981, 231. Eastern vexillationes certainly were present in the Danubian theatre during the Dacian wars (STROBEL, 1984, 97, 102-3).
35. Fronto, Ad Verum Imp. II,22-3.
36. JAMES, 1983, 6-7; 1986, 109; COULSTON, 1987, 146.
37. ALFS, 1941, 121.
38. Pers. comm. Mr N. Slope. The writer is very grateful to Mr Slope for this information and for showing him photographs of these and other finds from the site.
39. ROBINSON, 1975, 160, 170, 186. See also RICHMOND, 1967, 34-5 and SIMKINS, 1984, 34. The Romans had, of course, been facing falces in the wars of Domitian, and, perhaps, ever since A.D.69 (Tac., Hist. I,79; see 5.12.3). A segmental arm-guard may even be depicted on the side of a tombstone at Mainz (LINDENSCHMIT, 1864, IX, B, 2, Pl.4) which dates by reference to legio XXII Primigenia to either A.D.43-70 or to post A.D.92. In the light of the arm-guard, the latter may seem more likely. If the Alba Iulia relief (see n.24) is military, then it may represent legionary manicae.
40. Manicae and ocreae Inv.12, 13, 16-23, 29, 31, 33, 35. For Republican greaves see Polybius VI,23. Sports greaves: ROBINSON, 1975, 187-9; GARBSCH, 1978, 9-12. Tombstones: HOFMANN, 1905, No.13-18; ROBINSON, 1975, Pl.467; FRANZONI, 1987, No.28-30, 57.
41. For 'lorica segmentata' finds in general see ROBINSON, 1975, 181-2; ALLASON-JONES & BISHOP, 1988. The Dacian finds are of great interest for the distribution pattern in the Trajanic period onwards (CHIRILA et al., 1972, Pl.CXIII, 38, 41-2, 47). Fittings from this type of cuirass have been found by the Polish expedition recently working at Novae (Sviştov), Bulgaria (pers. comm. Dr T. Sarnowski). The St.Albans pieces were found in a pit with Neronian pottery (pers. obs. and Mr S. Greep, pers. comm.). The Caernarfon material is in course of publication (pers. comm. Ms L. Allason-Jones).
42. ROBINSON, 1975, 45-51, 62-65. The German approach has been to classify helmets by type-site, such as 'Hagenau' and 'Weisenau' (ULBERT, 1968, 13-14; KLUMBACH, 1974; WAURICK, 1983, Fig.4). For examinations of helmets on the column see FLORESCU, 1969, 107-9, Fig.4; WAURICK, 1983, 293-6, Fig.14.
43. ROBINSON, 1975, 49, 80-1.

44. PETCULESCU & PROTASE, 1975.
45. ULBERT & FISCHER, 1983, Fig.10 (Theilenhofen); Mr P. Connolly, pers. comm. (Brigetio).
46. ROBINSON, 1975, 70-3; WEINSTOCK, 1979, Pl.23-4.
47. ROBINSON, 1975, 84-5. There is no real reason for labling this as an 'auxiliary' helmet.
48. Ibid., 90-1.
49. Ibid., 64. Inv.No.17-22, 29, 31, 35.
50. ROBINSON, 1975, 64, 83.
51. ÉSPÉRANDIEU, 1907-66, No.1344.
52. ÉSPÉRANDIEU, 1907-66, No.130.
53. ROBINSON, 1975, 64-5.
54. VERMEULE, 1960. A second helmet with a ring may also be a forgery (DINTIS, 1986, Pl.48.3-4).
55. ROBINSON, 1975, 27, 64-5; WAURICK, 1983, 292-8; DINTIS, 1986, 108, 112, supplement 8, No.322-30.
56. SNODGRASS, 1967, 69; WAURICK, 1983, 266-8; DINTIS, 1986, 105-12, Pl.45-7.
57. HELBIG, 1966, No.1748; DUDLEY, 1967, Pl.58 (Museo Capitolino); MINGAZZINI, 1973, Pl.88; ROBINSON, 1975, Pl.424; HOLSCHEER, 1979, 342-8 (Vatican). There is some dispute as to whether the latter relief commemorates the Battle of Actium or the Claudian conquest of Britain. For the Corinthian form of helmet see SNODGRASS, 1967, 51, 93-4; CONNOLLY, 1981, 60-3. Alternatively, the Capitoline helmet may belong to the 'pseudo-attic' type (DINTIS, 1986, 113-33, Supplement 9).
58. MICHON, 1909, 231-9; ROBINSON, 1975, Pl.423; KOEPPPEL, 1983b, 106-8. Long thought to be of Hadrianic date, Koeppeel has convincingly advanced a provenance for the relief on the Arch of Claudius (via Flaminia).
59. For Rome examples see KASCHNITZ-WEINBERG, 1937, No.421 (Vatican); SPANNAGEL, 1979, Fig.8 (Mus. Capitolino); CALZA, 1977, No.135 (Villa Doria Pamphilj); KOEPPPEL, 1984, No.25 (Mus. Terme). For others elsewhere: TRAINA, 1981, Fig.6 (Potsdam); COMSTOCK & VERMEULE, 1976, No.237 (Boston); ANDERSON, 1986, Fig.1-2 (New York); KOEPPPEL, 1984, No.26 (Ann Arbor), No.29 (Louvre); 1985, No.15 (Berlin); LEVI, 1931, No.165 (Mantua).
60. KASCHNITZ-WEINBERG, 1937, No.422. See also MANSUELLI, 1958, Pl.170 (Florence) and DAI Neg.54.591 (Pozzuoli).

61. JOBST, 1977, 77, n.341, Fig.137; LESSING & OBERLEITER, 1978, Pl.9; ONEN, 1983, 119; TERRACE, 1988, 29-31. These extremely important ivory reliefs belonged to a piece of furniture and were found in Room AB3 of the Embolos Houses. They appear to depict genre scenes of negotiation, adventus and battle associated with Trajan's Parthian wars.
62. ROBINSON, 1975, Pl.166-9, 175-8.
63. ÉSPÉRANDIEU, 1907-66, No.6822. For embossed griffins see KASCHITZ-WEINBERG, 1937, No.421 (Vatican); FRANZONI, 1987, No.47 (Ganaceto).
64. ROBINSON, 1975, Pl.339-40, 391-6, 417; GARBSCH, 1978, Pl.10, 19, 20-1; WAURICK, 1983, 299-300.
65. ROBINSON, 1975, 64. DURRY, 1938, 213-5; 1954, 1625-6 identified equipment on the Great Trajanic Frieze as campaign dress. For a fine decorated Attic helmet reconstruction see CONNOLLY, 1981, 311, No.15.
66. See BISHOP, forthcoming.
67. For equipment production in Rome see BISHOP, 1986b, 84-5. Tac., Hist. I,88 mentions showy equipment in the capital.
68. Apart from helmets already mentioned on the Great Trajanic Frieze, the Ephesus ivories, the Louvre praetorians relief and on relief heads at Mantua, Florence, Potsdam and Pozzuoli, feather crests appear on reliefs in the Villa Borghese (KOEPPPEL, 1985, No.10-12). Bronze figurines and ivory carvings from northern Italy also display these crests (TRAINA, 1981, Fig.1, 3; AOSTA, 1982, Fig.65).
69. ROBINSON, 1975, 46, 64, 140-3.
70. In Caesar's time crests were used in battle (Caes., B.G. II,21; VII,45). For a pay parade context see Jos., B.J. 348-51.
71. Chest: IV, XXXIII, XLVIII, XLIX, LXXXVI, LXXXVII, XCVIII, CI, CII. Shields: XII, LVI, LXIX, CXXVII, CXXVIII. Poles: XX. Loose: XXVI, XXXIII, XXXV. Pack: CVI.
72. ÉSPÉRANDIEU, 1907-66, No.5822; KEPPIE & ARNOLD, 1984, No.90; COULSTON, 1988b, 9.
73. ROBINSON, 1975, 47, 51, 63.
74. Ibid., 82.
75. ÉSPÉRANDIEU, 1907-66, No.5819.
76. For example, an 'Imperial-Gallic' helmet from Eich (W. Germany) is made of tinned copper alloy, instead of iron like the rest of its class (GRUNEWALD, 1986, 21-2). Likewise, the late 2nd century Niedermörmter helmet (W. Germany) is copper alloy, not iron

(ROBINSON, 1975, Pl.179-82).

77. Tac., Hist. I,38.
78. IV, X, XXI, XXII, XXIV, XXVI, XXVII, XXXIII, XL, LI, LXII, LXXII, LXXIII, CI, CXIV, CXV, CXXIII, CXLVII.
79. XVIII, LV, LXVI, XCVIII, CII, CIV, CVI, CVIII, CXXIII.
80. LXXII, CI.
81. XLVIII, L.
82. IV, X, XIII, XVIII, XXI, XXII, XXIV, XXVI, XXVII, XXXIII, XXXVIII, XL, XLVIII, L, LV, LXII, CI, CXXIII, CXLVII. The term 'sub-oval' is employed for shields with curved side edges and straight top and bottom, or with straight sides and curved top and bottom. LI,26, 29 are damaged or obscured and could be either rectangular or sub-oval.
83. LXVI, LXXII, LXXIII, XCVIII, CII, CIV, CVI, CVIII, CXIV, CXV.
84. XII, XX, XXIII, LVI, LXIX, LXXIII, CXXVI, CXXVII.
85. ÉSPÉRANDIEU, 1907-66, No.5816, 5822.
86. LINDENSCHMIT, 1870, VI, Pl.V.3.
87. ÉSPÉRANDIEU, 1907-66, No.130; PICARD, 1957, Pl.XXVI. For the Parma relief see also DAI Neg.33.434.
88. ÉSPÉRANDIEU, 1907-66, No.7763. Dated by epigraphic reference to legio I Minervia.
89. FRANZONI, 1987, No.28.
90. ÖNEN, 1983, 119, lower right; pers. obs.
91. ABDUL-HAK, 1954-55, Pl.VII.
92. BAUCHHENß, 1978, No.2, 3; ÉSPÉRANDIEU, 1907-66, No.5822.
93. KEPPIE & ARNOLD, 1984, No.90; COULSTON, 1988b, 5.
94. BUSING, 1982, Pl.39.2.
95. ÉSPÉRANDIEU, 1907-66, No.5790.
96. HOFMANN, 1905, No.29; SCHÖBER, 1923, No.337.
97. ÉSPÉRANDIEU, 1907-66, No.5835.
98. CUMONT, 1926, 10, 323-7; ROSTOVITZEFF et al., 1936, 456-66; Mr S. James pers. comm.
99. GANSSE-BURCKHARDT, 1942, 74-81.

100. VAN DRIEL-MURRAY, 1988.
101. GROENMAN-VAN WAATERINGE, 1967, Fig.16.
102. VAN DRIEL-MURRAY & GECHTER, 1983, 30-8, Fig.9, Pl.6-7. Dr C. van Driel-Murray assures the writer that it is impossible to determine from a leather cover whether the shield involved was flat or curved.
103. KAHLER, 1965, Pl.6, 14, 18-19 (Aemilius Paulus, Delphi); ROBINSON, 1975, Pl.463-6; TORELLI, 1982, Pl.I.4 (Ahenobarbus, Rome); LEHMANN-HARTLEBEN, 1926, Fig.12 (Esquiline).
104. KIMMIG, 1940. See Polybius, VI,23 and CONNOLLY, 1981, 131-2.
105. FELLMANN, 1957, 31, 48.
106. WHITEHOUSE, 1976, 4-5, Fig.13.b. The date of this mosaic is controversial, suggestions ranging from the 1st century B.C. to the 2nd century A.D. The writer is very grateful to Dr H. Whitehouse for discussing this problem.
107. AMY et al., 1962, Pl.9-11, 96. See WAURICK, 1983, Pl.53.1 for a possibly contemporary ship relief with soldiers carrying rectangular shields.
108. For example RIC, Caligula 23-5. See large-scale reproduction in BELLEN, 1981, Fig.21.
109. See CURLE, 1911, Pl.XXXV.1-7; GROENMAN-VAN WAATERING, 1967, Fig.18; RICHMOND, 1968, Fig.57.22-4; FRERE & ST.JOSEPH, 1974, Fig.29.
110. THOMAS, 1971, 36, Pl.LIV (Vindonissa); HOFFILLER, 1912, Fig.24 (Aquincum); Mr S. James, pers. comm. (Dura); ALLASON-JONES & MIKET, 1984, Inv.3.724, Pl.VII (Tyne). See also VON GROLLER, 1901, 118-9, Pl.XX (Carnuntum, Austria). All of these examples come from legionary fortresses or bear legionary inscriptions.
111. JUNKELMANN, 1986, Pl.58.b.
112. ESPÉRANDIEU, 1907-66, No.5822, although this shape may be a product of the eagle shield-blazon.
113. ROSTOVTZEFF et al., 1936, Pl.XXVA; KIMMIG, 1940, Pl.23.3 (Dura and Fayūm). For sculptural representations see HOFMANN, 1905, No.42; KAHLER, 1965, Pl.6, 18-9; BAUCHHENSS, 1978, No.2, 5.
114. XL,36, 59, 65; CVI,11; CXIII,9, 16; CXV,14.
115. AMY et al., 1962, Pl.9-11; ESPÉRANDIEU, 1907-66, No.5822.
116. See JUNKELMANN, 1986, Fig.10. For a curved rectangular shield slung on the back of a marching soldier see ESPÉRANDIEU, 1907-66,

No.158.1.

117. CICHORIUS, 1896, Fig.7, 13-14, 35-8, 42-3, 46; FLORESCU, 1969, 81-4, Fig.42; ROSSI, 1971, 108, Fig.vi.
118. IV,4, 6, 8, 14; XXVI,12; LV,8; LXII,10, 12; LXXII,7; LXXXV,24; CII,23. XXXVIII,5 is carried by an auxiliary and one is standing on end in LXXIII.
119. XCVIII,7. Two are on end in LVI.
120. IV, LV, LXIX, LXXI, CIV, CVI, CXIV-V.
121. ESPÉRANDIEU, 1907-66, No.130; ROBINSON, 1975, Pl.200.
122. MAGI, 1945, 25.
123. For the symbolic significance of stars and crescents see CUMONT, 1942, 177-252; SALVIET, 1966; ZADOKS-JOSEPHUS JITTA & WITTEVEEN, 1977, 173-6.
124. AMY et al., 1962, Pl.10.59.
125. MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423.
126. BRACKER, 1974, Pl.85 (Köln); PICARD, 1957, Pl.XXVI (Parma).
127. ESPÉRANDIEU, 1907-66, No.5816.
128. Ibid., No.5790; FRANZONI, 1987, No.47.
129. ABDUL-HAK, 1954-5, Pl.VII.
130. A fulmen quite often appears on supposedly barbarian shields in congeries armorum reliefs. See REINACH, 1909, 290; ESPÉRANDIEU, 1907-66, No.46, 700; PICARD, 1957, Pl.XXII, XXVIII; VON MERCKLIN, 1962, Fig.1220; CARDUCCI, 1968, 54.
131. For example, ESPÉRANDIEU, 1907-66, No.46, 130, 531, 697, 1347.
132. ROSTOVTZEFF, 1942, Pl.IV (cloth standard); Adamklissi Inv.No.26, 40 (sculpture); YADIN, 1971, 76-9 (clothing).
133. ESPÉRANDIEU, 1907-66, No.5816.
134. FLORESCU, 1969, Fig.42.2, 10, 11, 16, 17, 26, 27, 40.
135. Veg., II,18. For ansae on shield-covers see GANSSE-BURCKHARDT, 1942, Fig.50, 53, 59-61, 70, 71; GROENMAN-VAN WAATERINGE, 1967, Fig.10. Dio, LXVII,10,1 credits Tettius Iulianus with ordering troops to inscribe their names and the names of their centurions on their shields. Clearly this was happening long before, as the Arch at Orange suggests (AMY et al., 1962, Pl.45-7, Fig.40). Interestingly, in Pet., Sat. 82, where Encolpius walks abroad with a sword, he is stopped by a soldier who demands the names of his legio and centurio. For labeled equipment see MACMULLEN, 1960.

136. ÉSPÉRANDIEU, 1907-66, No.5822. No.5816 appears to have bolts emanating out from the body of an eagle.
137. VAN DRIEL-MURRAY & GECHTER, 1984, Pl.7.137.
138. THOMAS, 1971, Pl.LIV; ALLASON-JONES & MIKET, 1984, Pl.VII.
139. ROSTOVTZEFF et al., 1936, Pl.XXVA. Figures of animals and deities appear on shields on the Arch of Galerius at Salonika and the Arch of Constantine in Rome (LAUBSCHER, 1975, Pl.32.2, 34-5, 38.1, 42.2, 52, 56.2, 65.2; L'ORANGE & VAN GERKAN, 1939, Pl.28). Interestingly, an ansate panel occurs above a boss on a shield on one of the Piazza Armerina mosaics (STRONG, 1980, Fig.202).
140. BUCKLAND, 1978, 253-6, 258-9.
141. CICHORIUS, 1896, 34, 90, 142, 164, 184, 191-2, 205-6, 255, 281, 284, 288, 308, 338, 344-5; 1900, 56, 162, 165, 175, 181-2, 193; ROSSI, 1966; 1971a, 108-18.
142. Römisch-Germanisches Museum, Köln, Inv.No.236. The same motif appears on a gladiatorial shield carried in a Museo Torlonia relief (GRANT, 1971, Pl.12).
143. ROSTOVTZEFF et al., 1939, Pl.XLII, XLV.
144. THOMAS, 1971, Pl.XLIX-LII; ALLASON-JONES & MIKET, 1984, Pl.VII.
145. Veg., II,18.
146. Tac., Hist. III,22-3.
147. ROSSI, 1972, 65.
148. MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423 (Louvre); VERMEULE, 1981, No.192, Pl.19 (Pozzuoli). For the dating and identification of the latter see also GABRICI, 1909; CAGIANO DE AZEVEDO, 1939; KÄHLER, 1951.
149. 'Cingulum' is used in this study to denote a waist-belt. However, Dr M.C. Bishop (pers. comm.) has suggested that in military contexts this was predominantly a Late Roman usage. Modern commentators employ the term 'balteus' for a baldric but this seems to have been applied to the waist-belt in the early imperial period (Juv., Sat. XVI,48; Tac., Hist. I,57; Pliny, N.H. XXXIII,54. See also Caes., B.G. V,44; Varro, de lingua latina V,116.
150. XV, LXII, LXVI, CI, CVIII, CXVI, CXVII, CXXVII, CXXIX, CXLVII.
151. LII,12, 19; CII,19; CIV,15.
152. XII,1; XVIII,5, 9; XXVI,11; LXII,3, 12; LXVIII,2; CXXIII,1; CXXIX,3.

153. For example on an apron strip from Mainz (LINDENSCHMIT, 1870, X, Pl.IV.2) and in association with the Tekiya apron fittings (MANO-ZISI, 1957, No.25, Pl.XV-VI). Studs were presumably found with the Herculaneum soldier.
154. For the earlier, niello inlaid plates see ULBERT, 1968, Pl.16; BISHOP, 1987, Fig.3-4.
155. ULBERT, 1968, Pl.13; 1969, Pl.32.5; KUNZL, 1977, Fig.11. The Rheingönheim belt is the best known, but bossed, hinged cingulum plates have also been found at Tekiya (Yugoslavia) and these are datable to Domitian's reign (MANO-ZISI, 1957, No.18-21, Pl.XIII, XIV, XVII).
156. This is not at all clear from published photographs of the fittings in situ (FRAIA & D'ORIANO, 1982, 20-21; JUDGE, 1982, 691; GORE, 1984, 572). However, a very poor reconstruction drawing of the soldier does show both belts (ibid., 573) and Mr P. Connolly has very kindly made his drawings of the fittings available to the writer.
157. FRANZONI, 1987, No.24, Pl.X-XI (Cussaco); ÉSPÉRANDIEU, 1931, No.16 (Wiesbaden); FRANZONI, 1987, No.1-2 (Pula). See also ÉSPÉRANDIEU, 1907-66, No.6253 (Bonn).
158. For example, ÉSPÉRANDIEU, 1907-66, No.5853, 6125, 6136-7, 6207, 6213, 6252, 6254; 1931, No.11, 412; BRACKER, 1974, Pl.85; ROBINSON, 1975, Pl.465. Good close-up photographs may be found in BAATZ, 1983a, Pl.44-5, and a discussion which improbably links rosettes with oriental influences in WILL, 1954.
159. KOEPPPEL, 1986, No.1, Fig.2.6, 7, 8, 12.
160. KOEPPPEL, 1984, No.7, Fig.11.14.
161. KOEPPPEL, 1985, No.8, Fig.10.2, 5. Another apron has broken off Fig.10.1.
162. KÄHLER, 1951, Pl.28-9; VERMEULE, 1981, Pl.19.
163. This is not altogether clear because the figures, many of which were carved almost in the round, have been badly damaged. They are best reproduced by ANDREAE, 1977, Fig.426-9, and may be closely examined by means of a cast in the Museo della Civiltà Romana, E.U.R. A figure-by-figure description and numbering system was provided by PFANNER, 1983, 87-90, Beilage 3. Soldiers including at least one centurion, escort prisoners and wear paenulae. A number have short swords on their right hips. The features of dress and equipment, together with musical instruments and wicker baskets borne along, do not appear on the corresponding Arch of Titus triumphal frieze.
164. MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423. A bronze statuette, presumably of 2nd century A.D. date, depicts a soldier wearing a tunic with cingulum and short apron (Colonia Ulpia Traiana (Romania), museum pers. obs.).

165. For example, CIL IX,4397 (l'Aquila); ESPÉRANDIEU, 1907-66, No.6252 (Bonn); 1931, No.412 (Mannheim); BOLLINI, 1968, Fig.24 (Piraeus); KOLB, 1973, Pl.XXVI.2 (Athens); KOS, 1978, Pl.I.1-2 (Corinth); FRANZONI, 1987, No.61 (Belgioioso), Pl.XXI,1 (Turin).
166. ESPÉRANDIEU, 1907-66, No.5495 (8 straps), 6125 (8), 6136 (8), 6137 (6); TUFI, 1984, Fig.7 (8).
167. LINDENSCHMIT, 1870, X, Pl.IV.2; ULBERT, 1971, Fig.7.1.
168. HOFMANN, 1905, No.57 (3 straps); ESPÉRANDIEU, 1907-66, No.5835 (6), 5840 (4), 5853 (5-6), 6207 (6), 6209 (4), 6213 (4), 6254 (6), 6850 (4); 1931, No.16 (6); FRANZONI, 1987, No.30 (5), Pl.XX.1, XXI.2 (4).
169. Especially the Domitianic examples from Tekiya (MANO-ZISI, 1957, No.24, Pl.XV-VI).
170. HOFMANN, 1905, No.56 (3 straps); ESPÉRANDIEU, 1907-66, No.5792 (4), 5799 (4), 6252 (3), 6253 (4), 6255 (4); KOLB, 1973, Pl.26.2 (4); BAUCHHENB, 1987, No.10-1; BISHOP, 1983b, Fig.2.2; FRANZONI, 1987, No.1 (4).
171. Herculaneum pers. comm. Mr P. Connolly. For finds elsewhere see LINDENSCHMIT, 1870, X, Pl.IV.4, 5; MANO-ZISI, 1957, No.23, Pl.XV, XVII; ULBERT, 1971, Fig.7.5; ZADOKS-JOSEPHUS JITTA & WITTEVEEN, 1977, Pl.30.1, 2, 5; Pl.32.24-7; Pl.33.29, 33.
172. ESPÉRANDIEU, 1907-66, No.5790; FRANZONI, 1987, No.24, 26.
173. ESPÉRANDIEU, 1907-66, No.5495, 5787, 6253, 6255.
174. HOFMANN, 1905, No.56; ESPÉRANDIEU, 1907-66, No.5792, 5799, 5835, 5840, 5853, 6125, 6136-7, 6207, 6209, 6213; 1931, No.16; TUFI, 1984, Fig.7, 17, 28; FRANZONI, 1987, No.24.
175. ESPÉRANDIEU, 1907-66, No.5790.
176. FRANZONI, 1987, No.26, Pl.XIV.1.
177. ESPÉRANDIEU, 1907-66, No.5816, 5822.
178. ESPÉRANDIEU, 1907-66, No.5495, 5792, 5799, 5835, 5840, 5850, 5853, 6125, 6136-7, 6207, 6209, 6213, 6252-5; 1931, No.16, 412; TUFI, 1984, Fig.7, 17, 28; FRANZONI, No.30, 53.
179. SCOTT, 1985, 197-209.
180. Ibid., 175.
181. Pers. comm. Mr P. Connolly. No pugio was found. For a Domitianic dagger frog see MANO-ZISI, 1957, No.15, Pl.XI.
182. O.R.L., Kastell No.33, Stockstadt, Pl.IX.30, 32; No.71a, Theilenhofen, Pl.IV.47; CHARILA et al., 1972, Pl.LVII (Buciumi);

- ROBERTSON et al., 1975, Fig.32.15 (Bar Hill); SCOTT, 1985, Appendix 1, No.36 (Gelligaer). The writer is grateful to Mr L. Petculescu for drawing his attention to an unpublished example from Micia, Romania.
183. HERRMANN, 1969, Fig.3 (Künzing); COLLINGWOOD & RICHMOND, 1969, Pl.XIX.1, m (Copthall Court, London); pers. obs. Römisch-Germanisches Museum (Köln). It is noteworthy that Herodian, II,13,10 mentions that Severus deprived the praetorians of decorated daggers as well as their belts. Dr M.C. Bishop kindly drew the writer's attention to this aspect.
 184. DURRY, 1938, Pl.XA; MAXFIELD, 1981, Pl.8.c (Siena); FRANZONI, 1987, No.7 (Aquileia), Pl.XXI.2 (Assisi).
 185. LX,17; LXVI,19; CXXIII,4; CXLVII,1.
 186. LXII,2; LXIII,7; LXVI,12, 14, 15, 18, 22, 34.
 187. XXIV,34; XXXII,10; XXXV,4; XLVIII,2, 6, 8, 9, 11; LXII,9, 10, 12; LXV,26, 28; LXVI,1, 30; LXVII,13, 17, 19; LXXI,16; LXXV,1; XCIV,14, 20; CVI,28; CXVI,15; CXXIII,6, 10; CXLII,1; CXLIII,2.
 188. The term 'gladius' may be applied to any sword but in modern usage is attached to short swords, whilst 'spatha' is used for long cavalry swords. Cf. Tac., Ann. XII,35.
 189. IV, XXXVII, CI, CX, CXV, CXVI, CXVII, CXLV, CXLVII.
 190. XXXVII, CXV.
 191. XI, CXI, CXV, CXXVII.
 192. LII,6; CXIII,3; CXXIV,4; CXXVII,11; CXXVIII,2.
 193. ESPÉRANDIEU, 1907-66, No.5822.
 194. ULBERT, 1969a, 118-25. It is, therefore, rather disturbing that some swords on the Adamklissi metopes appear to be of the Mainz type (Inv.No.29-30).
 195. ULBERT, 1969a, 91-115, Pl.18-23, 25-8, 32-4. See also VON GONZENBACH, 1966; SCHOPPA, 1974.
 196. Clearly visible in FRAIA & D'ORIANO, 1982, 20-21.
 197. ESPÉRANDIEU, 1907-66, No.6253.
 198. BISHOP, 1983b, Pl.6.
 199. KOEPPPEL, 1986, No.8, Fig.10.1, 5 (Chatsworth); KÄHLER, 1951, 28-9 (Pozzuoli); FRANZONI, 1987, No.2 (Pula).
 200. KÄHLER, 1951, Pl.28; VERMEULE, 1981, Pl.19 (Pozzuoli); PFANNER, 1983, Beilage 3, Fig.22; HASSEL, 1966, Pl.19.2 (Benevento).

201. SCOTT, 1985, Fig.2.65.
202. FELLMANN, 1966; ULBERT, 1969a, Fig.3, Pl.17-18; GREEP, 1984.
203. KOEPPPEL, 1985, No.8, Fig.10.1, 2, 5 (Chatsworth). For chapes see ULBERT, 1969a, Fig.4, Pl.17-19, 26-7; SCHOPPA, 1974, Fig.2-3, Pl.26.
204. ÉSPÉRANDIEU, 1907-66, No.6136-7; 1931, No.16; FRANZONI, 1987, No.2, 7.
205. See NYLEN, 1963, 222-8; ULBERT, 1969a, 115-8; HAZELL, 1981, 73-7.
206. Scabbards with four rings on two transverse bands often appear on reliefs and statues of lamellar-armoured Palmyrene deities. A narrow waist-belt is usually attached to the upper forward ring only, and is split for attachment to both rearward rings (COLLEDGE, 1976, Pl.35; pers. obs. Syrian National Museum, Damascus, and Palmyra Museum). A similar three-ring baldric attachment is practised by the Ermine Street Guard (see CONNOLLY, 1981, 232, 310).
207. The same arrangement is clearly shown on one Adamklissi metope (Inv.No.XXVII, right). Swords found in Denmark employing Roman ring-suspension have two lateral strips but only two rings, one in the upper forward position, the other in the lower rearward. This represents a measure of rationalisation in the over-provision of rings (NYLEN, 1963, Fig.4-5, 7, 9, 11, 13, 22. Contrast Fig.28-9).
208. The few exceptions include a relief depicting soldiers reaping corn (KOEPPPEL, 1985, No.1) and a Mainz pedestal relief (ÉSPÉRANDIEU, 1907-66, No.5816). Auxiliary infantry on the Adamklissi metopes wear their swords on their left hips (Inv.No.14, 34, 36) as was sometimes the practice for centurions and standard-bearers (e.g. ÉSPÉRANDIEU, 1907-66, No.6255; ROBINSON, 1975, Pl.465).
209. FRAIA & D'ORIANO, 1982, 20-21; JUDGE, 1982, 691; GORE, 1982, 572.
210. XLIX,5, 21; L,5; LXXII,9.
211. HAZELL, 1981 makes unnecessarily heavy weather of this problem, but see MORGAN, 1987.
212. It is clear from hand actions where swords are sheathed that shafted-weapons were intended to have been provided by inserts: IV, XIII, XXI, XXII, XXIV, XXVI, XL, XLIII, XLVIII, XLIX, L, LV, LXII, LXIII, LXVI, LXXII, XCVIII, CI, CII, CIV, CVI, CVIII, CXIV, CXV, CXXIII, CXLVII.
213. COUISSIN, 1926, 20-5, 129-38, 181-213, 278-94; HARMAND, 1967, 61-5; CONNOLLY, 1981, 99, 131; KEPPIE, 1984, 235.
214. HELBIG, 1966, No.1608; ROBINSON, 1975, Fig.16.
215. ÉSPÉRANDIEU, 1907-66, No.94, 114 (St. Rémy); 5822 (Mainz); 5835,

6252-3, 7747 (stelae).

216. LINDENSCHMIT, 1864, XI, I, C, Pl.5; VON GROLLER, 1901, 126-7; HOFFILLER, 1912, 70-96; ULBERT, 1968, 12-13; DENSEM, 1980; CONNOLLY, 1981, 232-3; MANNING, 1985, 159-60.
217. CROWFOOT et al., 1957, 457, Q.4364, Fig.112 (Samaria); AVIGAD, 1980, Pl.139 (Jerusalem). However, neither of these pieces is securely identifiable as a pilum.
218. MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423 (Louvre); KÄHLER, 1951, Pl.28; VERMEULE, 1981, Pl.19 (Pozzuoli).
219. C.I.L. IX,4397 (l'Aquila); FRANZONI, 1987, No.7 (Aquileia), 9 (Verona).
220. MAGI, 1945, Fig.26-7; KOEPPPEL, 1984, No.7, Fig.11, 15-16.
221. KOEPPPEL, 1985, No.11, Pl.18.9.
222. Rome: C. Monnenius Secundus, Galleria Congiunzione, Musei Capitolini (pers. obs.); Q. Flavius Crito, Muséo Gregoriano Profano, Vatican (BENNDORF & SCHÖNE, 1867, No.151); Museo Epigrafico, Vatican (pers. obs.); L. Titius, American Academy in Rome (OHL, 1931, No.29). Modena: C. Samius Crescens (FRANZONI, 1984, No.47). Reggio Emilia: C. Metellius Constans (ibid., No.48). A ball-weighted pilum and a sub-oval shield on a relief in Yalvaç (Antioch-in-Pisidia) Museum are presumably legionary. The writer is grateful to Dr H. Dodge for providing a photograph of this piece. A very stylised weighted pilum relief is in the Split Archaeological Museum, Yugoslavia (pers. obs.).
223. KÄHLER, 1951, Pl.29. This is providing that the spear is not a modern restoration.
224. MAGI, 1945, Fig.28; KOEPPPEL, 1984, Fig.11.14. See RITTERLING, 1919; ALFÖLDI, 1969, 11-12; WAURICK, 1971; SCHALLMAYER, 1984 for the epigraphic and pictorial evidence supporting this association.
225. Notably the left-hand end of the Great Trajanic Frieze (KOEPPPEL, 1985, No.9, Fig.13). All the shafts above heads on Arch of Benevento panels belong to fascēs. A hasta is depicted on one of the Hadrianic tondi reused on the Arch of Constantine (KOEPPPEL, 1986, No.10). It is also worth noting here that Adamklissi Metope Inv.31 has a broken pilum. Likewise in Inv.35 a pilum shank is being thrust into a kneeling barbarian. In neither case may a hasta be identified, despite appearances to the contrary in published photographs.
226. Jos., B.J. III,95; Arrian, Ek. 5.
227. Tac., Ann. XII,35.
228. FUENTES, 1987, 41-50.
229. KOEPPPEL, 1986, No.8, Fig.10.1-2, 4-5.

230. Jos., B.J. VI,85; Juv., Sat. III,248; XVI,24-5.
231. For caligae and studs in general see VAN DRIEL-MURRAY, 1986, 140-1, Fig.2; JUNKELMANN, 1986, 158-61; GÖPFRICH, 1986, 9, 17-20, 26-32, Fig.3. For a relief from Neumagen with caliga studs in profile see ibid., Fig.23.

5.3 Auxiliary Infantry

1. The use of 'hamata' most likely referred to the individual rings, and perhaps also to the device which fastened the shoulder-pieces to the chest (see Virgil, Aeneid III,467).
2. The literature is suffused with references to leather armour prior to the 1970s. Scholars could discount mail on stelae but the more observant either accepted that there was a mixture of mail and leather usage on Trajan's Column (Froehner, Cichorius, Richmond), or they attempted to explain away the Column and the Adamklissi metopes' mail as artistic aberrations (Eadie). See POLLEN, 1874, 20; FROEHNER, 1872-74, 13; CICHORIUS, 1896, 55, 114, 175, 179, 236, 253, 290, 341, 346; PETERSEN, 1899, 9; CHEESMAN, 1914, 124, 126-7; G.R. III, 29, 30; COUISSIN, 1926, 442-4, 446, Pl.III.18, IV.21, V.28; FORESTIER, 1928, 78, 102; PARKER, 1928, 78, 102; RICHMOND, 1935, 15-6; ALFS, 1941, 73-4; EADIE, 1967, 166-8;; ROSSI, 1971a, 59, 85; GAUER, 1977, 56-8; WEBSTER, 1985, 152.
3. EADIE, 1967, 166-8, echoed by BIVAR, 1972, 276-7.
4. ROBINSON, 1972, 26-7; 1974, 5-8; 1975, 169. For cuir bouillé see STONE, 1934, 196.
5. For buff coats see STONE, 1934, 152, Fig.194; SIMKINS, 1984, 13-4.
6. Even for muscled cuirasses the supposition of leather use owes more to Hollywood than to any archaeological evidence (ROBINSON, 1975, 147-52). A piece of lorica squamata from Vindonissa has its scales attached to a soft and flexible leather backing (Dr M.C. Bishop, pers. comm.). Monuments depicting late Roman troops often show muscled cuirasses (Arch of Constantine, Column of Theodosius etc., cf. L'ORANGE & VAN GERKAN, 1939, Pl.25-6, 28-31; BECATTI, 1960, 51-5), but the question of infantry armour has not yet been properly examined. However, late sculpture was under strong Hellenistic influence and the actual use of muscled leather cuirasses by troops can safely be discounted (see JAMES, 1988, n.59).
7. A great variety of sculptural solutions to this problem are figured in EDGE & PADDOCK, 1988, 25, 45, 47, 52, 54, 56, 62, 66, 68, 75-6.
8. Plain surfaces: HOFMANN, 1905, No.55; ESPÉRANDIEU, 1907-66, No.5522, 5784-6, 5788-9, 5792, 5799, 5816, 5850, 5852-4, 5869, 6014, 6016, 6018, 6178, 6207, 6209, 6213, 6254-5, 6282-3, 6435, 7833-7, 8654-5; 1931, No.10-11; NOELKE, 1977, 5 (stelae); BENNDORF

- & SCHÖNE, 1867, Pl.I (Vatican frieze); KÄHLER, 1965, Pl.10, 14, 18-19; ROBINSON, 1975, Pl.460 (Aemilius Paulus Monument); ibid., Fig.122 (Saalburg figurine). For painting and additional details modelled in gesso, see ibid., 169; COULSTON & PHILLIPS, 1988, xviii.
9. Chiselled dashes or crescents: relief of soldiers from Osuna (GARCÍA Y BELLIDO, 1949, No.428); Volterra cinerary urn (BANDINELLI & GIULIANO, 1973, Fig.366); Arch at Orange (AMY et al., 1962, Pl.94a, c, 96c, 97b, 99); Mavilly Mars relief (ÉSPÉRANDIEU, 1907-66, No.2067); Villa Medici pedestal (CAGIANO DE AZEVEDO, 1951, No.119); Marcus Column (M.C. III, 33); Nawa helmet (ABDUL-HAK, 1954-55, Pl.IV-VII).
 10. Less ordered pecking: Chester stela (WRIGHT & RICHMOND, 1955, No.98); Volterra cinerary urn (BANDINELLI & GIULIANO, 1973, Fig.366); Pompeii relief (ibid., Fig.344); Domitius Ahenobarbus frieze (ROBINSON, 1975, Pl.463-6); British Museum figurine (ibid., Pl.474).
 11. ÉSPÉRANDIEU, 1907-66, No.8613, 8653.
 12. Marcus Column (throughout); Arch of Severus, Forum Romanorum (BRILLIANT, 1967, Pl.78, 85, 93); Arch of Severus, Lepcis (ANDREAE, 1978, Pl.557, right end); Arch of Constantine Antonine panels (KOEPPPEL, 1986, No.26, 27). Interestingly, both drilled hole and crescent mail conventions are used on the Marcus Column and the Forum Romanorum arch is more varied. On the seige panels mail is left blank, is drilled with large holes, drilled with each hole surrounded by one or two incised circles, or is drilled with small holes in horizontal lines (BRILLIANT, 1967, Pl.65.c, 78.c, 81, 85.b, 93.b, 94.a).
 13. ÉSPÉRANDIEU, 1907-66, No.35. Even more realistic is the mail on the Pergamon reliefs from the Athena Polias temenos (ROBINSON, 1975, Pl.459).
 14. GHIRSHMAN, 1962, Pl.163-6 (Firuzābād); FUKAI & HORIUCHI, 1972, Pl.XXXVII-VIII, XL-I (Tāq-i-Bustan).
 15. BIVAR, 1972, Pl.9; ANDREAE, 1977, Pl.144.
 16. For an extremely finely carved mail convention see a Julio-Claudian battle frieze from Rome, now at Mantua (LEVI, 1931, Pl.LXXXVI; ROBINSON, 1975, Pl.472; KOEPPPEL, 1983, No.33).
 17. Marcus Column, throughout; Pisa, Campo Santo, battle sarcophagus (REINACH, 1912b, 121); Antonine panels, Arch of Constantine (KOEPPPEL, 1986, No.26-7); Arch of Severus, Forum Romanum (BRILLIANT, 1967, Pl.78, 81, 85, 91, 93).
 18. RUMÄNIEN, 1969, Pl.91.
 19. ALFS, 1941, Fig.5; ROBINSON, 1975, Pl.474.
 20. SCHLEIERMACHER, 1984, No.1, 71, 73, 80, 82-3, 99, 112.

Unfortunately a group of three stelae at Tipasa (Algeria), probably dating to the reign of Pius, has only unarmoured depictions (ibid., No.65-7).

21. For the flexibility of scale on the Mantua battle frieze see n.16. For overlapping scale lappets see FRANZONI, 1987, No.30.
22. See STONE, 1934, Fig.36.1, 53, 61.3, 83.2. Italian Renaissance scale or plate cuirasses with 'pteruges', and the 'barbute' type of helmet were obviously influenced in their development by classical artworks (ibid., Fig.121, 190, 404).
23. For representations of Gallic mail with chest-fastenings see ÉSPÉRANDIEU, 1907-66, No.35, 7833-4, 8613, 8653-5. These also appear on 1st century A.D. stelae, ÉSPÉRANDIEU, 1907-66, No.5522, 5785, 5850, 5852, 5854, 6033, 6436; 1931, No.10. Significantly, most of the latter are cavalry gravestones. For chest-bridges as small-finds see ROBINSON, 1975, 164, Pl.480.
24. ÉSPÉRANDIEU, 1907-66, No.5792, 5799.
25. LESSING & OBERLEITER, 1978, Pl.9; ABDUL-HAK, 1954-55, Pl.VII.
26. ÉSPÉRANDIEU, 1907-66, No.6254.
27. Ibid., No.6435.
28. V,1, XXI,2, 4, 5, 9, 10; XXII,19; XXIV,18, 22, 30, 31, 33, 37, 45; XLII,1; XLVIII,8, 11; LIII,21; LIV,7, 14; LXXI,17, 18, 20; LXXII,4, 5, 24, 27, 29; XCIV,13; CXV,10, 11, 12; CXXIX,5; CXXXVI,14, 16; CXLV,13; CXLVI,9.
29. ÉSPÉRANDIEU, 1907-66, No.5790, 6207, 6209, 6213, 6255. ROBINSON, 1975, 169 interpreted these sculptural details as depicting two garments over mail, the edge of the latter represented by the wavy fringe. In the writer's opinion this is less likely.
30. ROBINSON, 1975, 149, Fig.158.
31. Officers with split tunic sleeves are seen in VI, XII, XXXV, XXXVI, XLVI, LII, LIV, LVIII, LXI, LXIII, LXVI, LXVIII, XCVII. In XCVII Trajan also has a split tunic skirt.
32. The view is often implicit but it is summed up by COUISSIN, 1926, 444-6 who, in following this reasoning, had to postulate that troops unquestionably wearing mail on the Column and the Great Trajanic Frieze were legionaries or praetorians.
33. ÉSPÉRANDIEU, 1907-66, No.6207, 6209, 6254; TUFİ, 1984, Fig.28. The small number is a bias of the surviving sample exaggerated by the unusual occurrence of armoured, as compared with unarmoured, representations (see BISHOP, 1988, n.169). Examples that have lost both their inscription and diagnostic shafted weapons, but which have mail with fringed undergarment, may also depict auxiliaries because the latter feature does not generally occur on legionary stelae (see ÉSPÉRANDIEU, 1907-66, No.5853, 6213; TUFİ, 1984,

Fig.17).

34. BISHOP, 1985b; 1986b, 76-85. Versus MACMULLEN, 1960, 25; ROBINSON, 1975, 8.
35. BISHOP, 1985b, 10-11.
36. Funerary: WAURICK, 1972, 85 (Es Soumâa). Ritual: WHEELER, 1954, Pl.VIII (Vimose). Scrap hoard: WEINBERG, 1972, 85 (Hebron). Abandonment: NASH-WILLIAMS, 1932, 68 (Caerleon). Siege: ROSTOVTZEFF et al., 1936, 192-7 (Dura-Europos).
37. Scale-armoured auxiliary infantry appear in profusion on the Marcus Column, on the Antonine panels of the Arch of Constantine (KOEPPPEL, 1986, No.27-8) and on the Severan arches in the Forum Romanum and at Lepcis Magna (BRILLIANT, 1967, Pl.95a-b; STRONG, 1980, Pl.160). Auxiliaries in scale escort prisoners on both ends of the Portonaccio Antonine battle sarcophagus (BERTINETTI et al., 1985, 178-9).
38. COULSTON, 1988b, n.103. Even 'light' infantry skirmishers seem to have been well equipped with plate and mail torso and arm defences. See MICHAEL, 1983.
39. I,3; LIV,14; LVII,5; LXV,6; LXXIV,7.
40. ÉSPÉRANDIEU, 1907-66, No.6207, 6819.
41. GROENMAN-VAN WAATERINGE, 1967, 56-65.
42. KLUMBACH, 1966; THOMAS, 1971, 31-4, Pl.XXXIX-LIII; BUCKLAND, 1978, 263-4; JAMES, 1980.
43. ÉSPÉRANDIEU, 1907-66, No.6819.
44. For example, CURLE, 1911, Pl.XXXIV.1-2; RICHMOND, 1968, Fig.58.A4; MANNING, 1985, 147.
45. BUCKLAND, 1978, Fig.3-4.
46. HOFMAN, 1905, No.34, 49; ÉSPÉRANDIEU, 1907-66, No.1323, 4012, 4017, 4123, 4126, 4677, 4918, 5792, 5799, 5886, 5901, 5905, 5919, 5954, 6078, 6125, 6142, 6207, 6209, 6250, 6254, 8459, 9245; 1931, No.16, 35, 50, 96-7, 99, 143, 194, 222, 324, 342, 357, 436; FELLMANN, 1957, Metope No.8, 14, 17, 24 etc., Pl.7.1; PICARD, 1957, Pl.XII, XIV, XXVIII; AMY et al., 1962, Pl.45-8; ROLAND, 1977, Pl.24; KEPPIE & ARNOLD, 1984, No.12; COULSTON & PHILLIPS, 1988, No.65, 67-8, 161. One of the Ephesus ivory panels also depicts a horizontal shield-grip (LESSING & OBERLEITER, 1978, Pl.8).
47. STEAD, 1985, Pl.XI (Clonoura); ROSENBERG, 1937, Fig.30-2 (Hjortspring). See also CONNOLLY, 1981, (Neuchâtel).
48. STONE, 1934, 308, Fig.390.

49. Circular shields seem to have been used primarily by standard-bearers and musicians in the early imperial period (see 5.5-6). Very large, round shields were adopted by cavalry during the 3rd century AD (SCHLEIERMACHER, 1984, No.94; HOFMANN, 1905, No.54) and in infantry employment by the end of the century (ÉSPÉRANDIEU, 1907-66, No.5496; FRANZONI, 1987, No.23; LAUBSCHER, 1975, Pl.30.2, 42.2, 51; L'ORANGE & VON GERKAN, 1939, Pl.8). A round German shield has been found at Thorsbjerg, Denmark (ENGELHARDT, 1863, Pl.8.1).
50. BUCKLAND, 1978, 249, Fig.7.
51. Valkenburg oval: 130-50 x 64cm; sub-oval: 110 x 70cm. See GROENMAN-VAN WAATERINGE, 1967, 68-71; VAN DRIEL-MURRAY & GECHTER, 1984, 33. Some reduction is necessary for the cover to fold round the shield rim.
52. For the Dura dimensions see ROSTOVTZEFF et al., 1939, 328. For the Doncaster shield, which was found in a very disturbed state and the full dimensions of which were unclear, see BUCKLAND, 1978, 254. In the revised reconstruction a notional length has been suggested in proportion to the width and in comparison with other shield finds. Buckland suggested 64 x 125cm.
53. CONNOLLY, 1981, 52-3; WAURICK, 1983, 282-3, Pl.41.4-5 (compare with Pl.47.2, 48.1).
54. HELBIG, 1966, No.1748; DUDLEY, 1967, Pl.58 (Museo Capitolino). ROBINSON, 1975, Pl.424 (Vatican).
55. A striking exception is the carriage of shields on the mausoleum of the Julii at St.Rémy (ÉSPÉRANDIEU, 1907-66, No.114; ROLAND, 1969, Pl.25-7). This monument depicts infantry and cavalry battle scenes following Hellenistic traditions in composition, figure poses, body armour and shields. Details of saddles, pila and helmets are, on the other hand, drawn from contemporary (late 1st century B.C.) usage. Shields are of the dished Greek hoplon type. For details of equipment see ROBINSON, 1975, 16; BISHOP, 1988, 87-8. For the Hellenistic background see KLEINER, 1980.
56. FLORESCU, 1969, 69-81; ROSSI, 1971a, 110-14.
57. The scholar most determined to see the oval shields as identificational badges for specific units has been ROSSI, 1966; 1971a, 114-8. This has been criticised by HASSALL, 1973, 172; SPEIDEL, 1973, 728.
58. ROBINSON, 1975, Pl.411-12. See also KOEPPPEL, 1983, No.4.
59. REINACH, 1909, 290.
60. ÉSPÉRANDIEU, 1907-66, No.5816, 5819, 5822.
61. CROUS, 1933, 94-7. For similar motifs on shields making up a trophy on the Arcus Titi see PFANNER, 1983, Pl.76.

62. The best drawings of these trophies is REINACH, 1909, 289-90. For their dating and context see LEHMANN-HARTLEBEN, 1923-24; NASH, 1981, II, 125, Pl.839-40.
63. For auxiliary animal standards see WEBSTER, 1986, 112-4; COULSTON & PHILLIPS, 1988, No.193. Animal badges appear in the form of a stork on the side of an altar from Vindolanda (Northumberland, ibid., No.45) and a bull and a capricorn on a building inscription at Brough-by-Bainbridge (TUF1, 1983, No.106). Badges do not appear on tile-stamps but the bird on lead seals from South Shields (Tyne and Wear) may represent an auxiliary totem (pers. comm. Mr W. Hubbard).
64. ROSSI, 1971a, 100. Even the empire-wide application of shield-patterns in the Notitia Dignitatum has been called into doubt (GRIGG, 1983).
65. GROENMAN-VAN WAATERINGE, 1967, Fig.16; BUCKLAND, 1978, Fig.6-7.
66. ÉSPÉRANDIEU, 1907-66, No.6125.
67. BENSEDDIK, 1979, Fig.28.
68. CICHORIUS, 1896, 191-2; PARIBENI, 1926, 233-4; ROSSI, 1971a, 150, 226; STROBEL, 1984, 135. The cohors II Hispanorum scutata Cyrenaica equitata has proved an irresistible identification.
69. KÄHLER, 1951, Pl.29; KOEPPPEL, 1984, No.7, Fig.11.14. They were also carried in triumphal processions (see 4.5, n.3)
70. XXXII,9, 10, 11, 13, 17, 18; XLIV,2; XCIV,8.
71. Contrary to the blanket description of gladii for legionaries and spathae for auxiliaries in Tac., Ann. XII,35 which has led more than one scholar astray (CHEESMAN, 1914, 125-6). For this historian's loose use of terms for rhetorical effect see WALKER, 1952, 53-7; BISHOP, 1986b, 39-40.
72. ÉSPÉRANDIEU, 1907-66, No.5819.
73. Ibid., No.6207 (Firmus); 1931, No.16 (Licaius); ÉSPÉRANDIEU, 1907-66, No.6125 (Daverzus).
74. Ibid., No.5787, 6209, 6254; BENSEDDIK, 1979, Fig.14, 28; TUF1, 1984, Fig.7, 28, 37.
75. Tac., Ann. XII,35.
76. SCOTT, 1980; MANNING, 1985, 160-72; ALLASON-JONES & BISHOP, 1988, 11-22, 103-5.
77. LEVI, 1931, Pl.LXXXVII; ROBINSON, 1976, Pl.451.
78. Ibid., Pl.474.
79. RUPRECHTSBERGER, 1982, No.244, dating to end 1st century A.D.,

first half 2nd century.

80. See n.31, above.

81. WILD, 1968, 226. For garments on the Gundestrup Cauldron see GLOB, 1977, Pl.70; CONNOLLY, 1981, 114. The common modern use of the term 'bracae' for these short trousers is a misnomer (e.g. WEBSTER, 1969, 123). 'Feminalia' derived from 'femur' (cf. Suet., Augustus 82). 'Braceae' was used repeatedly of barbarian long trousers (Divus Iulius 80; Ovid, Tristia 5, 7, 49; Tac., Hist. II,20; Juv., Sat. II,169). The Gundestrup Cauldron provides a number of important details of clothing, shields, spurs and horns which are relevant to the present study, and its vessel's stylistic affinities have been recently re-examined by BERGQUIST & TAYLOR, 1987.

82. WILD, 1968, 226; SHAW, 1982, 45-6.

83. Paenulae: ÉSPÉRANDIEU, 1907-66, No.5861, 6207, 6575; 1931, No.9, 16, 473. Saga: 1907-66, No.6125, 6136, 6137, 6209; BENSEDDIK, 1979, Fig.14.

84. CICHORIUS, 1896, 177-8; PETERSEN, 1899, 45. For velites with wolf-skins see Polybius, VI,22. For their function HARMAND, 1967, 39, 41; KEPPIE, 1984, 33-5 and see Livy, XXVI,4.

85. COULSTON, 1985, 235, 279.

5.4 Auxiliary Cavalry

1. SCHLEIERMACHER, 1984, No.5, 6, 17, 18, 20, 21, 27, 36, 43, 45, 46, 51, 52; ÉSPÉRANDIEU, 1907-66, No.6178; LEVI, 1931, Pl.LXXXVI; ROBINSON, 1975, Pl.472. Schleiermacher's work is now the definitive catalogue study of rider tombstones, superceding regional studies by Éspérandieu, Hofmann, Schober, Benseddik etc. However, her coverage is not exhaustive, the descriptions not as full as they could be and, most surprisingly, she still entertains the possibility that leather armour is depicted on some stelae (SCHLEIERMACHER, 1984, 22-3, 97, 136). Unfortunately, there is no comparable study of figural infantry tombstones.

2. Ibid., No.17; BISHOP, 1988, 71-4.

3. PHILLIPS, 1975, No.68; SCHLEIERMACHER, 1984, No.77.

4. Ibid., No.9, 55-7, 76; KOEPPPEL, 1983, No.33, 35.

5. See also a figure with scale on a fragment of the Great Trajanic Frieze in the Louvre (KOEPPPEL, 1985, No.16).

6. MANSEL, 1938, Fig.201-3. 1st-2nd century A.D. Thracian nobles who had presumably served in the auxilia were buried with Roman military equipment, including scale armour (see also BUJUKLIEV, 1986, No.94-5). The writer is very grateful to Dr H. Bujukliev for making this material available for study in Stara

Zagora Museum.

7. ROBINSON, 1975, 162-3. However, whilst leather tassets found at Dura Europos are undeniably a lamellar form, supposed western lamellae may in fact be a hybrid variant of scale armour. Lamellar would certainly have been used by Roman cavalry on the eastern frontiers (COULSTON, 1986, 60-3).
8. For example SCHLEIERMACHER, 1984, No.73.
9. Ibid., No.5, 6, 8, 17-8, 20-1, 26-7, 36, 51. Two signiferi on Mainz stelae and a legionary on a pedestal relief also have hem and shoulder-piece vents to facilitate movement (ÉSPÉRANDIEU, 1907-66, No.5791, 5799, 5816).
10. ROBINSON, 1975, 89-106. For examples on stelae see SCHLEIERMACHER, 1984, No.5-6, 8, 17-21, 27, 36, 42, 45-6, 48, 51-2, 75, 77, 79, 99. Functional considerations gave rise to an interestingly close similarity in coverage, peak, crest and perforated cheek-pieces to improve hearing, between 2nd century Roman cavalry helmets and 16th to 17th century European burgonets (see ROBINSON, 1975, Pl.256-62; STONE, 1934, Fig.45.1, 201.2, 203.5).
11. ROBINSON, 1975, Pl.254-5, 391-96.
12. ÉSPÉRANDIEU, 1907-66, No.6178; SCHLEIERMACHER, 1984, No.5, 8, 17-8, 20, 37, 42, 45, 47, 76-7, 79-80, 98, 112, 114, 125.
13. Ibid., No.4, 6, 9, 21, 27, 36, 38, 43, 46, 52, 55-6, 75, 92, 109, 128. These are mainly sub-oval, rather than hexagonal. A Republican period relief from S.M. di Fontigliano (Italy) depicts a number of horsemen with these shields (D.A.I. Neg.80.2428). A figure of a cavalryman on a lead coffin from Glamorgan also carries a sub-oval shield (MURRAY THREIPLAND, 1953, Fig.1, Pl.XVII).
14. GROENMAN-VAN WAATERINGE, 1967, 68-70.
15. Arrian, T.T. 37.2; see LAWSON, 1980, 178-9, Fig.3.
16. Awkwardly held shields: XXIV,62, 69; XXXVII,3-5; XLII,1; LVIII,1; LXXII,24; XCIV,14, 20, 22; CVII,4; CVIII,18; CXIII,1, 3, 4; CXLIV,1-4; CXLV,1, 4, 8; CXLVIII,1; CLI,5. For the clarifying effect of colour-coding see HAMBERG, 1945, Pl.40-1, 43 (transparencies).
17. XXI, XXIV, CXLII, CXLIII, CXLV.
18. XXXVI, XL, LVII, LXXIV, LXXXIX, CII, CXLV.
19. SCHLEIERMACHER, 1984, No.5-9, 11, 17-21, 26-7, 36-8, 42, 45-8, 51, 75, 79, 92.
20. SPEIDEL, 1970, Pl.XV.1; ROSSI, 1971a, 228; SCHLEIERMACHER, 1984, No.98.

21. KIECHLE, 1964, 114-7; BISHOP, 1988, 112-6.
22. There is no definitive published work on 1st-2nd century A.D. spathae, in contrast with short swords. For particularly fine examples from Newstead see CURLE, 1911, 183-5, Pl.XXXIV.6-7. The burials of cavalrymen at Vize (Bulgaria) and Nawa (Syria) were both accompanied by spathae (MANSEL, 1938, No.8, Fig.203.b; ABDUL-HAK, 1954-55, 187).
23. Tac., Ann. XII,35.
24. SCHLEIERMACHER, 1984, No.18, 27.
25. LINDENSCHMIT, 1870, IV, Pl.III.6 (Mainz); ULBERT, 1969c, Fig.6, Pl.60.1-2 (Rheingönheim).
26. ULBERT, 1969a, 111-5, Fig.2, Pl.17-19, 25.
27. PLANCK, 1975, Pl.79.3. Ease of drawing has been demonstrated by Mr P. Connolly (pers. comm. and at Roman Military Equipment Conferences IV, 1986; V, 1987).
28. TROUSDALE, 1975, 106; COULSTON, 1987, 143, 146.
29. TROUSDALE, 1975, 71-101.
30. In the same manner shafted weapons fill the space above heads on the Great Trajanic Frieze and the Borghese reliefs (KOEPPPEL, 1985, No.9 (adventus and head presentation sections), 11-12).
31. Short javelins: SCHLEIERMACHER, 1984, No.1, 4, 17, 20-1, 27, 36-7, 42, 45-7, 51-2, 63, 96, 101, 114, 122.
32. Hastae: ibid., No.6, 9, 18, 22, 42, 78-9.
33. Pinning fallen enemies: ibid., No.55-7, 75, 82, 116. A stela from Ribchester (Lancashire) with a pinning composition has been missed by Schleiermacher, and is otherwise unpublished. The lengths of shafted weapons on stelae may of course have been governed solely by the sculptor's readiness to extend the shaft onto the frame outside the aedicula, on his reluctance to obscure the rider and horse by a shaft passing across them, and by the choice of figure poses. However, two stelae definitely depict long lances (ibid., No.65, 67).
34. ÉSPÉRANDIEU, 1907-66, No.6448, 6454, 6463, 6465; 1931, No.32; SCHLEIERMACHER, 1984, No.10, 14, 17, 20, 27, 29-30, 36, 42, 46, 52, 96, 117, 123.
35. Jos., B.J. III,96.
36. Arrian, Ek. 21,31.
37. COULSTON, 1986, 60.
38. STROBEL, 1984, 110.

39. COULSTON, 1985, 285-90.
40. STROBEL, 1984, 112, 118, 148.
41. Stelae: SCHLEIERMACHER, 1984, No.17, 45, 65, 67. Vachères: ÉSPÉRANDIEU, 1907-66, No.35.
42. MANNING, 1985, 69-70.
43. For the harness terminology employed here see BISHOP, 1988, Fig.25.
44. XXXVI,22; XXXVII,7; XXXVIII,25; LVII,2; LXXXIX,6, 8, 9; XCVII,1; CII,3; CIV,32; CXLV,4, 6, 9, 10.
45. VIII,3; XXIV,31; XL,69; XLII,1, 2, 3; XCVII,3.
46. XXI,9, 11; CXLV,6, 9, 10, 12.
47. Without vertical straps: V,12, 15, 18; VII,1, 3; XXI,9, 10; XXIV,24, 28, 31; XL,62; XLII,1, 3; LXXIV,6. With straps: LXXXIX,1-4, 6-8; CII,1, 2; CIV,22, 32.
48. V,12, 18?; VII,1; XXI,9; XXXVI,15; XXXVII,2, 4, 7, 8; XXXVIII, 25; XLIX,9; CIV,32.
49. XXI,9, 11; XXIV,24; XXXVIII,25; XLII,1-3; LVII,1; LVIII,1, 3; LXXIX,8; XCVII,1; CXLII,1, 2, 4; CXLIII,1; CXLV,4, 6, 9, 12, 13.
50. VII,1; XLII,2; CIV,32.
51. V,18; XLIX,9, 22; LXXIX,1, 3-5.
52. SCHLEIERMACHER, 1984, No.17, 75; BISHOP, 1988, 71-7.
53. D.A.I. Neg.78.445.
54. BISHOP, 1988, 105-9.
55. XXIV,24; XXXVI,22; LVIII,1, 3; XCVII,1, 5, 8; CII,2, 3; CIV,22, 32; CXLII,1, 4; CXLIII,1; CXLV,6, 9, 12.
56. SCHLEIERMACHER, 1984, No.4, 42, 56-7, 73-8 (stelae); Inv.No.1, 2, 4-7 (Adamklissi); KOEPPPEL, 1986, No.5, 7 (Arch of Constantine).
57. ÉSPÉRANDIEU, 1907-66, No.6448, 6454, 6465; SCHLEIERMACHER, 1984, No.6, 17, 23, 26, 42, 77 (stelae). See also horses on the Pius Column pedestal (VOGEL, 1973, Pl.9, 15, 28-9) and on a fragmentary 'historical' relief from Rome (GUERRINI, 19871, No.48).
58. Finds: ZADOKS-JOSEPHUS JITTA & WITTEVEEN, 1977, Pl.29-34; LAWSON, 1978, 149-53, Fig.9, Pl.53; BISHOP, 1988, 96-8, Fig.45, 47-8. Significance: SALVIET, 1966; ZADOKS-JOSEPHUS JITTA & WITTEVEEN, 1977, 173-5; BISHOP, 1986, 107-8.

59. ÉSPÉRANDIEU, 1907-66, No.5828, 6448, 6454-5, 6463, 6465, 6509, 6603; SCHLEIERMACHER, 1984, No.4, 5, 13, 21, 30, 36, 42, 45-7, 51, 75-7, 92. See BISHOP, 1988, 94-5, 106-7.
60. GLOB, 1977, Pl.70; CONNOLLY, 1981, 114; BISHOP, 1988, Fig.20.
61. GHIRSHMAN, 1962, Pl.90, 119; COLLEDGE, 1976, Fig.26, Pl.32.
62. WEBSTER, 1971 (Fremington Hagg); JENKINS, 1985 (Xanten); BROUWER, 1982 (Doorwerth); ABDUL-HAK, 1954-55 (Nawa).
63. LEVI, 1931, Pl.LXXXVII; ROBINSON, 1975, Pl.451 (Mantua); AMY et al., 1962, Pl.29-30 (Arch at Orange). See BISHOP, 1988, 94.
64. SCHLEIERMACHER, 1984, No.20, 74, 78-9.
65. Dr M.C. Bishop, pers. comm. The writer is particularly grateful to Dr Bishop for discussing horse harness in general.
66. SCHLEIERMACHER, 1984, No.27. See also No.21.
67. ROLAND, 1969, Pl.33 (St.Rémy); AMY et al., 1962, Pl.44 (Orange); ÉSPÉRANDIEU, 1907-66, No.5828, 6448, 6454-5, 6463, 6465, 6509, 8437; SCHLEIERMACHER, 1982, 5, 6, 8, 9, 17-22, 26-7, 30, 36, 42, 45-7, 51, 75, 79, 92 (stelae).
68. GROENMAN-VAN WAATERINGE, 1967, 106-21; WATERER, 1981, 110-13, 122-6; ROBINSON, 1975, 194-6; BISHOP, 1988, 91-3.
69. CONNOLLY, 1986; 1987; 1988; BISHOP, 1988, 104-5.
70. COULSTON, 1986, 61-2; BISHOP, 1988, 113-4.
71. ÉSPÉRANDIEU, 1907-66, No.5828, 6448, 6454-5, 6463, 6465, 6509; SCHLEIERMACHER, 1984, No.6, 20, 22, 26-7, 30, 46, 75 (stelae); CONNOLLY, 1981, 114; BISHOP, 1988, Fig.20 (Gundestrup); LAWSON, 1978, Pl.52.2; RUPRECHTSBERGER, 1982, No.243; BISHOP, 1988, 88-9 (terracotta figurines).
72. ÉSPÉRANDIEU, 1907-66, No.6448, 6455, 6509. In addition, No.5251 which is a sculpture in the round appears to confusedly depict triplets with plates attached to a shoulder phalera. For plate finds see BISHOP, 1988, 94.
73. AMY et al., 1962, Pl.44; BISHOP, 1988, 84-7.
74. LEVI, 1931, Pl.LXXXVI-II; KOEPEL, 1986, No.5; SCHLEIERMACHER, 1984, No.5, 22, 26.
75. For example SCHLEIERMACHER, 1984, No.76.
76. ÉSPÉRANDIEU, 1907-66, No.6448, 6454.
77. ROSTOVTZEFF et al., 1936, Pl.XXII. See BISHOP, 1988, Fig.30.
78. ÉSPÉRANDIEU, 1907-66, No.6463, 6465.

79. For example AMELUNG, 1903, No.11c, 137d, 137f, 137k, 137l, Pl.23, 28 (Galleria Lapidaria, Vatican); CUMONT, 1942, Pl.XLIV.1; SMITH, 1904, No.2392 (British Museum). There are very large unpublished groups of calo and horse reliefs on equites singulares stelae in the Muséo Epigrafico (Vatican) collection and in the catacombs of SS. Marcellino e Pietro under the Tor Pignattura (pers. obs.). See also ÉSPÉRANDIEU, 1907-66, No.6575 (Neuss).
80. NOBIS, 1973; COULSTON, 1983, 25; 1986, 62.
81. RICHMOND, 1968, Pl.46A. Stallions: XXXVII,2; XXXVIII,17, 25; XLII,1; XCVII,5; CIV,22. The first three and the last two incidences form two groupings, perhaps reflecting the work of a particular sculptor.
82. SCHLEIERMACHER, 1984, No.8, 18, 26, 56.

5.5 Standard Bearers

1. ÉSPÉRANDIEU, 1907-66, No.5790 (Musius); FRANZONI, 1987, No.30 (Festus). For other representations and their identification see DOMASZEWSKI, 1885, 29-34; RENEL, 1903, 148-90. To these may be added KEPPIE & ARNOLD, 1984, No.149. For an aquilifer with an aquila and the title, from Istanbul, see SPEIDEL, 1976, Fig.1.
2. Notably Veg., II,6, 13.
3. Folded: LXI,11; CVIII,25. Extended: XXII,16; XLVIII,11; LI,19; LIII,19; LXIII,15; CIV,6; CVI,29. Upright: VIII; XXVII,5; LXXVII. Upright with corona: IV,18.
4. BAATZ, 1980, Pl.90.1; KEPPIE, 1984, Pl.13. For animal imagines see DOMASZEWSKI, 1885, 74 (who identified the Column ram as an auxiliary standard); RENEL, 1909, 191-233.
5. COULSTON & PHILLIPS, 1988, No.193.
6. DOMASZEWSKI, 1885, 54; WEBSTER, 1985, 135-6. Identified as cart-fittings by TOYNBEE & WILKINS, 1982.
7. TUDOR, 1968, Fig.118; ALEXANDRESCU-VIANU, 1977, Fig.1 (Sucidava); TUFI, 1983, No.44 (York). See also HOFMANN, 1905, No.10.
8. DOMASZEWSKI, 1885, Fig.34-52; KEPPIE, 1984, Pl.4, 12-3, 16 (coins); ALLASON-JONES & MIKET, 1984, Pl.VII (Tyne boss); ROBINSON, 1975, Pl.186 (Niedermörmter helmet). For legionary signa in general see DOMASZEWSKI, 1885, 35-53; RENEL, 1909, 263-8; VON PETRIKOVITS, 1983, 179-92.
9. For example HOFMANN, 1905, No.9, 11, 12, 14; ÉSPÉRANDIEU, 1907-66, No.5792, 5799; BARKOCZI et al., 1951, No.29; WEBSTER, 1985, Pl.X; KEPPIE, 1984, Pl.14; FRANZONI, 1987, No.8, 54, 57, 60. For signa in general see DOMASZEWSKI, 1885, 35-56; RENEL, 1909, 258-68. The type appears frequently on the Marcus Column and on the Arch of

Severus, Forum Romanum (BRILLIANT, 1967, Pl.62a).

10. IV, VIII, X, XXII, XXIV, XXVI, XXVII, XLVI, XLVIII, LXI, LXXVII, LXXXV, CXXV, CXXVIII.
11. C.I.L. XIV,2523 = I.L.S. 2662; DOMASZEWSKI, 1885, Fig.5; DURRY, 1938, Pl.IV; MAXFIELD, 1981, Pl.12.a.
12. KOEPPPEL, 1985, No.10 (Borghese relief); DOMASZEWSKI, 1885, Fig.80; BRILLIANT, 1967, Fig.38 (Arcus Argentariorum); KOEPPPEL, 1984, No.31 (Museo Gregoriano Profano, Vatican); MAXFIELD, 1981, Pl.5.c-d (Musei Capitolini). See, also, standards on an Antonine battle sarcophagus (REINACH, 1897c, 260.2) and flanking figures on two fine funerary altars (Galleria Lapidaria, Vatican: AMELUNG, 1903, No.163, Pl.30; No.533, Via Casilina, pers. obs.), all from Rome. For praetorian signa in general see DOMASZEWSKI, 1885, 56-69.
13. V, VIII, XXIV, XXXIII, XL, XLII, LI, LIII, LIV, LXI, LXIII, LXXV, LXXIX, LXXXVI, LXXXVII, XCVIII, CII, CIV, CVI, CXIII, CXVIII, CXXIII, CXXXVII.
14. PHILLIPS, 1975, No.86, 94, 177-8, 280; COULSTON & PHILLIPS, 1988, No.239, 249, 252; KEPPIE & ARNOLD, 1984, No.44, 68, 135, 150, 163. For vexilla in general see DOMASZEWSKI, 1885, 76-80; TOYNBEE & WILKINS, 1982, 246-8. Another example appears on a panel from Bonn (BAUCHHENB, 1978, No.45). For legionary vexillationes in the Dacian Wars see STROBEL, 1984, 99-103.
15. KEPPIE, 1973.
16. DOMASZEWSKI, 1967, 23 (praetorian), 48 (legionary), 55 (auxiliary), 60 (numeri). Vexilla on the Great Trajanic Frieze may belong to equites praetoriani (see 5.18). For four stelae depicting mounted vexillarii, two perhaps legionary, see HOFMANN, 1905, No.118 (Ptuj) and BARKOCZI et al., 1954, 41 (Intercisa); ECKHART, 1981, No.31-2 (Ovilava). See also COULSTON & PHILLIPS, 1988, No.400.
17. DOMASZEWSKI, 1967, 58. For the vexillum of cohors XX Palmyrenorum on the Tribune Terentius fresco from Dura see CUMONT, 1926, Pl.L.
18. For non-military vexilla see ROSTOVTZEFF, 1942, 97-106.
19. ROSTOVTZEFF, 1942, Pl.VI; GHIRSHMAN, 1962, Pl.98; COLLEDGE, 1977, Pl.34-5.
20. MAXFIELD, 1981, Pl.5.c-d (Capitolino); DURRY, 1928, Fig.4; CAGIANO DE AZEVEDO, 1951, No.119, Pl.XXXVI.65 (Villa Medici). For praetorian vexillarii and speculatores see DOMASZEWSKI, 1967, 20.
21. ROSTOVTZEFF, 1942, Pl.IV.
22. RITTERLING, 1919, Fig.19.
23. Fringe present: IV, V, VII, VIII, LIV, LXXIX, CV, CVI, CXVII,

- CXXIII. Absent: XL, LI, LXXXIX, CII, CXVII.
24. VII, VIII, XL, LIV, LXXIX, LXXXIX, CV, CVI.
25. KOEPPPEL, 1986, No.29.
26. CICHORIUS, 1896, 34, 106, 118, 131, 227-8, 250, 291, 368; 1900, 56, 171; RENEL, 1903, 201, 264-7; PARIBENI, 1926, 259; ROSSI, 1971a, 105, 108; GAUER, 1977, 29, 56; STROBEL, 1984, 85, 99.
27. VAN DRIEL-MURRAY & GECHTER, 1984, No.137. This legio may have used two badges, as did other legiones. These units, like II Augusta and IV Macedonica, had two zodiac signs, perhaps representing the birthday of the founder and the date of foundation. The Minerva could have replaced the former (see KEPPIE, 1984, 139-40, 142-3, Appendix 2 and Pl.13).
28. WRIGHT & RICHMOND, 1955, No.90, 126(?) (Chester); ÉSPÉRANDIEU, 1907-66, No.5850 (Mainz); ECKHARDT, 1976, No.86 (Enns). For a possible imaginifer on a sarcophagus from Brigetio (Hungary), see BARKOCZI, 1951, No.91, Pl.XXIV.
29. HOFMANN, 1905, No.58 (signum, Ragusa); ÉSPÉRANDIEU, 1907-66, No.5496 (infantry cockerel, Strassburg), 6282 (cavalry bull, Bonn), 6575 (cavalry lion, Neuss), 6255 (signum, Bonn); COULSTON & PHILLIPS, 1988, No.193 (infantry bull, Chesters); NOELKE, 1977, 7 (signum, Neuss). See RENEL, 1909, 197-206, 214-33; WEBSTER, 1986.
30. As described by Tac., Hist. IV,24; Ger. 7. See RENEL, 1909, 65-72, 112-48. Animal standards were often represented amongst spolia, for example on the Arch at Orange (AMY et al., 1962, Pl.44).
31. SCHLEIERMACHER, 1984, No.45 (Worms), 75 (Cirencester), 77 (Hexham). For an abstract Celtic standard on a relief from Bormio (Italy) see PAULI, 1973, Pl.7.1.
32. VIII, LXXXV, CXIII, CXXVIII.
33. For standards present in depictions of religious ceremonies see KEPPIE & ARNOLD, 1984, No.68; KOEPPPEL, 1986, No.31; STRONG, 1961, Pl.132.
34. VIII, LIII, LXXXVI, XCVIII.
35. XXXIII, CII, CXXV.
36. X, XXVIII, XLII, LXXVII, CIV, CXXXVII.
37. VIII, XXIV, XLI, LXIII, LXXIX, LXXXVI, LXXXIX, CV, CXVII, CXXIII.
38. R.I.C. I, Caligula, No.23-5; Nero, No.61-72; Galba, No.150; II, Domitian, No.288; Trajan, No.655-8; HAMBERG, 1945, 135-49; WARD-PERKINS, 1951, 287-8.
39. XVIII, XXVIII, XXXIX, LXVIII, C, CXXX. This is in contrast to, for example, the presence of standards in submission and presentation

scenes on the Arch of Constantine Antonine panels (KOEPPPEL, 1986, No.28-30).

40. CICHORIUS, 1896, 106, 136; 1900, 56-8; PETERSEN, 1899, 12, 15-16, 25-6. This approach was opposed by STUART-JONES, 1910, 441-4; DAVIES, 1917, 79; 1920, 5.
41. IV, VIII, X?, XXII, XXVII, XLVI, XLVIII, LXI, LXXVII.
42. VIII, LI, LIII, LXIII, CIV, CVI.
43. MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423. For the aquila see KEPPPE, 1984, 233-4.
44. V, VIII, XXIV, XL, LI, LIII, LIV, LXI, LXIII, CII, CIV, CVI, CXVIII, CXXIII.
45. XL, LI, LIV, LXXIX, CII, CVI, CXVII, CXXIII.
46. This has led to some misguided speculation as to the nature of the men's dress (GAUER, 1977, 58-60; SPEIDEL, 1984, 33), but such discussion has ignored the simple fact that these men of the auxiliary infantry figure type only lack mail chiselling (see 3.2.6), they do not wear any special form of 'camp dress' and they do indeed have loricae.
47. GAUER, 1977, Fig.1.
48. Praetorian signa would have been visible at any time when a body of praetoriani was present. For adlocutiones see R.I.C. I, Caligula, No.23-5; Nero, No.61-72; Galba, No.150; II, Domitian, No.288; Trajan, No.655-8; CAMPBELL, 1984, 74-5. For standards in a triumph see Tac., Hist. II,89 and EHLERS, 1948, 509. For standards grouped around emperors and other military commanders see Tac., Hist. I,36, 44; II,29.
49. STROBEL, 1984, 103-4.
50. ÉSPÉRANDIEU, 1907-66, No.5792, 5799.
51. Ibid., 6255.
52. NOELKE, 1977, 7.
53. DOMASZEWSKI, 1885, Fig.87; HOFMANN, 1905, No.58. Small round shields are carried by vexillarii on a coin of Hadrian (BRILLIANT, 1963, Fig.3.65).
54. FRANZONI, 1987, No.30.
55. ÉSPÉRANDIEU, 1907-66, No.5790.
56. FRANZONI, 1987, No.8.
57. WEBSTER, 1985, Pl.IX.b; COMSTOCK & VERMEULE, 1976, No.237 (Boston); MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423 (Louvre).

58. KOEPPPEL, 1985, No.10, Fig.17.4.
59. DOMASZEWSKI, 1885, Fig.8.
60. BENNDORF & SCHÖNE, 1867, No.1; DOMASZEWSKI, 1885, Fig.82; KOEPPPEL, 1984, No.17 (Vatican); CARDUCCI, 1968, 53, Pl.c (Turin).
61. HASSEL, 1966, Pl.6.2; ANDREAE, 1977, Fig.415.
62. CAGIANO DE AZEVEDO, 1951, No.119, Pl.XXXVI,65.
63. For the rôle of standards and the vulnerability of bearers see Caes., B.G. IV,23; Tac., Ann. I,65, 68; Veg., II,22; III,5; DOMASZEWSKI, 1885, 1-12; RENEL, 1903, 290-7; SPEIDEL, 1976, 140-3.
64. Veg., II,16.

5.6 Musicians

1. AMELUNG, 1903, No.137k, Pl.28 (Galleria Lapidaria, Vatican); HOFMANN, 1905, No.64; SCHÖBER, 1923, No.158 (Aquincum); HOFMANN, 1905, No.65 (sarcophagus, Aquincum); KUSZINSZKY, 1934, No.313 (Aquincum).
2. Veg., III,5; SPEIDEL, 1976, 147-8.
3. Cornua appear on a relief depicting a funeral, from Amiternum (San Vittorino, BANDINELLI, 1970, Pl.60), and on gladiatorial mosaics from Zliten (Libya, AURIGEMMA, 1926, Fig.87-9) and Nennig (W. Germany, STRONG, 1980, Pl.177). Civilian cornicines appear on two stelae at Mantua (LEVI, 1931, Pl.LXXXIX) and Bordeaux (ÉSPÉRANDIEU, 1907-66, No.1107).
4. WARD-PERKINS & CLARIDGE, 1976, No.303. For an Etruscan copper-alloy cornu see CONNOLLY, 1981, 134. BEHN, 1912 dealt with musical instruments in a military context and recent reconstruction work has been undertaken by BARTON, 1987.
5. ÉSPÉRANDIEU, 1907-66, No.16 (Susa); HASSEL, 1966, Pl.18.2 (Benevento); Marcus Column III,30, 32; XXX,20; XXXVII,6 (numbering follows PETERSEN et al., 1896); L'ORANGE & VON GERKAN, 1939, Pl.7b.
6. REINACH, 1912b, 260.2; ANDREAE, 1977, Pl.144.
7. Cornua are depicted on tombstones of equites from Győr, Hungary (SPEIDEL, 1976, Fig.16) and Mainz (ÉSPÉRANDIEU, 1907-66, No.5854). Cornua not associated with particular troops appear on sculptures at Bonn (ibid., No.6329) and Split (Archaeological Museum, pers. obs.), and a republican period relief depicts a player with an instrument very similar to the Etruscan type (GARCÍA Y BELLIDO, 1949, No.429).
8. STRONG, 1980, Pl.177.

9. SPEIDEL, 1976, Fig.2. For another representation see Fig.5.
10. KOEPPPEL, 1986, No.24, 31 (Arch of Constantine); 1983a, Pl.40 (Arch of Claudius). Such long horns also appear on the Great Ludovisi sarcophagus (ANDREAE, 1977, Pl.144).
11. Veg., III,5, 7. Stelae: SPEIDEL, 1976, Fig.9-13. See also Varro, de lingua latina V,117.
12. REINACH, 1912b, 260.2.
13. HOFMANN, 1905, No.64; SCHÖBER, 1923, No.158. Two leather shield covers for circular boards, 45cm in diameter, have been recognised in the material from Castleford fort excavations (Yorks.). These may represent the type of shield carried by standard-bearers and musicians on the Column (Dr C. van Driel-Murray, pers. comm.).

5.7 Unarmoured Soldiers

1. XXXIII, LXXIX, LXXXI, LXXXIV, LXXXVI, LXXXVII, CI.
2. KOEPPPEL, 1985, No.8, Fig.10.5; STRONG, 1926, Fig.179; BANDINELLI, 1971, Pl.175.
3. FUENTES, 1987, 46-7, 49. See JUNKELMANN, 1986, 156-8.
4. KOEPPPEL, 1986, No.8, Fig.10.1-2, 4-5; 1986, No.1, Fig.2.2, 6. This functioned in the same fashion as the Japanese sage-o (STONE, 1934, 534).
5. For example, ÉSPÉRANDIEU, 1907-66, No.5792, 5850, 6207, 6209, 6213, 6254, 6255 (armoured); 5797, 5835, 6125, 6136-7, 6253, 6835 (unarmoured).
6. KOEPPPEL, 1985, No.1.
7. ANDREAE, 1977, Fig.426-9 (Benevento); KÄHLER, 1951, Pl.28-30 (Pozzuoli); KOEPPPEL, 1984, No.7, Fig.11.16 (Cancelleria); 1985, No.8, Fig.10.1-5 (Chatsworth).
8. AMELUNG, 1903, No.163 (Rome); Lateran Magazzini, Vatican, pers. obs.; FRANZONI, 1987, No.9 (Verona), 48 (Reggio Emilia); KOS, 1978, Pl.I.1-2 (Corinth, Piraeus); BENSEDDIK, 1979, Fig.14 (Cherchel); ÉSPÉRANDIEU, 1907-66, No.6575 (Neuss); HASSALL & TOMLIN, 1984, Pl.XXIV (Gloucester).
9. ÉSPÉRANDIEU, 1907-66, No.5822 (pedestal), 5835 (Cordus).
10. AMELUNG, 1903, No.163; stela at No.533, Via Casilina, pers. obs.; FRANZONI, 1987, No.38, 61, 71 (praetorian); 9, 48 (urban), 44; KOLB, 1973, 26.2 (fleet); KOS, 1978, Pl.I.1; KEPPIE & ARNOLD, 1984, No.90; ÉSPÉRANDIEU, 1907-66, No.5494, 5495, 5497-8, 5816, 6252 (legionary); 5861, 6207, 6575; 1931, No.16 (auxiliary).

11. KOEPPPEL, 1984, No.7, Fig.11.15-6 (Cancellaria); ANDREAE, 1977, Fig.426-9; 1979, Pl.80.1, 81.2, 82.1 (Benevento); KOEPPPEL, 1985, No.8, Fig.10.3 (Chatsworth); KÄHLER, 1951, Pl.28-30 (Pozzuoli). See also a fragmentary figure supposedly belonging to the Arch of Titus (GJODESEN, 1976, Fig.2-4).
12. KOLB, 1973, 76-87, 110-4; SHAW, 1982, 47; JUNKELMANN, 1986, 156-8.
13. HASSALL & TOMLIN, 1984, No.1, Pl.XXIV (Gloucester); BISHOP, 1983b, Fig.2.1, 4 (London); ESPÉRANDIEU, 1907-66, No.5495 (Strassburg).
14. Veg., I,20 commented on the weight of armour.
15. For servants and porters see 5.9, n.12.
16. The body was clearly unarmoured as the published photographs show (FRAIA & D'ORIANO, 1982, 20-1; JUDGE, 1982, 691; GORE, 1984, 572-3).
17. ANDREAE, 1977, Fig.426-9. See also CARDUCCI, 1968, 53.b; KOEPPPEL, 1984, No.3 (Turin and Rome reliefs); PFANNER, 1983, Pl.45, 54, 80-7 (Arcus Titi); BRILLIANT, 1967, Pl.49-59 (Arch of Severus, pedestal reliefs). The triumphal frieze on the Arch of Severus, Forum Romanum, exceptionally depicts armoured soldiers escorting prisoners (ibid., Pl.44-8).
18. Tac., Hist. II,68, clothing contrasting with Amm. XVI,10,8, a description of shining armour.
19. Tac., Ann. IV,67; VI,15, 19; XII,43, 69; XIII,18, 24-5, 48; XIV,11, 15, 45, 61, 64; XV,55, 57-60, 69; Hist. I,29; Suet., Nero 34; Otho 6. For praetorian duties see DURRY, 1938, 274-80; PASSERINI, 1939, 211-2; MILLAR, 1977, 61-4; CAMPBELL, 1984, 111-3.
20. Tac., Hist. I,38; Ann. XVI,27. For praetorian dress see DURRY, 1938, 207-14; 1954, 1625-6.
21. Tac., Ann. III,2; IV,14, 59; XI,1; XIV,57; XV,33, 46; XVI,9, 15; Hist. II,63; Suet., Tiberius 60.
22. See Pet., Sat. 83.
23. Tac., Hist. II,88; Herodian, II,13,10.
24. COULSTON, 1987, 149.
25. This may have been a consideration purely for the individual soldier because there is room for doubt that Roman troops marched in cadenced step.
26. For example, for the Renaissance period and in general see HALE, 1985, 127-9 and COULSTON, 1988a, x.
27. LXXVI,1, 4; LXXXVII,1, 2, 4-7, 10; LXXXVIII,4, 5.
28. KOEPPPEL, 1984, No.7, Fig.11.15, 17.

29. KÄHLER, 1951, Pl.28; VERMEULE, 1981, Pl.19.
30. LEVI, 1931, No.165, Pl.LXXXIV; KOEPPPEL, 1984, No.13.
31. REINACH, 1912a, 36.3.
32. FRANZONI, 1987, No.7. See also No.61 for a ribbed oval praetorian shield (Belgioioso) and No.48 for an urbanicianus' oval shield (Reggio Emilia).
33. STARR, 1941, 33-5; STROBEL, 1984, 105-6.
34. See REINACH, 1912b, 378.2 (Athens); BOLLINI, 1968, Fig.24 (Piraeus); KOLB, 1973, Pl.26.2 (Athens); FRANZONI, 1987, No.44 (Ravenna). For the equipment of classiarii who, like auxiliaries, carried hastae and not pila, see BOLLINI, 1968, 87-96.
35. See Veg., V,44. More than one relief depicts ship-bound troops in armour (VIERECK, 1975, Fig.22, 31; ROBINSON, 1975, Pl.424).
36. PARKER, 1928, 100-1; STARR, 1941, 180-5; KIENAST, 1966, 62-70.
37. DURRY, 1938, 23-5; STARR, 1941, 17-24; KIENAST, 1966, 74-5. For fleet castra in Rome see 4.4.
38. See Tac., Ann. XIV,4.
39. R.I.B. 1340 (Benwell); CLEERE, 1974 (Weald). Classiarii with other troops worked on an aqueduct near Lambaesis, Numidia (I.L.S. 5795) and detachments of 500 and 800 classiarii were present in 'Hyginus'' field army drawn from Misenum and Ravenna respectively (Hyg., de Mun. Castr. 24, 30).
40. For the identification of Danubian locales and the role of the fleets in Trajan's Wars and on the Column see CICHORIUS, 1896, 160-2, 174; 1900, 47, 105-6, 129; PETERSEN, 1899, 36-43, 49-52; 1903, 46, 58; RICHMOND, 1935, 7; PATSCH, 1937, 102; STARR, 1941, 133-5; KIENAST, 1966, 76; ROSSI, 1971a, 89-91, 96-7, 105; GAUER, 1977, 33; GOSTAR, 1979, 6.

5.8 Archers

1. For toxophilological terms employed in this study see COULSTON, 1985, 223-4.
2. FROEHNER, 1872-74, 16; CICHORIUS, 1896, 328-9; 1900, 193, 238; PARIBENI, 1926, 216, 261; RICHMOND, 1935, 15-16; FLORESCU, 1969, 62; ROSSI, 1971a, 102; GOSTAR, 1979, 6; CISEK, 1983, 294; STROBEL, 1984, 150; WEBSTER, 1985, 154-5; COULSTON, 1985, 279-80; HANNESTAD, 1986, 160.
3. For the use of archers in this theatre see COULSTON, 1985, 296-7.
4. CICHORIUS, 1896, 310, 328-9; 1900, 189, 238.

5. GAMBER, 1964, 11-8; COULSTON, 1985, 280; 1986, 70; JAMES, 1986, 128-31.
6. Ibid., 131-4. The later Roman helmet forms appear on the Arch of Galerius at Salonika and as small-finds (KLUMBACH, 1973; LAUBSCHER, 1975, Pl.12.2, 31, 65.2) and continued to develop into the Medieval period (WERNER, 1949-50).
7. PETCULESCU & GHEORGHE, 1979, Fig.1.
8. SZABÓ, 1986, Fig.2-9.
9. HOFFILER, 1910-11, 191-2, Fig.27; POPOVIC et al., 1969, No.206; ROBINSON, 1975, Pl.237.
10. VELKOV, 1928-9, Pl.III-V.
11. CONNOLLY, 1981, 121 (Celtic); WAURICK, 1980, 309-17, Fig.189 (Mesopotamia).
12. Ibid., 315, Fig.190.
13. JAMES, 1986, 117-27. For clear asiatic influence in a later period see OVERLAET, 1982.
14. All Roman helmets dating to the 1st-3rd centuries A.D. found in the eastern provinces conform to normal developments in infantry, cavalry and sports types. See ROBINSON, 1975, Pl.175-8, 345-51, 397-8; GARBSCH, 1978, Cat.L, N, 04, 030; WEINBERG, 1979; JAMES, 1986, 123, n.53.
15. COULSTON & PHILLIPS, 1988, No.200.
16. SCHOBBER, 1923, No.191; CUMONT, 1942, Fig.25.
17. Intercisa: coh. I Hemesenorum mill. sag. (SZABÓ, 1986, 424). Bumbesti: coh. IV Cypria (PETCULESCU & GHEORGHE, 1979, 605). This may, of course, be coincidental and the conical helmet form could have nothing to do with 'oriental' auxiliaries. Another possibility is that they belonged to a Thracian tradition distinct from steppe influences but not unaffected by them. The Karagaach helmet (VELKOV, 1928-9) was found in a funerary context very similar to the Thracian type burials at Vize (MANSEL, 1938) and Catalka (BUJUKLIEV, 1986) and may have belonged to a spear and shield-armed cavalryman, and not an archer at all. For Thracian helmet burial-practices see WAURICK, 1986.
18. HOFMANN, 1905, No.25; SCHOBBER, 1923, No.243 (Győr); SCHLEIERMACHER, 1984, No.23.
19. COULSTON, 1985, 271-5.
20. REINACH, 1909, 290 (Campidoglio trophy); HASSEL, 1966, Pl.12 (Arch of Benevento). A seemingly reliable depiction of a conical quiver-cap is on the archer's tombstone from Housesteads, but even

this sculpture seems to have been complicated by the inclusion of unmilitary attributes. For a discussion of this stela see COULSTON & PHILLIPS, 1988, No.200. Significantly, no caps appear on the Column's pedestal reliefs.

21. COULSTON, 1985, 234-48.
22. SULIMIRSKI, 1970, 32, 120. For frescoes and reliefs see ROSTOVTZEFF, 1913, Pl.LI.B, LXXXIV.1-2, 4, XCIII.1-2; KIESERITZKY & WATZINGER, 1909, No.559, 575, 587, 591, 593-4, 597, 599-600 etc.
23. COULSTON, 1985, 224-34, 282-6.
24. Bows on the Domitianic congeries armorum pilasters (CROUS, 1933, 75) and on the Marcus Column (see n.37, below) are further stylised by having their curled ears turned into birds' heads. Artist accustomed to depicting deities such as Apollo, Diana, Cupid, Atys and Hercules with fanciful weapons would have found it difficult to reproduce weapons actually in use without models to work directly from (see 4.5). This is especially true of small art-works. Provided sculptors had both the models and the motivation, they could create representations which were technically accurate and are very useful in the study of archery equipment. A panel from Rome depicting Diana (GUERRINI, 1971, No.35), the stela of an archer from Housesteads, and a statue of Atys from London (COULSTON, 1985, Fig.35) are products of this type.
25. See SEYRIG, 1937, 4-26, Fig.1-2, 4, 6-7, 10, 14, Pl.I, II-V; GHIRSHMAN, 1962, Pl.4-5, 55, 62, 90-1, 98-100, 110, 119; BANDINELLI, 1971, Pl.316-7; COLLEDGE, 1976, 145-6, Pl.23, 33, 106, 108-9, 112, 143; 1977, 133, Pl.12, 17, 22, 28-9, 47a; TAHA, 1982, 118-9, 123-4.
26. YADIN, 1971, 69-72; BOSSERT, 1951, No.1302-6, 1309-10. The ankle-length Assyrian style of skirt did not continue through to the Roman/Parthian period it seems (cf. GAMBER, 1968, Fig.37; BARNETT, 1975, throughout).
27. COLLEDGE, 1976, 148, Pl.41, 43-4; TAHA, 1982, 121-2. These appear to have been a separate skirt or wrap-around garment secured at the waist and hanging down loose and cool for riding, and may also have been worn over trousers. 'Parthian' tunics reached down to below the wearer's knees but were shorter than asiatic kaftans. The writer is particularly grateful to Dr B. Zouhdi, Dr K. Assad and Dr A. Taha for granting access to the Damascus and Palmyra museum collections.
28. GHIRSHMAN, 1962, Fig.59. See also TAHA, 1982, 119-21; COLLEDGE, 1977, Pl.33.
29. ESPÉRANDIEU, 1907-66, No.6136-7.
30. COULSTON & PHILLIPS, 1988, No.200. See COULSTON, 1985, 278-80 for oriental attire in general.

31. SCHOBER, 1923, No.191 (Győr); SCHLEIERMACHER, 1984, No.23 (Mainz), 66 (Tipasa).
32. CUMONT, 1926, Pl.L.
33. SCHLEIERMACHER, 1984, No.25.
34. SZABÓ, 1986, 423-4.
35. COULSTON, 1985, 280.
36. MANN, 1954, 502, 504, 506-7; CALLIES, 1964, 182-3, 185, 205, 207; MACREA, 1964, 155; GOSTAR, 1979, 6; STROBEL, 1984, 149-50.
37. SAXER, 1967, No.33 (Civil War); Hyg.. de mun. castr. 29-30. Irregular infantry archers appear on the Marcus Column (M.C. XII,8; XV,1-3; XXVIII,4-5; XXXIX,6; LXXVIII,119) together with one horse-archer (M.C. LVII,2). For 3rd century use of archers against German adversaries see S.H.A., Alexander Severus LXI,8; Maximini Duo XI; Herodian, VII,2,1-5.
38. A point explicitly made by Herodian, VI,7,8.
39. STROBEL, 1984, 120, 127-9, 136, 142-3, 145, 149-50.
40. The best known example of this is the group of 5000 Sarmatians transferred to Britain under Marcus but the practice was probably common after every major Sarmatian conflict and a number of units with Sarmatian titles appear in the Notitia Dignitatum (Dio, LXXII,16,2; N.D., Oc. XLII,49-70).
41. Dio, LXVIII,10,3-4. See PATSCH, 1937, 54, 61, 104-5, 128; MOCSY, 1974, 91, 94; WILKES, 1983, 273; STROBEL, 1984, 84, 152, 171.

5.9 Slingers

1. Commentators have chosen 'Balearic', 'Iberian' or 'Asturian' labels: FROEHNER, 1872-74, 15; CICHORIUS, 1896, 310-11; PARIBENI, 1926, 216; RICHMOND, 1935, 17; PATSCH, 1937, 61; GOSTAR, 1979, 6.
2. RICHMOND, 1935, 17; SADDINGTON, 1982, 24, 29, 31, 140; GREEP, 1987, 192-3.
3. Ibid., 193-200; GRIFFITHS, forthcoming. For slings in general see KORFMANN, 1972.
4. Arrian, T.T. 43,1; C.I.L. VIII,18042 = I.L.S. 2487. See also Veg. II,23.
5. BAATZ, 1983, 136.
6. N.D., Oriens VII,52; Veg. I,16; II,17; III,14. See also Julian, 57D (Loeb).
7. Slings continued in use on the the eastern frontier where heavy

armour for men and horses was more commonly worn as protection against arrows than in the west. For Sassanid slingers see Amm., XIX,2,3; XXIV,4,16. For continued Roman use of slingers in the west under Germanicus Tac., Ann. II,20, and later in the east XIII,39.

8. Shepherds continue to use slings for these purposes on Majorca (pers. comm. Mr W. Griffiths) and in central Turkey (pers. comm. Dr H. Dodge). They can achieve remarkable accuracy with them.
9. For Balearic slingers who were generally grouped under the heading of 'Spanish' troops in the Punic Wars see LAZENBY, 1978, 14 and passim; CONNOLLY, 1981, 150.
10. Hyg., de Mun. Castr. 30. The inscription (A.E. 1926, 88) was dated to Commodus by DOBSON, 1969, but this was ignored by GOSTAR, 1979, 6, and STROBEL, 1984, 150-1 who supported a Trajanic date.
11. For Raeti which are usually also called 'gaesati' see R.I.B. 1216-17, 1235, 1724, 1737, 2117; C.I.L. XIII,1041; I.L.S. 2531, 5795; perhaps Hyg., de Mun. Castr. 30.
12. See WIERSCHOWSKI, 1984, 65-71 for an examination of the evidence for serving soldiers' slaves and freedmen.
13. Calones appear very frequently on Rider Type stelae standing behind the cavalryman carrying his equipment or leading horses on Funerary Banquet Type tombstones (see 5.4, n.34). Many equites singulares stelae in Rome have a calo and horse panel (see 5.4, n.79).
14. For calones and lixae see Tac., Hist. II,14; 87; II,33; Jos., B.J. III,69.

5.10 Bare-Chested Irregulars

1. XXIV, XXXVI, XXXVIII, XL, XLII, LXVI, LXX, LXXII, CVIII, CXV.
2. FROEHNER, 1872-74, 16; POLLEN, 1874, 143-4; REINACH, 1886, 45; CICHORIUS, 1896, 177-8; PARIBENI, 1926, 216; PATSCH, 1937, 54, 61; ROSSI, 1971a, 96, 103-4; GOSTAR, 1979, 6; CISEK, 1983, 294; STROBEL, 1984, 152.
3. Coincidentally, short swords influenced by Roman types were in use by German warriors, both outside the empire (NYLEN, 1963) and within it as members of early auxiliary units (GECHTER & KUNOW, 1983, Fig.16).

5.11 Moorish Cavalry

1. DANIELS, 1970, 31-2, Fig.6; VERCOUTTER et al., 1976, Fig.251-8, 295-6, 299; TOYNBEE, 1978, 90-1, Fig.147-8; FITTSCHER, 1979, 210, 640, Fig.125, Pl.57, 147. Scholars are, for once, unanimous in this identification: FROEHNER, 1872-74, 14; POLLEN, 1874, 28;

- REINACH, 1886, 50-1; CICHORIUS, 1896, 294-6; PETERSEN, 1899, 69-70; PARIBENI, 1926, 216; PATSCH, 1937, 61; PETERSEN, 1969, 213; ROSSI, 1971a, 104, 162; GLODARIU, 1974, 151-2; SPEIDEL, 1975, Pl.I; GOSTAR, 1979, 6; CISEK, 1983, 307; STROBEL, 1984, 151-2, 195-6; WEBSTER, 1985, 142.
2. ROSTOVITZ, 1946, Pl.XI-II; HORN & RUGER, 1979, 640-41; CONNOLLY, 1981, 148.
 3. ANDREAE, 1980, No.27, 32, 57, 65, 78, 124, 185, 206, 232, 242, 247.
 4. AURIGEMMA, 1926, Fig.114, 120.
 5. TOYNBEE, 1934, 156, Pl.XXXIV.6.
 6. SCHLEIERMACHER, 1984, No.101.
 7. HORN & RUGER, 1979, 580, Pl.107; Encyclopédie Barbère I, 1984, s.v. 'Abizar', 79-86.
 8. BROGAN & SMITH, 1984, Pl.61b, 68a, b, 123a, 124a.
 9. ANDREAE, 1980, No.247.
 10. ROLAND, 1969, Pl.25-7 (St.Rémy); LEVI, 1931, Pl.LXXV (Mantua); ÉSPÉRANDIEU, 1907-66, No.5496; SCHLEIERMACHER, 1984, No.94; FRANZONI, 1987, No.23 (stelae); LAUBSCHER, 1975, Pl.30, 31.1, 32.1, 33.3, 34, 36.1.
 11. Dio, LXVIII,18.
 12. Tac., Hist. IV,50; Pliny, N.H. V,38; Dio, LXVII,3,5; Ptolemy, I,8, 10. See MATTINGLY, 1984, 14. The writer is very grateful to Dr D.J. Mattingly for bringing these references to his attention.
 13. For Quietus see S.H.A., Hadrianus 5, 8; Dio, LXVIII,18, 22, 30; LXIX,2; GROAG, 1927; PETERSEN, 1968; SPEIDEL, 1975, 212; STROBEL, 1984, 68-71. Moreover, according to Martial, Epigram X,6,7-8 Moors were present amongst TRajan's escorts.
 14. Appian, VI,xiv,89; Caes., B.G. II,7,10.
 15. HORN & RUGER, 1979, Fig.117-21, 123, Pl.143, 145.
 16. After the Trajanic period Moorish cavalry continued to be employed on the Danubian front and in the east through the 2nd and 3rd centuries. See Herodian, I,15,2; III,3,4-5; VI,7,8; VII,2,1; VIII,1,1; Dio, LXXVIII,32; Zosimus, I,20, 52; II,10; N.D., Oc. XXXIII,31; XXIV,23; Or. XXXII,18; XXXIII,26; XXXIV,22; XXXV,16; XXXVI,20; XXXVII,17. Familiar tactics were repeated in Procopius' description of Moorish troops in Belisarius' army defending Rome (Procopius, Wars V,xxix,22), and Maurikios still described light javelins as 'Moorish' in the late 6th century (Strategikon XII,ii,20).

17. LAZENBY, 1978, especially 8, 14, 53-4, 70, 84, 111, 122, 130, 180, 223, 256; CONNOLLY, 1981, 148-50.
18. Sallust, B. Jug. VII, LXVIII-IX; Appian, B. Civ., I,62; II,46; Caes., B. Af. 1,1; 1,5; 2,1; 18,1; 19,3; 32,3. See SADDINGTON, 1982, 11-12, 19, 24, 88, 165.
19. Tac., Hist. II,40, 58.
20. SPEIDEL, 1975, 208-11.
21. Hyg., de Mun. Castr. 24, 30.
22. SAXER, 1967, No.74; MÓCSY, 1974, 194; COULSTON, 1985, 296-8.
23. This is to say that really mountainous terrain would have restricted them in pitched battle, but as scouts and in a skirmishing function facing other cavalry they would have come into their own. Sure-footed Moorish ponies would have made better time over broken ground than men on foot. Numidian horsemen facing heavy Roman cavalry in North Africa could retreat across terrain that slowed their adversaries, but not themselves (Sallust, B. Jug. L). For Moors and terrain in Dacia see GLODARIU, 1974. The rope bridle depicted on the column coincides with Strabo, XVII,3,7 and recent reconstruction experiments in riding with a neck rope, but without reins, worked very well. The writer is very grateful to Mr P. Connolly for the invitation to observe these trials (14th May, 1988).

5.12 Dacians

1. XXIV,52; XXXVIII,23; XL,42; LXX,13, 29; LXXII,18, 21, 28, 30, 33; C,2; CXII,13; CLI,9.
2. Dio, LXVIII,9.
3. XXIV,59; XXXI,8, 16; LXIV,30; CXXII,2.
4. XXIV, XXXII, XXXVIII, XLIII, LXIV, LXXI, LXXV, XCIII, CXI, CXIX, CXLIX-CL.
5. XXXI, XXXIX, LXVI-II, LXXVI, CXX-XXI, CXXIII, CXLI, CXLIV.
6. XXV, XXVII-IX, XL, LXX. LXXII, XCIV-V, CXV, CXXXVI, CXXXIX, CXL.
7. LXXV,65; XCIII,26; CXXXV,2; CXXXIX,4; CXLV,11. For Phrygian caps in general see SEITERIE, 1985.
8. XXIV,53, 56; XXXII,1, 7, 12, 14, 24, 27; XL,42; XCIII,2; CXIII,13, 24; CXXXIV,27, 28.
9. Swords: XXIV,42, 46; XL,40; LXVIII,1, 4; LXXV,26; XCIII,26; CXX,21. Clubs: XXXVIII,10, 13.
10. Hilt: XXIX,5, 7, 8; XLI,9; LXX,24; LXXII,28, 33, 35; LXXV,26;

- CXIV,1; XCV,1, 3, 4, 7; XCVI,3, 5, 6, 10; CXV,16, 20; CXLV,2; CLI,8. Haft: LVI,39, 40; CXLV,11.
11. Vexillum: XXIV, XXV, LXVI, LXVI, LXXV, LXXVIII. Draco: XXIV, XXV, XXXI, XXXVIII, LIX, LXIV, LXVI, LXXV, LXXVIII, CXXII.
 12. A catalogue of these statues, and a discussion of their provenance and place in the Roman depiction of barbarians is provided by PINKERNEIL, 1983, 124-234. See also WAELKENS, 1985.
 13. For Dacians on the column, the Great Trajanic Frieze and coin issues in general see FLORESCU, 1965, 588-621; 1969, 112-6; COLONNE, 1976, 65-77; VON BÜLOW, 1980, 145-53; PINKERNEIL, 1983, 74-7, 80-96.
 14. A helmet hangs from a tree to the right of Fig. No.68.
 15. REINACH, 1909, 289.
 16. For a helmet and mail from Ciumești see RUSU, 1969, 276-8, Fig.2-5, Pl.141-6. For this and other eastern European mail finds see WAURICK, 1979, 324, Fig.195. The Celtic development of mail was suggested by Varro, de lingua Latina V,116 and is followed by ROBINSON, 1975, 164; WAURICK, 1979, 326-30.
 17. AMY et al., 1962, Pl.10-11 (Orange); GLOB, 1977, Pl.70; CONNOLLY, 1981, 114 (Gundestrup); ÉSPÉRANDIEU, 1907-66, No.271 (Mondragon). See also ROLAND, 1977, Pl.22, 24 (St.Rémy, arch).
 18. FLORESCU, 1965, Fig.129, Pl.X.
 19. R.I.C. II, Trajan, No.96-9; BELLONI, 1973, No.105-7, 270-9, 346-50, 400-1 (coins); GLODARIU, 1971, Fig.1 (Louvre bronze).
 20. See ROSENBERG, 1937, Fig.29-30; CONNOLLY, 1981, 118-20; STARRY, 1981, Beilage 6.
 21. Pre-conquest Dacian cultural and economic links with the Roman empire have been discussed by GLODARIU, 1976.
 22. For a discussion of Getic art-styles depicting animals and humans in connection with Thracian finds from Augustan Oberaden (W. Germany) see VON SCHNURBEIN, 1986. A geometric pattern shield decoration is figured on a relief representing Celtic warriors from Bormio, Italy (PAULI, 1973, Pl.7). For figures in the asiatic 'animal style' see SULIMIRSKI, 1970, Fig.57, Pl.8-10, 27, 29-30, 34-6, 41-2.
 23. CROUS, 1933, 94-7.
 24. PICARD, 1957, Pl.XXVI. Palmette shield blazons also decorate shields depicted on Trajanic coins (R.I.C. II, Trajan, No.584, Pl.XI.195; BELLONI, 1973, No.400-1, Pl.19-20).
 25. KOEPPPEL, 1984, No.7, Fig.11.14 (Cancellaria); VOGEL, 1973, Pl.50; NASH, 1981, I, Pl.563 (Hadrianeum). See also CROUS, 1933, 97

(Uffizi).

26. The Witham Shield has an incised boar over its boss (STEAD, 1985, Pl.XIV) and the Parma congeries armorum relief has a stag blazon amongst stylised equipment (D.A.I. Neg.33.434 - this section of the frieze does not appear to be published). For painted Simris shields see STERNQUIST, 1955, 118-9. Animal shield blazons are repeatedly mentioned in the Táin Bó Cuailnge (KINSELLA, 1970, 211, 226-7, 230, 232).
27. ÉSPÉRANDIEU, 1907-66, No.271.
28. In general see STERNQUIST, 1955, 118-9; CONNOLLY, 1981, 120. All the Roman shields from Dura were painted (see 5.2.3; 5.3.2) and countless barbarian shields in the more reliable Roman depictions on monuments (arches at Orange and St.Rémy, for example) have painted designs. Such motifs would presumably have been the personal choice of individual warriors. Coloured shields are mentioned in the Táin (KINSELLA, 1970, 5, 152, 158, 228-9, 233).
29. R.I.C. II, Trajan, No.89; BELLONI, 1973, No.50-4 (coins); SPEIDEL, 1970, Pl.XV.1; ROSSI, 1971a, 228 (stela).
30. FLORESCU, 1965, Pl.X.C-D.
31. COULSTON, 1981; COULSTON & PHILLIPS, 1988, No.266-7.
32. TUDOR, 1968b, 517-9, Fig.1-2; VON SCHNURBEIN, 1979, Fig.9; MICLEA & FLORESCU, 1980a, Pl.199. Care must be taken not to confuse these weapons with sickle blades. Single-handed falces are also found in contexts which suggest Dacian influence on Germanic (BÓNA, 1955, 75-6, pl.XVII.34, XVIII.4, XX,2; BÖHME, 1975, 182, Fig.10) and Sarmatian (PÁRDUCZ, 1944, 53, Pl.XXV.6) groups.
33. MENDEL, 1912, No.1155; BUTTNER, 1957, Pl.11. A wavy-bladed sword on a Domitianic congeries armorum frieze from Ephesus may be a large falx. If so, it is one of the earliest known depictions of this weapon (see LESSING & OBERLEITER, 1978, Pl.87), together with those on the Farnese Trophy (COUISSIN, 1928, 79-81, Fig.1).
34. KOEPPPEL, 1986, No.44.
35. VON MERCKLIN, 1962, Fig.1224, 1226-8.
36. BERTINETTI et al., 1985, 181 (Portonaccio); STUART-JONES, 1912, II.5 (Amendola). Well reproduced in ANDREAE, 1977, Fig.503-4.
37. For large falces on coins in general see R.I.C. II, Trajan, No.96-9, 584-5; BELLONI, 1973, No.99-101, 104-7, 270-9, 346-50, 400-1.
38. PÁRVAN, 1926, Fig.342 (Cohalme). See also GLODARIU & IAROSLAVSCHI, 1979, 137-8, Fig.71.1; DACIANS, 1980, No.252.
39. SNODGRASS, 1967, 97, 119, Pl.50.

40. SANDERS, 1912-13, 231-58; CONNOLLY, 1981, 98, 150.
41. Statius, Achilleid II, 132. For general discussions of the falx see COUISSIN, 1928, 79-81, 88-93; VULPE, 1963a, 240-1; FLORESCU, 1965, 634; 1969, 85-6; ROSSI, 1971a, 122-3; VON SCHNURBEIN, 1979, 122-8; COULSTON, 1981, 349-50.
42. Tac., Hist. I, 79.
43. SNODGRASS, 1967, 119, 123, 142-3; SEKUNDA, 1983.
44. GRANT, 1971, 56; VON SCHNURBEIN, 1979, Fig.1-2.
45. For example, by COUISSIN, 1928; FLORESCU, 1969; VON SCHNURBEIN, 1979. The term Sichelschwert, employed by many German scholars is, on the other hand, strictly correct.
46. SCHLEIERMACHER, 1984, No.20.
47. For Sarmatian short swords see GINTERS, 1928, 56-9, Pl.25, 30; SULIMIRSKI, 1970, Fig.42, 45, 48-9, 67, Pl.47; TROUSDALE, 1975, 104. A fine ring-pommel sword was found with 1st century A.D. material in the Çatalca cemetery (Bulgaria). Pers. obs. thanks to Dr H. Bujukliev. For short, single-edged swords in Dacian contexts see GLODARIU & IAROSLAVSCHI, 1979, Fig.71.4; DACIANS, 1980, No.253.
48. FLORESCU, 1965, Fig.129.
49. For 'campanulate' hilts see NAVARRO, 1972, 23, Fig.3. Finds in Romania are figured by DAICOVICIU et al., 1960, Fig.53; ROSSI, 1971a, 124. Long swords with campanulate hilts do, however, appear as far east as the Ukraine (SULIMIRSKI, 1970, Fig.46). For comparative celtic material see PIGGOTT, 1950, especially Fig.2, 11.
50. BIVAR, 1971, 291; COULSTON, 1986, 67.
51. GLODARIU & IAROSLAVSCHI, 1979, Fig.70; DACIANS, 1980, No.255-8.
52. REINACH, 1909, 290.
53. Dio, LXVII, 7, 4; LXVIII, 9, 3, 5. All of Rome's adversaries were at a considerable technical disadvantage, especially where artillery was concerned. See also Tac., Hist. IV, 23; Veg., III, 10; Amm., XIX, 2, 8.
54. CROUS, 1933, 76-7; PICARD, 1957, Pl.XXVI, XXIX; MERCKLIN, 1962, Fig.1217-20, 1224-5; AMY et al., 1962, Pl.20.
55. Arrian, T.T. 35, 2.
56. BERTINETTI et al., 1985, 177-8 (Portonaccio); KIECHLE, 1964, Pl.14; ANDREAE, 1977, Pl.144 (Ludovisi).
57. CROUS, 1933, 77. See also COUISSIN, 1928, 79.

58. SMITH, 1904, No.2620; REINACH, 1912a, 497, Fig.1.
59. STUART-JONES, 1926, 9, Pl.4.
60. WRIGHT & RICHMOND, 1955, No.137.
61. TUDOR, 1969, No.36, 42-3, 73, 75. No.97 and 104 have spears without snakes and No.150 has a snake without a staff.
62. GROUSSET, 1970, 87.
63. LE COQ, 1925, 18, Fig.101-2, 116-8.
64. GARBSCH, 1979, T1, Pl.48.3. This form of crested head was commonly used for snakes in Roman art and did not denote a mythical 'dragon' beast as such. This point has kindly been clarified for the writer by Dr C. Johns. Compare TUDOR, 1979, No.150.
65. TREVOR, 1964.
66. S.H.A., Aurelianus XXXVIII,5.
67. A draco is depicted in the St.Gallen Psalter (LE COQ, 1925, Fig.120). This is paralleled by the Carolingian adoption of asiatic bows (COULSTON, 1985, 259, n.204). Dracones came into Roman infantry use in the 3rd century AD and continued alongside cavalry dracones into the 4th century (S.H.A., Gallieni duo VIII,6; Aurelianus XXXI,7; Veg., II,13; Amm., XV,5,16; XVI,10,7; 12,39; Zos., III,19). Fine cavalry examples are also depicted on the Arch of Galerius (LAUBSCHER, 1975, Pl.14.1; 23.1, 30.2, 63) and the Arch of Constantine (L'ORANGE & VON GERKAN, 1939, Pl.12b, 13a) whilst a bronze plaque in the National Museum, Budapest, depicts late Roman infantry with dracones and vexilla (MÓCSY, 1974, Pl.44). For dracones in general see FIEBIGER, 1905; KIECHLE, 1964, 120-22; COULSTON, 1986, 69-70.
68. PICARD, 1957, Pl.VII, XIII; MERCKLIN, 1962, Fig.1219, 1224-5; AMY et al., 1962, Pl.44; ROLAND, 1977, Pl.27. For the term 'carnyx' see PIGGOTT, 1959, 19, n.1.
69. Ibid., Pl.VII.b; GLOB, 1977, Pl.66; CONNOLLY, 1981, 114.
70. Notably Polybius II,29,6; Diodorus Siculus, V,30, both describing the Battle of Telamon.
71. CROUS, 1933, 104.
72. Reproduced in WAURICK, 1979, Fig.197.
73. PIGGOTT, 1959, 19-32, Pl.VI, VIII.
74. For the La Tène element in Dacian culture see DAICOVICIU et al., 1960, 223-48, 316-38; CONDURACHI & DAICOVICIU, 1971, 81-3, 101-10; PINKERNEIL, 1983, 70-3.

75. MENDEL, 1912, No.1155; BUTTNER, 1957, Pl.11.
76. R.I.C. II, Trajan, No.89, 208-9, 534-45; BELLONI, 1973, No.50-4, 333-45. See PINKERNEIL, 1983, 74-7.
77. SPEIDEL, 1970, Pl.XV.1; ROSSI, 1971a, 228; PINKERNEIL, 1983, 115-6.
78. In particular ROSSI, 1972, 61-2. See also FLORESCU, 1965, 490-1; ROSSI, 1971c; ALEXANDRESCU-VIANU, 1979, 125-6.
79. PATSCH, 1937, 23.
80. FLORESCU, 1965, 634, 664.
81. VULPE, 1963, 240-1.
82. FURTWÄNGLER, 1903, 495-6; RICHMOND, 1967, 33, 35, 37; SYME, 1971, 158.
83. For the tribes north of the Danube and their relations with Rome see C.A.H. XI, 79-85; ALFÖLDI, 1939, 30-1; VULPE, 1960; 1961; MÓCSY, 1974, 66; BOGDAN-CATANIȚIU, 1977, 273-5. Migrating peoples may have forced other groups ahead of them in a 'knock-on' effect, but they would never have moved into a demographic vacuum. The modern employment of labels to designate different peoples is dependent on ancient usages and these in turn were dictated by politico-military prominence which drew the attention of Roman writers. The result is a serious simplification of the actual situation.
84. See I.L.S. 985-6, discussed by WILKES, 1983, 259-60; CONOLE & MILNS, 1983, 183-5, 195-200.
85. Thus the question is not simply whether or not a 'Moesian incursion' actually occurred but one of Decebalus' strategic capabilities in manipulating allied peoples. The invasion may just have been one of those periodic folk-movements across the Danube, but one which was fortuitously timed from the Dacian point of view. On the other hand, if Pliny is to be believed that Decebalus was in diplomatic contact with the Parthians, then perhaps his position was strong and organised enough for his power to have reached out across the whole region north of the Danube (Pliny, Ep. X,74). Still it might be doubted whether, in the face of Trajan's advance into Dacia, his directives could have mobilised an assortment of peoples within a sufficiently short 'reaction time' (see VULPE, 1979b).
86. COULSTON, 1986, 63-7. The only bladed weapons that the writer can think of as having been used two-handedly on horseback are the Japanese yari and naginata which were essentially shafted cut-and-thrust weapons with blades (STONE, 1934, 463, 674, Fig.587, 864).
87. Tac., Hist. I,79.

88. SULIMIRSKI, 1970, 29, 126-7, Fig.45; TROUSDALE, 1975, 104, Fig.57-8, 61-2, 64-5, 67 for depictions all around the western asiatic fringe which exhibit this feature.
89. The Historiae may have been in circulation by A.D.105 (SYME, 1958, 117-8; DUDLEY, 1968, 16).
90. This is evident whenever one tribe rose to dominate others to form a 'steppe empire' (GROUSSET, 1970, throughout).
91. Polybius, II,22,1; 28,4.
92. LXVII,1, 4, 6, 9; CXIII,11, 27.
93. TOYNBEE, 1934, 157, 159, Pl.XXXIX,1-2.

5.13 Germans

1. GIRKE, 1922, 3-5, Pl.31, 38a, c. For the term 'nodus' see FISCHER, 1912.
2. SCHLEIERMACHER, 1984, No.20, 22.
3. STRUVE, 1967, 38, 45-6, Pl.3.1; TODD, 1975, 202; GLOB, 1977, 117-8, Pl.41.
4. Tac., Ger. 38. For a general discussion of the nodus see FLORESCU, 1965, 649-59.
5. Representations: ÉSPÉRANDIEU, 1907-66, No.5818; GIRKE, 1922, Pl.38-40; BARKÓCZI, 1951, No.18; GABELMANN, 1973, Fig.10-13; ROLAND, 1977, Pl.23-5; SCHLEIERMACHER, 1984, No.17, 20-1, 26-7, 34, 42, 45-7. For German clothing see Tac., Ger. 17; TODD, 1975, 155-7; GLOB, 1977, 131-4.
6. FLORESCU, 1965, Pl.X.
7. Representations: GIRKE, 1922, Pl.38.d; BARKÓCZI, 1951, No.18; SCHLEIERMACHER, 1984, No.6, 17, 21, 24, 32, 34, 38, 45-7. Finds: ROSENBERG, 1937, 48-61, Fig.28-32. For German shields in general see JAHN, 1916, 152-207; TODD, 1975, 168, 171-2; RADDATZ, 1985, 296-8, 303-4, 313-5, 322.
8. Tac., Ger. 6.
9. Tombstones: SCHLEIERMACHER, 1984, No.6, 17, 20-1, 46. Finds: ROSENBERG, 1937, 40-3; NYLEN, 1963; TODD, 1975, 162-8.
10. VULPE, 1963a, 235-6.
11. Dio, LXVIII,8.
12. VULPE, 1963a, 230; 1963b, 55; 1969, 220.
13. Tac., Ger. 43.

14. S.H.A., Marcus 22. See also Dio, LXXIII,2,4.
15. Ptolemy, Geography III,8,3. See VULPE, 1963a, 227-8; 1963b, 53-4.
16. PATSCH, 1937, 54, 61, 104-5, 128; WILKES, 1983, 273; STROBEL, 1984, 84, 152, 171.
17. FURTWÄGLER, 1903, 495.
18. CICHORIUS, 1904, 10; PATSCH, 1937, 20; FLORESCU, 1965, 649-59; RICHMOND, 1967, 33; ROSSI, 1971a, 60, 121.
19. VULPE, 1963a, 239; 1963b, 52. For the Bastarnae in general see Dio, LI,2,3-6; Livy, XL,5,57-8; XLI,19,23; XLV,4; C.A.H. XI,84; MÓCSY, 1974, 21, 23-4, 32-6.
20. I.L.S. 986.
21. I.L.S. 985. Unlikely because he was governor of Pannonia, too far over to the west.
22. Livy, XL,57.
23. Appian, IX,16,1-2; Dio, LI,23.
24. Wagon laagers have been used by many peoples, both sedentary and nomadic. For celtic & German use see Caes., B.G. I,3, 6, 26, 51; IV,14; VIII,14; Tac., Ann. XIV,34. Nevertheless, wagons belonging to steppe peoples caught the attention of observers (SULIMIRSKI, 1970, 26; MAENCHEN-HELFEN, 1973, 214-20; WILKES, 1983, 258).
25. Tac., Ger. 46.
26. Strabo, Geography VII,3, 15, 17.
27. C.A.H. XI,81-2; PATSCH, 1937, 54; SULIMIRSKI, 1970, 128-30; MÓCSY, 1974, 23, 35; WILKES, 1983, 258; STROBEL, 1984, 59.
28. S.H.A., Marcus 22.
29. See TODD, 1975, 79-80 for a sketch of this cultural group.
30. FROEHNER, 1872-4, 5; CICHORIUS, 1896, 54; PETERSEN, 1899, 17; DAVIES, 1917, 84-5; CHRISTESCU, 1937, 17; VULPE, 1963a, 224-6; 1963b, 53; 1969, 214; ROSSI, 1971a, 136; GAUER, 1977, 24. This was disputed by STUART-JONES, 1917, 84; HANNESTAD, 1986, 166-7.
31. Dio, LXVIII,8.

5.14 Sarmatians

1. Tac., Hist. I,79; Pausanias, I,21,6; Amm., XVII,12,2. See also Valerius Flaccus, VI,231-8.
2. Summarised by VULPE, 1963a, 245-6, these include Jordanes, Getica

- 18 which mentions Sarmatae specifically. Other sources refer to 'Scythians' in addition to Dacians defeated by Trajan, an archaizing usage also employed by Arrian in connection with Sarmatian peoples (e.g. T.T. 35,2).
3. ROSTOVTZEFF, 1913, Pl.LXXXIV.3; SULIMIRSKI, 1970, Pl.33; WILKES, 1983, Pl.I.
 4. ROSTOVTZEFF, 1913, Pl.LXIV.1, LXXVIII.1, LXXIX, LXXXVIII.2.
 5. KIESERITZKY & WATZINGER, 1909, No.650.
 6. GAMBER, 1964, 20-34; 1968; BIVAR, 1972, 276-81; HALDON, 1975, 11-22, 24-30; COULSTON, 1986, 62-3.
 7. ROSTOVTZEFF et al., 1936, Pl.XXI-II.
 8. BAUR et al., 1933, Pl.XXII.2; ROSTOVTZEFF et al., 1952, Fig.6.
 9. FUKAI & HORIUCHI, 1972, XLVIII-IX, L, LII. For these items of horse armour see also Xenophon, Art of Horsemanship XII,8; Maurikios, Strategikon XI,2,7.
 10. Scale armour for limbs would have seriously restricted movement. The only representation of such defences on man or horse is a Tetrarchic(?) relief in the Museo Chiaramonti, Vatican (KOEPPPEL, 1986, No.48).
 11. BERNARD, 1964, Pl.X.
 12. ROBINSON, 1975, Pl.517-8, 520, 522-8; GARBSCH, 1978, Pl.4-7, 11-2, 45-8. See Arrian, T.T. 34,8.
 13. Sports eye-guards have been mistaken for functional, battlefield horse armour (SULIMIRSKI, 1970, 176).
 14. GAMBER, 1968, Fig.10; ROBINSON, 1975, Fig.198.
 15. HELBIG, 1966, No.1650; ROBINSON, 1975, Fig.201. For the provenance and date of this monument see SCHÄFER, 1979, Pl.53-5.
 16. ROBINSON, 1975, 164; COULSTON, 1986, 70.
 17. For leather scale and lamellar in general: THORDEMANN, 1939, 245-84; WATERER, 1981, 46-54.
 18. Maurikios, Strategikon XI,2,7.
 19. GAMBER, 1964, 20-5.
 20. THORDEMANN, 1939, 245-84; ROBINSON, 1967, 7-10; 1975, 162-3. For armour combinations see HALDON, 1985, 24-7.
 21. LE COQ, 1925, Fig.32-3, 50, 53, 55, 59, 63-4, 67-8, 70, 74, 102, 124, 134; ROBINSON, 1967, Fig.12-4, 31, 64-6.

22. A particularly good example is the T'ang Chinese relief from the tomb of T'ang tai-Tsung (A.D.623) on which a long lamellar skirt appears under a kaftan (LE COQ, 1925, Fig.99; BIVAR, 1972, Pl.27). The wearer was presumably an Eastern Turk.
23. ROBINSON, 1967, Fig.13.
24. ROSTOVTZEFF et al., 1936, Pl.XXIII.
25. ROSTOVTZEFF, 1913, Pl.LXIV.1, LXXVIII.1, LXXIX, LXXXVIII.2. A similar conical form appears on one stela (KIESERITZKY & WATZINGER, 1909, No.400).
26. WERNER, 1949-50; GAMBER, 1964, 11-8; JAMES, 1986, 128-31.
27. Small nasals: ROBINSON, 1975, Pl.273-82; COULSTON & PHILLIPS, 1988, No.400. Full nasals: KLUMBACH, 1973, Pl.3, 7, 19; LAUBSCHER, 1975, Pl.31.2-3.
28. GHIRSHMAN, 1962, Pl.102, 139, 148; KLUMBACH, 1973, Pl.65.3; OVERLAET, 1982, Pl.I, IV-V.
29. BRILLIANT, 1967, Pl.78.c-d, 80.a, 81 (Arch of Severus); ANDREAE, 1977, Pl.144 (Great Ludovisi Sarcophagus); ibid., Fig.587, 590; KASCHNITZ-WEINBERG, 1937, No.543 (other sarcophagi); AMELUNG, 1903, No.137b, Pl.28; STUART-JONES, 1926, 205, Pl.78 (stelae). Helmet bowls on the sarcophagi and stelae point forwards in 'Phrygian' fashion but have eagle-head apexes. The only surviving helmet which is in any way similar to the Phrygian forms on the pedestal reliefs is a copper-alloy example of unknown date from Ostrov, Romania (RĂDULESCU, 1963, Fig.8-11; ROBINSON, 1975, Pl.407-10; KLUMBACH, 1978, Cat.058, Pl.32; MICLEA & FLORESCU, 1980b, Pl.169-70). Unfortunately the apex has been damaged but feather decoration suggests that it too originally had an eagle-head finial. For Hellenistic Phrygian helmets quite unlike the pedestal type but close to the Arch of Severus bowls see WAURICK, 1983, 297, Pl.60.2; SEITERIE, 1985, Fig.2, 5.
30. ROSTOVTZEFF, 1913, Pl.LXXIX; 1922, Pl.XXIX.2.
31. BENNDORF & SCHÖNE, 1867, No.38.
32. SMITH, 1904, No.2620; REINACH, 1912a, 497, Fig.1. It also appears on a relief in the cortile of the Museo Conservatori (STUART JONES, 1926, 18, Pl.8), see Pl.161.
33. M.C. XLIX,13, 15-7. A flat-topped hat also appears on the Arch of Galerius worn by a barbarian (LAUBSCHER, 1975, Pl.44.2).
34. GINTERS, 1928, 56-9; PÁRDUCZ, 1944, 52, Pl.XXV.5; SULIMIRSKI, 1970, Fig.42, 45, 49, 67, Pl.47; TROUSDALE, 1975, 104. These appear on Crimean stelae (e.g. KIESERITZKY & WATZINGER, 1909, No.599-600, 627, 619).
35. PARDUCZ, 1944, 53, Pl.XXV.6.

36. GINTERS, 1928, 59-66; SULIMIRSKI, 1970, 29, 126-7; TROUSDALE, 1975, 104-5 (artefacts); ROSTOVTZEFF, 1913, Pl.LI.6, LXXIX (frescoes); KIESERITZKY & WATZINGER, 1909, No.631, 634, 640, 642, 647, 669-70, 686, 703.
37. GINTERS, 1928, 66-75; TROUSDALE, 1975, 105-8.
38. PIGGOTT, 1950, Fig.2, 9-10; NAVARRO, 1972, Pl.II seq.; CONNOLLY, 1981, 116. Celtic scabbard belt-attachments were often closer to the mouth than was usually the case with asiatic slides.
39. For example on the Vachères Gaul statue (ÉSPÉRANDIEU, 1907-66, No.35).
40. COULSTON, 1987, 148-9. The earliest sculptural representation of a Roman soldier with a scabbard slide is on a 2nd century A.D. stela from Aquincum on the Danube (HOFMANN, 1905, No.63). The earliest Palmyrene sculptural depiction dates to A.D.191 (COLLEDGE, 1976, Pl.44). Slides are common on both Roman and Palmyrene 3rd century reliefs.
41. See LE COQ, 1925, Fig.8-9, 11, 50, 53, 69-70, 86, 88, 93, 101; TROUSDALE, 1975, 71-102.
42. COULSTON, 1985, 235, 241.
43. KIESERITZKY & WATZINGER, 1909, No.574, 626-7, 650; MAENCHEN-HELFEN, 1973, Fig.2.
44. COULSTON, 1985, 292.
45. Ibid., 271.
46. REINACH, 1909, 290; CROUS, 1933, 82.
47. COULSTON, 1985, 271.
48. KIESERITZKY & WATZINGER, 1909, No.559, 575, 587, 591, 593-4, 597, 599-600, 604, 606, 609, 618-9, 622, 624-5, 630, 633-5, 639-40, 642, 647, 650-52, 655, 657, 662, 664, 666, 669-71, 675, 680-1, 683, 686, 693, 703, 718 (stelae); ROSTOVTZEFF, 1913, Pl.LI.6, XCIII.1-2.
49. ROSTOVTZEFF, 1913, Pl.XLVII.E, LI.6, LXXVIII.1, LXXIX, LXXXVIII.2, LXXXIX.1 (frescoes); LXXXIV.3; KIESERITZKY & WATZINGER, 1909, No.587, 591, 606, 618, 635, 650 (stelae). See Tac., Hist. I,79; Arrian, T.T. 44,1; Valerius Flaccus, VI,162; Statius, Achilleid II,132-3; Silius, Punica XV,684-5.
50. COULSTON, 1986, 65-7.
51. See SYME, 1929, 130-3; GROUSSET, 1970, 16; SULIMIRSKI, 1970, 29; MAENCHEN-HELFEN, 1973, 238-9; WILKES, 1983, 258.
52. EADIE, 1967, 165-8 (for lance influence, but armour development conclusions here are erroneous); GAMBER, 1968, 14-20; STROBEL,

- 1984, 110. See SCHLEIERMACHER, 1984, No.65, 67.
53. LE COQ, 1925, 9-10, Fig.8, 11, 18, 28, 30, 34, 36, 69, 86, 94, 99. For asiatic kaftans in general see KNAUER, 1985 and 628-9 with reference to Sarmatian dress.
54. See LE COQ, 1925, Fig.68, 99; BIVAR, 1972, Pl.27.
55. Compare n.53 with LE COQ, 1925, Fig.32-3, 50, 53, 64-7, 70, 74, 102, 134.
56. For Sarmatian cultural history see C.A.H. XI, 91-5; HARMATTA, 1950; SULIMIRSKI, 1970; WILKES, 1983, 225-8.
57. RUBIN, 1955, 265-6, 269-73; COULSTON, 1986, 62.
58. Strabo, VII,4,6 described Sarmatians with spears and shields, not with lances. For this evolution in weaponry and incidence of lanceheads as small-finds see SULIMIRSKI, 1970, 28-32; MAENCHEN-HELFEN, 1973, 238-9.
59. Dio, LXVIII,10,3.
60. See S.H.A., Hadrianus VI,6; PATSCH, 1937, 157, 161-2; DOBIAŞ, 1960, 148-9; MÓCSY, 1974, 95, 100-1; WILKES, 1983, 275.
61. FROEHNER, 1872-4, 10; CICHORIUS, 1896, 181-2; PATSCH, 1937, 23-5, 67; C.A.H. XI, 227; DOBIAŞ, 1960; FLORESCU, 1965, 665-7; ROSSI, 1971a, 121, 148, 150; MÓCSY, 1974, 94; VĂȚĂȘIANU, 1982, 17; CISEK, 1983, 297, 301; WILKES, 1983, 273; STROBEL, 1984, 178.
62. 'Spare' rulers of the Roxolani were evidently kept for future use within the empire as was the common practice with German and British puppets (C.I.L. V,32-3). For steppe leadership and empire formation in general see KHAZANOV, 1984, 157-64, 229-63.
63. For sudden barbarian crossings of the Danube, particularly in winter when it was frozen, see Ovid, Tristia III,10,56; ex Ponto I,2,77-80; Tac., Hist. I,79; Jos., B.J. VII,90-2; Suet., Domitianus 6; Eutropius, VII,23; S.H.A., Hadrianus VI,6; Dio, LIV,36,2.
64. The 9000 Roxolani were swiftly dealt with within Moesia in A.D.69 (Tac., Hist. I,79), admittedly at a disadvantage in snow, but Arrian's Ektaxis envisaged repulsing the Alan attack frontally on level ground.

5.15 Sacrificial Attendants and Lictores

1. VIII,22; LIII,20; CIII,4, 6. See RYBERG, 1955, 109-13.
2. VIII,12, 20; LIII,6, 9, 10, 12; LXXXV,2, 3, 6, 8; LXXVI,15; XCI,7, 13, 17, 24; XCIX,1; CII,10; CIII,2. These men were known as popae (RYBERG, 1955, 35).

3. Ibid., Fig.22b, 25, 30, 32, 36-8, 41d, 42a, 43, 45d-e, 46, 51-4, 58, 60, 61a, 69a, 70-1, 73b, 74, 75a, 77, 78a, 80-3, 85, 87, 89-4, 96b, 99, 116.
4. VIII,13; LIII,18; LXXXVI,12; XCI,2; XCIX,3; CII,4; CIII,6.
5. Pliny, N.H. XXXV,36,70. Similar hairstyles are worn by adult heralds on the triumphal friezes of the Arch of Titus and the arch at Benevento (RYBERG, 1955, 21, 148).
6. VIII,14; LIII,15; LXXXVI,14; XCIX,4; CIII,10.
7. RYBERG, 1955, Fig.25, 29-30, 32, 39a, 46, 51, 54a, 58-9, 61b, 70, 72b, 75b, 86-7, 90-3, 95, 101-2, 104, 116; KEPPIE & ARNOLD, 1984, No.68.
8. RYBERG, 1955, 112-3; HASSEL, 1966, Pl.1, 6-9, 13, 15; PFANNER, 1983, Pl.45; KOEPEL, 1983b, No.14, 30, 36; 1984, No.7-8, 16, 19; 1985, No.9, 19-22, 49-50; 1986, No.37-8, 41. Pliny, Pan. 76,8 praises Trajan for the restraint exercised by his lictors in clearing the way for him through crowds.

5.16 Civilians

1. LXXX, LXXXI, LXXXIII, LXXXVI, XC, XCI.
2. In fact women appear remarkably seldom in official sculpture after the Ara Pacis (ANDREAE, 1977, Fig.271). When they are depicted on stelae or in statuary it is clear that hair buns were common in all periods. The writer is grateful to Miss L. Allason-Jones for discussing this question. For female hairstyles see EVANS, 1906.
3. For female dress both inside and outside the empire see FLORESCU, 1965, 621-32; WILD, 1968, 194-217; PINKERNEIL, 1983, 122-3.
4. Most importantly the identifications by VULPE, 1979a (Dacian women) and GAUER, 1977, 28, n.144 (Roman provincial women). See 3.2.9.

5.17 The Pedestal Reliefs

1. The sides of the pedestal have been numbered in this study in anti-clockwise order starting at the side with the door: side 1, south-east; side 2, north-east; side 3, north-west; side 4, south-west.
2. REINACH, 1909, 289-90; LEHMANN-HARTLEBEN, 1923-24 (Campidoglio); CROUS, 1933 (Aventine); LESSING & OBERLEITER, 1978, Pl.87 (Ephesus). See also the Farnese trophies, which are probably contemporary (COUISSIN, 1928, Fig.1-4; PICARD, 1957, 352-3), and a panel with congeries armorum in the cortile of the Museo Conservatori (STUART JONES, 1926, Pl.8).
3. REINACH, 1912a, 36, Fig.2; PICARD, 1957, Pl.XIV. See also ibid.,

Pl.XV. Curiously, a peltaform shield appears on the Amastris statue base which appears to be accurate in other details (MENDEL, 1912, No.1155; BÜTTNER, 1957, Pl.II.2). The only barbarians which appear in Roman sculpture wearing muscled cuirasses are adversaries on the Arch of Galerius (LAUBSCHER, 1975, Pl.15.1).

4. SMITH, 1904, No.2620; REINACH, 1912a, 497, Fig.1. See also STUART JONES, 1926, 18, Pl.8 for a similar Conservatori panel (see Pl.161).
5. SPANNAGEL, 1979, Fig.2. A soldier on one side (Fig.4) is similar to those seen on the Marcus Column and Antonine battle sarcophagi.
6. MERCKLIN, 1962, Fig.1198-1235 (capitals); ANDREAE, 1977, Fig.487 (Hadrianeum). See also Marcus Column scene LV and the Portonaccio Sarcophagus (BERTINETTI et al., 1985, 177, 181).
7. In its inclusion of ships' prows the arch reliefs may be contaminated by traditional motifs (AMY et al., 1962, Pl.24-7). In other respects its details of saddliery, shield grips and blazons appear to be reliable, despite the problem of exactly which victories the congeries armorum came from (ibid., 143-52).

5.18 Trajan's Column and the Great Trajanic Frieze

1. For full bibliography and description of most of these pieces see KOEPPPEL, 1985, No.9-16. The standard work on the Great Trajanic Frieze is PALLOTTINO, 1938. For the Antiquario Forense fragments see ibid., 33-5, Fig.10, Pl.II; JACOPI, 1976, 40, Fig.38, and for the Turin panel see CARDUCCI, 1968, 53.a. A number of fragmentary reliefs depicting non-military subjects also formed part of the same scheme (KOEPPPEL, 1985, No.17-51).
2. GIULIANO, 1981, III.9; KOEPPPEL, 1985, No.1.
3. STRONG, 1923, 135; GAUER, 1973, 345-8; 1977, 74 (challenged by KOEPPPEL, 1979, 369).
4. Amm., XVI,10,15-6.
5. PALLOTTINO, 1938, 35-9; BANDINELLI, 1938-39, 332; ZANKER, 1970, 513-7; BONANNO, 1976, 77-8; ANDREAE, 1977, 201; STRONG, 1980, 151-3; PINKERNEIL, 1983, 91-2; KOEPPPEL, 1985, 150-1. For its significance to the Dacian Wars see STROBEL, 1984, 32-4.
6. After the Pergamene Altar of Zeus gigantomachy and the monument commemorating Verus' Parthian war at Ephesus (ANDREAE, 1977, 201), and excluding the spiral friezes on columns.
7. R.I.C. II, Trajan, No.208-9, 534-45; BELLONI, 1973, No.333-45. For comment see CAMPBELL, 1984, 66.
8. PALLOTTINO, 1938, 51-2; GAUER, 1973, 324; 1977, 73; ANDREAE, 1977, 201; STRONG, 1980, 153; PINKERNEIL, 1983, 92-3. Continuity between the policies of Domitian and Trajan in various fields is

considered by WATERS, 1969.

9. LEVI, 1931, No.165; KASCHNITZ-WEINBERG, 1937, No.420, 422; SPANNANEL, 1979, Fig.8; KOEPPPEL, 1984, No.28; ANDERSON, 1986, Fig.1-2.
10. BIVAR, 1972, Pl.9; ANDREAE, 1977, Pl.144.
11. See SCHLEIERMACHER, 1984, No.45. For a roundel on a scabbard LINDENSCHMIT, 1868, X, Pl.VB.
12. Fig. No.30, 46, 49, 56, 62, 65, 68. The stone plugs may represent a later refurbishment, perhaps associated with reuse on the Constantinian arch.
13. Fig. No.3, 4, 6-8, 11, 12, 17, 18, 24, 37, 55, 57, 58, 60, 61, 63, 65, 67.
14. For good reproductions of caligae on metropolitan sculptures see PFANNER, 1983, Pl.59-60, 67, Beilage 12, 5-6.
15. Juv., Sat. III,248; XVI,24-5.
16. GAUER, 1973, 339-41. See also DURRY, 1938, 221-2; PALLOTTINO, 1938, 44-9.
17. Horsehair has been successfully employed by the Ermine Street Guard to reconstruct a crest on an 'Imperial Gallic' helmet.
18. MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423 (Louvre); D.A.I. Neg.54.591 (Pozzuoli); LEVI, 1931, No.155 (Mantua); MANSUELLI, 1958, Pl.170 (Florence).
19. AOSTA, 1982, Fig.65; LESSING & OBERLEITER, 1978, Pl.9.
20. TRAINA, 1981, Fig.1, 3.
21. HOFMANN, 1905, No.17; SCHOBER, 1923, No.132 (Ptuj); FRANZONI, 1987, No.29 (Este).
22. ROBINSON, 1975, 140-1.
23. Ibid., Pl.33, 48-9, 54, 59, 69, 84, 118, 139.
24. For example, COULSTON & PHILLIPS, 1988, No.67 (Mars); AURIGEMMA, 1926, Fig.86; GRANT, 1971, Pl.23, 29 (gladiators).
25. ANDERSON, 1986, Fig.1-3.
26. MICHON, 1909, Fig.13; ROBINSON, 1975, Pl.423 (Louvre); ÉSPÉRANDIEU, 1907-66, No.5790 (Mainz).
27. DOMASZEWSKI, 1967, 20. See also 5.5, n.20.
28. KÄHLER, 1951, 432, Pl.28; VERMEULE, 1981, Pl.9.

29. DOMASZEWSKI, 1885, Fig.5; DURRY, 1938, Pl.IV; MAXFIELD, 1981, Pl.12.a. For the identification of the scorpion as the praetorian emblem see PALLOTTINO, 1938, 47-8; DURRY, 1938, 213; PASSERINI, 1939, 51; 1954, 1625; KÄHLER, 1951, 432; KOEPEL, 1985, 152. A shield as depicted with a scorpion blazon on an adlocutio coin of Galba (R.I.C. I, Galba, No.150; BREGLIA, 1968, No.26 illustrates it well). The writer is grateful to Dr M.C. Bishop for drawing attention to the latter reference. Identification of troops on the Great Trajanic Frieze is not as open as MAXFIELD, 1986, 67 implied.
30. Tac., Ann. IV,2. For the birth-sign see DURRY, 1938, 205; PASSERINI, 1939, 51.
31. SPEIDEL, 1965, 91-2.
32. DOMASZEWSKI, 1967, 23-4; DURRY, 1938, 99-100; PASSERINI, 1939, 59, 69.
33. C.I.L. XI,2661 = I.L.S. 2081.
34. DOMASZEWSKI, 1967, 24; DURRY, 1938, 100-1; PASSERINI, 1939, 75.
35. BANDINELLI, 1938-39, 327-8, Pl.CIII, CV; 1970, 235, Pl.255, 258-9; HASSEL, 1966, 33.
36. Gesture: XXXVII,14; XLI,3. Head: XL,56; LXX,5; LXXI,9; XCVI,4.
37. ROCCHETTI, 1959, 759; BANDINELLI, 1938-39, 329-34; 1970, 235.
38. For Trajan's personal interest in Alexander see Dio, LXVIII,29,1; 30,1.
39. For the political situation during the reigns of Nerva and Trajan with regard to the praetorians see 2.3, n.25-31.
40. Adlocutio coins show the emperor addressing guard troops: R.I.C. I, Caligula, No.23-5; Nero, No.61-72; Galba, No.150; II, Domitian, No.288; Trajan, No.655-8; Hadrian, No.908-37. See HAMBERG, 1945, 18-32; CAMPBELL, 1984, 69-88.
41. The symbolic use of a helmet held up by a comilito may be paralleled on a relief from Marmara Ereğlisi, Turkey, which seems to depict the transition from infantry to cavalry commands (FIRATLI, 1976, 422-3, Pl.7). For the supposed inferiority of praetoriani to legionarii in the field see PASSERINI, 1939, 43-4.

5.19 Trajan's Column and the Tropaeum Traiani

1. C.I.L. III,12467; FLORESCU, 1965, 61-6.
2. FLORESCU, 1965, 16-7; BARADEZ, 1971, 517; WILKES, 1983, 274; POULTER, 1986, 524.
3. FURTWÄGLER, 1903, 472-3; CICHORIUS, 1904, 36; DORUTIU, 1961,

- 360-1; FLORESCU, 1965, 360; POULTER, 1986, 525.
4. FLORESCU, 1959, 267-8; 1961, 402-3, 673-9; 1965, 401-16.
 5. Ibid., Fig.15, Pl.I.
 6. RICHMOND, 1967, 33-7.
 7. ROSSI, 1972.
 8. ROSSI, 1957, 400-1; FLORESCU, 1965, 19-20; ROSSI, 1971c (contrast 1971a, 57, 65); 1972, 67; ALEXANDRESCU-VIANU, 1979, 123-4; B'LOW, 1980, 149-53; STROBEL, 1984, 231-6.
 9. PICARD, 1957, 395-6; DORUȚIU, 1961, 361-3; FLORESCU, 1965, 15; RICHMOND, 1967, 29; VULPE, 1969, 209-11, 220, 224; POULTER, 1986, 525-6.
 10. VULPE, 1963a, 232-44; 1963b, 50-1, 60; 1969, 210-11. See also BARADEZ, 1971, 513-21.
 11. For general reviews of the literature dealing with the 'historical' content of the metopes see FLORESCU, 1965, 18-20; BARADEZ, 1971, Table III.
 12. RICHMOND, 1967, 33, 39; SYME, 1971b, 155-7; WILKES, 1983, 274. The emphasis is on a geographically separate war from the two main Dacian conflicts, not necessarily a chronologically 'third' war. For association of the Tropaeum with particular legiones operating locally see DORUȚIU, 1961, 349-52; POULTER, 1986, 524-5. Poulter links it specifically with the occupation of the Dobrogea (ibid., 525-6). For general discussions of the relationship between the tropaeum and the Danubian situation see PATSCH, 1937, 13-25; STROBEL, 1984, 34-40.
 13. PATSCH, 1937, 22-5; DORUȚIU, 1961, 360; RICHMOND, 1967, 32, 37; VULPE, 1969, 223-7; ROSSI, 1971a, 57; ALEXANDRESCU-VIANU, 1979, 125; WILKES, 1983, 274; POULTER, 1986, 525-6.
 14. SIMKINS, 1979, 17; CONNOLLY, 1981, 231. For eastern vexillationes in Trajan's Dacian wars see STROBEL, 1984, 97, 102-3.
 15. For military craftsmen see Digest 50,6,7; Veg., II,11; FROVA, 1961, 582; BANDINELLI, 1971, 314-7; KEPPIE & ARNOLD, 1984, xvii-viii; COULSTON & PHILLIPS, 1988, xviii.
 16. Not paralleled in monumental sculpture or shown being worn on stelae, but a tombstone from Mainz depicts what may be a segmental arm-guard alongside other legionary equipment (LINDENSCHMIT, 1864, IX, V.B, 2). A high relief figure from Alba Iulia (Romania) has a curved rectangular shield, scale shoulder armour and segmental arm and torso defences. Unfortunately, there is nothing diagnostic about the sculpture to indicate that it depicts a legionary rather than a gladiator (RUMĂNIEN, 1969, C63). Finds of segmental armour which seem to fit arms rather than legs have been made at Carnuntum (VON GROLLER, 1901, Pl.XVII.12, 14) and Newstead (CURLE,

1911, Pl.XXIII). Dr M.C. Bishop pers. comm. has drawn attention to the mistaken identification of the latter as thigh armour because it is too narrow (ROBINSON, 1975, 185-6). Perhaps limb-defences were far more common than the representational evidence suggests.

5.20 The Accuracy of the Figure Types

1. ULBERT, 1968, 12-15; 1970, 12; CONNOLLY, 1981, 233; HASSALL, 1983, 128; MAXFIELD, 1986, 66-72; POULTER, 1988, 39-40. For a general discussion of this problem see COULSTON, 1988, 10-13.
2. FRERE & ST.JOSEPH, 1974, 6-7; WEBSTER, 1985, 175.
3. See Suetonius, Divus Vespasianus 4; RICHMOND, 1968, 121-2; WEBSTER, 1980, 107-10; PEDDIE, 1987, 107-10.
4. Jos., B.J. IV,486.
5. See BAATZ, 1966; MARSDEN, 1969, 191; CAMPBELL, 1986.
6. BISHOP, 1985, 17; MAXFIELD, 1986, 70. This is not to suggest that equipment was exclusively produced by large legionary fabricae, or that auxiliary troops did not carry out at least small-scale work.
7. MACKENSEN, 1987, 125, n.314-7.
8. SAXER, 1967, No.299-306, 308, 313-23 (Africa Proconsularis and Numidia), 333 (Mauretania Caesariensis); MATTINGLY, 1984, Table 6: C (Tripolitania). These are 3rd century inscriptions but the Flavian 'East Fort' at Lambaesis (Numidia) was built by legionarii (A.E. 1954, No.137) and a 1st century legionary vexillatio was present at Chemtou (C.I.L. VIII,14603). During the war against Tacfarinas the legion was split up to form single cohort garrisons and to pass the winter (Tac., Ann. III,20-1, 76). The writer is grateful to Dr D.J. Mattingly for discussing this matter.
9. OLDENSTEIN-PFERDEHIRT, 1984, Fig.11, 14-15.
10. C.I.L. III,13439. See SAXER, 1967, No.68-9; BÖHME, 1975, 210-11. A copper alloy chest-piece from a lorica squamata or hamata, inscribed LEG X, from Mušov (Czechoslovakia) may have belonged to a member of a legionary vexillatio similar to the one on the Trenčín inscription (KOLNIK, 1986, 356). There is no reason why this class of artefact should have been solely 'parade' equipment or restricted to use by cavalry. For another very similar legionary piece see GARBSCH, 1978, Cat. P7.
11. SIMKINS, 1984, 15-16; MAXFIELD, 1986, 68.
12. BISHOP, 1985, 10-11.
13. COULSTON, 1988, 13.
14. The writer is grateful to Dr M.C. Bishop for elucidating this point.

15. ALLASON-JONES & BISHOP, 1988, 102.
16. See 5.3.1, n.36.
17. See FRERE & ST.JOSEPH, 1974, 40.
18. Tac., Ann. XII,35; Hist. I,38.
19. Cf. Tac., Ann. II,52; XII,35; XIII,38; XIV,34, 36-7; Hist. III,21-3. See also Jos., B.J. II,512; Veg., II,17; III,14-17.
20. Tac., Hist. II,22: densum legionum agmen, sparsa auxiliorum. See also Veg. III,15.
21. Arrian, Ek. 25-31.
22. Tac., Ag. 35-7.
23. Tac., Hist. IV,20.
24. Tac., Ag. 35.
25. Jos., B.J. 233-4, 324 (Jotapata); V,269, 282, 331, 467-8, 502; VI,179, 220, 236, 255-7 (Jerusalem).
26. JONES, 1975, 26, 37-8; JOHNSON, 1983, 43-4; LANDER, 1984, 43. However, one auxiliary ensor is recorded (C.I.L., XIII,6538) and Hadrian's Lambaesis adlocutio speech mentions auxiliary work on wall construction (C.I.L. VIII,18042).
27. OLDENSTEIN-PFERDEHIRT, 1984, Fig.11, 14-15.
28. LANDER, 1984, 43, 66.
29. BRODRIBB, 1987, 118.
30. See Digest 50,6,7; VON DOMASZEWSKI, 1967, xv, 25, 46.

6. Conclusions: Trajan's Column in Perspective

6.1 Preceding and Contemporary Works

1. Discussion summarised by HAMBERG, 1945, 119-35; BECATTI, 1960, 11-7, 33-45; 1959a. For the bookroll origin of the spiral see BIRT, 1907, 269-70 and 4.1; 4.6. ZANKER, 1970, 533-7 drew attention to the use of columns as funerary monuments at Pompeii and to the resemblance of the Trajan's Column pedestal to a monumental cinerary urn.
2. LEVI, 1931, No.167 (Mantua); STRONG, 1961, Pl.14 (Lecce); BANDIERA, 1977, No.31 (Palestrina).
3. HELBIG, 1966, No.1608; ROBINSON, 1975, Fig.16.

4. AMY et al., 1962, Pl.4-5, 108-9.
5. PFANNER, 1983, Pl.17.3-4 (Titus); HASSEL, 1966, Pl.3 (Benevento).
6. L'ORANGE & VON GERKAN, 1939, Pl.1-2.
7. Interpretations of the Cancelleria scenes was provided by MAGI, 1945, 98-115; TOYNBEE, 1957.
8. MINGAZZINI, 1973, Pl.88; ROBINSON, 1975, Pl.424; HÖLSCHER, 1979, 342-8. There is some dispute as to whether this relief commemorates the Battle of Actium, and thus is not Claudian (Hölscher), or whether it is linked with Claudius' invasion of Britain (Mingazzini).
9. For the problem of interpreting the panels' content see HASSEL, 1966; LEPPER, 1969; FITTSCHEN, 1972; LORENZ, 1973; BONANNO, 1976, 82-94; ANDREAE, 1977, 202-4. Fittschen put forward a view of generalised content against Hassel's very literal approach.
10. KÄHLER, 1966, Pl.4-5.
11. DUDLEY, 1967, Pl.58; ROBINSON, 1975, Pl.423-4.

6.2 The Columns of Trajan and Marcus

1. No dedicatory inscription survives on the pedestal and the exact date of completion is unknown. An inscription in the Musei Vaticani records the procurator columnam centenariam divorum Marci et Faustinae erecting a hut nearby in A.D.193 and this has been taken to mean that work on the column continued through the reign of Commodus (C.I.L. VI,1585 = I.L.S. 5920; CAPRINO et al., 1955, 38-41; BECATTI, 1959b, 760; BIRLEY, 1987, 267). Morris suggested that work continued into the Severan period but his arguments were unwittingly based on scenes restored in the 16th century (MORRIS, 1952. See also BECATTI, 1960, 48-9; BIRLEY, 1987, 197). Reliefs on the pedestal have been lost but fragments survive, supplemented by antiquarian sketches (FUHRMANN, 1937). For general descriptions see PETERSEN et al., 1896, 1-20, 29-38; CAPRINO et al., 1955, 18-28; BECATTI, 1959b, 760; FLORESCU, 1969, 139-43. Its design with regard to earthquake damage was discussed by MARTINES, 1983. The Marcus Column is made from Carrara marble with modern patching in Proconnesian. The writer is grateful to Dr S. Walker for elucidating this point. In this study the prefix 'M.C.' is used to refer to Marcus Column scenes, following the system of scene and individual figure numbering of PETERSEN et al., 1896, to distinguish them from Trajan's Column references.
2. For the Marcommanic Wars in general see PETERSEN et al., 1896, 21-8; ZWIKKER, 1941, 14-238; BÜHME, 1975; BIRLEY, 1987, 159-83, 189-91, 208-10, 249-55.
3. See PETERSEN et al., 1896, 51-95, 105-25; ZWIKKER, 1941, 7-13, 239-74; HAMBERG, 1945, 149-58; MORRIS, 1952, 33-43; CAPRINO et

- al., 1955, 81-117; BECATTI, 1959b, 760-1; 1960, 47-53; FLORESCU, 1969, 142-3; BIRLEY, 1987, 27, 178, 252-3, 267.
4. Dio, LXXII,10 mentions both the 'Rain Miracle' (M.C. XVI) and the lightning hitting the enemy (M.C. XI). See PETERSEN et al., 1896, 56, 58-9; ZWIKKER, 1941, 2, 118, 131, 206, 214, 230, 240, 246, 254, 258, 262-3; HAMBERG, 1945, 152-3; CAPRINO et al., 1955, 86, 88; BÖHME, 1975, 197-9; BIRLEY, 1987, 173, 252; FOWDEN, 1987; SAGE, 1987.
 5. The total number of figures can only be very approximate because many scenes have been almost obliterated by damage whilst others are now represented by 16th century reconstructions in several styles. Following the figure numbering of PETERSEN et al., 1896, and its inclusion of such modern inserts, there are c.33% fewer figures on the Marcus Column than on Trajan's Column. It is vitally important in any enquiry that the Renaissance restorations be recognised and thus eliminated (see CAPRINO et al., 1955, 34-6, 121-4). The two columns were compared by PETERSEN et al., 1896, 95-104.
 6. Notably M.C. XX, L, LXI, LXVIII, CIV. In M.C. scene LXVI a severed head is presented to Marcus in the same manner as seen on Trajan's Column and the Great Trajanic Frieze.
 7. M.C. LXXXII,4, 5, 7; XCIV,1, 6, 7 recall Trajan's Column figures XI,1; XV,6; XVI,3; XIX,3, 4; XX,13; LII,14, 19; LVI,4; LX,5, 7. All over the Marcus Column there are figure poses borrowed from elsewhere. For example, compare the falling messenger of Trajan's Column (IX,1) with M.C. LXXIX,4.
 8. M.C. XV, XXXVIII, XLIV, XLIX, L, LV, LXV, LXXIV, CIII, CIX.
 9. M.C. XVI, CVIII. In M.C. XLIV, LXVII, LXXVIII front and rear ranks of citizen troops are in contrasting poses.
 10. M.C. XI, XXXVIII, XLIX, LV, LXV, LXVII, LXVIII, LXXVIII, XCVI, CIII, CIX.
 11. M.C. IX, XVI, XXXIII, XXXIV, XXXVI, XXXVII, XXXVIII, XLIII, XLIV, LV, LXXIII, LXXXI, XCVI, CVIII.
 12. M.C. XXXVIII, XLIV, L, LXI, LXVII, LXXVIII, XCIII, XCVI, CVIII.
 13. HAMBERG, 1945, 135-49; WARD-PERKINS, 1951, 287-8; RYBERG, 1967, 53-6; BRILLIANT, 1963, 165-70; 1967, 236-8. The Antonine period is notable for its stable succession but the Avidius Cassius revolt and the Marcomannic Wars themselves had a great impact on contemporary feelings of security.
 14. Praetorian signa: M.C. IV, IX, XVII, XXXIII, LV. Legionary signa: M.C. IV, IX. Vexilla: M.C. III, V, VIII, IX, XVII, XIX, XX, XXXIII, XXXVII, XXXVIII, XLVIII, LIII, LV, LVI, LXVII, LXIX, (barbarians), LXXVI, LXXVIII, LXXXIII, LXXXVI, XCVI, XCVIII, C, CVI, CXI, CXV. There are 11 praetorian and 3 legionary signa, and 47 Roman vexilla.

15. Alternatively, all the Roman field armies may have been made up of legionary vexillationes with rumps and aquilae of legiones staying in their bases, which had become permanent since Hadrian. This is suggested by coin issues and epigraphic evidence (PETERSEN et al., 1896, 112-3; ZWIKKER, 1941, 230; MORRIS, 1952, 38; CAPRINO et al., 1955, 65; SAXER, 1967, 35-43; BÖHME, 1975, 201; BIRLEY, 1987, 176, 208, 253). However, as on Trajan's Column (see 5.5.1), standards on the Marcus Column had artistic, rather than documentary rôles. It is not just the absence of aquilae at issue here, but also the unrealistic scarcity of signa. The very large number of vexilla are carried by auxiliaries far more often than by standard bearers wearing animal skins, and only once by a citizen soldier (M.C. LXVII). Vexilla usually accompany auxiliary infantry and cavalry and appear also with oriental cavalry (M.C. LXXVIII) but their primary function is to locate the emperor (especially XXXVIII, XLVIII, LIII, LXXVI, CXI). Moreover, with the exception of M.C. LV, vexilla are the only standard type figured above the third spiral. Standards also fulfill this rôle on the Antonine Arch of Constantine panels (RYBERG, 1967, Pl.II, XXII, XXVII, XXXI-II, XXXVI, XXXIX, XLIII; KOEPPPEL, 1986, No.23, 26-31. For the relationship between these panels and the Column see RYBERG, 1967; BECATTI, 1960, 55-79). Although barbarians carry vexilla (M.C. LXIX), dracones are figured neither as barbarian nor as Roman standards. They appear in contemporary Roman use on the Portonaccio sarcophagus (BERTINETTI et al., 1985, 177-8).
16. VOGEL, 1973, Pl.9, 15, 28-9.
17. For barbarian adversaries see S.H.A., Marcus 22; ZWIKKER, 1941, 14-24; BÖHME, 1975, 182-90, 211-17, Fig.2-3, 15; BIRLEY, 1987, 208, 252.
18. ROBINSON, 1975, 183-4. The provision of pteruges varies: scallops only M.C. IV, XI, LXVII, CXI-II; long pteruges M.C. III, IX, XCIII; no scallops or pteruges M.C. III, XVI, XIX, XXXII-IV, XXXIX, XLIV, LXXVI, LXXVIII, LXXXI-II, XCIV, CIII. Future work may detect distribution patterns of helmet types, pteruges provision and 'lorica segmentata' fittings on the Marcus Column but with far less precision than with Trajan's Column because of the former's damage and restoration. For the Roman army and military equipment on the column see PETERSEN et al., 1896, 44-51, 111-3; COLINI et al., 1955, 63-77; FLORESCU, 1969, 146-8; WAURICK, 1983, 296-7, Fig.15.
19. For example M.C. XXXVI,3 (unless this is a restored section).
20. M.C. VIII,11; XVI,8; XX,32. Significantly they occur low down on the shaft.
21. M.C. XII, XV, XXVII, XXXIX, LXXVIII. LVII,2 is an armoured auxiliary horse-archer. In M.C. LXXVIII 'oriental' cavalry with shafted-weapons are depicted.
22. COULSTON, 1985, 235.

23. CAGIANO DE AZEVEDO, 1951, No.119. Antonine battle sarcophagi are very close in both composition and style to the Marcus Column frieze. A striking example is the Portonaccio sarcophagus, the end reliefs of which are stylistically identical to the column (BERTINETTI et al., 1985, 178-9). The problem is whether column influenced sarcophagi or vice versa. Whatever the solution, the versatility of Roman artists in working on different classes of sculpture is revealed because surely the same workshops were at work in both fields (see 4.8). For these battle sarcophagi see HAMBERG, 1945, 172-89; ANDREAE, 1956; SCHÄFER, 1979; BRILLIANT, 1984, 112-5.
24. Artificial in that it divides the spiral into two equal parts. More artificial than Trajan's Column in the sense that it is copied directly from the earlier monument. If, as seems likely to the writer, this was done without regard to historical circumstances, and if the spiral represents simply a stream of triumphal genre imagery, with a few historical set-pieces, then this seriously affects discussions as to what particular wars are depicted.
25. For the visibility of the frieze and its architectural context see PETERSEN et al., 1896, 2-3; HAMBERG, 1945, 150-1; CAPRINO et al., 1955, 15-8; COARELLI, 1980, 268-9. Alternatively, the Temple of Marcus, the plan and exact location of which are unknown, may have enclosed the column in a colonnaded temenos.
26. Despite the popularity of Marcus with his contemporaries and with later generations, only a small amount of scholarly literature has been devoted to his column in comparison with Trajan's Column. This may be ascribed to four reasons. 1. The Marcus Column has suffered serious damage because of its high relief and the climatic conditions of the Piazza Colonna. 2. The frieze does not lend itself well to attempts at identifying geographical locations and historical events. 3. The lack of small detail and the less perfectly 'classical' style of the reliefs have deterred art historians who insisted on studying them close up in photographs as they were never intended to be seen. 4. No complete set of casts has ever been made of the Marcus Column, although a high quality photographic coverage was provided by PETERSEN et al., 1896. See also CAPRINO et al., 1955; BECATTI, 1957.

6.3 Trajan's Column and its Successors

1. BRILLIANT, 1967, Pl.61, 68, 77, 87 (Forum Romanum); Fig.98a; WARD-PERKINS, 1951, Pl.IX; STRONG, 1980, Pl.160 (Lepcis Magna).
2. BRILLIANT, 1967, Pl.90a (spears); 62a, 80a, 90a (standards).
3. LAUBSCHER, 1975, Pl.25.1, 32.1, 34, 40, 46, 53.1, 58.
4. Ibid., Pl.14.1, 30.2, 48.1.
5. L'ORANGE & VON GERKAN, 1939, Pl.12-15.

6. Column of Theodosius: BECATTI, 1959c; 1960, 83-150; FLORESCU, 1969, 148-50; MÜLLER-WIENER, 1977, 253; STRONG, 1980, 319-20. Column of Arcadius: FRESHFIELD, 1922; BECATTI, 1959d; 1960, 151-264; FLORESCU, 1969, 150-60; MÜLLER-WIENER, 1977, 264; STRONG, 1980, 320-1. Both columns were demolished in the 16th century.
7. MÜLLER-WIENER, 1977, 250-3, 258-63.
8. In a sense the superimposed registers of the pedestal merged with the frieze. See HAMBERG, 1945, 160-1. The style of both this and the Theodosius Column are discussed by CAPRINO et al., 1955, 265-8.
9. FRESHFIELD, 1922, Pl.XV-VI, XXIII.
10. Ibid., Pl.XV, XVIII-XXII.
11. Ibid., Pl.XVIII-XXII. For a similar mosaic composition see BANDINELLI, 1971, Pl.211.
12. For the typological adlocutio sequence see HAMBERG, 1945, 135-49; WARD-PERKINS, 1951, 287-8; RYBERG, 1967, 53-6; BRILLIANT, 1967, 236-8.
13. BRILLIANT, 1967, 171-82, 220-1; RUBIN, 1975, 425-31 followed a literalist approach to historical content.
14. For interpretations of the panels see LAUBSCHER, 1975; POND ROTHMAN, 1977; MEYER, 1980. These depend on which route a viewing pedestrian took through the arch and suffer from the fact that only two out of four piers with reliefs survive. The genre scenes are so generalised that the writer even doubts the existence of a complex original programme linking all the reliefs together.
15. L'ORANGE & VON GERKAN, 1939, Pl.46, 10-1. See Zos., II,16. For 'Red Sea Crossing' sarcophagi and their influence on the Constantinian registers see L'ORANGE & VON GERKAN, 1939, 203-4, 221-2, 227-8; RIZZARDI, 1970; STRONG, 1980, 289. Like the relationship between Antonine battle sarcophagi and the Marcus Column this is a chicken-and-egg situation (see 6.2, n.23). If the sarcophagi came first, then the 'documentary' value of the arch panels decreases. This is the most likely situation because there was a 3rd century hiatus in monumental figural sculpture in Rome after the Arch of Severus. When Constantine wished to raise his civil war monument, only sculptors skilled in small-scale sarcophagus work may have been available, thus he was forced to loot panels from Trajanic, Hadrianic and Antonine buildings. Flavian architectural spolia are also visible inside the attic (pers. obs.).
16. BRILLIANT, 1967, Pl.62a.
17. See ROBINSON, 1975, 185.
18. BRILLIANT, 1967, Pl.49-59. Similar figures appear on the Arcus Argentariorum, ibid., Fig.61.

19. COULSTON, 1987, 141, 143, 149. There is also the possibility that praetorian troops in the capitals used forms of equipment out of fashion elsewhere, especially if Herodian, II,13,10 is correct about Severan decorated daggers (see 5.2.4).
 20. As did MICLEA & FLORESCU, 1980, 90. See BRILLIANT, 1967, Pl.48c, 50-9, 78a, 84. Barbarian weaponry likewise lost its specificity. On the same arch despite the renowned Parthian skill in horse-archery (COULSTON, 1985, 239-41), as far as damage and antiquarian sketches allow judgement, no enemy archers are depicted at all. A quiver with a classical conical cap (not of Parthian form, see 5.8.3) on a siege panel is the only hint of archery (BRILLIANT, 1967, Pl.61, lower middle at right).
1. CLEMEN, 1975.
 2. GAUER, 1981, 187, Fig.5. For Dante and Trajan's Column see COLONNE, 1976, 122-3; BECATTI, 1982, 536-7.
 3. FROEHNER, 1872-74, xx; REINACH, 1886, 13, 21-2; STRONG, 1913; PARIBENI, 1929; CHEVALLIER, 1980; BECATTI, 1982, 537-8. For the long French artistic involvement with the column see COLONNA, 1988. The writer is very grateful to Ms I. Sjöström who kindly acquired a copy of this work for him.
 4. The Karlskirche columns (1716-23) depicted the life of Borromeo (GAUER, 1981, 189-90, Fig.6) whilst the Vendôme column (1805) represented the Grande Armée and Austerlitz (FROEHNER, 1872-74, xix; KRAUS, 1974, 116-8; COLONNE, 1976, 116-21; GAUER, 1981, 190-1, Fig.8; BECATTI, 1982, 539; COLONNA, 1988, 118-22.

Appendix 1: Human Figures**SCENE I** **FIGURE 1**

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured.

SCENE I **FIGURE 2**

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Roman method of carriage.

SCENE I **FIGURE 3**

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield with Hellenistic method of carriage.

SCENE I **FIGURE 4**

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield with Hellenistic method of carriage.

SCENE II **FIGURE 1**

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent.

SCENE II **FIGURE 2**

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent.

SCENE III **FIGURE 1**

Deity.

SCENE IV **FIGURE 1**

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Sword is present.

SCENE IV **FIGURE 2**

Citizen figure type. Helmet type 32. 'Lorica segmentata'.

SCENE IV **FIGURE 3**

Citizen figure type. Helmet type 32. 'Lorica segmentata' type 2. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Additional cingulum. Mistake in detail.

SCENE IV **FIGURE 4**

Citizen figure type. Bare head. 'Lorica segmentata' type 2. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Rectangular shield with wreath blazon. Additional cingulum. Mistake in detail.

SCENE IV **FIGURE 5**

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE IV **FIGURE 6**

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Cingulum is

present. Sword is present. Rectangular shield with wreath blazon.

SCENE IV FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE IV FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Rectangular shield with wreath blazon. Additional cingulum. Mistake in detail.

SCENE IV FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE IV FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent.

SCENE IV FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE IV FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'. 'Lorica segmentata' type 2. Apron is present. Baldric is absent.

SCENE IV FIGURE 13

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE IV FIGURE 14

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Rectangular shield with wreath blazon. Additional cingulum. Mistake in detail.

SCENE IV FIGURE 15

Citizen figure type. Bare head. 'Lorica segmentata' type 1. Cingulum is absent. Baldric is absent.

SCENE IV FIGURE 16

Standard bearer. Animal skin. Lorica hamata. Baldric is present. Sword is present. Cloak is a sagum. Mail edging is zig-zag.

SCENE IV FIGURE 17

Citizen figure type. Bare head. 'Lorica segmentata' type 1.

SCENE IV FIGURE 18

Standard bearer. Bare head. Lorica hamata. Baldric is present. Sword is present. Cloak is a sagum. Mail edging is shallow and rounded lappets.

SCENE IV FIGURE 19

Standard bearer. Bare head. Lorica hamata. Cloak is a sagum.

SCENE IV FIGURE 20

Standard bearer. Animal skin. Lorica hamata. Cloak is a sagum.

SCENE IV FIGURE 21

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE IV FIGURE 22

Standard bearer. Bare head. Lorica hamata. Cloak is a sagum.

SCENE V FIGURE 1

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Mail edging is zig-zag. Additional detail on mail.

SCENE V FIGURE 2

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 3

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Mail edging is tongues. Cingulum present when unnecessary.

SCENE V FIGURE 4

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Mail edging is zig-zag. Cingulum present when unnecessary.

SCENE V FIGURE 5

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE V FIGURE 6

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 7

Officer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is tongues. Mistake in figure type characteristics.

SCENE V FIGURE 8

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is absent.

SCENE V FIGURE 9

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is absent.

SCENE V FIGURE 10

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is shallow and rounded lappets.

SCENE V FIGURE 11

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 12

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Horse harness is practical.

SCENE V FIGURE 13

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 14

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 15

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Horse harness is practical.

SCENE V FIGURE 16

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 17

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 18

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Horse harness is practical.

SCENE V FIGURE 19

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 20

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE V FIGURE 21

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE VI FIGURE 1

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VI FIGURE 2

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VI FIGURE 3

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE VI FIGURE 4

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VI FIGURE 5

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VI FIGURE 6

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE VI FIGURE 7

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VI FIGURE 8
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE VI FIGURE 9
Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VI FIGURE 10
Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VI FIGURE 11
Officer. Bare head. Tunic. Cloak is a sagum.

SCENE VII FIGURE 1
Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Horse harness is practical. Mail edging is shallow and rounded lappets.

SCENE VII FIGURE 2
Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum.

SCENE VII FIGURE 3
Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with piles blazon. Horse harness is practical. Tunic is absent. Mail edging is ragged. Mistake in detail.

SCENE VIII FIGURE 1
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 2
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 3
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 4
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 5
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 6
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 7
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 8
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 9
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 10
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 11

Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 12

Sacrificial attendant. Laureate head. Bare torso.

SCENE VIII FIGURE 13

Sacrificial attendant. Bare head. Tunic.

SCENE VIII FIGURE 14

Sacrificial attendant. Laureate head. Tunic.

SCENE VIII FIGURE 15

Sacrificial attendant. Laureate head. Toga.

SCENE VIII FIGURE 16

Unidentifiable figure. Laureate head.

SCENE VIII FIGURE 17

Trajan. Veiled head. Toga.

SCENE VIII FIGURE 18

Unarmoured soldier. Laureate head. Tunic. Cloak is a sagum.

SCENE VIII FIGURE 19

Unarmoured soldier. Laureate head. Tunic. Cloak is a sagum.

SCENE VIII FIGURE 20

Sacrificial attendant. Laureate head. Bare torso.

SCENE VIII FIGURE 21

Musician. Laureate head. Knotted tunic. Cloak is a sagum.

SCENE VIII FIGURE 22

Sacrificial attendant. Laureate head. Tunic. Cloak is absent.

SCENE VIII FIGURE 23

Sacrificial attendant. Laureate head.

SCENE VIII FIGURE 24

Sacrificial attendant. Laureate head. Bare torso.

SCENE VIII FIGURE 25

Musician. Laureate head. Cloak is a sagum.

SCENE VIII FIGURE 26

Musician. Laureate head. Cloak is a sagum.

SCENE VIII FIGURE 27

Musician. Laureate head. Tunic. Cloak is a sagum.

SCENE VIII FIGURE 28

Musician. Laureate head. Cloak is a sagum.

SCENE IX FIGURE 1
Unidentifiable figure. Bare head. Tunic.

SCENE IX FIGURE 2
Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE IX FIGURE 3
Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE IX FIGURE 4
Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE X FIGURE 1
Officer. Bare head. Lorica hamata. Mail chiselling is present on cast. Cloak is a fringed sagum. Mail edging is tongues. Mistake in figure type characteristics.

SCENE X FIGURE 2
Officer. Bare head. Muscled cuirass. Mail chiselling is present on cast. Cloak is a sagum. Mistake in detail.

SCENE X FIGURE 3
Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE X FIGURE 4
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view/obscured. Tunic is absent. Mail edging is ragged. Mistake in detail.

SCENE X FIGURE 5
Standard bearer. Animal skin.

SCENE X FIGURE 6
Citizen figure type. Helmet type 22. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE X FIGURE 7
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE X FIGURE 8
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is present on cast. Cloak is absent.

SCENE X FIGURE 9
Standard bearer. Animal skin.

SCENE X FIGURE 10
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield is unfinished. Mail edging is ragged. Mistake in detail.

SCENE X FIGURE 11
Citizen figure type. Helmet type 22. 'Lorica segmentata' type 5. Baldric is absent. Additional detail on helmet.

SCENE X FIGURE 12

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Baldric is absent.

SCENE X FIGURE 13

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Baldric is absent.

SCENE X FIGURE 14

Citizen figure type. Helmet type 22.

SCENE X FIGURE 15

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE X FIGURE 16

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Additional detail on helmet.

SCENE X FIGURE 17

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Baldric is absent.

SCENE X FIGURE 18

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE X FIGURE 19

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Cloak is absent. Additional detail on helmet.

SCENE X FIGURE 20

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Additional detail on helmet.

SCENE X FIGURE 21

Citizen figure type. Helmet type 22. Additional detail on helmet.

SCENE X FIGURE 22

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Additional detail on helmet.

SCENE X FIGURE 23

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Additional detail on helmet.

SCENE X FIGURE 24

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE X FIGURE 25

Citizen figure type. Helmet type 22. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent. Rectangular shield with wreath blazon. Mistake in pose.

SCENE X FIGURE 26

Auxiliary infantryman. Helmet type 22. Lorica hamata. Cloak is absent.

SCENE XI FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent. Mistake in pose.

SCENE XI FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent. Sword is absent.

SCENE XI FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is present. Baldric is absent. Sword is present. Mistake in pose.

SCENE XI FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XI FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XI FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 1. Baldric is absent.

SCENE XI FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 1. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XI FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata' type 1. Baldric is absent. Sword is absent.

SCENE XI FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XI FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is absent.

SCENE XI FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent.

SCENE XI FIGURE 12

Auxiliary infantryman. Helmet type 8. Lorica hamata. Mail chiselling is

absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with wreath blazon. Tunic is absent. Mail edging is shallow and rounded lappets. Mistake in detail.

SCENE XI FIGURE 13

Auxiliary infantryman. Helmet type 8. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Tunic is absent. Mail edging is shallow and rounded lappets. Mistake in detail.

SCENE XII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is absent. Baldric is absent. Sword is absent.

SCENE XII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Mistake in pose.

SCENE XII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Mistake in pose.

SCENE XII FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata' type 1. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XII FIGURE 6

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 1. Baldric is absent. Sword is absent.

SCENE XII FIGURE 8

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XII FIGURE 9

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XII FIGURE 10

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is a sagum. Mail edging is shallow and rounded lappets. Mistake in figure type characteristics.

SCENE XIII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XIII FIGURE 2

Citizen figure type. Helmet type 9. 'Lorica segmentata' type 1. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XIII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XIII FIGURE 4

Citizen figure type. Helmet type 9. 'Lorica segmentata'. Baldric is absent.

SCENE XIII FIGURE 5

Citizen figure type. Helmet type 9. 'Lorica segmentata' type 1. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XIII FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XIII FIGURE 7

Citizen figure type. Helmet type 9. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XIV FIGURE 1

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XIV FIGURE 2

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XIV FIGURE 3

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with Hellenistic method of carriage. Tunic with tufts. Mail edging is zig-zag.

SCENE XIV FIGURE 4

Auxiliary infantryman. Helmet type 1 Lorica hamata. Mail chiselling is absent. Sword is absent. Cloak is absent. Tunic is absent. Mail edging is zig-zag.

SCENE XIV FIGURE 5

Auxiliary infantryman. Helmet type 1 Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield rear view/obscured. Tunic is absent. Mail edging is zig-zag. Mistake in detail.

SCENE XIV FIGURE 6

Citizen figure type. Helmet type 1 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XV FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XV FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XV FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XV FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 2. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XV FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present.

SCENE XV FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XVI FIGURE 1

Unidentifiable figure. Bare head. Bare torso. Baldric is absent. Sword is absent. Horse harness is practical. Mistake in figure type characteristics.

SCENE XVI FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XVI FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent. Mistake in pose.

SCENE XVI FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XVI FIGURE 5

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XVI FIGURE 6

Unidentifiable figure. Bare head. Cloak is a sagum.

SCENE XVI FIGURE 7

Unidentifiable figure. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Mistake in figure type characteristics.

SCENE XVI FIGURE 8

Unidentifiable figure. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Mistake in figure type characteristics.

SCENE XVI FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is absent.

SCENE XVII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is

absent. Baldric is absent. Sword is absent.

SCENE XVII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is absent.

SCENE XVII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent.

SCENE XVII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XVIII FIGURE 1

Auxiliary infantryman. Helmet type 24. Lorica hamata. Mail chiselling is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured.

SCENE XVIII FIGURE 2

Auxiliary infantryman. Helmet type 24. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with small motifs. Mail edging is very small lappets.

SCENE XVIII FIGURE 3

Auxiliary infantryman. Helmet type 24. Oval shield with palmettes blazon.

SCENE XVIII FIGURE 4

Auxiliary infantryman. Helmet type 24. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Tunic is fringed. Mail edging is very small lappets.

SCENE XVIII FIGURE 5

Citizen figure type. Helmet type 1. 'Lorica segmentata' type 1. Cingulum is present. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XVIII FIGURE 6

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XVIII FIGURE 7

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XVIII FIGURE 8

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XVIII FIGURE 9

Citizen figure type. Helmet type 1. 'Lorica segmentata'. Cingulum is present. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XVIII FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XVIII FIGURE 11

Dacian. Bare head. Tunic.

SCENE XVIII FIGURE 12

Auxiliary infantryman. Bare head.

SCENE XVIII FIGURE 13

Auxiliary infantryman. Helmet type 8. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Tunic with tufts. Mail edging is zig-zag.

SCENE XVIII FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XVIII FIGURE 15

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent.

SCENE XIX FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 6. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XIX FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XIX FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XIX FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent.

SCENE XIX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XIX FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XIX FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XIX FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Mail chiselling is surviving on the shaft. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XX FIGURE 1

Unidentifiable figure. Bare head. Cloak is a sagum.

SCENE XX

FIGURE 2

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XX

FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XX

FIGURE 4

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with small motifs. Mistake in detail.

SCENE XX

FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XX

FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XX

FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XX

FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent.

SCENE XX

FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent.

SCENE XX

FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XX

FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XX

FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XX

FIGURE 13

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XXI

FIGURE 1

Auxiliary cavalryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Horse harness is practical. Mail edging is zig-zag.

SCENE XXI

FIGURE 2

Auxiliary cavalryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Horse

harness is practical. Mail edging is zig-zag. Additional detail on mail.

SCENE XXI FIGURE 3

Auxiliary cavalryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Horse harness is practical. Mail edging is zig-zag.

SCENE XXI FIGURE 4

Auxiliary cavalryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Mail edging is zig-zag. Additional detail on mail.

SCENE XXI FIGURE 5

Auxiliary cavalryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Horse harness is practical. Mail edging is zig-zag. Additional detail on mail.

SCENE XXI FIGURE 6

Citizen figure type. Helmet type 27. 'Lorica segmentata' type 8. Cingulum is present. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXI FIGURE 7

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 8. Cingulum is present. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXI FIGURE 8

Auxiliary infantryman. Helmet type 8. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Oval shield is unfinished. Tunic is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE XXI FIGURE 9

Auxiliary cavalryman. Helmet type 8. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Tunic is absent. Mail edging is zig-zag. Additional detail on mail. Mistake in detail.

SCENE XXI FIGURE 10

Auxiliary cavalryman. Helmet type 8. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Tunic is absent. Mail edging is zig-zag. Additional detail on mail. Mistake in detail.

SCENE XXI FIGURE 11

Auxiliary cavalryman. Helmet type 8. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Tunic is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE XXII FIGURE 1

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXII FIGURE 2

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 3

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Cingulum is present. Baldric is absent.

SCENE XXII FIGURE 4

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 5

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 6

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXII FIGURE 7

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE XXII FIGURE 8

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 9

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Additional detail on helmet.

SCENE XXII FIGURE 10

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 11

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE XXII FIGURE 12

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXII FIGURE 13

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Additional detail on helmet.

SCENE XXII FIGURE 14

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 15

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 16

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is a fringed sagum.

SCENE XXII FIGURE 17

Citizen figure type. Helmet type 5. 'Lorica segmentata'.

SCENE XXII FIGURE 18

Citizen figure type. Helmet type 5. 'Lorica segmentata'. Baldric is absent. Additional detail on helmet.

SCENE XXII FIGURE 19

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is a fringed sagum. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE XXII FIGURE 20

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is a fringed sagum.

SCENE XXII FIGURE 21

Officer. Bare head. Muscled cuirass.

SCENE XXIII FIGURE 1

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XXIII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XXIII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XXIII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XXIII FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is absent.

SCENE XXIII FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XXIII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE XXIV FIGURE 1

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XXIV FIGURE 2

Citizen figure type. Helmet type 4. 'Lorica segmentata'. Baldric is

absent. Sword is absent.

SCENE XXIV FIGURE 3

Citizen figure type. Helmet type 2. 'Lorica segmentata'.

SCENE XXIV FIGURE 4

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Baldric is absent.

SCENE XXIV FIGURE 5

Citizen figure type. Helmet type 4. 'Lorica segmentata'. Baldric is absent.

SCENE XXIV FIGURE 6

Citizen figure type. Helmet type 4. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXIV FIGURE 7

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 13. Baldric is absent.

SCENE XXIV FIGURE 8

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Baldric is absent.

SCENE XXIV FIGURE 9

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Baldric is absent.

SCENE XXIV FIGURE 10

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXIV FIGURE 11

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 13. Mail chiselling is present on cast. Baldric is absent. Additional detail on 'lorica segmentata'. Mistake in detail.

SCENE XXIV FIGURE 12

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 13. Mail chiselling is present on cast. Baldric is absent. Additional detail on 'lorica segmentata'. Mistake in detail.

SCENE XXIV FIGURE 13

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 13. Mail chiselling is present on cast. Baldric is absent. Additional detail on 'lorica segmentata'. Mistake in detail.

SCENE XXIV FIGURE 14

Citizen figure type. Helmet type 2.

SCENE XXIV FIGURE 15

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Mail chiselling is present on cast. Cingulum is present. Apron is present.

Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on 'lorica segmentata'. Mistake in detail.

SCENE XXIV FIGURE 16

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 13. Baldric is absent. Sword is absent.

SCENE XXIV FIGURE 17

Standard bearer. Animal skin. Lorica hamata. Baldric is absent. Sword is absent. Cloak is absent. Mail edging is tongues.

SCENE XXIV FIGURE 18

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is absent. Mail edging is tongues. Additional detail on mail.

SCENE XXIV FIGURE 19

Standard bearer. Animal skin. Lorica hamata. Baldric is absent. Cloak is absent.

SCENE XXIV FIGURE 20

Citizen figure type. Helmet type 2. 'Lorica segmentata'.

SCENE XXIV FIGURE 21

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent.

SCENE XXIV FIGURE 22

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Cloak is absent. Tunic is absent. Mail edging is zig-zag. Additional detail on mail. Mistake in detail.

SCENE XXIV FIGURE 23

Unidentifiable figure. Helmet type 25.

SCENE XXIV FIGURE 24

Auxiliary cavalryman. Helmet type 16. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Horse harness is impractical. Mail edging is zig-zag.

SCENE XXIV FIGURE 25

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with Hellenistic method of carriage. Mail edging is zig-zag.

SCENE XXIV FIGURE 26

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with Roman blazon. Mail edging is zig-zag.

SCENE XXIV FIGURE 27

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXIV FIGURE 28

Auxiliary cavalryman. Helmet type 16. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Mail edging is zig-zag.

SCENE XXIV FIGURE 29

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXIV FIGURE 30

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with tendrils blazon. Mail edging is zig-zag. Additional detail on mail.

SCENE XXIV FIGURE 31

Auxiliary cavalryman. Helmet type 16. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Mail edging is zig-zag. Additional detail on mail.

SCENE XXIV FIGURE 32

Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with palmettes blazon. Mail edging is zig-zag.

SCENE XXIV FIGURE 33

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Additional detail on mail.

SCENE XXIV FIGURE 34

Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag. Additional detail on baldric.

SCENE XXIV FIGURE 35

Auxiliary infantryman. Helmet type 1. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE XXIV FIGURE 36

Dacian. Bare head. Tunic. Oval shield with rings blazon.

SCENE XXIV FIGURE 37

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with tendrils blazon. Mail edging is zig-zag. Additional detail on mail.

SCENE XXIV FIGURE 38

Archer. Helmet type 1. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Mail edging is zig-zag. Mistake in figure type characteristics.

SCENE XXIV FIGURE 39

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXIV FIGURE 40

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is present. Oval shield with Hellenistic method of carriage.

SCENE XXIV FIGURE 41

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXIV FIGURE 42

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XXIV FIGURE 43

Dacian. Pilleus. Tunic. Oval shield with Roman method of carriage.

SCENE XXIV FIGURE 44

Dacian. Pilleus. Tunic.

SCENE XXIV FIGURE 45

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is present. Cloak is absent. Tunic is absent. Mail edging is zig-zag. Additional detail on mail. Mistake in detail.

SCENE XXIV FIGURE 46

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XXIV FIGURE 47

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with rings blazon.

SCENE XXIV FIGURE 48

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XXIV FIGURE 49

Dacian. Bare head. Tunic. Oval shield with small motifs. Mistake in figure type characteristics.

SCENE XXIV FIGURE 50

Deity. Bare head.

SCENE XXIV FIGURE 51

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XXIV FIGURE 52

Dacian. Pilleus. Tunic. Cloak is absent. Oval shield with small motifs. Tunic with tufts. Mail edging is zig-zag. Mistake in detail.

SCENE XXIV FIGURE 53

Dacian. Bare head. Tunic.

SCENE XXIV FIGURE 54

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XXIV FIGURE 55

Dacian. Bare head. Tunic. Oval shield with palmettes blazon.

SCENE XXIV FIGURE 56

Dacian. Pilleus. Tunic. Mail edging is zig-zag. Additional detail on mail. Mistake in detail.

SCENE XXIV FIGURE 57

Dacian. Bare head. Tunic. Oval shield with palmettes blazon.

SCENE XXIV FIGURE 58

Dacian. Bare head. Tunic.

SCENE XXIV FIGURE 59

Dacian. Pilleus. Tunic.

SCENE XXIV FIGURE 60

Dacian. Bare head. Tunic. Oval shield with small motifs.

SCENE XXIV FIGURE 61

Dacian. Bare head. Tunic.

SCENE XXIV FIGURE 62

Dacian. Pilleus. Tunic.

SCENE XXIV FIGURE 63

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XXIV FIGURE 64

Dacian. Bare head. Tunic.

SCENE XXIV FIGURE 65

Dacian. Bare head. Tunic.

SCENE XXIV FIGURE 66

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXV FIGURE 1

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXV FIGURE 2

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXV FIGURE 3

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXV FIGURE 4

Auxiliary infantryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is zig-zag. Mistake in pose.

SCENE XXV FIGURE 5
 Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield is unfinished. Mail edging is zig-zag. Mistake in detail.

SCENE XXV FIGURE 6
 Dacian. Bare head. Tunic.

SCENE XXV FIGURE 7
 Dacian. Bare head.

SCENE XXV FIGURE 8
 Dacian. Bare head. Tunic. Oval shield with Roman method of carriage.

SCENE XXV FIGURE 9
 Dacian. Bare head. Tunic. Oval shield with palmettes blazon.

SCENE XXVI FIGURE 1
 Citizen figure type. Bare head. Rectangular shield rear view or obscured.

SCENE XXVI FIGURE 2
 Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield rear view or obscured.

SCENE XXVI FIGURE 3
 Citizen figure type. Bare head.

SCENE XXVI FIGURE 4
 Citizen figure type. Bare head.

SCENE XXVI FIGURE 5
 Citizen figure type. Bare head.

SCENE XXVI FIGURE 6
 Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXVI FIGURE 7
 Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXVI FIGURE 8
 Musician. Animal skin.

SCENE XXVI FIGURE 9
 Unidentifiable figure. Animal skin. Cloak is a paenula. Mistake in figure type characteristics.

SCENE XXVI FIGURE 10
 Standard bearer. Animal skin. Over-tunic. Mail chiselling is absent. Cingulum is present. Baldric is absent. Sword is absent. Cloak is absent. Mistake in figure type characteristics.

SCENE XXVI FIGURE 11

Standard bearer. Animal skin. Over-tunic. Mail chiselling is absent. Cingulum is present. Apron is absent. Baldric is present. Cloak is absent. Mail edging is zig-zag. Mistake in figure type characteristics.

SCENE XXVI FIGURE 12

Citizen figure type. Bare head. Bare torso. Baldric is present. Sword is present. Rectangular shield with wreath blazon.

SCENE XXVI FIGURE 13

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Sword is absent. Cloak is a fringed sagum. Mail edging is plain (unfinished).

SCENE XXVI FIGURE 14

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXVII FIGURE 1

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXVII FIGURE 2

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXVII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata' type 7. Baldric is absent.

SCENE XXVII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 7. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXVII FIGURE 5

Standard bearer. Bare head. Mistake in detail.

SCENE XXVII FIGURE 6

German. Nodus hairstyle. Bare torso. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE XXVII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XXVII FIGURE 8

Standard bearer. Bare head.

SCENE XXVII FIGURE 9

German. Nodus hairstyle. Cloak is a fringed sagum.

SCENE XXVII FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XXVII FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XXVII FIGURE 12

Dacian. Bare head. Tunic.

SCENE XXVII FIGURE 13

Dacian. Bare head. Tunic.

SCENE XXVII FIGURE 14

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXVII FIGURE 15

Dacian cavalryman. Bare head. Tunic.

SCENE XXVII FIGURE 16

Dacian cavalryman. Bare head. Tunic.

SCENE XXVII FIGURE 17

Dacian cavalryman. Bare head. Tunic.

SCENE XXVII FIGURE 18

Dacian. Bare head. Tunic.

SCENE XXVII FIGURE 19

Dacian. Bare head. Tunic.

SCENE XXVIII FIGURE 1

Citizen figure type. Helmet type 2. 'Lorica segmentata'.

SCENE XXVIII FIGURE 2

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXVIII FIGURE 3

Citizen figure type. Helmet type 2. 'Lorica segmentata'.

SCENE XXVIII FIGURE 4

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXVIII FIGURE 5

Officer. Bare head.

SCENE XXVIII FIGURE 6

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXVIII FIGURE 7

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE XXVIII FIGURE 8

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE XXVIII FIGURE 9

Dacian. Bare head.

SCENE XXVIII FIGURE 10

Dacian. Bare head.

SCENE XXVIII FIGURE 11

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE XXIX FIGURE 1

Unidentifiable figure. Bare head. Tunic. Cloak is a sagum. Mistake in figure type characteristics.

SCENE XXIX FIGURE 2

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXIX FIGURE 3

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with tendrils blazon. Mail edging is zig-zag.

SCENE XXIX FIGURE 4

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XXIX FIGURE 5

Dacian. Bare head. Tunic.

SCENE XXIX FIGURE 6

Unidentifiable figure. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a sagum. Horse harness is practical. Mistake in figure type characteristics.

SCENE XXIX FIGURE 7

Dacian. Bare head. Tunic.

SCENE XXIX FIGURE 8

Dacian. Bare head. Tunic.

SCENE XXIX FIGURE 9

Unidentifiable figure. Bare head. Tunic. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is practical. Mistake in figure type characteristics.

SCENE XXIX FIGURE 10

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XXIX FIGURE 11

Dacian civilian. Bare head. Tunic.

SCENE XXIX FIGURE 12

Dacian. Bare head. Tunic.

SCENE XXX FIGURE 1

Dacian civilian. Bare head.

SCENE XXX FIGURE 2

Dacian civilian. Bare head.

SCENE XXX FIGURE 3

Dacian civilian. Bare head.

SCENE XXX FIGURE 4
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXX FIGURE 5
Dacian civilian. Bare head.

SCENE XXX FIGURE 6
Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXX FIGURE 7
Dacian civilian. Bare head.

SCENE XXX FIGURE 8
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is a sagum. Oval shield with piles blazon.

SCENE XXX FIGURE 9
Dacian civilian. Bare head.

SCENE XXX FIGURE 10
Dacian civilian. Bare head.

SCENE XXX FIGURE 11
Dacian civilian. Bare head.

SCENE XXX FIGURE 12
Dacian civilian. Bare head.

SCENE XXX FIGURE 13
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with piles blazon.

SCENE XXXI FIGURE 1
Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XXXI FIGURE 2
Dacian cavalryman. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXXI FIGURE 3
Dacian. Bare head. Tunic.

SCENE XXXI FIGURE 4
Dacian. Bare head. Tunic. Oval shield with wreath blazon.

SCENE XXXI FIGURE 5
Dacian. Pilleus. Tunic. Oval shield rear view or obscured.

SCENE XXXI FIGURE 6
Dacian. Pilleus. Oval shield rear view or obscured.

SCENE XXXI FIGURE 7
Dacian. Bare head. Tunic.

SCENE XXXI FIGURE 8
Dacian. Pilleus. Tunic. Oval shield with Roman method of carriage.

SCENE XXXI FIGURE 9

Dacian cavalryman. Bare head. Tunic.

SCENE XXXI FIGURE 10

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXXI FIGURE 11

Dacian. Pilleus. Tunic. Oval shield with tendrils blazon.

SCENE XXXI FIGURE 12

Dacian cavalryman. Bare head. Tunic.

SCENE XXXI FIGURE 13

Dacian cavalryman. Bare head. Tunic.

SCENE XXXI FIGURE 14

Dacian. Pilleus. Tunic. Oval shield with Hellenistic method of carriage.

SCENE XXXI FIGURE 15

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XXXI FIGURE 16

Dacian. Pilleus. Tunic. Oval shield rear view or obscured.

SCENE XXXI FIGURE 17

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE XXXI FIGURE 18

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXI FIGURE 19

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXI FIGURE 20

Dacian cavalryman. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XXXI FIGURE 21

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XXXI FIGURE 22

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXII FIGURE 1

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXXII FIGURE 2

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 3

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 4

Dacian. Bare head. Tunic. Oval shield with Roman method of carriage.

SCENE XXXII FIGURE 5

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XXXII FIGURE 6

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XXXII FIGURE 7

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 8

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XXXII FIGURE 9

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with tendrils blazon. Mail edging is zig-zag. Mistake in detail.

SCENE XXXII FIGURE 10

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with Roman blazon. Mail edging is zig-zag. Additional detail on baldric. Mistake in detail.

SCENE XXXII FIGURE 11

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Mistake in detail.

SCENE XXXII FIGURE 12

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 13

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with Roman blazon. Mail edging is zig-zag. Mistake in detail.

SCENE XXXII FIGURE 14

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 15

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE XXXII FIGURE 16

Dacian. Bare head. Tunic. Oval shield with Roman method of carriage.

SCENE XXXII FIGURE 17

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with small motifs. Mail edging is zig-zag. Additional detail on

baldric. Mistake in detail.

SCENE XXXII FIGURE 18

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with small motifs. Mail edging is zig-zag. Additional detail on baldric. Mistake in detail.

SCENE XXXII FIGURE 19

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 20

Dacian. Pilleus. Tunic.

SCENE XXXII FIGURE 21

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with wreath blazon.

SCENE XXXII FIGURE 22

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 23

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is zig-zag.

SCENE XXXII FIGURE 24

Dacian. Pilleus. Tunic.

SCENE XXXII FIGURE 25

Dacian. Bare head. Tunic.

SCENE XXXII FIGURE 26

Dacian. Pilleus. Tunic. Oval shield rear view or obscured.

SCENE XXXII FIGURE 27

Dacian. Bare head. Tunic.

SCENE XXXIII FIGURE 1

Auxiliary infantryman. Bare head. Tunic. Apron is absent. Baldric is absent. Sword is present. Cloak is a sagum. Rectangular shield rear view or obscured.

SCENE XXXIII FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Tunic is absent. Mail edging is shallow and rounded lappets. Mistake in detail.

SCENE XXXIII FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Mail edging is shallow and rounded lappets.

SCENE XXXIII FIGURE 4

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is shallow and rounded lappets.

SCENE XXXIII FIGURE 5

Auxiliary infantryman. Helmet type 32. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Rectangular shield with thunderbolts and wings blazon. Mail edging is shallow and rounded lappets.

SCENE XXXIII FIGURE 6

Auxiliary infantryman. Helmet type 33. Lorica hamata. Sword is present. Cloak is absent. Oval shield with Roman blazon. Mail edging is shallow and rounded lappets.

SCENE XXXIII FIGURE 7

Auxiliary infantryman. Bare head. Lorica hamata. Baldric is absent. Sword is absent. Cloak is a sagum. Rectangular shield rear view or obscured. Mail edging is shallow and rounded lappets. Mistake in detail.

SCENE XXXIII FIGURE 8

Auxiliary infantryman. Helmet type 33. Lorica hamata. Baldric is absent. Sword is absent. Cloak is absent. Rectangular shield with thunderbolts and wings blazon. Mail edging is shallow and rounded lappets. Mistake in detail.

SCENE XXXIII FIGURE 9

Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE XXXIII FIGURE 10

Classiarius. Bare head. Knotted tunic.

SCENE XXXIII FIGURE 11

Standard bearer. Bare head.

SCENE XXXIII FIGURE 12

Classiarius. Bare head.

SCENE XXXIII FIGURE 13

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula.

SCENE XXXIII FIGURE 14

Standard bearer. Bare head.

SCENE XXXIII FIGURE 15

Classiarius. Bare head. Knotted tunic.

SCENE XXXIII FIGURE 16

Classiarius. Bare head.

SCENE XXXIII FIGURE 17

Standard bearer. Bare head.

SCENE XXXIII FIGURE 18

Classiarius. Bare head. Knotted tunic.

SCENE XXXIII FIGURE 19

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula.

SCENE XXXIII FIGURE 20
Classiarius. Bare head. Knotted tunic.

SCENE XXXIII FIGURE 21
Classiarius. Bare head. Knotted tunic.

SCENE XXXIII FIGURE 22
 Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE XXXIII FIGURE 23
Classiarius. Bare head. Knotted tunic.

SCENE XXXIII FIGURE 24
 Trajan. Bare head. Tunic. Cloak is a paenula.

SCENE XXXIII FIGURE 25
 Unarmoured soldier. Bare head.

SCENE XXXIII FIGURE 26
Classiarius. Bare head. Knotted tunic.

SCENE XXXIII FIGURE 27
 Unarmoured soldier. Bare head. Tunic. Cloak is a paenula.

SCENE XXXIII FIGURE 28
 Unarmoured soldier. Bare head. Cloak is a paenula.

SCENE XXXIII FIGURE 29
 Unarmoured soldier. Bare head. Tunic. Cloak is a paenula.

SCENE XXXIII FIGURE 30
 Unarmoured soldier. Bare head. Tunic. Rectangular shield with
 thunderbolts and wings blazon.

SCENE XXXIII FIGURE 31
 Unarmoured soldier. Bare head.

SCENE XXXIII FIGURE 32
 Unarmoured soldier. Bare head.

SCENE XXXIV FIGURE 1
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 2
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 3
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 4
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 5
 Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE XXXIV FIGURE 6
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 7
 Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE XXXIV FIGURE 8
Classiarius. Bare head.

SCENE XXXIV FIGURE 9
Classiarius. Bare head.

SCENE XXXIV FIGURE 10
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 11
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 12
Classiarius. Bare head.

SCENE XXXIV FIGURE 13
Classiarius. Bare head.

SCENE XXXIV FIGURE 14
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 15
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 16
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 17
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 18
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 19
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 20
Classiarius. Bare head. Knotted tunic.

SCENE XXXIV FIGURE 21
 Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE XXXIV FIGURE 22
Classiarius. Bare head. Knotted tunic.

SCENE XXXV FIGURE 1
 Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is absent. Cloak is a sagum. Tunic with tufts. Mail edging is zig-zag.

SCENE XXXV FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE XXXV FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield is unfinished. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE XXXV FIGURE 4

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is absent. Cloak is a sagum. Rectangular shield with thunderbolts and wings blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on baldric.

SCENE XXXV FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield is unfinished. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE XXXV FIGURE 6

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE XXXV FIGURE 7

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXXV FIGURE 8

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXXV FIGURE 9

Officer. Bare head. Cloak is a sagum.

SCENE XXXV FIGURE 10

Trajan. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE XXXV FIGURE 11

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXXVI FIGURE 1

Auxiliary cavalryman. Helmet type 20. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is practical. Mail edging is zig-zag.

SCENE XXXVI FIGURE 2

Auxiliary infantryman. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with piles blazon. Mistake in figure type characteristics.

SCENE XXXVI FIGURE 3

Auxiliary cavalryman. Helmet type 25. Lorica hamata. Mail chiselling is

absent. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE XXXVI FIGURE 4

Auxiliary infantryman. Helmet type 28. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mistake in detail.

SCENE XXXVI FIGURE 5

Auxiliary infantryman. Animal skin. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Mistake in figure type characteristics.

SCENE XXXVI FIGURE 6

Auxiliary infantryman. Animal skin. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Oval shield rear view or obscured. Mistake in figure type characteristics.

SCENE XXXVI FIGURE 7

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Mail edging is zig-zag.

SCENE XXXVI FIGURE 8

Auxiliary infantryman. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag. Mistake in figure type characteristics.

SCENE XXXVI FIGURE 9

Auxiliary infantryman. Helmet type 28. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured. Mistake in detail.

SCENE XXXVI FIGURE 10

Auxiliary infantryman. Helmet type 28. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured. Mistake in detail.

SCENE XXXVI FIGURE 11

Auxiliary infantryman. Helmet type 28. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is absent. Cloak is absent. Oval shield with Hellenistic method of carriage. Mail edging is zig-zag. Mistake in detail.

SCENE XXXVI FIGURE 12

Bare-chested irregular. Bare head. Bare torso. Baldric is present. Oval shield rear view or obscured.

SCENE XXXVI FIGURE 13

Bare-chested irregular. Bare head. Bare torso. Baldric is present. Sword is present. Oval shield with Hellenistic method of carriage.

SCENE XXXVI FIGURE 14

Bare-chested irregular. Bare head. Bare torso. Oval shield rear view or obscured.

SCENE XXXVI FIGURE 15

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Cloak is absent. Horse harness is practical.

SCENE XXXVI FIGURE 16

Bare-chested irregular. Bare head. Bare torso. Oval shield rear view or obscured.

SCENE XXXVI FIGURE 17

Bare-chested irregular. Bare head. Over-tunic. Baldric is absent. Oval shield with Hellenistic method of carriage.

SCENE XXXVI FIGURE 18

Bare-chested irregular. Bare head. Bare torso.

SCENE XXXVI FIGURE 19

Bare-chested irregular. Bare head. Bare torso.

SCENE XXXVI FIGURE 20

Bare-chested irregular. Bare head. Bare torso. Oval shield rear view or obscured.

SCENE XXXVI FIGURE 21

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is impractical. Mail edging is plain (unfinished). Mistake in detail.

SCENE XXXVI FIGURE 22

Trajan. Bare head. Muscled cuirass. Cloak is a sagum. Horse harness is impractical.

SCENE XXXVII FIGURE 1

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is present. Cloak is absent. Oval shield with Roman blazon. Horse harness is practical. Mail edging is zig-zag. Mistake in pose.

SCENE XXXVII FIGURE 2

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with piles blazon. Horse harness is practical. Mail edging is zig-zag. Mistake in pose.

SCENE XXXVII FIGURE 3

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with small motifs. Horse harness is practical. Mail edging is zig-zag. Additional detail on scabbard (suspension details or decoration).

SCENE XXXVII FIGURE 4

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with small motifs. Horse harness is practical. Mail edging

is zig-zag. Additional detail on scabbard (suspension details or decoration).

SCENE XXXVII FIGURE 5

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with piles blazon. Horse harness is practical. Mail edging is zig-zag. Additional detail on scabbard (suspension details or decoration).

SCENE XXXVII FIGURE 6

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Horse harness is practical. Mail edging is zig-zag. Additional detail on scabbard (suspension details or decoration). Mistake in detail.

SCENE XXXVII FIGURE 7

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with Roman method of carriage. Horse harness is practical. Mail edging is zig-zag. Additional detail on scabbard (suspension details or decoration).

SCENE XXXVII FIGURE 8

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Mail edging is zig-zag. Additional detail on scabbard (suspension details or decoration).

SCENE XXXVII FIGURE 9

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXVII FIGURE 10

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXVII FIGURE 11

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXVII FIGURE 12

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXVII FIGURE 13

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXVII FIGURE 14

Sarmatian. Helmet type 30. Lorica squamata.

SCENE XXXVIII FIGURE 1

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is absent. Oval shield rear view or obscured.

SCENE XXXVIII FIGURE 2

Deity.

SCENE XXXVIII FIGURE 3

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is absent. Oval shield with Roman method of carriage.

SCENE XXXVIII FIGURE 4

Auxiliary infantryman. Helmet type 23. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE XXXVIII FIGURE 5

Auxiliary infantryman. Helmet type 23. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Rectangular shield with wreath blazon. Mail edging is zig-zag. Mistake in figure type characteristics.

SCENE XXXVIII FIGURE 6

Dacian. Pilleus. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XXXVIII FIGURE 7

Dacian. Bare head. Tunic.

SCENE XXXVIII FIGURE 8

Dacian. Bare head. Tunic.

SCENE XXXVIII FIGURE 9

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XXXVIII FIGURE 10

Dacian. Bare head. Tunic.

SCENE XXXVIII FIGURE 11

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE XXXVIII FIGURE 12

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is absent. Oval shield with wreath blazon. Mistake in detail.

SCENE XXXVIII FIGURE 13

Dacian. Bare head. Tunic. Oval shield with small motifs.

SCENE XXXVIII FIGURE 14

Dacian. Bare head. Tunic.

SCENE XXXVIII FIGURE 15

Dacian. Pilleus. Tunic. Oval shield with palmettes blazon.

SCENE XXXVIII FIGURE 16

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XXXVIII FIGURE 17

Auxiliary cavalryman. Helmet type 23. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Horse harness is practical. Mail edging is zig-zag.

SCENE XXXVIII FIGURE 18

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XXXVIII FIGURE 19

Dacian. Bare head. Tunic.

SCENE XXXVIII FIGURE 20

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XXXVIII FIGURE 21

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with tendrils blazon. Tunic with tufts. Mail edging is zig-zag.

SCENE XXXVIII FIGURE 22

Unidentifiable figure. Nodus hairstyle. Tunic. Oval shield with wreath blazon.

SCENE XXXVIII FIGURE 23

Dacian. Bare head. Tunic. Cloak is absent.

SCENE XXXVIII FIGURE 24

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XXXVIII FIGURE 25

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Oval shield with piles blazon. Horse harness is practical. Tunic with tufts. Mail edging is zig-zag.

SCENE XXXVIII FIGURE 26

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XXXIX FIGURE 1

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 2

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 3

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 4

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 5

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 6

Dacian. Bare head. Tunic.

SCENE XXXIX FIGURE 7

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 8

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 9

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 10

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 11

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 12

Dacian civilian. Bare head.

SCENE XXXIX FIGURE 13

Dacian. Pilleus. Tunic.

SCENE XXXIX FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XXXIX FIGURE 15

Dacian. Pilleus. Tunic.

SCENE XXXIX FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XXXIX FIGURE 17

Dacian. Pilleus. Tunic.

SCENE XXXIX FIGURE 18

Citizen figure type. Bare head. 'Lorica segmentata' type 3. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XXXIX FIGURE 19

Citizen figure type. Bare head. 'Lorica segmentata' type 3. Cingulum is absent. Apron is absent. Baldric is absent.

SCENE XXXIX FIGURE 20

Officer. Bare head. Muscled cuirass. Apron is absent. Cloak is a sagum.

SCENE XXXIX FIGURE 21

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXXIX FIGURE 22

Officer. Bare head. Cloak is a sagum.

SCENE XXXIX FIGURE 23

Citizen figure type. Bare head. 'Lorica segmentata' type 3. Baldric is absent.

SCENE XXXIX FIGURE 24

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XXXIX FIGURE 25

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is absent.

SCENE XL FIGURE 1

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 4. Baldric is absent. Sword is absent.

SCENE XL FIGURE 2

Dacian. Bare head. Tunic.

SCENE XL FIGURE 3

Dacian. Pilleus. Tunic.

SCENE XL FIGURE 4

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Baldric is absent.

SCENE XL FIGURE 5

Auxiliary infantryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is zig-zag.

SCENE XL FIGURE 6

Auxiliary infantryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with tendrils blazon. Mail edging is zig-zag.

SCENE XL FIGURE 7

Auxiliary infantryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is zig-zag.

SCENE XL FIGURE 8

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE XL FIGURE 9

Dacian. Bare head. Tunic.

SCENE XL FIGURE 10

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 5. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 11

Citizen figure type. Helmet type 2. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 12

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Cingulum is absent.

SCENE XL FIGURE 13

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Cingulum is

absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE XL FIGURE 14

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 15

Citizen figure type. Helmet type 17. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 16

Auxiliary infantryman. Helmet type 2. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is zig-zag.

SCENE XL FIGURE 17

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Sword is absent.

SCENE XL FIGURE 18

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 19

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Cingulum is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 20

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE XL FIGURE 21

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 22

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present.

SCENE XL FIGURE 23

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Tunic with tufts.

SCENE XL FIGURE 24

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent.

SCENE XL FIGURE 25

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent.

SCENE XL FIGURE 26

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. .. Baldric is absent. Sword is absent. Cloak is absent.

SCENE XL FIGURE 27

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE XL FIGURE 28

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XL FIGURE 29

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent.

SCENE XL FIGURE 30

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XL FIGURE 31

Citizen figure type. Helmet type 1. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is present. Sword is present.

SCENE XL FIGURE 32

Citizen figure type. Helmet type 1. 'Lorica segmentata'.

SCENE XL FIGURE 33

Dacian. Bare head. Tunic.

SCENE XL FIGURE 34

Citizen figure type. Helmet type 2. 'Lorica segmentata'. Baldric is absent.

SCENE XL FIGURE 35

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with wreath blazon.

SCENE XL FIGURE 36

Citizen figure type. Helmet type 1. 'Lorica segmentata' type 5. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 37

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE XL FIGURE 38

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XL FIGURE 39

Citizen figure type. Helmet type 33. 'Lorica segmentata'. Cingulum is present. Baldric is present. Sword is present. Rectangular shield rear view or obscured.

SCENE XL FIGURE 40

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XL FIGURE 41

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XL FIGURE 42
Dacian. Bare head. Tunic. Cloak is absent.

SCENE XL FIGURE 43
Citizen figure type. Helmet type 31. 'Lorica segmentata'. Cingulum is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 44
Dacian. Bare head. Tunic.

SCENE XL FIGURE 45
Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XL FIGURE 46
Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE XL FIGURE 47
Dacian. Bare head. Tunic. Oval shield with palmettes blazon.

SCENE XL FIGURE 48
Dacian. Bare head. Tunic.

SCENE XL FIGURE 49
Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XL FIGURE 50
Dacian. Bare head. Tunic. Oval shield with wreath blazon.

SCENE XL FIGURE 51
Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XL FIGURE 52
Dacian. Bare head. Tunic. Oval shield with wreath blazon.

SCENE XL FIGURE 53
Dacian. Bare head. Tunic.

SCENE XL FIGURE 54
Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XL FIGURE 55
Bare-chested irregular. Bare head. Bare torso. Baldric is present. Sword is present. Oval shield with piles blazon.

SCENE XL FIGURE 56
Dacian. Bare head. Tunic.

SCENE XL FIGURE 57
Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XL FIGURE 58

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XL FIGURE 59

Citizen figure type. Helmet type 33. 'Lorica segmentata'. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 60

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XL FIGURE 61

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is present. Oval shield with piles blazon.

SCENE XL FIGURE 62

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with tendrils blazon. Horse harness is practical.

SCENE XL FIGURE 63

Dacian. Bare head. Tunic. Oval shield with small motifs.

SCENE XL FIGURE 64

Dacian. Bare head. Tunic.

SCENE XL FIGURE 65

Citizen figure type. Helmet type 20. 'Lorica segmentata'. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XL FIGURE 66

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XL FIGURE 67

Dacian. Bare head. Tunic.

SCENE XL FIGURE 68

Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with piles blazon.

SCENE XL FIGURE 69

Auxiliary cavalryman. Helmet type 20. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Horse harness is practical.

SCENE XL FIGURE 70

Dacian. Bare head. Tunic.

SCENE XL FIGURE 71

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XL FIGURE 72

Dacian. Bare head. Tunic. Oval shield with wreath blazon.

SCENE XLI FIGURE 1

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XLI FIGURE 2

Dacian. Bare head. Tunic. Oval shield with Roman method of carriage.

SCENE XLI FIGURE 3

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE XLI FIGURE 4

Dacian. Bare head. Tunic. Oval shield with Roman blazon. Mistake in detail.

SCENE XLI FIGURE 5

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE XLI FIGURE 6

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XLI FIGURE 7

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XLI FIGURE 8

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XLI FIGURE 9

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XLI FIGURE 10

Dacian. Bare head. Tunic.

SCENE XLI FIGURE 11

Dacian. Bare head. Tunic. Oval shield with wreath blazon.

SCENE XLII FIGURE 1

Auxiliary cavalryman. Helmet type 20. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE XLII FIGURE 2

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with tendrils blazon.

SCENE XLII FIGURE 3

Auxiliary cavalryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE XLII FIGURE 4

Auxiliary cavalryman. Nodus hairstyle. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE XLII FIGURE 5

Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling

is absent. Cloak is absent.

SCENE XLII FIGURE 6

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLII FIGURE 7

Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with Roman method of carriage. Tunic with tufts. Mail edging is ragged, very small lappets, or fringed.

SCENE XLII FIGURE 8

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLII FIGURE 9

Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent.

SCENE XLII FIGURE 10

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is absent. Oval shield with Roman blazon.

SCENE XLII FIGURE 11

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLII FIGURE 12

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE XLII FIGURE 13

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is absent.

SCENE XLII FIGURE 14

Citizen figure type. Helmet type 26. 'Lorica segmentata'.

SCENE XLII FIGURE 15

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE XLII FIGURE 16

Bare-chested irregular. Bare head. Bare torso. Oval shield with piles blazon.

SCENE XLII FIGURE 17

Citizen figure type. 'Lorica segmentata'. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XLII FIGURE 18

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE XLII FIGURE 19

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Baldric is absent.

SCENE XLII FIGURE 20

Citizen figure type. Helmet type 26. 'Lorica segmentata' type 17. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield is unfinished. Mistake in detail.

SCENE XLII FIGURE 21

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE XLII FIGURE 22

Citizen figure type. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XLII FIGURE 23

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE XLIII FIGURE 1

Citizen figure type. Helmet type 25. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE XLIII FIGURE 2

Citizen figure type. 'Lorica segmentata' type 5. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE XLIII : FIGURE 3

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE XLIII FIGURE 4

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE XLIII FIGURE 5

Dacian. Pilleus. Tunic.

SCENE XLIII FIGURE 6

Dacian. Bare head. Tunic.

SCENE XLIII FIGURE 7

Dacian. Pilleus. Tunic.

SCENE XLIII FIGURE 8

Dacian. Bare head. Tunic.

SCENE XLIII FIGURE 9

Dacian. Pilleus. Tunic.

SCENE XLIII FIGURE 10

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE XLIII FIGURE 11

Dacian. Pilleus. Tunic.

SCENE XLIII FIGURE 12

Dacian. Bare head. Tunic.

SCENE XLIV FIGURE 1

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is a sagum. Mail edging is shallow and rounded lappets.

SCENE XLIV FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Cloak is a sagum. Mail edging is shallow and rounded lappets.

SCENE XLIV FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is zig-zag.

SCENE XLIV FIGURE 4

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Cloak is a sagum. Tunic with tufts. Mail edging is zig-zag.

SCENE XLIV FIGURE 5

Officer. Bare head. Tunic. Mail chiselling is present on cast. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE XLIV FIGURE 6

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Mail edging is shallow and rounded lappets.

SCENE XLIV FIGURE 7

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum.

SCENE XLIV FIGURE 8

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLIV FIGURE 9

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLIV FIGURE 10

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a fringed sagum. Tunic with tufts. Mail edging is zig-zag.

SCENE XLIV FIGURE 11

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE XLIV FIGURE 12

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLIV FIGURE 13

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is

absent. Cloak is a fringed sagum. Tunic with tufts.

SCENE XLV FIGURE 1
Dacian. Bare head. Bare torso.

SCENE XLV FIGURE 2
Roman civilian. Bare head.

SCENE XLV FIGURE 3
Roman civilian. Bare head.

SCENE XLV FIGURE 4
Roman civilian. Bare head.

SCENE XLV FIGURE 5
Dacian. Bare head. Bare torso.

SCENE XLV FIGURE 6
Dacian. Bare head. Bare torso.

SCENE XLV FIGURE 7
Roman civilian. Bare head.

SCENE XLV FIGURE 8
Roman civilian. Bare head.

SCENE XLVI FIGURE 1
Auxiliary infantryman. Helmet type 1. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield is unfinished. Tunic with tufts. Mistake in detail.

SCENE XLVI FIGURE 2
Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is a sagum. Tunic with tufts. Mail edging is shallow and rounded lappets.

SCENE XLVI FIGURE 3
Dacian. Bare head. Tunic.

SCENE XLVI FIGURE 4
Dacian. Bare head. Tunic.

SCENE XLVI FIGURE 5
Dacian. Bare head. Tunic. Cloak is a sagum.

SCENE XLVI FIGURE 6
Officer. Bare head. Tunic. Cloak is a sagum.

SCENE XLVI FIGURE 7
Trajan. Bare head. Tunic. Cloak is a paenula.

SCENE XLVI FIGURE 8
Officer. Bare head. Cloak is a sagum.

SCENE XLVI FIGURE 9
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLVII FIGURE 1

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE XLVII FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE XLVII FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Mail edging is zig-zag.

SCENE XLVII FIGURE 4

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Tunic with tufts. Mail edging is zig-zag.

SCENE XLVIII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLVIII FIGURE 2

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Cingulum is present. Apron is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on baldric.

SCENE XLVIII FIGURE 3

Citizen figure type. Bare head.

SCENE XLVIII FIGURE 4

Citizen figure type. Bare head.

SCENE XLVIII FIGURE 5

Citizen figure type. Bare head.

SCENE XLVIII FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is present. Sword is present. Additional detail on baldric.

SCENE XLVIII FIGURE 7

Unidentifiable figure. Bare head.

SCENE XLVIII FIGURE 8

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is zig-zag. Additional detail on baldric.

SCENE XLVIII FIGURE 9

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is zig-zag. Additional detail on baldric.

SCENE XLVIII FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLVIII FIGURE 11

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is absent. Mail edging is zig-zag. Additional detail on baldric.

SCENE XLVIII FIGURE 12

Citizen figure type. Bare head.

SCENE XLVIII FIGURE 13

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is zig-zag.

SCENE XLVIII FIGURE 14

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XLVIII FIGURE 15

Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE XLVIII FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLVIII FIGURE 17

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Mail edging is zig-zag.

SCENE XLIX FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Mail edging is zig-zag. Mistake in detail.

SCENE XLIX FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 5.

SCENE XLIX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is present. Rectangular shield with thunderbolts and wings blazon. Mistake in detail.

SCENE XLIX FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 17. Baldric is absent.

SCENE XLIX FIGURE 7

Citizen figure type. Helmet type 32. 'Lorica segmentata' type 18. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XLIX FIGURE 8
Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent.

SCENE XLIX FIGURE 9
Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is practical. Tunic is fringed. Mail edging is zig-zag.

SCENE XLIX FIGURE 10
Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent.

SCENE XLIX FIGURE 11
Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 12
Citizen figure type. Bare head. 'Lorica segmentata' type 18. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XLIX FIGURE 13
Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Tunic is fringed. Mail edging is zig-zag.

SCENE XLIX FIGURE 14
Citizen figure type. Bare head. 'Lorica segmentata' type 18.

SCENE XLIX FIGURE 15
Citizen figure type. Bare head. 'Lorica segmentata' type 10. Baldric is absent. Rectangular shield rear view or obscured.

SCENE XLIX FIGURE 16
Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 17
Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 18
Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 19
Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE XLIX FIGURE 20
Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE XLIX FIGURE 21
Citizen figure type. Bare head. 'Lorica segmentata'. Mistake in detail.

SCENE XLIX FIGURE 22
Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is

absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is practical.

SCENE XLIX FIGURE 23

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XLIX FIGURE 24

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 25

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 26

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XLIX FIGURE 27

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 28

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Sword is present.

SCENE XLIX FIGURE 29

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE XLIX FIGURE 30

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE XLIX FIGURE 31

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is present.

SCENE L FIGURE 1

Citizen figure type. Animal skin. Mistake in figure type characteristics.

SCENE L FIGURE 2

Citizen figure type. Animal skin. 'Lorica segmentata'. Mistake in figure type characteristics.

SCENE L FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is present.

SCENE L FIGURE 4

Citizen figure type. Animal skin. 'Lorica segmentata'. Baldric is present. Mistake in figure type characteristics.

SCENE L FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Rectangular shield rear view or obscured. Mistake in detail.

SCENE L FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Rectangular shield rear

view or obscured.

SCENE L FIGURE 7

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE L FIGURE 8

Trajan. Bare head. Muscled cuirass. Cloak is a fringed sagum.
Additional detail on mail. Mistake in detail.

SCENE L FIGURE 9

Officer. Bare head. Muscled cuirass. Mail chiselling is absent. Cloak is a fringed sagum.

SCENE LI FIGURE 1

Auxiliary infantryman. Bare head.

SCENE LI FIGURE 2

Citizen figure type. Bare head.

SCENE LI FIGURE 3

Auxiliary infantryman. Bare head.

SCENE LI FIGURE 4

Auxiliary infantryman. Bare head.

SCENE LI FIGURE 5

Auxiliary infantryman. Bare head.

SCENE LI FIGURE 6

Citizen figure type. Bare head.

SCENE LI FIGURE 7

Standard bearer. Bare head.

SCENE LI FIGURE 8

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield rear view or obscured.

SCENE LI FIGURE 9

Auxiliary infantryman. Bare head. Cloak is a sagum.

SCENE LI FIGURE 10

Standard bearer. Animal skin.

SCENE LI FIGURE 11

Auxiliary infantryman. Bare head. Oval shield rear view or obscured.

SCENE LI FIGURE 12

Standard bearer. Animal skin.

SCENE LI FIGURE 13

Trajan. Bare head. Cloak is a fringed sagum.

SCENE LI FIGURE 14

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Sword is absent. Cloak is a sagum. Mail edging is shallow and

rounded lappets.

SCENE LI

FIGURE 15

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE LI

FIGURE 16

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is a fringed sagum.

SCENE LI

FIGURE 17

Auxiliary infantryman. Bare head. Over-tunic. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Mail edging is ragged, very small lappets, or fringed. Cingulum present when unnecessary. Mistake in detail.

SCENE LI

FIGURE 18

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE LI

FIGURE 19

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE LI

FIGURE 20

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LI

FIGURE 21

Citizen figure type. Bare head.

SCENE LI

FIGURE 22

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LI

FIGURE 23

Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE LI

FIGURE 24

Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE LI

FIGURE 25

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LI

FIGURE 26

Citizen figure type. Bare head. 'Lorica segmentata' type 14. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE LI

FIGURE 27

Citizen figure type. Bare head. 'Lorica segmentata' type 14. Cingulum is present. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LI

FIGURE 28

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LI

FIGURE 29

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LII

FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LII

FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata' type 14. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE LII

FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE LII

FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 14. Cingulum is present. Baldric is absent. Sword is absent.

SCENE LII

FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE LII

FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is present. Sword is present. Additional detail on scabbard (suspension details or decoration).

SCENE LII

FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 14. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE LII

FIGURE 8

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LII

FIGURE 9

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LII

FIGURE 10

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LII

FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LII

FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is present. Baldric is present. Sword is present.

SCENE LII

FIGURE 13

Dacian. Bare head. Tunic.

SCENE LII

FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE LII FIGURE 15

Dacian. Bare head.

SCENE LII FIGURE 16

Dacian. Bare head. Tunic.

SCENE LII FIGURE 17

Citizen figure type. Bare head.

SCENE LII FIGURE 18

Dacian. Bare head.

SCENE LII FIGURE 19

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is present. Baldric is present. Sword is present.

SCENE LIII FIGURE 1

Unarmoured soldier. Bare head. Tunic. Cloak is absent.

SCENE LIII FIGURE 2

Unarmoured soldier. Bare head. Tunic. Cloak is absent.

SCENE LIII FIGURE 3

Unarmoured soldier. Bare head. Tunic. Cloak is absent.

SCENE LIII FIGURE 4

Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE LIII FIGURE 5

Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE LIII FIGURE 6

Sacrificial attendant. Laureate head. Bare torso.

SCENE LIII FIGURE 7

Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE LIII FIGURE 8

Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE LIII FIGURE 9

Sacrificial attendant. Laureate head. Bare torso.

SCENE LIII FIGURE 10

Sacrificial attendant. Laureate head. Bare torso.

SCENE LIII FIGURE 11

Officer. Laureate head. Tunic. Cloak is a sagum.

SCENE LIII FIGURE 12

Sacrificial attendant. Laureate head. Bare torso.

SCENE LIII FIGURE 13

Trajan. Veiled head. Toga.

SCENE LIII FIGURE 14
Sacrificial attendant. Bare head. Tunic.

SCENE LIII FIGURE 15
Sacrificial attendant. Bare head. Tunic.

SCENE LIII FIGURE 16
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent.

SCENE LIII FIGURE 17
Sacrificial attendant. Laureate head. Bare torso.

SCENE LIII FIGURE 18
Sacrificial attendant. Bare head. Tunic.

SCENE LIII FIGURE 19
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE LIII FIGURE 20
Sacrificial attendant. Laureate head. Knotted tunic. Cloak is absent.

SCENE LIII FIGURE 21
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE LIII FIGURE 22
Unarmoured soldier. Laureate head. Cloak is a sagum.

SCENE LIII FIGURE 23
Musician. Laureate head. Tunic. Cloak is a fringed sagum.

SCENE LIII FIGURE 24
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE LIII FIGURE 25
Unarmoured soldier. Laureate head. Cloak is a sagum.

SCENE LIII FIGURE 26
Unarmoured soldier. Laureate head. Tunic. Cloak is a fringed sagum.

SCENE LIII FIGURE 27
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent.

SCENE LIII FIGURE 28
Unarmoured soldier. Laureate head. Cloak is a sagum.

SCENE LIII FIGURE 29
Unarmoured soldier. Laureate head. Tunic. Cloak is a fringed sagum.

SCENE LIII FIGURE 30
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 31
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 32
Unarmoured soldier. Laureate head. Cloak is absent.

SCENE LIII FIGURE 33
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 34
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 35
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 36
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 37
Unarmoured soldier. Bare head. Tunic. Cloak is absent.

SCENE LIII FIGURE 38
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 39
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 40
Unarmoured soldier. Bare head. Tunic. Cloak is absent.

SCENE LIII FIGURE 41
Unarmoured soldier. Bare head.

SCENE LIII FIGURE 42
Unarmoured soldier. Bare head. Tunic. Cloak is absent.

SCENE LIV FIGURE 1
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Sword is absent. Cloak is absent. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE LIV FIGURE 2
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LIV FIGURE 3
Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE LIV FIGURE 4
Officer. Bare head. Cloak is a sagum.

SCENE LIV

FIGURE 5

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE LIV

FIGURE 6

Trajan. Bare head. Muscled cuirass. Baldric is absent. Cloak is a sagum.

SCENE LIV

FIGURE 7

Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with Roman method of carriage. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE LIV

FIGURE 8

Citizen figure type. Helmet type 4. 'Lorica segmentata'.

SCENE LIV

FIGURE 9

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Cingulum present when unnecessary).

SCENE LIV

FIGURE 10

Citizen figure type. Helmet type 4. 'Lorica segmentata'.

SCENE LIV

FIGURE 11

Citizen figure type. Helmet type 4. 'Lorica segmentata'.

SCENE LIV

FIGURE 12

Citizen figure type. Helmet type 4. 'Lorica segmentata'.

SCENE LIV

FIGURE 13

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent.

SCENE LIV

FIGURE 14

Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with Hellenistic method of carriage. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE LIV

FIGURE 15

Citizen figure type. Helmet type 4. 'Lorica segmentata'. Baldric is absent.

SCENE LIV

FIGURE 16

Citizen figure type. Helmet type 4. 'Lorica segmentata'. Baldric is absent.

SCENE LIV

FIGURE 17

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE LIV FIGURE 18
Citizen figure type. Helmet type 4. 'Lorica segmentata'.

SCENE LIV FIGURE 19
Citizen figure type. Helmet type 4. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE LIV FIGURE 20
Auxiliary infantryman. Helmet type 33. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with tendrils blazon. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE LIV FIGURE 21
Auxiliary infantryman. Helmet type 3. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE LIV FIGURE 22
Auxiliary infantryman. Helmet type 3. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent. Oval shield with rings blazon.

SCENE LIV FIGURE 23
Auxiliary infantryman. Helmet type 3. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with palmettes blazon.

SCENE LV FIGURE 1
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LV FIGURE 2
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LV FIGURE 3
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield rear view or obscured.

SCENE LV FIGURE 4
Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE LV FIGURE 5
Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE LV FIGURE 6
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent.

SCENE LV FIGURE 7
Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LV FIGURE 8
Citizen figure type. Bare head. 'Lorica segmentata' type 10. Cingulum is absent. Baldric is absent. Rectangular shield with wreath blazon.

SCENE LV FIGURE 9
Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Additional detail on 'lorica segmentata'.

SCENE LV FIGURE 10
Citizen figure type. Bare head. 'Lorica segmentata' type 10. Cingulum is absent. Apron is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LV FIGURE 11
Citizen figure type. Bare head. 'Lorica segmentata' type 10. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LVI FIGURE 1
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE LVI FIGURE 2
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE LVI FIGURE 3
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE LVI FIGURE 4
Citizen figure type. Bare head. 'Lorica segmentata' type 18. Baldric is present.

SCENE LVI FIGURE 5
Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is absent. Apron is absent. Baldric is present. Sword is absent.

SCENE LVI FIGURE 6
Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is absent. Apron is absent. Baldric is absent.

SCENE LVI FIGURE 7
Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is present. Apron is present. Baldric is present. Sword is absent.

SCENE LVI FIGURE 8
Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE LVI FIGURE 9
Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is present. Baldric is absent. Sword is absent.

SCENE LVI

FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is present.

SCENE LVII

FIGURE 1

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Horse harness is impractical. Mail edging is shallow and rounded lappets. Mistake in detail.

SCENE LVII

FIGURE 2

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical. Mistake in pose.

SCENE LVII

FIGURE 3

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE LVII

FIGURE 4

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Horse harness is impractical. Mistake in detail.

SCENE LVII

FIGURE 5

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is zig-zag.

SCENE LVII

FIGURE 6

Auxiliary infantryman. Helmet type 26. Cloak is a sagum.

SCENE LVII

FIGURE 7

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is a fringed sagum. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE LVIII

FIGURE 1

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Sword is absent. Cloak is absent. Oval shield is unfinished. Horse harness is impractical. Mistake in detail.

SCENE LVIII

FIGURE 2

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield rear view or obscured. Horse harness is practical.

SCENE LVIII

FIGURE 3

Trajan. Bare head. Muscled cuirass. Cloak is a sagum. Horse harness is impractical. Mistake in detail.

SCENE LIX

FIGURE 1

Dacian. Bare head. Tunic.

SCENE LIX FIGURE 2

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LIX FIGURE 3

Dacian. Bare head. Tunic.

SCENE LIX FIGURE 4

Dacian. Bare head. Tunic.

SCENE LIX FIGURE 5

Dacian. Bare head. Tunic.

SCENE LIX FIGURE 6

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum.

SCENE LIX FIGURE 7

Dacian. Bare head.

SCENE LIX FIGURE 8

Dacian. Bare head. Tunic.

SCENE LIX FIGURE 9

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Mistake in detail.

SCENE LIX FIGURE 10

Dacian. Bare head. Tunic.

SCENE LIX FIGURE 11

Dacian. Bare head. Tunic.

SCENE LX FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is present.

SCENE LX FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LX FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Baldric is absent.

SCENE LX FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Baldric is absent. Sword is absent.

SCENE LX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE LX FIGURE 6

Citizen figure type. Helmet type 22. 'Lorica segmentata' type 5. Baldric is absent.

SCENE LX FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE LX FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is present. Sword is present.

SCENE LX FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Baldric is absent.

SCENE LX FIGURE 10

Citizen figure type. Helmet type 22. 'Lorica segmentata' type 5. Baldric is absent. Rectangular shield rear view or obscured.

SCENE LX FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent.

SCENE LX FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Baldric is present.

SCENE LX FIGURE 13

Citizen figure type. Helmet type 20. 'Lorica segmentata'. Baldric is absent.

SCENE LX FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE LX FIGURE 15

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE LX FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Baldric is absent.

SCENE LX FIGURE 17

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is present. Mistake in detail.

SCENE LX FIGURE 18

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent. Mistake in pose.

SCENE LX FIGURE 19

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Mistake in pose.

SCENE LXI FIGURE 1

Officer. Helmet type 16. Muscled cuirass. Cloak is a sagum. Mistake in figure type characteristics.

SCENE LXI

FIGURE 2

Officer. Helmet type 16. Mistake in figure type characteristics.

SCENE LXI

FIGURE 3

Trajan. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXI

FIGURE 4

Officer. Bare head.

SCENE LXI

FIGURE 5

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXI

FIGURE 6

Dacian. Pilleus. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE LXI

FIGURE 7

Musician. Animal skin. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE LXI

FIGURE 8

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXI

FIGURE 9

Unidentifiable figure. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mistake in detail.

SCENE LXI

FIGURE 10

Musician. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in pose.

SCENE LXI

FIGURE 11

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent.

SCENE LXI

FIGURE 12

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE LXI

FIGURE 13

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Tunic with tufts.

SCENE LXI

FIGURE 14

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Tunic with tufts.

SCENE LXI

FIGURE 15

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE LXI

FIGURE 16

Citizen figure type. Helmet type 14. 'Lorica segmentata'.

SCENE LXI FIGURE 17

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is absent.

SCENE LXI FIGURE 18

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Tunic with tufts.

SCENE LXI FIGURE 19

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Rectangular shield rear view or obscured. Tunic with tufts. Mistake in detail.

SCENE LXII FIGURE 1

Citizen figure type. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXII FIGURE 2

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is present. Additional detail on baldric.

SCENE LXII FIGURE 3

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is present. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on 'lorica segmentata'.

SCENE LXII FIGURE 4

Citizen figure type. Helmet type 18. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE LXII FIGURE 5

Citizen figure type. Helmet type 14. 'Lorica segmentata'.

SCENE LXII FIGURE 6

Citizen figure type. Helmet type 18. 'Lorica segmentata'. Baldric is absent.

SCENE LXII FIGURE 7

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE LXII FIGURE 8

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is absent.

SCENE LXII FIGURE 9

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on baldric. Mistake in detail.

SCENE LXII FIGURE 10

Citizen figure type. Helmet type 13. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

Rectangular shield with wreath blazon. Additional detail on baldric.

SCENE LXII FIGURE 11

Citizen figure type. Helmet type 14. 'Lorica segmentata'.

SCENE LXII FIGURE 12

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 12. Cingulum is present. Apron is absent. Baldric is present. Rectangular shield with wreath blazon. Additional detail on baldric.

SCENE LXII FIGURE 13

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE LXII FIGURE 14

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a fringed sagum. Oval shield with Roman blazon. Mail edging is zig-zag.

SCENE LXII FIGURE 15

Citizen figure type. Helmet type 13. 'Lorica segmentata'. Baldric is present.

SCENE LXII FIGURE 16

Citizen figure type. Helmet type 13. 'Lorica segmentata'.

SCENE LXII FIGURE 17

Citizen figure type. Helmet type 13. 'Lorica segmentata'. Sword is absent.

SCENE LXII FIGURE 18

Citizen figure type. Helmet type 13. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield rear view or obscured.

SCENE LXII FIGURE 19

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE LXII FIGURE 20

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is a fringed sagum. Oval shield with wreath blazon.

SCENE LXIII FIGURE 1

Citizen figure type. Helmet type 14. Baldric is present.

SCENE LXIII FIGURE 2

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXIII FIGURE 3
Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is present.

SCENE LXIII FIGURE 4
Citizen figure type. Helmet type 14. 'Lorica segmentata'.

SCENE LXIII FIGURE 5
Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is present.

SCENE LXIII FIGURE 6
Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on 'lorica segmentata'.

SCENE LXIII FIGURE 7
Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is present. Rectangular shield rear view or obscured. Additional detail on baldric.

SCENE LXIII FIGURE 8
Citizen figure type. Helmet type 14. 'Lorica segmentata'.

SCENE LXIII FIGURE 9
Citizen figure type. Helmet type 14. 'Lorica segmentata'.

SCENE LXIII FIGURE 10
Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE LXIII FIGURE 11
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE LXIII FIGURE 12
Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent.

SCENE LXIII FIGURE 13
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE LXIII FIGURE 14
Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE LXIII FIGURE 15
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE LXIII FIGURE 16

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXIII FIGURE 17

Trajan. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXIII FIGURE 18

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXIV FIGURE 1

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 2

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 3

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 4

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 5

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 6

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 7

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 8

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 9

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 10

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 11

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 12

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 13

Dacian. Pilleus. Tunic.

SCENE LXIV FIGURE 14

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 15

Moorish cavalryman. Bare head. Knotted tunic.

SCENE LXIV FIGURE 16

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with

tendrils blazon.

SCENE LXIV FIGURE 17

Dacián. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXIV FIGURE 18

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE LXIV FIGURE 19

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE LXIV FIGURE 20

Dacian. Bare head. Tunic.

SCENE LXIV FIGURE 21

Dacian. Bare head. Tunic.

SCENE LXIV FIGURE 22

Dacian. Pilleus. Tunic.

SCENE LXIV FIGURE 23

Dacian. Pilleus. Tunic. Oval shield rear view or obscured.

SCENE LXIV FIGURE 24

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LXIV FIGURE 25

Dacian. Pilleus.

SCENE LXIV FIGURE 26

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LXIV FIGURE 27

Dacian. Pilleus. Tunic. Oval shield rear view or obscured.

SCENE LXIV FIGURE 28

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE LXIV FIGURE 29

Dacian. Pilleus. Tunic.

SCENE LXIV FIGURE 30

Dacian. Pilleus. Tunic.

SCENE LXIV FIGURE 31

Dacian. Bare head. Tunic.

SCENE LXIV FIGURE 32

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.

SCENE LXIV FIGURE 33

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE LXIV FIGURE 34

Dacian. Pilleus.

SCENE LXIV FIGURE 35

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE LXIV FIGURE 36

Dacian. Bare head. Oval shield with piles blazon.

SCENE LXIV FIGURE 37

Dacian. Bare head. Tunic.

SCENE LXIV FIGURE 38

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LXV FIGURE 1

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is zig-zag.

SCENE LXV FIGURE 2

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with Roman blazon. Mail edging is zig-zag.

SCENE LXV FIGURE 3

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE LXV FIGURE 4

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield rear view or obscured.

SCENE LXV FIGURE 5

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent.

SCENE LXV FIGURE 6

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with Roman method of carriage. Mail edging is zig-zag.

SCENE LXV FIGURE 7

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE LXV FIGURE 8

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE LXV FIGURE 9

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling

is absent. Baldric is present. Cloak is absent. Oval shield with Hellenistic method of carriage.

SCENE LXV

FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent.

SCENE LXV

FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXV

FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXV

FIGURE 13

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent.

SCENE LXV

FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXV

FIGURE 15

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXV

FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata' type 25. Cingulum is present. Baldric is absent.

SCENE LXV

FIGURE 17

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Cloak is a sagum.

SCENE LXV

FIGURE 18

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXV

FIGURE 19

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Baldric is absent.

SCENE LXV

FIGURE 20

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is present. Baldric is absent. Sword is absent.

SCENE LXV

FIGURE 21

Citizen figure type. Bare head. 'Lorica segmentata' type 23.

SCENE LXV

FIGURE 22

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Baldric is absent.

SCENE LXV

FIGURE 23

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is absent.

SCENE LXV

FIGURE 24

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE LXV

FIGURE 25

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Baldric is absent.

SCENE LXV

FIGURE 26

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is present. Apron is present. Baldric is present. Sword is absent. Additional detail on baldric.

SCENE LXV

FIGURE 27

Citizen figure type. Bare head. 'Lorica segmentata' type 25. Baldric is absent.

SCENE LXV

FIGURE 28

Citizen figure type. Bare head. 'Lorica segmentata' type 25. Cingulum is absent. Apron is absent. Baldric is present. Sword is absent. Additional detail on baldric.

SCENE LXVI

FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is present. Baldric is present. Sword is absent. Additional detail on baldric.

SCENE LXVI

FIGURE 2

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXVI

FIGURE 3

Trajan. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXVI

FIGURE 4

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXVI

FIGURE 5

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE LXVI

FIGURE 6

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is present.

SCENE LXVI

FIGURE 7

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE LXVI

FIGURE 8

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 25. Cingulum is present. Apron is present.

SCENE LXVI

FIGURE 9

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 24. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE LXVI

FIGURE 10

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured. Additional detail on 'lorica segmentata'.

SCENE LXVI FIGURE 11

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE LXVI FIGURE 12

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield rear view or obscured. Additional detail on 'lorica segmentata'.

SCENE LXVI FIGURE 13

Citizen figure type. Helmet type 14.

SCENE LXVI FIGURE 14

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 24. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on baldric.

SCENE LXVI FIGURE 15

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on 'lorica segmentata'.

SCENE LXVI FIGURE 16

Citizen figure type. Helmet type 14.

SCENE LXVI FIGURE 17

Citizen figure type. Helmet type 14.

SCENE LXVI FIGURE 18

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on baldric.

SCENE LXVI FIGURE 19

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is present. Rectangular shield rear view or obscured.

SCENE LXVI FIGURE 20

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE LXVI FIGURE 21

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXVI FIGURE 22

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Baldric is present. Rectangular shield rear view or obscured. Additional detail on baldric.

SCENE LXVI FIGURE 23

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Rectangular

shield with thunderbolts and wings blazon.

SCENE LXVI

FIGURE 24

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Additional detail on 'lorica segmentata'.

SCENE LXVI

FIGURE 25

Archer. Helmet type 30. Lorica squamata. Baldric is absent.

SCENE LXVI

FIGURE 26

Archer. Helmet type 30. Lorica squamata. Baldric is absent.

SCENE LXVI

FIGURE 27

Archer. Helmet type 30. Lorica squamata.

SCENE LXVI

FIGURE 28

Slinger. Bare head. Tunic. Sword is absent. Cloak is absent.

SCENE LXVI

FIGURE 29

Archer. Helmet type 30. Lorica squamata.

SCENE LXVI

FIGURE 30

Auxiliary infantryman. Helmet type 14. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with Roman blazon. Additional detail on baldric.

SCENE LXVI

FIGURE 31

Slinger. Bare head. Tunic. Baldric is absent. Sword is present. Cloak is a sagum. Oval shield with Roman method of carriage.

SCENE LXVI

FIGURE 32

Auxiliary infantryman. Helmet type 14. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield rear view or obscured.

SCENE LXVI

FIGURE 33

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Oval shield with Hellenistic method of carriage.

SCENE LXVI

FIGURE 34

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Additional detail on baldric.

SCENE LXVI

FIGURE 35

Bare-chested irregular. Bare head. Bare torso. Baldric is present. Oval shield with Hellenistic method of carriage.

SCENE LXVI

FIGURE 36

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LXVI

FIGURE 37

Dacian. Bare head. Bare torso. Oval shield is unfinished. Mistake in

detail.

SCENE LXVI FIGURE 38

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Oval shield with Roman method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE LXVI FIGURE 39

Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE LXVI FIGURE 40

Dacian. Pilleus. Tunic. Oval shield with small motifs.

SCENE LXVI FIGURE 41

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE LXVI FIGURE 42

Dacian. Bare head. Tunic.

SCENE LXVI FIGURE 43

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE LXVI FIGURE 44

Dacian. Bare head. Tunic.

SCENE LXVI FIGURE 45

Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE LXVI FIGURE 46

Dacian. Pilleus. Tunic.

SCENE LXVI FIGURE 47

Dacian. Bare head.

SCENE LXVI FIGURE 48

Dacian. Bare head. Tunic.

SCENE LXVI FIGURE 49

Dacian. Bare head.

SCENE LXVI FIGURE 50

Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with rings blazon.

SCENE LXVI FIGURE 51

Dacian. Bare head. Oval shield is unfinished. Mistake in detail.

SCENE LXVI FIGURE 52

Dacian. Pilleus. Oval shield is unfinished. Mistake in detail.

SCENE LXVI FIGURE 53

Dacian. Bare head. Tunic.

SCENE LXVI FIGURE 54

Dacian. Bare head.

SCENE LXVI FIGURE 55

Dacian. Bare head.

SCENE LXVII FIGURE 1

Dacian. Pilleus. Tunic. Sword is present. Cloak is a fringed sagum.
Straight sword present on hip.

SCENE LXVII FIGURE 2

Dacian. Pilleus. Oval shield is unfinished. Mistake in detail.

SCENE LXVII FIGURE 3

Dacian. Pilleus. Cloak is a fringed sagum. Oval shield is unfinished.
Mistake in detail.

SCENE LXVII FIGURE 4

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE LXVII FIGURE 5

Dacian. Bare head.

SCENE LXVII FIGURE 6

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE LXVII FIGURE 7

Dacian. Bare head. Tunic.

SCENE LXVII FIGURE 8

Dacian. Bare head. Tunic.

SCENE LXVII FIGURE 9

Dacian. Bare head. Tunic. Sword is present. Cloak is a fringed sagum.
Straight sword present on hip.

SCENE LXVIII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is
present. Baldric is absent. Sword is absent.

SCENE LXVIII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata' type 24. Cingulum
is present. Apron is absent. Baldric is absent. Sword is present.

SCENE LXVIII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXVIII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 22. Cingulum
is absent.

SCENE LXVIII FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata' type 19. Cingulum
is present. Baldric is absent. Sword is absent. Mistake in pose.

SCENE LXVIII FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 19. Cingulum is present. Baldric is absent.

SCENE LXVIII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXVIII FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Mistake in pose.

SCENE LXVIII FIGURE 9

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is zig-zag. Mistake in pose.

SCENE LXVIII FIGURE 10

Officer. Bare head. Tunic. Cloak is a sagum. Mistake in pose.

SCENE LXVIII FIGURE 11

Auxiliary infantryman. Helmet type 26.

SCENE LXVIII FIGURE 12

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXVIII FIGURE 13

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Mail edging is zig-zag. Additional detail on baldric.

SCENE LXVIII FIGURE 14

Officer. Bare head. Cloak is a sagum.

SCENE LXVIII FIGURE 15

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent.

SCENE LXVIII FIGURE 16

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXVIII FIGURE 17

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with Hellenistic method of carriage. Tunic is fringed. Mail edging is zig-zag. Additional detail on baldric.

SCENE LXVIII FIGURE 18

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXVIII FIGURE 19

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Additional detail on baldric.

SCENE LXVIII FIGURE 20

Dacian. Pilleus. Tunic.

SCENE LXVIII FIGURE 21

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield with rings blazon.

SCENE LXIX FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE LXIX FIGURE 2

Auxiliary infantryman. Helmet type 22.

SCENE LXIX FIGURE 3

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE LXIX FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent. Sword is absent.

SCENE LXIX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXIX FIGURE 6

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE LXIX FIGURE 7

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE LXIX FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Apron is present. Baldric is absent.

SCENE LXIX FIGURE 9

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE LXIX FIGURE 10

Auxiliary infantryman. Helmet type 22.

SCENE LXIX FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Baldric is absent. Sword is present.

SCENE LXIX FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is absent. Baldric is absent.

SCENE LXIX FIGURE 13

Auxiliary infantryman. Helmet type 22.

SCENE LXIX FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata' type 26. Cingulum is present. Baldric is absent. Sword is present.

SCENE LXIX FIGURE 15

Auxiliary infantryman. Helmet type 22.

SCENE LXIX FIGURE 16

Citizen figure type. Helmet type 22. 'Lorica segmentata' type 26. Cingulum is present. Baldric is absent.

SCENE LXIX FIGURE 17

Auxiliary infantryman. Helmet type 22. Cloak is absent. Oval shield with Hellenistic method of carriage.

SCENE LXIX FIGURE 18

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE LXIX FIGURE 19

Auxiliary infantryman. Helmet type 22.

SCENE LXIX FIGURE 20

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Oval shield rear view or obscured.

SCENE LXX FIGURE 1

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE LXX FIGURE 2

Slinger. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a sagum.

SCENE LXX FIGURE 3

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present.

SCENE LXX FIGURE 4

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with small motifs.

SCENE LXX FIGURE 5

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXX FIGURE 6

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is absent. Oval shield with small motifs.

SCENE LXX FIGURE 7

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present.

SCENE LXX FIGURE 8

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with small motifs.

SCENE LXX FIGURE 9

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with small motifs.

SCENE LXX FIGURE 10

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present.

SCENE LXX FIGURE 11

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXX FIGURE 12

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with small motifs.

SCENE LXX FIGURE 13

Dacian. Bare head. Tunic. Cloak is absent. Oval shield rear view or obscured.

SCENE LXX FIGURE 14

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with small motifs.

SCENE LXX FIGURE 15

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present.

SCENE LXX FIGURE 16

Archer. Helmet type 29. Lorica hamata. Mail chiselling is present on cast. Baldric is present.

SCENE LXX FIGURE 17

Dacian. Bare head. Tunic. Oval shield with small motifs.

SCENE LXX FIGURE 18

Dacian. Bare head. Tunic.

SCENE LXX FIGURE 19

Dacian. Bare head. Tunic. Oval shield with small motifs.

SCENE LXX FIGURE 20

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE LXX FIGURE 21

Dacian. Bare head. Tunic.

SCENE LXX FIGURE 22

Dacian. Bare head. Tunic.

SCENE LXX FIGURE 23

Dacian. Bare head.

SCENE LXX FIGURE 24

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE LXX FIGURE 25

Dacian. Bare head.

SCENE LXX FIGURE 26

Dacian. Bare head.

SCENE LXX FIGURE 27

Dacian. Bare head. Tunic.

SCENE LXX FIGURE 28

Dacian. Bare head.

SCENE LXX FIGURE 29

Dacian. Bare head. Tunic. Cloak is absent.

SCENE LXX FIGURE 30

Dacian. Bare head.

SCENE LXX FIGURE 31

Dacian. Bare head. Tunic.

SCENE LXX FIGURE 32

Dacian. Bare head.

SCENE LXXI FIGURE 1

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXI FIGURE 2

Dacian. Pilleus. Tunic.

SCENE LXXI FIGURE 3

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXI FIGURE 4

Dacian. Bare head. Tunic.

SCENE LXXI FIGURE 5

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE LXXI FIGURE 6

Citizen figure type. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXI FIGURE 7

Citizen figure type. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXI FIGURE 8

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LXXI FIGURE 9

Dacian. Bare head. Tunic. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXI FIGURE 10

Citizen figure type. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXI FIGURE 11

Citizen figure type. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXI FIGURE 12

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXI FIGURE 13

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXI FIGURE 14

Citizen figure type. 'Lorica segmentata' type 23. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXI FIGURE 15

Citizen figure type. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXI FIGURE 16

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag. Additional detail on baldric.

SCENE LXXI FIGURE 17

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is absent. Oval shield is unfinished. Mail edging is zig-zag. Additional detail on mail. Mistake in detail.

SCENE LXXI FIGURE 18

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with small motifs. Mail edging is zig-zag. Additional detail on mail.

SCENE LXXI FIGURE 19

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE LXXI FIGURE 20

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Mail edging is zig-zag. Additional detail on mail.

SCENE LXXII FIGURE 1

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXII FIGURE 2

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXII FIGURE 3

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXII FIGURE 4

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield is unfinished. Tunic is fringed. Mail edging is zig-zag. Additional detail on mail. Mistake in detail.

SCENE LXXII FIGURE 5

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with wreath blazon. Tunic is fringed. Mail edging is zig-zag. Additional detail on mail.

SCENE LXXII FIGURE 6

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE LXXII FIGURE 7

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with wreath blazon. Additional detail on 'lorica segmentata'. Mistake in detail.

SCENE LXXII FIGURE 8

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on 'lorica segmentata'. Mistake in detail.

SCENE LXXII FIGURE 9

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXII FIGURE 10

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 7. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXII FIGURE 11

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXII FIGURE 12

Dacian. Bare head.

SCENE LXXII FIGURE 13

Dacian. Bare head.

SCENE LXXII FIGURE 14

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 18. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Oval shield rear view or obscured. Mistake in figure type characteristics.

SCENE LXXII FIGURE 15

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent. Oval shield with Roman method of carriage. Additional detail on 'lorica segmentata'. Mistake in figure type characteristics.

SCENE LXXII FIGURE 16

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE LXXII FIGURE 17

Slinger. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a sagum. Mistake in detail.

SCENE LXXII FIGURE 18

Dacian. Bare head. Tunic. Cloak is absent. Oval shield is unfinished. Mistake in detail.

SCENE LXXII FIGURE 19

Dacian. Bare head. Tunic.

SCENE LXXII FIGURE 20

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is absent. Oval shield with Roman method of carriage. Mistake in pose.

SCENE LXXII FIGURE 21

Dacian. Bare head. Tunic. Cloak is absent. Oval shield with palmettes blazon.

SCENE LXXII FIGURE 22

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield is unfinished. Mistake in detail.

SCENE LXXII FIGURE 23

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE LXXII FIGURE 24

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with wreath blazon. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail. Mistake in detail.

SCENE LXXII FIGURE 25

Dacian. Bare head.

SCENE LXXII FIGURE 26

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LXXII FIGURE 27

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with rings blazon. Additional detail on mail.

SCENE LXXII FIGURE 28

Dacian. Bare head. Tunic. Cloak is absent. Oval shield with rings blazon. Mistake in pose.

SCENE LXXII FIGURE 29

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is absent. Oval shield with Hellenistic method of carriage. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE LXXII FIGURE 30

Dacian. Pilleus. Tunic. Cloak is absent. Oval shield rear view or obscured. Mistake in figure type characteristics.

SCENE LXXII FIGURE 31

Dacian. Bare head. Tunic.

SCENE LXXII FIGURE 32

Dacian. Bare head. Tunic.

SCENE LXXII FIGURE 33

Dacian. Bare head. Tunic. Cloak is absent. Oval shield with tendrils blazon. Mistake in pose.

SCENE LXXII FIGURE 34

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE LXXII FIGURE 35

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE LXXIII FIGURE 1

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE LXXIII FIGURE 2

Officer. Bare head. Cloak is a sagum.

SCENE LXXIII FIGURE 3

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXIII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE LXXIII FIGURE 5

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 6

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXIII FIGURE 7

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 8

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata' type 15. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE LXXIII FIGURE 10

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 11

Citizen figure type. 'Lorica segmentata' type 15. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 12

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 13

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Baldric is absent.

SCENE LXXIII FIGURE 14

Citizen figure type. 'Lorica segmentata'.

SCENE LXXIII FIGURE 15

Citizen figure type. 'Lorica segmentata'.

SCENE LXXIII FIGURE 16

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 17

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is absent. Baldric is absent.

SCENE LXXIII FIGURE 18

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE LXXIII FIGURE 19

Citizen figure type. Helmet type 11. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE LXXIII FIGURE 20

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent.

SCENE LXXIV FIGURE 1

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with wreath blazon.

SCENE LXXIV FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE LXXIV FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE LXXIV FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXXIV FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE LXXIV FIGURE 6

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Horse harness is practical. Mail edging is zig-zag.

SCENE LXXIV FIGURE 7

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Tunic with tufts. Mail edging is zig-zag.

SCENE LXXV FIGURE 1

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Mail edging is shallow and rounded lappets. Additional detail on baldric.

SCENE LXXV FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXXV FIGURE 3

Auxiliary infantryman. Helmet type 22. Cloak is a sagum.

SCENE LXXV FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXXV FIGURE 5

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling

is surviving on the shaft. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Roman method of carriage. Mail edging is shallow and rounded lappets.

SCENE LXXV FIGURE 6

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is present on cast. Sword is absent. Cloak is absent. Mail edging is shallow and rounded lappets.

SCENE LXXV FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXXV FIGURE 8

Auxiliary infantryman. Helmet type 22.

SCENE LXXV FIGURE 9

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXV FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXXV FIGURE 11

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXV FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE LXXV FIGURE 13

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is present on cast. Cingulum is present. Cloak is absent. Mail edging is shallow and rounded lappets.

SCENE LXXV FIGURE 14

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXV FIGURE 15

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXV FIGURE 16

Standard bearer. Animal skin.

SCENE LXXV FIGURE 17

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXV FIGURE 18

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXV FIGURE 19

Officer. Bare head. Sword is present.

SCENE LXXV FIGURE 20

Dacian. Pilleus. Tunic.

SCENE LXXV FIGURE 21

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE LXXV FIGURE 22

Standard bearer. Animal skin.

SCENE LXXV FIGURE 23

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cingulum is present. Baldric is absent. Cloak is absent. Mail edging is shallow and rounded lappets.

SCENE LXXV FIGURE 24

Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE LXXV FIGURE 25

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cingulum is present. Baldric is present. Cloak is absent. Mail edging is shallow and rounded lappets. Mistake in detail.

SCENE LXXV FIGURE 26

Dacian. Pilleus. Tunic. Oval shield rear view or obscured.

SCENE LXXV FIGURE 27

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Cloak is absent. Oval shield with Hellenistic method of carriage. Mail edging is zig-zag.

SCENE LXXV FIGURE 28

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent.

SCENE LXXV FIGURE 29

Dacian. Bare head. Tunic.

SCENE LXXV FIGURE 30

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with piles blazon.

SCENE LXXV FIGURE 31

Dacian. Bare head. Tunic.

SCENE LXXV FIGURE 32

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent.

SCENE LXXV FIGURE 33

Dacian. Pilleus. Tunic.

SCENE LXXV FIGURE 34

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE LXXV FIGURE 35

Dacian. Bare head.

SCENE LXXV FIGURE 36

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling

is absent. Baldric is present. Cloak is absent. Oval shield with piles blazon.

SCENE LXXV FIGURE 37
Dacian. Bare head. Tunic.

SCENE LXXV FIGURE 38
Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent.

SCENE LXXV FIGURE 39
Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield with Hellenistic method of carriage. Mail edging is shallow and rounded lappets.

SCENE LXXV FIGURE 40
Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with tendrils blazon.

SCENE LXXV FIGURE 41
Dacian. Bare head.

SCENE LXXV FIGURE 42
Dacian. Pilleus.

SCENE LXXV FIGURE 43
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE LXXV FIGURE 44
Dacian. Bare head.

SCENE LXXV FIGURE 45
Dacian. Pilleus.

SCENE LXXV FIGURE 46
Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXV FIGURE 47
Dacian. Bare head.

SCENE LXXV FIGURE 48
Dacian. Bare head.

SCENE LXXV FIGURE 49
Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE LXXV FIGURE 50
Dacian. Pilleus. Tunic.

SCENE LXXV FIGURE 51
Dacian. Bare head. Oval shield with piles blazon.

SCENE LXXV FIGURE 52
Dacian. Pilleus. Tunic. Oval shield with wreath blazon.

SCENE LXXV FIGURE 53

Dacian. Bare head. Tunic.

SCENE LXXV FIGURE 54

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXV FIGURE 55

Dacian. Pilleus.

SCENE LXXV FIGURE 56

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXV FIGURE 57

Dacian. Bare head.

SCENE LXXV FIGURE 58

Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE LXXV FIGURE 59

Dacian. Bare head. Oval shield rear view or obscured.

SCENE LXXV FIGURE 60

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE LXXV FIGURE 61

Dacian. Bare head. Tunic.

SCENE LXXV FIGURE 62

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE LXXV FIGURE 63

Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE LXXV FIGURE 64

Dacian. Bare head.

SCENE LXXV FIGURE 65

Dacian. Pilleus. Tunic.

SCENE LXXVI FIGURE 1

Dacian. Pilleus.

SCENE LXXVI FIGURE 2

Dacian. Bare head. Tunic.

SCENE LXXVI FIGURE 3

Dacian. Bare head.

SCENE LXXVI FIGURE 4

Dacian. Bare head. Tunic.

SCENE LXXVI FIGURE 5

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 6

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 7

Dacian. Bare head.

SCENE LXXVI FIGURE 8

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 9

Dacian. Bare head.

SCENE LXXVI FIGURE 10

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 11

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 12

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 13

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 14

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 15

Dacian. Bare head.

SCENE LXXVI FIGURE 16

Dacian civilian. Bare head.

SCENE LXXVI FIGURE 17

Dacian. Bare head. Tunic.

SCENE LXXVI FIGURE 18

Dacian. Bare head.

SCENE LXXVI FIGURE 19

Dacian. Bare head.

SCENE LXXVI FIGURE 20

Dacian civilian. Bare head.

SCENE LXXVII FIGURE 1

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE LXXVII FIGURE 2

Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE LXXVII FIGURE 3

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE LXXVII FIGURE 4

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent.

Baldric is absent. Cloak is absent.

SCENE LXXVII FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is plain (unfinished). Mistake in detail.

SCENE LXXVII FIGURE 6

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mistake in detail.

SCENE LXXVII FIGURE 7

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is a fringed sagum. Mail edging is shallow and rounded lappets.

SCENE LXXVII FIGURE 8

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Tunic is absent. Mail edging is plain (unfinished). Mistake in detail.

SCENE LXXVII FIGURE 9

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent.

SCENE LXXVII FIGURE 10

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE LXXVII FIGURE 11

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE LXXVII FIGURE 12

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Tunic is absent. Mail edging is plain (unfinished). Mistake in detail.

SCENE LXXVII FIGURE 13

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE LXXVII FIGURE 14

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent.

SCENE LXXVII FIGURE 15

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Tunic is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE LXXVII FIGURE 16

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE LXXVIII FIGURE 1
Deity. Oval shield with wreath blazon.

SCENE LXXIX FIGURE 1
Unidentifiable figure. Bare head. Tunic.

SCENE LXXIX FIGURE 2
Unidentifiable figure. Bare head.

SCENE LXXIX FIGURE 3
Classiarius. Bare head. Tunic.

SCENE LXXIX FIGURE 4
Classiarius. Bare head.

SCENE LXXIX FIGURE 5
Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE LXXIX FIGURE 6
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 7
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 8
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 9
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 10
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 11
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 12
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 13
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 14
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 15
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 16
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 17
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 18
Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 19

Classiarius. Bare head. Tunic.

SCENE LXXIX FIGURE 20

Classiarius. Bare head.

SCENE LXXIX FIGURE 21

Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 22

Classiarius. Bare head.

SCENE LXXIX FIGURE 23

Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 24

Classiarius. Bare head.

SCENE LXXIX FIGURE 25

Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 26

Classiarius. Bare head.

SCENE LXXIX FIGURE 27

Classiarius. Bare head. Knotted tunic.

SCENE LXXIX FIGURE 28

Classiarius. Bare head.

SCENE LXXIX FIGURE 29

Classiarius. Bare head. Knotted tunic.

SCENE LXXX FIGURE 1

Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 2

Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 3

Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 4

Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 5

Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 6

Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 7

Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 8
Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 9
Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 10
Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXX FIGURE 11
Roman civilian. Bare head. Cloak is a sagum.

SCENE LXXXI FIGURE 1
Unarmoured soldier. Bare head. Tunic.

SCENE LXXXI FIGURE 2
Unarmoured soldier. Bare head.

SCENE LXXXI FIGURE 3
Trajan. Bare head. Tunic.

SCENE LXXXI FIGURE 4
Unarmoured soldier. Bare head.

SCENE LXXXI FIGURE 5
Unarmoured soldier. Bare head. Tunic.

SCENE LXXXI FIGURE 6
Unarmoured soldier. Bare head.

SCENE LXXXI FIGURE 7
Unarmoured soldier. Bare head.

SCENE LXXXI FIGURE 8
Unarmoured soldier. Bare head. Tunic.

SCENE LXXXI FIGURE 9
Unarmoured soldier. Bare head. Tunic.

SCENE LXXXI FIGURE 10
Unarmoured soldier. Bare head. Tunic.

SCENE LXXXI FIGURE 11
Unarmoured soldier. Bare head. Tunic.

SCENE LXXXI FIGURE 12
Roman civilian. Bare head.

SCENE LXXXI FIGURE 13
Roman civilian. Bare head. Tunic.

SCENE LXXXI FIGURE 14
Roman civilian. Bare head.

SCENE LXXXI FIGURE 15
Roman civilian. Bare head.

SCENE LXXXI FIGURE 16
Roman civilian. Bare head. Tunic.

SCENE LXXXI FIGURE 17
Roman civilian. Bare head.

SCENE LXXXI FIGURE 18
Roman civilian. Bare head. Tunic.

SCENE LXXXI FIGURE 19
Roman civilian. Bare head.

SCENE LXXXI FIGURE 20
Roman civilian. Bare head. Tunic.

SCENE LXXXI FIGURE 21
Roman civilian. Bare head.

SCENE LXXXII FIGURE 1
Classiarius. Bare head.

SCENE LXXXII FIGURE 2
Classiarius. Bare head. Knotted tunic.

SCENE LXXXII FIGURE 3
Classiarius. Bare head. Knotted tunic.

SCENE LXXXII FIGURE 4
Classiarius. Bare head.

SCENE LXXXII FIGURE 5
Classiarius. Bare head. Knotted tunic.

SCENE LXXXIII FIGURE 1
Roman civilian. Bare head.

SCENE LXXXIII FIGURE 2
Roman civilian. Bare head.

SCENE LXXXIII FIGURE 3
Roman civilian. Bare head.

SCENE LXXXIII FIGURE 4
Roman civilian. Bare head.

SCENE LXXXIII FIGURE 5
Roman civilian. Bare head.

SCENE LXXXIII FIGURE 6
Roman civilian. Bare head.

SCENE LXXXIII FIGURE 7
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 8
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 9
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 10
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 11
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 12
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 13
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 14
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 15
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 16
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 17
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 18
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 19
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 20
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 21
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 22
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 23
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 24
Unarmoured soldier. Bare head.

SCENE LXXXIIII FIGURE 25
Roman civilian. Bare head.

SCENE LXXXIIII FIGURE 26
Roman civilian. Bare head.

SCENE LXXXIII FIGURE 27

Roman civilian. Bare head.

SCENE LXXXIII FIGURE 28

Roman civilian. Bare head.

SCENE LXXXIII FIGURE 29

Roman civilian. Bare head.

SCENE LXXXIII FIGURE 30

Roman civilian. Bare head.

SCENE LXXXIII FIGURE 31

Roman civilian. Bare head.

SCENE LXXXIV FIGURE 1

Unarmoured soldier. Bare head.

SCENE LXXXIV FIGURE 2

Unarmoured soldier. Bare head. Cloak is a sagum.

SCENE LXXXIV FIGURE 3

Unarmoured soldier. Bare head. Cloak is a sagum.

SCENE LXXXIV FIGURE 4

Unarmoured soldier. Bare head. Cloak is a sagum.

SCENE LXXXIV FIGURE 5

Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXIV FIGURE 6

Lictor. Bare head. Cloak is a sagum.

SCENE LXXXIV FIGURE 7

Unarmoured soldier. Bare head. Cloak is a sagum.

SCENE LXXXIV FIGURE 8

Lictor. Bare head.

SCENE LXXXIV FIGURE 9

Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXIV FIGURE 10

Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXIV FIGURE 11

Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXIV FIGURE 12

Unarmoured soldier. Bare head. Cloak is a sagum.

SCENE LXXXIV FIGURE 13

Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXV FIGURE 1
Unarmoured soldier. Bare head. Toga.

SCENE LXXXV FIGURE 2
Sacrificial attendant. Laureate head. Bare torso.

SCENE LXXXV FIGURE 3
Sacrificial attendant. Laureate head. Bare torso.

SCENE LXXXV FIGURE 4
Unarmoured soldier. Laureate head.

SCENE LXXXV FIGURE 5
Unarmoured soldier. Laureate head.

SCENE LXXXV FIGURE 6
Sacrificial attendant. Bare head. Bare torso.

SCENE LXXXV FIGURE 7
Unarmoured soldier. Laureate head. Toga.

SCENE LXXXV FIGURE 8
Sacrificial attendant. Laureate head. Bare torso.

SCENE LXXXV FIGURE 9
Unarmoured soldier. Laureate head.

SCENE LXXXV FIGURE 10
Unarmoured soldier. Laureate head.

SCENE LXXXV FIGURE 11
Unarmoured soldier. Laureate head.

SCENE LXXXV FIGURE 12
Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.

SCENE LXXXV FIGURE 13
Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 14
Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 15
Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.

SCENE LXXXV FIGURE 16
Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 17
Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 18
Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 19
Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.

SCENE LXXXV FIGURE 20

Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 21

Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 22

Unarmoured soldier. Laureate head.

SCENE LXXXV FIGURE 23

Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 24

Citizen figure type. Helmet type 1. 'Lorica segmentata' type 9. Rectangular shield with wreath blazon. Mistake in detail.

SCENE LXXXV FIGURE 25

Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.

SCENE LXXXV FIGURE 26

Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 27

Unarmoured soldier. Laureate head. Cloak is a paenula.

SCENE LXXXV FIGURE 28

Citizen figure type. Helmet type 1. 'Lorica segmentata' type 9. Rectangular shield with thunderbolts and wings blazon. Mistake in detail.

SCENE LXXXVI FIGURE 1

Unarmoured soldier. Bare head. Tunic. Apron is present. Sword is present. Cloak is a paenula. Oval shield rear view or obscured. Additional detail on scabbard (suspension details or decoration).

SCENE LXXXVI FIGURE 2

Unarmoured soldier. Bare head. Tunic.

SCENE LXXXVI FIGURE 3

Unarmoured soldier. Helmet type 33. Tunic. Apron is present. Sword is present. Cloak is a paenula.

SCENE LXXXVI FIGURE 4

Unarmoured soldier. Helmet type 33. Tunic. Apron is present. Sword is present. Cloak is a paenula. Oval shield with Roman blazon. Additional detail on scabbard (suspension details or decoration).

SCENE LXXXVI FIGURE 5

Standard bearer. Bare head.

SCENE LXXXVI FIGURE 6

Standard bearer. Bare head. Tunic. Cloak is a paenula.

SCENE LXXXVI FIGURE 7

Standard bearer. Bare head.

SCENE LXXXVI FIGURE 8
Unarmoured soldier. Bare head. Tunic. Cloak is a paenula.

SCENE LXXXVI FIGURE 9
Unarmoured soldier. Bare head. Cloak is a paenula.

SCENE LXXXVI FIGURE 10
Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXVI FIGURE 11
Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXVI FIGURE 12
Sacrificial attendant. Bare head. Tunic.

SCENE LXXXVI FIGURE 13
Unarmoured soldier. Bare head.

SCENE LXXXVI FIGURE 14
Sacrificial attendant. Bare head.

SCENE LXXXVI FIGURE 15
Sacrificial attendant. Bare head. Bare torso.

SCENE LXXXVI FIGURE 16
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 17
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 18
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 19
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 20
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 21
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 22
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 23
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 24
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 25
Roman civilian. Bare head.

SCENE LXXXVI FIGURE 26

Roman civilian. Bare head.

SCENE LXXXVI FIGURE 27

Roman civilian. Bare head.

SCENE LXXXVI FIGURE 28

Roman civilian. Bare head.

SCENE LXXXVI FIGURE 29

Roman civilian. Bare head.

SCENE LXXXVI FIGURE 30

Roman civilian. Bare head.

SCENE LXXXVI FIGURE 31

Roman civilian. Bare head.

SCENE LXXXVII FIGURE 1

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula. Oval shield rear view or obscured.

SCENE LXXXVII FIGURE 2

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula. Oval shield is unfinished. Mistake in detail.

SCENE LXXXVII FIGURE 3

Unarmoured soldier. Helmet type 33. Cloak is a paenula.

SCENE LXXXVII FIGURE 4

Unarmoured soldier. Bare head. Tunic. Sword is absent. Cloak is a paenula. Oval shield rear view or obscured.

SCENE LXXXVII FIGURE 5

Unarmoured soldier. Helmet type 33. Tunic. Cloak is a paenula. Oval shield rear view or obscured.

SCENE LXXXVII FIGURE 6

Unarmoured soldier. Helmet type 33. Tunic. Cloak is a paenula. Oval shield is unfinished. Mistake in detail.

SCENE LXXXVII FIGURE 7

Unarmoured soldier. Bare head. Cloak is a paenula. Oval shield rear view or obscured.

SCENE LXXXVII FIGURE 8

Unarmoured soldier. Bare head.

SCENE LXXXVII FIGURE 9

Officer. Bare head. Tunic. Cloak is a fringed sagum.

SCENE LXXXVII FIGURE 10

Unarmoured soldier. Bare head. Cloak is a paenula. Oval shield is unfinished. Mistake in detail.

SCENE LXXXVII FIGURE 11

Standard bearer. Bare head.

SCENE LXXXVII FIGURE 12

Officer. Bare head.

SCENE LXXXVII FIGURE 13

Standard bearer. Bare head. Mistake in figure type characteristics.

SCENE LXXXVII FIGURE 14

Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXVII FIGURE 15

Unarmoured soldier. Bare head. Cloak is a paenula.

SCENE LXXXVII FIGURE 16

Standard bearer. Bare head. Cloak is a paenula.

SCENE LXXXVIII FIGURE 1

Officer. Bare head. Tunic. Cloak is a fringed sagum.

SCENE LXXXVIII FIGURE 2

Standard bearer. Bare head. Tunic. Cloak is a paenula.

SCENE LXXXVIII FIGURE 3

Unarmoured soldier. Bare head. Tunic.

SCENE LXXXVIII FIGURE 4

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula. Oval shield is unfinished. Mistake in detail.

SCENE LXXXVIII FIGURE 5

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula. Oval shield is unfinished. Mistake in detail.

SCENE LXXXVIII FIGURE 6

Unarmoured soldier. Bare head. Cloak is a paenula.

SCENE LXXXVIII FIGURE 7

Unarmoured soldier. Bare head. Tunic. Cloak is a fringed sagum.

SCENE LXXXVIII FIGURE 8

Unarmoured soldier. Bare head. Cloak is a paenula.

SCENE LXXXVIII FIGURE 9

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula.

SCENE LXXXVIII FIGURE 10

Unarmoured soldier. Bare head. Tunic. Cloak is a paenula.

SCENE LXXXIX FIGURE 1

Auxiliary cavalryman. Bare head. Tunic. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is practical.

SCENE LXXXIX FIGURE 2

Auxiliary cavalryman. Bare head. Lorica hamata. Sword is present. Cloak is a sagum. Horse harness is practical. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE LXXXIX FIGURE 3

Auxiliary cavalryman. Bare head. Tunic. Baldric is present. Sword is present. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is practical.

SCENE LXXXIX FIGURE 4

Auxiliary cavalryman. Bare head. Lorica hamata. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is practical. Mail edging is ragged, very small lappets, or fringed.

SCENE LXXXIX FIGURE 5

Standard bearer. Bare head. Tunic. Baldric is present. Sword is present. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is impractical.

SCENE LXXXIX FIGURE 6

Auxiliary cavalryman. Bare head. Tunic. Cloak is a sagum. Horse harness is impractical.

SCENE LXXXIX FIGURE 7

Auxiliary cavalryman. Bare head. Tunic. Cloak is a sagum.

SCENE LXXXIX FIGURE 8

Officer. Bare head. Tunic. Cloak is a sagum. Horse harness is practical. Mistake in pose.

SCENE LXXXIX FIGURE 9

Trajan. Bare head. Tunic. Cloak is a sagum. Horse harness is practical. Mistake in pose.

SCENE XC FIGURE 1

Roman civilian. Bare head.

SCENE XC FIGURE 2

Roman civilian. Bare head.

SCENE XC FIGURE 3

Roman civilian. Bare head.

SCENE XC FIGURE 4

Roman civilian. Bare head.

SCENE XC FIGURE 5

Roman civilian. Bare head.

SCENE XC FIGURE 6

Roman civilian. Bare head.

SCENE XC FIGURE 7

Roman civilian. Bare head.

SCENE XC FIGURE 8

Roman civilian. Bare head.

SCENE XC FIGURE 9

Roman civilian. Bare head.

SCENE XC FIGURE 10

Roman civilian. Bare head.

SCENE XC FIGURE 11

Roman civilian. Bare head.

SCENE XC FIGURE 12

Roman civilian. Bare head.

SCENE XC FIGURE 13

Roman civilian. Bare head.

SCENE XC FIGURE 14

Roman civilian. Bare head.

SCENE XC FIGURE 15

Roman civilian. Bare head.

SCENE XC FIGURE 16

Roman civilian. Bare head.

SCENE XCI FIGURE 1

Sacrificial attendant. Bare head. Tunic.

SCENE XCI FIGURE 2

Sacrificial attendant. Bare head. Tunic.

SCENE XCI FIGURE 3

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE XCI FIGURE 4

Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE XCI FIGURE 5

Roman civilian. Bare head.

SCENE XCI FIGURE 6

Roman civilian. Bare head.

SCENE XCI FIGURE 7

Sacrificial attendant. Bare head.

SCENE XCI FIGURE 8

Roman civilian. Bare head. Bare torso.

SCENE XCI FIGURE 9

Roman civilian. Bare head.

SCENE XCI FIGURE 10

Roman civilian. Bare head.

SCENE XCI FIGURE 11

Roman civilian. Bare head.

SCENE XCI FIGURE 12

Roman civilian. Bare head.

SCENE XCI FIGURE 13

Sacrificial attendant. Bare head. Bare torso.

SCENE XCI FIGURE 14

Roman civilian. Bare head.

SCENE XCI FIGURE 15

Roman civilian. Bare head.

SCENE XCI FIGURE 16

Roman civilian. Bare head.

SCENE XCI FIGURE 17

Sacrificial attendant. Bare head. Bare torso.

SCENE XCI FIGURE 18

Roman civilian. Bare head.

SCENE XCI FIGURE 19

Roman civilian. Bare head.

SCENE XCI FIGURE 20

Roman civilian. Bare head.

SCENE XCI FIGURE 21

Roman civilian. Bare head.

SCENE XCI FIGURE 22

Roman civilian. Bare head.

SCENE XCI FIGURE 23

Roman civilian. Bare head.

SCENE XCI FIGURE 24

Sacrificial attendant. Bare head. Bare torso.

SCENE XCI FIGURE 25

Roman civilian. Bare head.

SCENE XCI FIGURE 26

Roman civilian. Bare head.

SCENE XCI FIGURE 27

Roman civilian. Bare head.

SCENE XCII FIGURE 1

Unarmoured soldier. Bare head. Apron is absent.

SCENE XCIII FIGURE 7

Dacian. Bare head. Tunic.

SCENE XCIII FIGURE 8

Dacian. Pilleus. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XCIII FIGURE 9

Dacian. Bare head. Oval shield is unfinished. Mistake in detail.

SCENE XCIII FIGURE 10

Dacian. Pilleus. Tunic. Oval shield with Hellenistic method of carriage.

SCENE XCIII FIGURE 11

Dacian. Bare head.

SCENE XCIII FIGURE 12

Dacian. Pilleus.

SCENE XCIII FIGURE 13

Dacian. Bare head.

SCENE XCIII FIGURE 14

Dacian. Bare head. Tunic.

SCENE XCIII FIGURE 15

Dacian. Bare head.

SCENE XCIII FIGURE 16

Dacian. Bare head. Oval shield rear view or obscured.

SCENE XCIII FIGURE 17

Dacian. Bare head. Oval shield rear view or obscured.

SCENE XCIII FIGURE 18

Dacian. Bare head.

SCENE XCIII FIGURE 19

Dacian. Bare head. Oval shield with piles blazon.

SCENE XCIII FIGURE 20

Dacian. Bare head. Oval shield is unfinished. Mistake in detail.

SCENE XCIII FIGURE 21

Dacian. Bare head. Oval shield with Roman blazon. Mistake in detail.

SCENE XCIII FIGURE 22

Dacian. Pilleus. Tunic.

SCENE XCIII FIGURE 23

Dacian. Bare head. Tunic.

SCENE XCIII FIGURE 24

Dacian. Bare head. Tunic.

SCENE XCIII FIGURE 25

Dacian. Pilleus. Oval shield with wreath blazon.

SCENE XCIII FIGURE 26

Dacian. Pilleus. Tunic. Straight sword present on hip.

SCENE XCIII FIGURE 27

Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE XCIII FIGURE 28

Dacian. Bare head. Tunic.

SCENE XCIII FIGURE 29

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIII FIGURE 30

Dacian. Bare head. Tunic.

SCENE XCIII FIGURE 31

Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE XCIII FIGURE 32

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XCIII FIGURE 33

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIII FIGURE 34

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIII FIGURE 35

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIII FIGURE 36

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIII FIGURE 37

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIV FIGURE 1

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIV FIGURE 2

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE XCIV FIGURE 3

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XCIV FIGURE 4

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with piles blazon.

SCENE XCIV FIGURE 5

Dacian. Bare head. Tunic.

SCENE XCIV FIGURE 6

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with tendrils blazon.

SCENE XCIV FIGURE 7

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE XCIV FIGURE 8

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mistake in detail.

SCENE XCIV FIGURE 9

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XCIV FIGURE 10

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE XCIV FIGURE 11

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XCIV FIGURE 12

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XCIV FIGURE 13

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Additional detail on mail.

SCENE XCIV FIGURE 14

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Additional detail on baldric.

SCENE XCIV FIGURE 15

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XCIV FIGURE 16

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Oval shield with Roman blazon. Mail edging is zig-zag.

SCENE XCIV FIGURE 17

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XCIV FIGURE 18

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE XCIV FIGURE 19

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCIV FIGURE 20

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag. Additional detail on baldric.

SCENE XCIV FIGURE 21

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE XCIV FIGURE 22

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with piles blazon. Mail edging is zig-zag.

SCENE XCIV FIGURE 23

Dacian. Bare head. Tunic.

SCENE XCIV FIGURE 24

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE XCV FIGURE 1

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCV FIGURE 2

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with wreath blazon.

SCENE XCV FIGURE 3

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with wreath blazon.

SCENE XCV FIGURE 4

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCV FIGURE 5

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XCV FIGURE 6

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE XCV FIGURE 7

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE XCV FIGURE 8

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XCV FIGURE 9

Dacian. Bare head. Tunic.

SCENE XCV FIGURE 10

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XCV FIGURE 11

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 11. Baldric is absent. Rectangular shield is unfinished. Mistake in detail.

SCENE XCV FIGURE 12

Citizen figure type. Helmet type 6. 'Lorica segmentata'.

SCENE XCV FIGURE 13

Citizen figure type. Helmet type 19. 'Lorica segmentata' type 11. Baldric is absent. Rectangular shield rear view or obscured.

SCENE XCV FIGURE 14

Citizen figure type. Helmet type 6. 'Lorica segmentata' type 11. Rectangular shield rear view or obscured.

SCENE XCV FIGURE 15

Citizen figure type. Helmet type 6. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE XCV FIGURE 16

Citizen figure type. Helmet type 19.

SCENE XCV FIGURE 17

Citizen figure type. Helmet type 19.

SCENE XCV FIGURE 18

Citizen figure type. Helmet type 19.

SCENE XCVI FIGURE 1

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XCVI FIGURE 2

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag.

SCENE XCVI FIGURE 3

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE XCVI FIGURE 4

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE XCVI FIGURE 5

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE XCVI FIGURE 6

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE XCVI FIGURE 7

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XCVI FIGURE 8

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 21. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield rear view or obscured.

SCENE XCVI FIGURE 9

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Cingulum is absent. Baldric is absent.

SCENE XCVI FIGURE 10

Dacian. Bare head. Tunic.

SCENE XCVI FIGURE 11

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Cingulum is absent. Baldric is absent.

SCENE XCVII FIGURE 1

Trajan. Bare head. Muscled cuirass. Cloak is a sagum. Horse harness is impractical. Mistake in detail.

SCENE XCVII FIGURE 2

Unarmoured soldier. Bare head. Knotted tunic.

SCENE XCVII FIGURE 3

Auxiliary cavalryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is a sagum.

SCENE XCVII FIGURE 4

Unarmoured soldier. Bare head. Knotted tunic. Mail edging is zig-zag.

SCENE XCVII FIGURE 5

Auxiliary cavalryman. Helmet type 25. Lorica hamata. Mail chiselling is present on cast. Cloak is a sagum. Oval shield with piles blazon. Horse harness is impractical. Tunic is absent. Mistake in detail.

SCENE XCVII FIGURE 6

Unarmoured soldier. Bare head. Knotted tunic.

SCENE XCVII FIGURE 7

Auxiliary cavalryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with wreath blazon.

SCENE XCVII FIGURE 8

Auxiliary cavalryman. Helmet type 6. Lorica hamata. Mail chiselling is

absent. Cloak is a sagum. Oval shield with wreath blazon.

SCENE XCVII FIGURE 9

Unarmoured soldier. Bare head. Knotted tunic.

SCENE XCVIII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XCVIII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XCVIII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata' type 16. Baldric is absent. Rectangular shield rear view or obscured.

SCENE XCVIII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XCVIII FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Sword is absent. Rectangular shield is unfinished. Mistake in detail.

SCENE XCVIII FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 16. Baldric is absent. Sword is absent. Rectangular shield rear view or obscured.

SCENE XCVIII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 16. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with tendrils blazon.

SCENE XCVIII FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE XCVIII FIGURE 9

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent.

SCENE XCVIII FIGURE 10

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE XCVIII FIGURE 11

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE XCVIII FIGURE 12

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

- SCENE XCIX FIGURE 1
Sacrificial attendant. Bare head. Bare torso.
- SCENE XCIX FIGURE 2
Officer. Bare head. Muscled cuirass. Cloak is a paenula.
- SCENE XCIX FIGURE 3
Sacrificial attendant. Bare head. Tunic.
- SCENE XCIX FIGURE 4
Sacrificial attendant. Bare head. Tunic.
- SCENE XCIX FIGURE 5
Unarmoured soldier. Bare head. Tunic. Cloak is a sagum.
- SCENE XCIX FIGURE 6
Trajan. Bare head. Tunic. Cloak is a paenula.
- SCENE XCIX FIGURE 7
Unarmoured soldier. Bare head. Cloak is a sagum.
- SCENE XCIX FIGURE 8
Unarmoured soldier. Bare head. Tunic. Cloak is a fringed sagum.
- SCENE XCIX FIGURE 9
Unarmoured soldier. Bare head. Cloak is a fringed sagum.
- SCENE C FIGURE 1
Dacian. Flat-topped hat. Tunic.
- SCENE C FIGURE 2
Dacian. Flat-topped hat. Tunic. Cloak is absent.
- SCENE C FIGURE 3
Sarmatian. Bare head. Kaftan.
- SCENE C FIGURE 4
Sarmatian. Bare head. Kaftan.
- SCENE C FIGURE 5
Sarmatian. Bare head. Kaftan.
- SCENE C FIGURE 6
German. Bare torso. Cloak is a fringed sagum.
- SCENE C FIGURE 7
Dacian. Bare head. Tunic.
- SCENE C FIGURE 8
Dacian. Flat-topped hat. Tunic. Cloak is a fringed sagum.
- SCENE C FIGURE 9
Dacian. Bare head.
- SCENE C FIGURE 10
German. Nodus hairstyle. Bare torso. Cloak is a fringed sagum.

SCENE C FIGURE 11

Dacian. Bare head. Tunic.

SCENE C FIGURE 12

German. Nodus hairstyle. Bare torso. Cloak is a fringed sagum.

SCENE C FIGURE 13

German. Nodus hairstyle.

SCENE C FIGURE 14

German. Nodus hairstyle.

SCENE C FIGURE 15

Officer. Bare head. Cloak is a sagum.

SCENE C FIGURE 16

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE C FIGURE 17

Officer. Bare head. Cloak is a sagum.

SCENE C FIGURE 18

Trajan. Bare head. Tunic. Cloak is a sagum.

SCENE C FIGURE 19

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE C FIGURE 20

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE C FIGURE 21

Officer. Bare head. Tunic. Cloak is a fringed sagum.

SCENE C FIGURE 22

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with wreath blazon.

SCENE CI FIGURE 1

Citizen figure type. 'Lorica segmentata'. Cingulum is present. Apron is present. Rectangular shield rear view or obscured.

SCENE CI FIGURE 2

Citizen figure type. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 3

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 4

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 5

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 6

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE CI FIGURE 7

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Cingulum is present. Apron is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 8

Citizen figure type. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CI FIGURE 9

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CI FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 12

Citizen figure type. Helmet type 32. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 13

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE CI FIGURE 14

Citizen figure type. Helmet type 32. 'Lorica segmentata' type 23. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CI FIGURE 15

Officer. Bare head. Tunic. Cloak is a sagum.

SCENE CI FIGURE 16

Citizen figure type. Helmet type 32. 'Lorica segmentata' type 24. Cingulum is present. Apron is present. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CII FIGURE 1

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is

absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Horse harness is impractical. Tunic is fringed. Mail edging is zig-zag.

SCENE CII FIGURE 2

Auxiliary cavalryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is impractical. Tunic is fringed. Mail edging is zig-zag.

SCENE CII FIGURE 3

Trajan. Bare head. Tunic. Cloak is a sagum. Horse harness is impractical.

SCENE CII FIGURE 4

Sacrificial attendant. Bare head. Tunic.

SCENE CII FIGURE 5

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CII FIGURE 6

Unidentifiable figure. Bare head.

SCENE CII FIGURE 7

Musician. Animal skin.

SCENE CII FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CII FIGURE 9

Musician. Animal skin.

SCENE CII FIGURE 10

Sacrificial attendant. Bare head. Bare torso.

SCENE CII FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CII FIGURE 12

Standard bearer. Animal skin.

SCENE CII FIGURE 13

Standard bearer. Animal skin.

SCENE CII FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CII FIGURE 15

Standard bearer. Animal skin.

SCENE CII FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield rear view or obscured.

SCENE CII FIGURE 17

Standard bearer. Animal skin.

SCENE CII FIGURE 18

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CII FIGURE 19

Citizen figure type. 'Lorica segmentata'. Cingulum is absent. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CII FIGURE 20

Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE CII FIGURE 21

Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield rear view or obscured.

SCENE CII FIGURE 22

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CII FIGURE 23

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is absent. Rectangular shield with wreath blazon.

SCENE CII FIGURE 24

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Baldric is absent.

SCENE CII FIGURE 25

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Baldric is absent.

SCENE CII FIGURE 26

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CII FIGURE 27

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CII FIGURE 28

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIII FIGURE 1

Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE CIII FIGURE 2

Sacrificial attendant. Laureate head. Bare torso. Cloak is absent.

SCENE CIII FIGURE 3

Unarmoured soldier. Laureate head. Knotted tunic. Cloak is absent.

- SCENE CIII FIGURE 4
Sacrificial attendant. Laureate head. Tunic. Cloak is absent.
- SCENE CIII FIGURE 5
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.
- SCENE CIII FIGURE 6
Sacrificial attendant. Laureate head. Knotted tunic. Cloak is absent.
- SCENE CIII FIGURE 7
Sacrificial attendant. Bare head. Tunic. Cloak is absent.
- SCENE CIII FIGURE 8
Sacrificial attendant. Laureate head. Tunic.
- SCENE CIII FIGURE 9
Musician. Laureate head. Tunic. Cloak is a sagum.
- SCENE CIII FIGURE 10
Sacrificial attendant. Bare head. Tunic.
- SCENE CIII FIGURE 11
Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.
- SCENE CIII FIGURE 12
Trajan. Laureate head. Toga.
- SCENE CIII FIGURE 13
Musician. Veiled head. Tunic. Cloak is a sagum.
- SCENE CIII FIGURE 14
Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.
- SCENE CIII FIGURE 15
Officer. Laureate head. Toga.
- SCENE CIII FIGURE 16
Musician. Laureate head. Tunic. Cloak is a fringed sagum.
- SCENE CIII FIGURE 17
Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.
- SCENE CIII FIGURE 18
Unarmoured soldier. Laureate head. Tunic. Cloak is a paenula.
- SCENE CIII FIGURE 19
Musician. Laureate head. Tunic. Cloak is a fringed sagum.
- SCENE CIII FIGURE 20
Unarmoured soldier. Laureate head. Knotted tunic. Cloak is a paenula.
- SCENE CIII FIGURE 21
Unarmoured soldier. Laureate head. Knotted tunic. Cloak is absent.
- SCENE CIII FIGURE 22
Unarmoured soldier. Laureate head. Knotted tunic. Cloak is absent.

SCENE CIII FIGURE 23
Unarmoured soldier. Laureate head. Knotted tunic. Cloak is absent.

SCENE CIII FIGURE 24
Unarmoured soldier. Laureate head. Tunic. Cloak is absent.

SCENE CIII FIGURE 25
Unarmoured soldier. Laureate head. Knotted tunic. Cloak is absent.

SCENE CIII FIGURE 26
Unarmoured soldier. Laureate head. Knotted tunic. Cloak is absent.

SCENE CIV FIGURE 1
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CIV FIGURE 2
Lictor. Bare head.

SCENE CIV FIGURE 3
Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CIV FIGURE 4
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CIV FIGURE 5
Citizen figure type. 'Lorica segmentata'.

SCENE CIV FIGURE 6
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CIV FIGURE 7
Citizen figure type. Helmet type 10. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CIV FIGURE 8
Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield rear view or obscured.

SCENE CIV FIGURE 9
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CIV FIGURE 10
Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Apron is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 11
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CIV FIGURE 12
Citizen figure type. Helmet type 9. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 13

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CIV FIGURE 14

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield is unfinished. Mistake in detail.

SCENE CIV FIGURE 15

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Cingulum is absent. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 16

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 17

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CIV FIGURE 18

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Apron is present. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 19

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 20

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 21

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 22

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is impractical. Mail edging is zig-zag.

SCENE CIV FIGURE 23

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield is unfinished. Mistake in detail.

SCENE CIV FIGURE 24

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 25

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12.

Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 26

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 27

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield is unfinished. Mistake in detail.

SCENE CIV FIGURE 28

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 29

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CIV FIGURE 30

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 31

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 32

Auxiliary cavalryman. Helmet type 26. Cloak is a sagum. Oval shield with piles blazon. Horse harness is impractical.

SCENE CV FIGURE 1

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CV FIGURE 2

Standard bearer. Helmet type 25. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a fringed sagum. Oval shield with Roman method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CV FIGURE 3

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CV FIGURE 4

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CV FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CV

FIGURE 6

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CV

FIGURE 7

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is absent. Cloak is a fringed sagum. Oval shield with Roman blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CV

FIGURE 8

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI

FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is present. Sword is present.

SCENE CVI

FIGURE 2

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI

FIGURE 3

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CVI

FIGURE 4

Citizen figure type. Helmet type 26. 'Lorica segmentata' type 1. Cingulum is present. Baldric is present. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI

FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Mistake in detail.

SCENE CVI

FIGURE 6

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CVI

FIGURE 7

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI

FIGURE 8

Citizen figure type. Helmet type 26. 'Lorica segmentata' type 18. Baldric is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI

FIGURE 9

Citizen figure type. Helmet type 26. 'Lorica segmentata'.

SCENE CVI

FIGURE 10

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Baldric is present. Rectangular shield with thunderbolts and wings blazon.

Additional detail on helmet.

SCENE CVI FIGURE 11

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is absent. Rectangular shield rear view or obscured.

SCENE CVI FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI FIGURE 13

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 14

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 15

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is present. Rectangular shield is unfinished. Mistake in detail.

SCENE CVI FIGURE 17

Citizen figure type. Helmet type 3. 'Lorica segmentata' type 11. Baldric is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 18

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI FIGURE 19

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 20

Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI FIGURE 21

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Baldric is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 22

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI FIGURE 23

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 24

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Baldric is absent. Additional detail on helmet.

SCENE CVI FIGURE 25

Musician. Animal skin. Over-tunic. Mail chiselling is absent. Sword is absent. Cloak is absent. Mistake in detail.

SCENE CVI FIGURE 26

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Apron is present. Baldric is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 27

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Additional detail on helmet.

SCENE CVI FIGURE 28

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Additional detail on baldric.

SCENE CVI FIGURE 29

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI FIGURE 30

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVI FIGURE 31

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI FIGURE 32

Citizen figure type. Helmet type 3. Additional detail on helmet.

SCENE CVI FIGURE 33

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVI FIGURE 34

Standard bearer. Animal skin. Over-tunic. Mail chiselling is absent. Cingulum is present. Apron is present. Sword is absent. Cloak is absent. Mistake in figure type characteristics.

SCENE CVI FIGURE 35

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI FIGURE 36

Unidentifiable figure. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI FIGURE 37

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVII FIGURE 1

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 4

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with piles blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 6

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CVIII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CVIII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CVIII FIGURE 4

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling

is absent. Cloak is absent.

SCENE CVIII FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVIII FIGURE 6

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CVIII FIGURE 8

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CVIII FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CVIII FIGURE 10

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is present.

SCENE CVIII FIGURE 12

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CVIII FIGURE 13

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVIII FIGURE 15

Slinger. Bare head. Tunic. Cloak is a sagum. Oval shield with wreath blazon.

SCENE CVIII FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is present. Sword is present.

SCENE CVIII FIGURE 17

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CVIII FIGURE 18

Slinger. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield with wreath blazon.

SCENE CVIII FIGURE 19

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CVIII FIGURE 20

Slinger. Bare head. Tunic. Cloak is a sagum.

SCENE CVIII FIGURE 21

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CVIII FIGURE 22

Bare-chested irregular. Bare head. Bare torso. Baldric is present. Sword is present. Mistake in detail.

SCENE CVIII FIGURE 23

Standard bearer. Animal skin. Over-tunic. Mail chiselling is present on cast. Cingulum is present. Apron is present. Sword is present. Cloak is absent. Mistake in figure type characteristics.

SCENE CVIII FIGURE 24

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Mistake in detail.

SCENE CVIII FIGURE 25

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 26

Bare-chested irregular. Bare head. Bare torso. Baldric is present. Sword is present. Oval shield with Roman method of carriage.

SCENE CVIII FIGURE 27

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVIII FIGURE 28

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present.

SCENE CVIII FIGURE 29

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVIII FIGURE 30

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Mail edging is ragged, very small

lappets, or fringed.

SCENE CVIII FIGURE 31

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Mail edging is ragged, very small lappets, or fringed.

SCENE CIX FIGURE 1

Unidentifiable figure. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CIX FIGURE 2

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CIX FIGURE 3

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE CIX FIGURE 4

Auxiliary infantryman. Helmet type 19. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with palmettes blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CIX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE CX FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is absent. Baldric is present. Sword is present.

SCENE CX FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present.

SCENE CX FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CX FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CX FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Baldric is present. Sword is present.

SCENE CX FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXI FIGURE 1

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXI FIGURE 2

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a fringed sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXI FIGURE 3

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield is unfinished. Mail edging is ragged, very small lappets, or fringed.

SCENE CXI FIGURE 4

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with tendrils blazon.

SCENE CXI FIGURE 5

Dacian. Bare head.

SCENE CXI FIGURE 6

Dacian. Pilleus. Tunic.

SCENE CXI FIGURE 7

Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage.

SCENE CXI FIGURE 8

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXI FIGURE 9

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE CXI FIGURE 10

Dacian. Pilleus. Tunic. Oval shield with small motifs.

SCENE CXI FIGURE 11

Dacian. Bare head. Oval shield with piles blazon.

SCENE CXI FIGURE 12

Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE CXI FIGURE 13

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXI FIGURE 14

Dacian. Pilleus. Tunic.

SCENE CXI FIGURE 15

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXII FIGURE 1

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 2

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE CXII FIGURE 3

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 4

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with Roman blazon. Tunic is absent. Mail edging is plain (unfinished). Mistake in figure type characteristics.

SCENE CXII FIGURE 6

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 7

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 8

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 9

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Cingulum is present. Baldric is present. Cloak is a sagum. Oval shield with Roman method of carriage. Cingulum present when unnecessary. Mistake in figure type characteristics.

SCENE CXII FIGURE 10

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 11

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 12

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 13

Dacian. Bare head. Tunic. Cloak is absent. Oval shield with piles blazon.

SCENE CXII FIGURE 14

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXII FIGURE 15

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is

a fringed sagum. Mail edging is plain (unfinished). Mistake in figure type characteristics.

SCENE CXII FIGURE 16

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 17

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE CXII FIGURE 18

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXIII FIGURE 1

Auxiliary infantryman. Helmet type 23. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is a fringed sagum. Oval shield with palmettes blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on helmet.

SCENE CXIII FIGURE 2

Auxiliary infantryman. Helmet type 21. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on helmet.

SCENE CXIII FIGURE 3

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CIV FIGURE 7

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CIV FIGURE 8

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Baldric is absent. Sword is absent. Rectangular shield rear view or obscured.

SCENE CIV FIGURE 9

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CIV FIGURE 10

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Apron is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 11

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CIV FIGURE 12

Citizen figure type. Helmet type 9. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 13

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CIV

FIGURE 14

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Apron is absent. Baldric is absent. Sword is absent. Rectangular shield is unfinished. Mistake in detail.

SCENE CIV

FIGURE 15

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Cingulum is absent. Apron is present. Baldric is absent. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 16

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 17

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CIV

FIGURE 18

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Apron is present. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 19

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 20

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 21

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 22

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is impractical. Mail edging is zig-zag.

SCENE CIV

FIGURE 23

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield is unfinished. Mistake in detail.

SCENE CIV

FIGURE 24

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV

FIGURE 25

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12.

Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 26

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 27

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield is unfinished. Mistake in detail.

SCENE CIV FIGURE 28

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 29

Citizen figure type. Helmet type 10. 'Lorica segmentata' type 12. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CIV FIGURE 30

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 31

Citizen figure type. Helmet type 10. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CIV FIGURE 32

Auxiliary cavalryman. Helmet type 26. Cloak is a sagum. Oval shield with piles blazon. Horse harness is impractical.

SCENE CV FIGURE 1

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CV FIGURE 2

Standard bearer. Helmet type 25. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a fringed sagum. Oval shield with Roman method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CV FIGURE 3

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CV FIGURE 4

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CV FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CV

FIGURE 6

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CV

FIGURE 7

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is absent. Cloak is a fringed sagum. Oval shield with Roman blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CV

FIGURE 8

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI

FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is present. Sword is present.

SCENE CVI

FIGURE 2

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI

FIGURE 3

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CVI

FIGURE 4

Citizen figure type. Helmet type 26. 'Lorica segmentata' type 1. Cingulum is present. Baldric is present. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI

FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Mistake in detail.

SCENE CVI

FIGURE 6

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CVI

FIGURE 7

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI

FIGURE 8

Citizen figure type. Helmet type 26. 'Lorica segmentata' type 18. Baldric is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI

FIGURE 9

Citizen figure type. Helmet type 26. 'Lorica segmentata'.

SCENE CVI

FIGURE 10

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Baldric is present. Rectangular shield with thunderbolts and wings blazon.

Additional detail on helmet.

SCENE CVI FIGURE 11

Citizen figure type. Helmet type 26. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is absent. Rectangular shield rear view or obscured.

SCENE CVI FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI FIGURE 13

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 14

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 15

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is present. Rectangular shield is unfinished. Mistake in detail.

SCENE CVI FIGURE 17

Citizen figure type. Helmet type 3. 'Lorica segmentata' type 11. Baldric is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 18

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI FIGURE 19

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI FIGURE 20

Citizen figure type. Bare head. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI FIGURE 21

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Baldric is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI

FIGURE 22

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVI

FIGURE 23

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI

FIGURE 24

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Baldric is absent. Additional detail on helmet.

SCENE CVI

FIGURE 25

Musician. Animal skin. Over-tunic. Mail chiselling is absent. Sword is absent. Cloak is absent. Mistake in detail.

SCENE CVI

FIGURE 26

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Apron is present. Baldric is absent. Rectangular shield with thunderbolts and wings blazon. Additional detail on helmet.

SCENE CVI

FIGURE 27

Citizen figure type. Helmet type 3. 'Lorica segmentata'. Additional detail on helmet.

SCENE CVI

FIGURE 28

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Additional detail on baldric.

SCENE CVI

FIGURE 29

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI

FIGURE 30

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVI

FIGURE 31

Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI

FIGURE 32

Citizen figure type. Helmet type 3. Additional detail on helmet.

SCENE CVI

FIGURE 33

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVI

FIGURE 34

Standard bearer. Animal skin. Over-tunic. Mail chiselling is absent. Cingulum is present. Apron is present. Sword is absent. Cloak is absent. Mistake in figure type characteristics.

SCENE CVI FIGURE 35

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI FIGURE 36

Unidentifiable figure. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVI FIGURE 37

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVII FIGURE 1

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 4

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with piles blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVII FIGURE 6

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CVIII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CVIII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CVIII FIGURE 4

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling

is absent. Cloak is absent.

SCENE CVIII FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVIII FIGURE 6

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CVIII FIGURE 8

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CVIII FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CVIII FIGURE 10

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is present.

SCENE CVIII FIGURE 12

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CVIII FIGURE 13

Auxiliary infantryman. Helmet type 25. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CVIII FIGURE 15

Slinger. Bare head. Tunic. Cloak is a sagum. Oval shield with wreath blazon.

SCENE CVIII FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is present. Sword is present.

SCENE CVIII FIGURE 17
Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CVIII FIGURE 18
Slinger. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield with wreath blazon.

SCENE CVIII FIGURE 19
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CVIII FIGURE 20
Slinger. Bare head. Tunic. Cloak is a sagum.

SCENE CVIII FIGURE 21
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CVIII FIGURE 22
Bare-chested irregular. Bare head. Bare torso. Baldric is present. Sword is present. Mistake in detail.

SCENE CVIII FIGURE 23
Standard bearer. Animal skin. Over-tunic. Mail chiselling is present on cast. Cingulum is present. Apron is present. Sword is present. Cloak is absent. Mistake in figure type characteristics.

SCENE CVIII FIGURE 24
Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Mistake in detail.

SCENE CVIII FIGURE 25
Standard bearer. Bare head. Lorica hamata. Mail chiselling is absent. Sword is present. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CVIII FIGURE 26
Bare-chested irregular. Bare head. Bare torso. Baldric is present. Sword is present. Oval shield with Roman method of carriage.

SCENE CVIII FIGURE 27
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVIII FIGURE 28
Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present.

SCENE CVIII FIGURE 29
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CVIII FIGURE 30
Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Mail edging is ragged, very small

lappets, or fringed.

SCENE CVIII FIGURE 31

Archer. Helmet type 29. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Mail edging is ragged, very small lappets, or fringed.

SCENE CIX FIGURE 1

Unidentifiable figure. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CIX FIGURE 2

Musician. Animal skin. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CIX FIGURE 3

Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE CIX FIGURE 4

Auxiliary infantryman. Helmet type 19. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with palmettes blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CIX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is absent.

SCENE CX FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is absent. Baldric is present. Sword is present.

SCENE CX FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present.

SCENE CX FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CX FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CX FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is absent.

SCENE CX FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Baldric is present. Sword is present.

SCENE CX FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXI FIGURE 1

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXI FIGURE 2

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a fringed sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXI FIGURE 3

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield is unfinished. Mail edging is ragged, very small lappets, or fringed.

SCENE CXI FIGURE 4

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with tendrils blazon.

SCENE CXI FIGURE 5

Dacian. Bare head.

SCENE CXI FIGURE 6

Dacian. Pilleus. Tunic.

SCENE CXI FIGURE 7

Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage.

SCENE CXI FIGURE 8

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXI FIGURE 9

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE CXI FIGURE 10

Dacian. Pilleus. Tunic. Oval shield with small motifs.

SCENE CXI FIGURE 11

Dacian. Bare head. Oval shield with piles blazon.

SCENE CXI FIGURE 12

Dacian. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE CXI FIGURE 13

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXI FIGURE 14

Dacian. Pilleus. Tunic.

SCENE CXI FIGURE 15

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXII FIGURE 1

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 2

Auxiliary infantryman. Helmet type 26. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE CXII FIGURE 3

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 4

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with Roman blazon. Tunic is absent. Mail edging is plain (unfinished). Mistake in figure type characteristics.

SCENE CXII FIGURE 6

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 7

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 8

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 9

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Cingulum is present. Baldric is present. Cloak is a sagum. Oval shield with Roman method of carriage. Cingulum present when unnecessary. Mistake in figure type characteristics.

SCENE CXII FIGURE 10

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 11

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXII FIGURE 12

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 13

Dacian. Bare head. Tunic. Cloak is absent. Oval shield with piles blazon.

SCENE CXII FIGURE 14

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXII FIGURE 15

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is

a fringed sagum. Mail edging is plain (unfinished). Mistake in figure type characteristics.

SCENE CXII FIGURE 16

Dacian. Bare head. Tunic.

SCENE CXII FIGURE 17

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE CXII FIGURE 18

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXIII FIGURE 1

Auxiliary infantryman. Helmet type 23. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is a fringed sagum. Oval shield with palmettes blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on helmet.

SCENE CXIII FIGURE 2

Auxiliary infantryman. Helmet type 21. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on helmet.

SCENE CXIII FIGURE 3

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXIII FIGURE 4

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXIII FIGURE 5

Auxiliary infantryman. Helmet type 4. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIII FIGURE 6

Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIII FIGURE 7

Auxiliary infantryman. Helmet type 4. Lorica hamata. Mail chiselling is absent. Oval shield with piles blazon.

SCENE CXIII FIGURE 8

Auxiliary infantryman. Helmet type 4. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXIII FIGURE 9

Citizen figure type. Helmet type 31. 'Lorica segmentata'. Cingulum is

absent. Baldric is present. Sword is absent. Rectangular shield with Roman method of carriage.

SCENE CXIII FIGURE 10

Slinger. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a sagum.

SCENE CXIII FIGURE 11

Dacian. Bare head. Tunic.

SCENE CXIII FIGURE 12

Slinger. Bare head. Tunic. Cloak is a sagum.

SCENE CXIII FIGURE 13

Dacian. Bare head. Tunic.

SCENE CXIII FIGURE 14

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with tendrils blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIII FIGURE 15

Dacian. Bare head. Tunic. Oval shield with small motifs.

SCENE CXIII FIGURE 16

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXIII FIGURE 17

Auxiliary infantryman. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with Hellenistic method of carriage.

SCENE CXIII FIGURE 18

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is absent. Cloak is absent. Oval shield is unfinished. Mistake in detail.

SCENE CXIII FIGURE 19

Dacian. Pilleus. Tunic. Oval shield rear view or obscured.

SCENE CXIII FIGURE 20

Auxiliary infantryman. Helmet type 31. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIII FIGURE 21

Dacian. Bare head. Tunic.

SCENE CXIII FIGURE 22

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXIII FIGURE 23
Slinger. Bare head. Tunic. Cloak is a sagum.

SCENE CXIII FIGURE 24
Dacian. Bare head. Tunic.

SCENE CXIII FIGURE 25
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIII FIGURE 26
Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXIII FIGURE 27
Dacian. Bare head. Tunic.

SCENE CXIII FIGURE 28
Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE CXIII FIGURE 29
Dacian. Bare head.

SCENE CXIII FIGURE 30
Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE CXIII FIGURE 31
Dacian. Bare head. Oval shield rear view or obscured.

SCENE CXIII FIGURE 32
Dacian. Bare head. Oval shield with piles blazon.

SCENE CXIV FIGURE 1
Auxiliary infantryman. Helmet type 7. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is a fringed sagum. Oval shield with small motifs. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIV FIGURE 2
Auxiliary infantryman. Helmet type 12. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXIV FIGURE 3
Officer. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE CXIV FIGURE 4
Trajan. Bare head. Muscled cuirass. Sword is present. Cloak is a sagum.

SCENE CXIV FIGURE 5
Auxiliary infantryman. Helmet type 12. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXIV FIGURE 6
Officer. Bare head. Muscled cuirass.

SCENE CXIV FIGURE 7

Auxiliary infantryman. Helmet type 12. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Oval shield with palmettes blazon.

SCENE CXIV FIGURE 8

Auxiliary infantryman. Helmet type 15. Lorica hamata. Mail chiselling is present on cast. Cloak is a fringed sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIV FIGURE 9

Auxiliary infantryman. Helmet type 12. Lorica hamata. Mail chiselling is present on cast. Baldric is present.

SCENE CXIV FIGURE 10

Citizen figure type. Helmet type 15. 'Lorica segmentata' type 5. Apron is present. Baldric is present.

SCENE CXIV FIGURE 11

Auxiliary infantryman. Helmet type 15. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent.

SCENE CXIV FIGURE 12

Auxiliary infantryman. Helmet type 12. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield with tendrils blazon.

SCENE CXIV FIGURE 13

Auxiliary infantryman. Helmet type 12. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Mail edging is shallow and rounded lappets.

SCENE CXIV FIGURE 14

Auxiliary infantryman. Helmet type 12. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is shallow and rounded lappets.

SCENE CXIV FIGURE 15

Citizen figure type. Helmet type 15. 'Lorica segmentata' type 21. Cingulum is present. Baldric is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXIV FIGURE 16

Auxiliary infantryman. Helmet type 15. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE CXIV FIGURE 17

Citizen figure type. Helmet type 12. 'Lorica segmentata' type 21. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXV FIGURE 1

Citizen figure type. Helmet type 21. 'Lorica segmentata' type 17. Cingulum is present. Baldric is present. Sword is present. Rectangular shield rear view or obscured.

SCENE CXV

FIGURE 2

Archer. Helmet type 29. Lorica squamata. Baldric is present. Sword is present. Mail edging is ragged, very small lappets, or fringed.

SCENE CXV

FIGURE 3

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage.

SCENE CXV

FIGURE 4

Archer. Helmet type 29. Lorica squamata. Baldric is present. Sword is present.

SCENE CXV

FIGURE 5

Archer. Helmet type 29. Lorica squamata. Baldric is present. Sword is present.

SCENE CXV

FIGURE 6

Citizen figure type. Helmet type 21. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXV

FIGURE 7

Citizen figure type. Helmet type 21. 'Lorica segmentata'. Rectangular shield with thunderbolts and wings blazon.

SCENE CXV

FIGURE 8

Citizen figure type. Helmet type 21. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXV

FIGURE 9

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Baldric is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXV

FIGURE 10

Auxiliary infantryman. Helmet type 21. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with small motifs. Additional detail on mail.

SCENE CXV

FIGURE 11

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with Roman blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE CXV

FIGURE 12

Auxiliary infantryman. Helmet type 21. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield with tendrils blazon. Mail edging is shallow and rounded lappets. Additional detail on mail.

SCENE CXV

FIGURE 13

Bare-chested irregular. Bare head. Bare torso. Baldric is absent. Sword is absent. Oval shield with small motifs.

SCENE CXV FIGURE 14

Citizen figure type. Helmet type 21. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXV FIGURE 15

Bare-chested irregular. Bare head. Bare torso. Oval shield with small motifs.

SCENE CXV FIGURE 16

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXV FIGURE 17

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is shallow and rounded lappets.

SCENE CXV FIGURE 18

Dacian. Bare head. Oval shield with small motifs.

SCENE CXV FIGURE 19

Dacian. Pilleus. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE CXV FIGURE 20

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE CXV FIGURE 21

Dacian. Bare head. Cloak is a fringed sagum.

SCENE CXV FIGURE 22

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE CXV FIGURE 23

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE CXV FIGURE 24

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXV FIGURE 25

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.

SCENE CXV FIGURE 26

Dacian. Bare head. Cloak is a fringed sagum. Oval shield with tendrils blazon.

SCENE CXV FIGURE 27

Dacian. Bare head. Cloak is a fringed sagum.

SCENE CXV FIGURE 28

Dacian. Bare head.

SCENE CXV FIGURE 29

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE CXV FIGURE 30

Dacian. Bare head. Tunic. Oval shield with palmettes blazon.

SCENE CXV FIGURE 31

Dacian. Bare head.

SCENE CXV FIGURE 32

Dacian. Bare head. Tunic.

SCENE CXV FIGURE 33

Dacian. Bare head. Tunic. Oval shield with wreath blazon.

SCENE CXV FIGURE 34

Dacian. Bare head. Oval shield with tendrils blazon.

SCENE CXV FIGURE 35

Dacian. Bare head.

SCENE CXV FIGURE 36

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXV FIGURE 37

Dacian. Bare head. Cloak is a fringed sagum. Oval shield rear view or obscured.

SCENE CXVI FIGURE 1

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with Roman blazon. Mistake in detail.

SCENE CXVI FIGURE 2

Dacian. Bare head.

SCENE CXVI FIGURE 3

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXVI FIGURE 4

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXVI FIGURE 5

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXVI FIGURE 6

Dacian. Bare head.

SCENE CXVI FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 23. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXVI FIGURE 8

Dacian. Bare head. Cloak is a fringed sagum.

SCENE CXVI FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Apron is present.

SCENE CXVI FIGURE 10

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXVI FIGURE 11

Dacian. Bare head.

SCENE CXVI FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is absent. Baldric is present. Sword is present.

SCENE CXVI FIGURE 13

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is present.

SCENE CXVI FIGURE 14

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with wreath blazon.

SCENE CXVI FIGURE 15

Auxiliary infantryman. Helmet type 21. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with tendrils blazon. Mail edging is ragged, very small lappets, or fringed. Additional detail on baldric.

SCENE CXVI FIGURE 16

Citizen figure type. Helmet type 21. 'Lorica segmentata'. Baldric is present.

SCENE CXVI FIGURE 17

Auxiliary infantryman. Helmet type 21. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXVI FIGURE 18

Auxiliary infantryman. Helmet type 21. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield rear view or obscured.

SCENE CXVII FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXVII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent.

SCENE CXVII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CXVII FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is

present. Apron is present. Baldric is present. Sword is present.

SCENE CXVII FIGURE 5

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Baldric is present. Sword is present.

SCENE CXVII FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is present. Sword is present.

SCENE CXVII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is absent.

SCENE CXVII FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXVII FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Baldric is present. Sword is absent.

SCENE CXVII FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata'. Apron is present. Baldric is present.

SCENE CXVII FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present.

SCENE CXVII FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata'.

SCENE CXVII FIGURE 13

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is present.

SCENE CXVII FIGURE 14

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXVII FIGURE 15

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is absent. Baldric is present. Sword is present.

SCENE CXVII FIGURE 16

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Apron is present. Baldric is present. Sword is absent.

SCENE CXVII FIGURE 17

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is absent.

SCENE CXVII FIGURE 18

Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is present. Apron is present. Baldric is present.

SCENE CXVIII FIGURE 1

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXVIII FIGURE 2

Standard bearer. Bare head.

SCENE CXVIII FIGURE 3

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXVIII FIGURE 4

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXVIII FIGURE 5

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXVIII FIGURE 6

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 7

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXVIII FIGURE 8

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 9

Auxiliary infantryman. Bare head.

SCENE CXVIII FIGURE 10

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 11

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield with tendrils blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 12

Auxiliary infantryman. Bare head.

SCENE CXVIII FIGURE 13

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 14

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with Roman blazon. Mail edging is ragged,

very small lappets, or fringed.

SCENE CXVIII FIGURE 15

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Cloak is a fringed sagum. Oval shield with Roman method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 16

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 17

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 18

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 19

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 20

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Sword is present. Cloak is a fringed sagum. Oval shield with tendrils blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 21

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXVIII FIGURE 22

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a fringed sagum. Oval shield with Roman blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXIX FIGURE 1

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXIX FIGURE 2

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXIX FIGURE 3

Dacian. Pilleus. Tunic.

SCENE CXIX FIGURE 4

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXIX FIGURE 5
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 1
Dacian. Bare head. Tunic.

SCENE CXX FIGURE 2
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 3
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 4
Dacian. Bare head. Tunic.

SCENE CXX FIGURE 5
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 6
Dacian. Pilleus. Tunic.

SCENE CXX FIGURE 7
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 8
Dacian. Bare head. Tunic.

SCENE CXX FIGURE 9
Dacian. Pilleus. Tunic.

SCENE CXX FIGURE 10
Dacian. Bare head.

SCENE CXX FIGURE 11
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 12
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 13
Dacian. Pilleus. Tunic.

SCENE CXX FIGURE 14
Dacian. Pilleus. Tunic.

SCENE CXX FIGURE 15
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 16
Dacian. Bare head. Tunic.

SCENE CXX FIGURE 17
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 18
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXX FIGURE 19
Dacian. Pilleus. Tunic.

SCENE CXX FIGURE 20
Dacian. Pilleus. Tunic.

SCENE CXX FIGURE 21
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXXI FIGURE 1
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXI FIGURE 2
Dacian. Pilleus. Tunic.

SCENE CXXI FIGURE 3
Dacian. Bare head. Tunic.

SCENE CXXI FIGURE 4
Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXXII FIGURE 1
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXII FIGURE 2
Dacian. Pilleus.

SCENE CXXII FIGURE 3
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXII FIGURE 4
Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 5
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXII FIGURE 6
Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 7
Dacian. Bare head.

SCENE CXXII FIGURE 8
Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE CXXII FIGURE 9
Dacian. Bare head.

SCENE CXXII FIGURE 10
Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 11

Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 12

Dacian. Bare head.

SCENE CXXII FIGURE 13

Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 14

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXII FIGURE 15

Dacian. Bare head.

SCENE CXXII FIGURE 16

Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 17

Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 18

Dacian. Bare head.

SCENE CXXII FIGURE 19

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXII FIGURE 20

Dacian. Bare head.

SCENE CXXII FIGURE 21

Dacian. Bare head. Tunic.

SCENE CXXII FIGURE 22

Dacian. Pilleus. Tunic. Cloak is a fringed sagum.

SCENE CXXII FIGURE 23

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 1

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 5. Cingulum is present. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXXIII FIGURE 2

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 5. Baldric is absent.

SCENE CXXIII FIGURE 3

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent.

SCENE CXXIII FIGURE 4

Citizen figure type. Helmet type 14. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon.

SCENE CXXIII FIGURE 5

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 5. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CXXIII FIGURE 6

Citizen figure type. Helmet type 13. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on baldric.

SCENE CXXIII FIGURE 7

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 5. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CXXIII FIGURE 8

Citizen figure type. Helmet type 21. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent.

SCENE CXXIII FIGURE 9

Citizen figure type. Helmet type 21. 'Lorica segmentata' type 5. Cingulum is absent. Baldric is absent.

SCENE CXXIII FIGURE 10

Citizen figure type. Helmet type 14. 'Lorica segmentata' type 5. Cingulum is absent. Apron is absent. Baldric is present. Sword is present. Rectangular shield with thunderbolts and wings blazon. Additional detail on baldric.

SCENE CXXIII FIGURE 11

Citizen figure type. Helmet type 21. 'Lorica segmentata' type 5. Baldric is absent.

SCENE CXXIII FIGURE 12

Citizen figure type. Helmet type 21. 'Lorica segmentata' type 5. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.

SCENE CXXIII FIGURE 13

Citizen figure type. Helmet type 21. 'Lorica segmentata' type 5. Baldric is absent.

SCENE CXXIII FIGURE 14

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is a fringed sagum. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXXIII FIGURE 15

Musician. Animal skin. Lorica hamata. Mail chiselling is present on cast. Sword is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXIII FIGURE 16

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXIII FIGURE 17

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXIII FIGURE 18

Auxiliary infantryman. Helmet type 18. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXIII FIGURE 19

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXIII FIGURE 20

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXIII FIGURE 21

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 22

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 23

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXIII FIGURE 24

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 25

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 26

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 27

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 28

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 29

Dacian. Bare head.

SCENE CXXIII FIGURE 30

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXIII FIGURE 31

Dacian. Bare head. Tunic.

SCENE CXXIII FIGURE 32

Dacian. Bare head. Tunic.

SCENE CXXIV FIGURE 1
Citizen figure type. Bare head. 'Lorica segmentata' type 24. Baldric is absent.

SCENE CXXIV FIGURE 2
Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXIV FIGURE 3
Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXIV FIGURE 4
Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Additional detail on scabbard (suspension details or decoration).

SCENE CXXIV FIGURE 5
Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is absent. Baldric is present. Sword is present.

SCENE CXXV FIGURE 1
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is a sagum.

SCENE CXXV FIGURE 2
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE CXXV FIGURE 3
Auxiliary infantryman. Helmet type 22. Cloak is a sagum.

SCENE CXXV FIGURE 4
Auxiliary infantryman. Helmet type 22. Cloak is a sagum.

SCENE CXXV FIGURE 5
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE CXXV FIGURE 6
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXV FIGURE 7
Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXV FIGURE 8
Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXV FIGURE 9
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a fringed sagum. Oval shield with piles blazon.

- SCENE CXXV** **FIGURE 10**
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.
- SCENE CXXV** **FIGURE 11**
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.
- SCENE CXXV** **FIGURE 12**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.
- SCENE CXXV** **FIGURE 13**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.
- SCENE CXXV** **FIGURE 14**
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.
- SCENE CXXV** **FIGURE 15**
Citizen figure type. Helmet type 22. 'Lorica segmentata'. Cingulum is absent. Baldric is absent. Rectangular shield with thunderbolts and wings blazon.
- SCENE CXXV** **FIGURE 16**
Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.
- SCENE CXXV** **FIGURE 17**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.
- SCENE CXXV** **FIGURE 18**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.
- SCENE CXXV** **FIGURE 19**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a fringed sagum. Oval shield with piles blazon. Mail edging is ragged, very small lappets, or fringed.
- SCENE CXXV** **FIGURE 20**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.
- SCENE CXXVI** **FIGURE 1**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield is unfinished. Mistake in detail.
- SCENE CXXVI** **FIGURE 2**
Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is absent. Oval shield is unfinished. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXXVI FIGURE 3

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Cloak is absent.

SCENE CXXVI FIGURE 4

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield is unfinished. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXXVI FIGURE 5

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield is unfinished. Mistake in detail.

SCENE CXXVI FIGURE 6

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXXVI FIGURE 7

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXVI FIGURE 8

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXXVI FIGURE 9

Auxiliary infantryman.

SCENE CXXVI FIGURE 10

Auxiliary infantryman. Helmet type 22. Oval shield rear view or obscured.

SCENE CXXVI FIGURE 11

Auxiliary infantryman.

SCENE CXXVI FIGURE 12

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Cloak is absent. Oval shield is unfinished. Mistake in detail.

SCENE CXXVI FIGURE 13

Auxiliary infantryman. Helmet type 22. Cloak is absent. Oval shield rear view or obscured.

SCENE CXXVI FIGURE 14

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Oval shield with palmettes blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXVI FIGURE 15

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling

is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE CXXVII FIGURE 1

Citizen figure type. Helmet type 22. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXXVII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata'. Cingulum is present. Baldric is absent. Sword is absent. Mistake in pose.

SCENE CXXVII FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata' type 18. Baldric is absent.

SCENE CXXVII FIGURE 4

Citizen figure type. Helmet type 20. 'Lorica segmentata'.

SCENE CXXVII FIGURE 5

Citizen figure type. Helmet type 20. 'Lorica segmentata'. Cingulum is present. Apron is present. Baldric is present. Sword is present.

SCENE CXXVII FIGURE 6

Citizen figure type. Bare head. 'Lorica segmentata' type 18. Baldric is present.

SCENE CXXVII FIGURE 7

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Baldric is absent. Sword is absent.

SCENE CXXVII FIGURE 8

Citizen figure type. Bare head. 'Lorica segmentata'. Baldric is present.

SCENE CXXVII FIGURE 9

Citizen figure type. Bare head. 'Lorica segmentata' type 11. Cingulum is present. Baldric is absent. Sword is absent.

SCENE CXXVII FIGURE 10

Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is present. Baldric is absent.

SCENE CXXVII FIGURE 11

Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is present. Baldric is present. Sword is present. Additional detail on scabbard (suspension details or decoration).

SCENE CXXVII FIGURE 12

Citizen figure type. Bare head. 'Lorica segmentata' type 18. Cingulum is present. Baldric is absent.

SCENE CXXVIII FIGURE 1

Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is present on cast. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXVIII FIGURE 2

Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed. Additional detail on scabbard (suspension details or decoration).

SCENE CXXVIII FIGURE 3

Auxiliary infantryman. Helmet type 20. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXIX FIGURE 1

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Baldric is present. Sword is present.

SCENE CXXIX FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is absent. Baldric is present. Sword is present.

SCENE CXXIX FIGURE 3

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Apron is absent. Baldric is present. Sword is absent.

SCENE CXXIX FIGURE 4

Citizen figure type. Bare head. 'Lorica segmentata' type 20. Cingulum is present. Baldric is absent. Sword is absent.

SCENE CXXIX FIGURE 5

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail. Mistake in figure type characteristics.

SCENE CXXIX FIGURE 6

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed. Mistake in figure type characteristics.

SCENE CXXX FIGURE 1

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXX FIGURE 2

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXX FIGURE 3

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXX FIGURE 4

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXX FIGURE 5

Dacian. Bare head. Tunic.

SCENE CXXX FIGURE 6

Dacian. Bare head. Tunic.

SCENE CXXX FIGURE 7

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXXI FIGURE 1

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 2

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 3

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is absent. Oval shield with tendrils blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 4

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Oval shield with tendrils blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 5

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE CXXXI FIGURE 6

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 7

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Sword is absent. Cloak is a fringed sagum. Oval shield is unfinished. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXXXI FIGURE 8

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a sagum.

SCENE CXXXI FIGURE 9

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Sword is absent. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 10

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling

is surviving on the shaft. Sword is absent. Cloak is a fringed sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 11

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXI FIGURE 12

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXII FIGURE 1

Dacian. Bare head. Tunic.

SCENE CXXXII FIGURE 2

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXXXII FIGURE 3

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE CXXXII FIGURE 4

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXXXII FIGURE 5

Dacian. Bare head. Oval shield rear view or obscured.

SCENE CXXXII FIGURE 6

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.

SCENE CXXXII FIGURE 7

Dacian. Bare head. Oval shield rear view or obscured.

SCENE CXXXII FIGURE 8

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXXII FIGURE 9

Dacian. Bare head.

SCENE CXXXII FIGURE 10

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXXII FIGURE 11

Dacian. Bare head. Oval shield with piles blazon.

SCENE CXXXIII FIGURE 1

Dacian. Bare head. Tunic.

SCENE CXXXIII FIGURE 2

Citizen figure type. Helmet type 20. 'Lorica segmentata'. Cingulum is present. Baldric is present.

SCENE CXXXIII FIGURE 3

Dacian. Bare head. Tunic.

SCENE CXXXIII FIGURE 4

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.

SCENE CXXXIII FIGURE 5

Citizen figure type. Helmet type 20. 'Lorica segmentata'. Cingulum is present. Baldric is present.

SCENE CXXXIII FIGURE 6

Dacian. Bare head. Oval shield rear view or obscured.

SCENE CXXXIII FIGURE 7

Dacian. Bare head. Tunic. Oval shield with Hellenistic method of carriage.

SCENE CXXXIII FIGURE 8

Dacian. Bare head. Oval shield rear view or obscured.

SCENE CXXXIII FIGURE 9

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXXXIV FIGURE 1

Dacian. Bare head. Tunic.

SCENE CXXXIV FIGURE 2

Dacian. Bare head. Tunic.

SCENE CXXXIV FIGURE 3

Dacian. Bare head. Tunic. Oval shield with small motifs.

SCENE CXXXIV FIGURE 4

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE CXXXIV FIGURE 5

Dacian. Bare head. Tunic. Oval shield is unfinished. Mistake in detail.

SCENE CXXXIV FIGURE 6

Dacian. Bare head. Tunic. Oval shield with wreath blazon.

SCENE CXXXIV FIGURE 7

Dacian. Bare head. Tunic.

SCENE CXXXIV FIGURE 8

Dacian. Bare head. Tunic.

SCENE CXXXIV FIGURE 9

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXXXIV FIGURE 10

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield is unfinished. Mistake in detail.

SCENE CXXXIV FIGURE 11

Dacian. Bare head. Tunic. Oval shield rear view or obscured.

SCENE CXXXIV FIGURE 12

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with rings blazon.

SCENE CXXXIV FIGURE 13

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with rings blazon.

SCENE CXXXIV FIGURE 14

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with rings blazon.

SCENE CXXXIV FIGURE 15

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Cloak is absent.

SCENE CXXXIV FIGURE 16

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE CXXXIV FIGURE 17

Dacian. Bare head. Tunic. Oval shield with rings blazon.

SCENE CXXXIV FIGURE 18

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent.

SCENE CXXXIV FIGURE 19

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE CXXXIV FIGURE 20

Dacian. Bare head. Tunic. Oval shield with rings blazon.

SCENE CXXXIV FIGURE 21

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXXXIV FIGURE 22

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Oval shield rear view or obscured.

SCENE CXXXIV FIGURE 23

Dacian. Bare head. Tunic.

SCENE CXXXIV FIGURE 24

Dacian. Bare head. Tunic. Oval shield with piles blazon.

SCENE CXXXIV FIGURE 25

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with rings blazon.

SCENE CXXXIV FIGURE 26

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE CXXXIV FIGURE 27

Dacian. Bare head. Tunic.

SCENE CXXXIV FIGURE 28

Dacian. Bare head. Tunic.

SCENE CXXXIV FIGURE 29

Dacian. Bare head. Tunic. Oval shield with tendrils blazon.

SCENE CXXXIV FIGURE 30

Dacian. Bare head. Tunic.

SCENE CXXXV FIGURE 1

Dacian. Pilleus. Tunic.

SCENE CXXXV FIGURE 2

Dacian. Pilleus. Tunic.

SCENE CXXXV FIGURE 3

Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE CXXXVI FIGURE 1

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXXVI FIGURE 2

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with Roman method of carriage.

SCENE CXXXVI FIGURE 3

Dacian. Bare head.

SCENE CXXXVI FIGURE 4

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXXVI FIGURE 5

Dacian. Bare head. Oval shield rear view or obscured.

SCENE CXXXVI FIGURE 6

Dacian. Bare head.

SCENE CXXXVI FIGURE 7

Dacian. Bare head.

SCENE CXXXVI FIGURE 8

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.

SCENE CXXXVI FIGURE 9

Dacian. Bare head.

SCENE CXXXVI FIGURE 10

Dacian. Bare head. Cloak is a fringed sagum.

SCENE CXXXVI FIGURE 11

Dacian. Bare head.

SCENE CXXXVI FIGURE 12

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with piles blazon.

SCENE CXXXVI FIGURE 13

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield rear view or obscured.

SCENE CXXXVI FIGURE 14

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield with Hellenistic method of carriage. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE CXXXVI FIGURE 15

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE CXXXVI FIGURE 16

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed. Additional detail on mail.

SCENE CXXXVII FIGURE 1

Citizen figure type. Helmet type 22. 'Lorica segmentata' type 5.

SCENE CXXXVII FIGURE 2

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield rear view or obscured. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXVII FIGURE 3

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXXXVII FIGURE 4

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXXVII FIGURE 5

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXVII FIGURE 6

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXXVII FIGURE 7

Trajan. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXXXVII FIGURE 8

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent. Cloak is absent. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXVII FIGURE 9

Standard bearer. Animal skin. Lorica hamata. Mail chiselling is absent.

SCENE CXXXVII FIGURE 10

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield rear view or obscured.

SCENE CXXXVII FIGURE 11

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Oval shield with palmettes blazon. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXVII FIGURE 12

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Oval shield rear view or obscured.

SCENE CXXXVII FIGURE 13

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE CXXXVII FIGURE 14

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXXXVII FIGURE 15

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXVII FIGURE 16

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Oval shield with palmettes blazon.

SCENE CXXXVII FIGURE 17

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Oval shield with wreath blazon.

SCENE CXXXVII FIGURE 18

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXXXVII FIGURE 19

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXXXVIII FIGURE 1

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Sword is absent. Cloak is absent. Horse harness

is practical. Mail edging is ragged, very small lappets, or fringed.

SCENE CXXXVIII FIGURE 2

Citizen figure type. Bare head. 'Lorica segmentata' type 5. Baldric is absent. Horse harness is practical.

SCENE CXXXVIII FIGURE 3

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent. Horse harness is practical.

SCENE CXXXIX FIGURE 1

Dacian cavalryman. Bare head. Tunic. Horse harness is impractical.

SCENE CXXXIX FIGURE 2

Dacian. Bare head. Tunic. Oval shield rear view or obscured. Mistake in detail.

SCENE CXXXIX FIGURE 3

Dacian. Pilleus.

SCENE CXXXIX FIGURE 4

Dacian. Pilleus. Tunic.

SCENE CXXXIX FIGURE 5

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXXXIX FIGURE 6

Dacian. Bare head. Tunic.

SCENE CXXXIX FIGURE 7

Dacian. Bare head. Oval shield with palmettes blazon.

SCENE CXXXIX FIGURE 8

Dacian. Bare head. Oval shield rear view or obscured.

SCENE CXXXIX FIGURE 9

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE CXXXIX FIGURE 10

Dacian. Bare head.

SCENE CXXXIX FIGURE 11

Dacian. Bare head.

SCENE CXXXIX FIGURE 12

Dacian. Bare head. Tunic. Oval shield with palmettes blazon.

SCENE CXL FIGURE 1

Dacian. Bare head. Tunic.

SCENE CXL FIGURE 2

Dacian. Bare head.

- SCENE CXL** **FIGURE 3**
Dacian. Bare head.
- SCENE CXL** **FIGURE 4**
Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage.
- SCENE CXL** **FIGURE 5**
Dacian. Bare head. Tunic. Oval shield rear view or obscured.
- SCENE CXL** **FIGURE 6**
Dacian. Bare head.
- SCENE CXL** **FIGURE 7**
Dacian. Bare head. Tunic. Oval shield rear view or obscured.
- SCENE CXL** **FIGURE 8**
Dacian. Bare head. Tunic.
- SCENE CXL** **FIGURE 9**
Dacian. Bare head. Tunic. Oval shield rear view or obscured.
- SCENE CXL** **FIGURE 10**
Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.
- SCENE CXL** **FIGURE 11**
Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage.
- SCENE CXL** **FIGURE 12**
Dacian. Bare head.
- SCENE CXL** **FIGURE 13**
Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.
- SCENE CXL** **FIGURE 14**
Dacian. Bare head.
- SCENE CXL** **FIGURE 15**
Dacian. Bare head. Tunic. Cloak is a fringed sagum.
- SCENE CXL** **FIGURE 16**
Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield rear view or obscured.
- SCENE CXL** **FIGURE 17**
Dacian. Bare head. Tunic.
- SCENE CXL** **FIGURE 18**
Dacian. Bare head. Tunic. Cloak is a fringed sagum.
- SCENE CXL** **FIGURE 19**
Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXLI FIGURE 1

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Baldric is absent. Sword is absent. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLI FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLI FIGURE 3

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is a sagum. Oval shield rear view or obscured. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLI FIGURE 4

Auxiliary infantryman. Bare head. Cloak is a sagum.

SCENE CXLI FIGURE 5

Officer. Bare head. Muscled cuirass. Cloak is a sagum.

SCENE CXLI FIGURE 6

Officer. Bare head. Cloak is a sagum.

SCENE CXLI FIGURE 7

Trajan. Bare head. Muscled cuirass. Cloak is a fringed sagum.

SCENE CXLI FIGURE 8

Dacian. Pilleus. Tunic.

SCENE CXLI FIGURE 9

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is present on cast. Cloak is a sagum. Oval shield with Roman blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLI FIGURE 10

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Cloak is a sagum.

SCENE CXLI FIGURE 11

Dacian. Pilleus. Tunic.

SCENE CXLI FIGURE 12

Auxiliary infantryman. Helmet type 16. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with tendrils blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLI FIGURE 13

Dacian. Pilleus.

SCENE CXLI FIGURE 14

Dacian. Pilleus. Tunic.

SCENE CXLI FIGURE 15

Dacian. Pilleus.

SCENE CXLI FIGURE 16

Dacian. Pilleus. Tunic.

SCENE CXLII FIGURE 1

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is impractical. Mail edging is ragged, very small lappets, or fringed. Additional detail on baldric.

SCENE CXLII FIGURE 2

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cloak is a sagum. Oval shield with tendrils blazon. Horse harness is impractical. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLII FIGURE 3

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is absent. Cloak is absent. Oval shield with piles blazon.

SCENE CXLII FIGURE 4

Auxiliary cavalryman. Helmet type 26. Lorica hamata. Mail chiselling is absent. Cingulum is present. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Horse harness is impractical. Cingulum present when unnecessary. Mistake in detail.

SCENE CXLII FIGURE 5

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is absent. Cloak is absent. Oval shield with tendrils blazon. Horse harness is practical. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLIII FIGURE 1

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is absent. Oval shield with tendrils blazon. Horse harness is impractical. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLIII FIGURE 2

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is absent. Oval shield is unfinished. Horse harness is practical. Mail edging is ragged, very small lappets, or fringed. Additional detail on baldric. Mistake in detail.

SCENE CXLIII FIGURE 3

Dacian cavalryman. Pilleus. Tunic. Oval shield with piles blazon. Horse harness is impractical.

SCENE CXLIII FIGURE 4

Dacian cavalryman. Pilleus. Tunic. Oval shield with piles blazon. Horse harness is impractical.

SCENE CXLIV FIGURE 1

Dacian cavalryman. Pilleus. Tunic. Oval shield with piles blazon. Horse harness is impractical.

SCENE CXLIV FIGURE 2

Dacian cavalryman. Pilleus. Tunic. Oval shield with piles blazon. Horse harness is practical.

SCENE CXLIV FIGURE 3

Dacian cavalryman. Pilleus. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon. Horse harness is impractical. Mistake in detail.

SCENE CXLIV FIGURE 4

Dacian cavalryman. Pilleus. Tunic. Oval shield with palmettes blazon. Horse harness is impractical.

SCENE CXLV FIGURE 1

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLV FIGURE 2

Dacian. Bare head. Tunic. Oval shield with Roman method of carriage.

SCENE CXLV FIGURE 3

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Tunic with tufts. Mail edging is zig-zag.

SCENE CXLV FIGURE 4

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield with palmettes blazon. Horse harness is practical. Mail edging is ragged, very small lappets, or fringed. Mistake in pose.

SCENE CXLV FIGURE 5

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Tunic with tufts. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLV FIGURE 6

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is a sagum. Oval shield with wreath blazon. Horse harness is impractical. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXLV FIGURE 7

Dacian. Pilleus. Tunic. Oval shield with piles blazon.

SCENE CXLV FIGURE 8

Auxiliary cavalryman. Helmet type 17. Lorica hamata. Mail chiselling is

surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with palmettes blazon. Mail edging is ragged, very small lappets, or fringed. Mistake in pose.

SCENE CXLV FIGURE 9

Auxiliary cavalryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with tendrils blazon. Horse harness is impractical. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXLV FIGURE 10

Auxiliary cavalryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with piles blazon. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXLV FIGURE 11

Dacian. Pilleus. Tunic. Oval shield with tendrils blazon.

SCENE CXLV FIGURE 12

Auxiliary cavalryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with wreath blazon. Horse harness is impractical. Mail edging is ragged, very small lappets, or fringed. Mistake in detail.

SCENE CXLV FIGURE 13

Auxiliary cavalryman. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with wreath blazon. Horse harness is practical. Mail edging is zig-zag. Additional detail on mail. Mistake in pose.

SCENE CXLVI FIGURE 1

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Tunic is fringed. Mail edging is ragged, very small lappets, or fringed. Additional detail on helmet. Mistake in detail.

SCENE CXLVI FIGURE 2

Auxiliary infantryman. Bare head. Lorica hamata. Mail chiselling is surviving on the shaft. Sword is present. Cloak is a sagum. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLVI FIGURE 3

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXLVI FIGURE 4

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a fringed sagum. Oval shield rear view or obscured. Tunic with tufts. Mail edging is ragged, very small lappets, or fringed. Additional detail on helmet.

SCENE CXLVI FIGURE 5

Dacian. Bare head. Tunic.

SCENE CXLVI FIGURE 6

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is a sagum. Oval shield with wreath blazon. Tunic with tufts. Mail edging is zig-zag.

SCENE CXLVI FIGURE 7

Dacian. Bare head. Tunic.

SCENE CXLVI FIGURE 8

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXLVI FIGURE 9

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Sword is absent. Cloak is absent. Oval shield with wreath blazon. Mail edging is zig-zag. Additional detail on mail.

SCENE CXLVI FIGURE 10

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CXLVII FIGURE 1

Citizen figure type. 'Lorica segmentata'. Cingulum is absent. Apron is absent. Baldric is absent. Sword is present. Rectangular shield with thunderbolts and wings blazon. Mistake in detail.

SCENE CXLVII FIGURE 2

Unidentifiable figure.

SCENE CXLVII FIGURE 3

Unidentifiable figure.

SCENE CXLVII FIGURE 4

Unidentifiable figure.

SCENE CXLVII FIGURE 5

Unidentifiable figure. Cloak is a sagum.

SCENE CXLVII FIGURE 6

Unidentifiable figure.

SCENE CXLVII FIGURE 7

Unidentifiable figure.

SCENE CXLVII FIGURE 8

Unidentifiable figure. Cloak is a sagum.

SCENE CXLVII FIGURE 9

Unidentifiable figure.

SCENE CXLVII FIGURE 10

Unidentifiable figure.

SCENE CXLVII FIGURE 11

Unidentifiable figure. Cloak is a sagum.

SCENE CXLVII FIGURE 12

Unidentifiable figure.

SCENE CXLVII FIGURE 13

Unidentifiable figure.

SCENE CXLVII FIGURE 14

Unidentifiable figure.

SCENE CXLVII FIGURE 15

Unidentifiable figure.

SCENE CXLVII FIGURE 16

Unidentifiable figure.

SCENE CXLVII FIGURE 17

Unidentifiable figure.

SCENE CXLVII FIGURE 18

Unidentifiable figure.

SCENE CXLVII FIGURE 19

Citizen figure type. 'Lorica segmentata'. Baldric is absent. Rectangular shield rear view or obscured.

SCENE CXLVII FIGURE 20

Unidentifiable figure.

SCENE CXLVII FIGURE 21

Unidentifiable figure.

SCENE CXLVII FIGURE 22

Unidentifiable figure. Cloak is a sagum.

SCENE CXLVII FIGURE 23

Unidentifiable figure.

SCENE CXLVIII FIGURE 1

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Oval shield with wreath blazon.

SCENE CXLVIII FIGURE 2

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured.

SCENE CXLVIII FIGURE 3

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXLVIII FIGURE 4

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXLVIII FIGURE 5

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured.

SCENE CXLVIII FIGURE 6

Dacian. Bare head. Tunic.

SCENE CXLVIII FIGURE 7

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent.

SCENE CXLVIII FIGURE 8

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is present on cast. Baldric is present. Sword is present. Cloak is absent. Oval shield with wreath blazon. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLVIII FIGURE 9

Dacian. Pilleus. Tunic.

SCENE CXLVIII FIGURE 10

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXLVIII FIGURE 11

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is present. Sword is present. Cloak is absent. Oval shield with piles blazon. Tunic with tufts. Mail edging is zig-zag.

SCENE CXLVIII FIGURE 12

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Baldric is absent. Cloak is absent. Tunic with tufts. Mail edging is zig-zag.

SCENE CXLVIII FIGURE 13

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXLVIII FIGURE 14

Dacian. Bare head. Tunic.

SCENE CXLVIII FIGURE 15

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with piles blazon. Tunic with tufts.

SCENE CXLVIII FIGURE 16

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Baldric is present. Cloak is absent. Oval shield with wreath blazon.

SCENE CXLVIII FIGURE 17

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield rear view or obscured.

SCENE CXLVIII FIGURE 18

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent.

SCENE CXLVIII FIGURE 19

Auxiliary infantryman. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with piles blazon. Tunic with tufts. Mail edging is ragged, very small lappets, or fringed.

SCENE CXLVIII FIGURE 20

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Oval shield rear view or obscured.

SCENE CL FIGURE 1

Auxiliary infantryman. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is absent. Cloak is absent. Oval shield rear view or obscured. Mail edging is plain (unfinished). Mistake in detail.

SCENE CL FIGURE 2

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield is unfinished. Mistake in detail.

SCENE CL FIGURE 3

Dacian. Pilleus. Tunic.

SCENE CL FIGURE 4

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is present on cast. Cloak is absent.

SCENE CL FIGURE 5

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with piles blazon. Mail edging is shallow and rounded lappets. Additional detail on baldric.

SCENE CL FIGURE 6

Deity.

SCENE CL FIGURE 7

Dacian. Pilleus. Bare torso. Mistake in figure type characteristics.

SCENE CL FIGURE 8

Dacian. Pilleus. Bare torso. Mistake in figure type characteristics.

SCENE CL FIGURE 9

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Mail edging is ragged, very small lappets, or fringed.

SCENE CL FIGURE 10

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CL **FIGURE 11**

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent.

SCENE CL **FIGURE 12**

Dacian. Bare head.

SCENE CL **FIGURE 13**

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is present on cast.

SCENE CL **FIGURE 14**

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Cloak is absent. Oval shield with wreath blazon.

SCENE CLI **FIGURE 1**

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield is unfinished. Mail edging is zig-zag. Mistake in detail.

SCENE CLI **FIGURE 2**

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with piles blazon. Tunic is absent. Mail edging is zig-zag. Mistake in detail.

SCENE CLI **FIGURE 3**

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with wreath blazon. Mistake in pose.

SCENE CLI **FIGURE 4**

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Mail edging is zig-zag.

SCENE CLI **FIGURE 5**

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with tendrils blazon. Mail edging is zig-zag.

SCENE CLI **FIGURE 6**

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with palmettes blazon.

SCENE CLI **FIGURE 7**

Dacian. Bare head. Tunic. Cloak is a fringed sagum.

SCENE CLI **FIGURE 8**

Dacian. Flat-topped hat. Tunic. Oval shield rear view or obscured.

SCENE CLI **FIGURE 9**

Dacian. Flat-topped hat. Tunic. Cloak is absent. Oval shield with piles blazon.

SCENE CLI FIGURE 10

Dacian. Bare head. Tunic. Cloak is a fringed sagum. Oval shield with tendrils blazon.

SCENE CLII FIGURE 1

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is absent. Cloak is absent.

SCENE CLII FIGURE 2

Auxiliary infantryman. Helmet type 22. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Cloak is absent. Oval shield with small motifs. Tunic is fringed.

SCENE CLII FIGURE 3

Auxiliary infantryman. Lorica hamata. Mail chiselling is present on cast. Cloak is absent.

SCENE CLII FIGURE 4

Dacian. Bare head. Tunic.

SCENE CLII FIGURE 5

Auxiliary infantryman. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield with tendrils blazon.

SCENE CLII FIGURE 6

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is absent. Cloak is absent. Oval shield is unfinished. Mistake in detail.

SCENE CLII FIGURE 7

Auxiliary infantryman. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield with Roman blazon. Tunic is absent. Mail edging is zig-zag. Mistake in detail.

SCENE CLIII FIGURE 1

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Mail edging is zig-zag.

SCENE CLIII FIGURE 2

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Baldric is present. Sword is present. Cloak is absent. Oval shield rear view or obscured. Tunic is absent. Mail edging is zig-zag. Mistake in detail.

SCENE CLIII FIGURE 3

Auxiliary infantryman. Helmet type 17. Lorica hamata. Mail chiselling is surviving on the shaft. Sword is present. Cloak is absent. Oval shield with piles blazon. Tunic is absent. Mail edging is zig-zag. Mistake in detail.

SCENE CLIV FIGURE 1

Auxiliary infantryman. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a sagum. Oval shield rear view or obscured. Tunic

Mistake in detail.

SCENE CLIV FIGURE 2
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 3
Auxiliary infantryman. Bare head. Cloak is a sagum.

SCENE CLIV FIGURE 4
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 5
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 6
Auxiliary infantryman. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Oval shield with Hellenistic method of carriage. Tunic is absent. Mistake in detail.

SCENE CLIV FIGURE 7
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 8
Auxiliary infantryman. Bare head. Cloak is a sagum.

SCENE CLIV FIGURE 9
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 10
Auxiliary infantryman. Bare head. Tunic. Baldric is absent. Sword is absent. Cloak is a fringed sagum. Oval shield rear view or obscured. Tunic is absent. Mistake in detail.

SCENE CLIV FIGURE 11
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 12
Auxiliary infantryman. Bare head. Tunic. Tunic is absent. Mistake in detail.

SCENE CLIV FIGURE 13
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 14
Auxiliary infantryman. Bare head. Tunic. Cloak is a sagum. Oval shield rear view or obscured.

SCENE CLIV FIGURE 15
Auxiliary infantryman. Bare head.

SCENE CLIV FIGURE 16
Auxiliary infantryman. Bare head. Cloak is a sagum.

SCENE CLV FIGURE 1
Roman civilian. Bare head.

SCENE CLV FIGURE 2
Roman civilian. Bare head.

SCENE CLV **FIGURE 3**
Roman civilian. Bare head.

SCENE CLV **FIGURE 4**
Roman civilian. Bare head.

SCENE CLV **FIGURE 5**
Roman civilian. Bare head.

SCENE CLV FIGURE 6
Roman civilian. Bare head.

SCENE CLV **FIGURE 7**
Roman civilian. Bare head.

SCENE CLV **FIGURE 8**
Roman civilian. Bare head.

Appendix 2: 'Loricae Segmentatae'.

Banded armour worn by the citizen soldiers on the spiral frieze has been categorised according to chest and upper back plate fittings (Types 1-26; see Fig.13). Drawings accompanying this appendix are modelled on XVIII,5.

1. Chest plates fastened together by two horizontal buckled straps which are attached to one plate by a studded lobate-hinged fitting. Back plates with two or three studded double-lobate fittings.
IV, XI, XII, XIII, XVIII.
Pl.10-1, 16.
2. Chest plates fastened together by a horizontal tie on a curvilinear fitting. Four studs surround the latter.
IV, XV.
Pl.4-5.
3. Chest plates fastened together by a horizontal tie in a reef-knot. The ends of the tie are attached to the plates by studded rectangular fittings.
XXXIX.
Pl.37, 38.
4. Chest plates fastened together by an upper knotted tie and a lower buckled strap. Both fastenings are attached to the plates by curvilinear, studded fittings.
XL.
5. Chest and back are represented with four plates each, divided up by a vertical and a horizontal joint. The upper and lower plates are horizontally attached in pairs by a strip with a stud at both ends.
X, XI, XVI, XVII, XIX, XX, XL, XLIII, XLIX, LX, CXIV, CXXIII, CXXXVII, CXXXVIII.
Pl.9, 15, 17, 53, 106.
6. Chest and back, each with a pair of vertically joined plates, have one horizontally attachment strip. Above and below the latter are two large studs positioned over the joint.
XIX.
7. Chest and back plates attached by two horizontal strips, between which is one large stud positioned over the vertical joint.
XXVII, LXXII.
Pl.78.
8. Chest and back each with a pair of plates. Four studs appear on the chest, two on each plate.
XXI.
Pl.18.
9. Chest and back each divided into four plates. One stud in each quarter.
LXXXV.

10. Chest and back plates joined by one horizontal plain rectangular fitting.
XLIX, LV.
11. Chest and back plates joined by two plain rectangular fittings.
XCV, CII, CVI, CX, CXXVII.
12. Chest and back plates with an edges vertical joint. Attached by horizontal rectangular fittings with a medial ridge, two on the chest, three on the back.
LXII, CIV.
13. Edged vertical joint between plates with one horizontal fitting linking the two plates. The fitting has two studs on it.
XXIV.
14. Plain vertical joint fastened by two edged rectangular plates, each with a pair of studs.
LI, LII.
Pl.47.
15. Chest and back plates with plain vertical joint and fastened by three rectangular fittings, each with four corner studs. The fittings also appear on the girdle plates.
LXXIII.
Pl.83.
16. Chest with two and back with three long, narrow rectangular fittings, each with a medial ridge over the vertical plate joint.
XCVIII.
17. Plates horizontally fastened by an upper plain curvilinear fitting and a lower plain rectangular piece.
XLII, XLIX, CXV.
Pl.41.
18. Plates horizontally fastened by two curvilinear fittings, each with one or two studs.
XXVI, XXXIX, XLIX, LVI, LXXII, CVI, CXVII, CXXVII.
Pl.37, 50, 79.
19. Plates with an edged vertical joint and fastened by two curvilinear plates, each with a vertical medial ridge and four studs. Fittings also appear on the girdle plates.
LXVIII.
Pl.73.
20. Plates with an edged vertical joint and fastened by two curvilinear fittings, each with a horizontal hinge or beading over the joint. Fittings also appear on the girdle plates.
CXVI, CXVII, CXXIX.
Pl.111.
21. Plates fastened by two plain curvilinear fittings with dove-tail ends.
XCVI, CXIV.

Pl.92.

22. Plates with a beaded vertical joint and fastened by one curvilinear fitting with four corner studs. Fittings also appear on the girdle plates.

LXVIII.

Pl.73.

23. Plates fastened by one chest and two back rectangular fittings with toothed ends and a pair of studs. Fittings also appear on the girdle plates.

LXV, LXVI, LXXI, LXXIII, CI, CXVI.

Pl.64, 77, 83.

24. Plates with a beaded vertical joint, fastened by one plain curvilinear, toothed fitting. Beading extends down the joint between girdle plates.

LXVI, LXVIII, CI, CXXIV.

Pl.66-7.

25. Plates fastened by two ridged and toothed curvilinear fittings. Rectangular fittings with corner studs fasten the girdle plates.

LXV, LXVI.

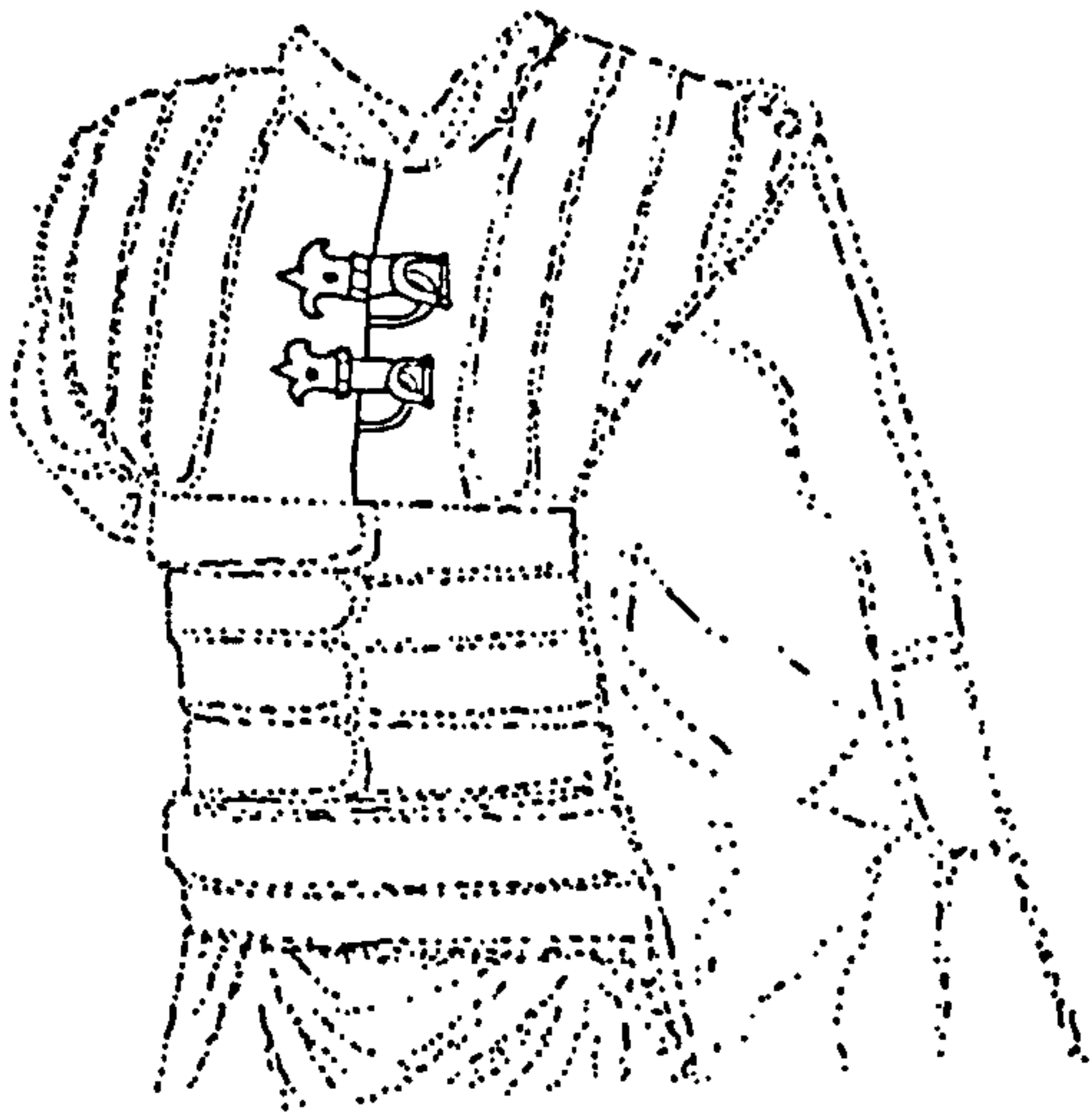
Pl.66.

26. Plates with either no fastenings or one or two horizontal strips with studded ends. The girdle plates have studded rectangular rosette fittings.

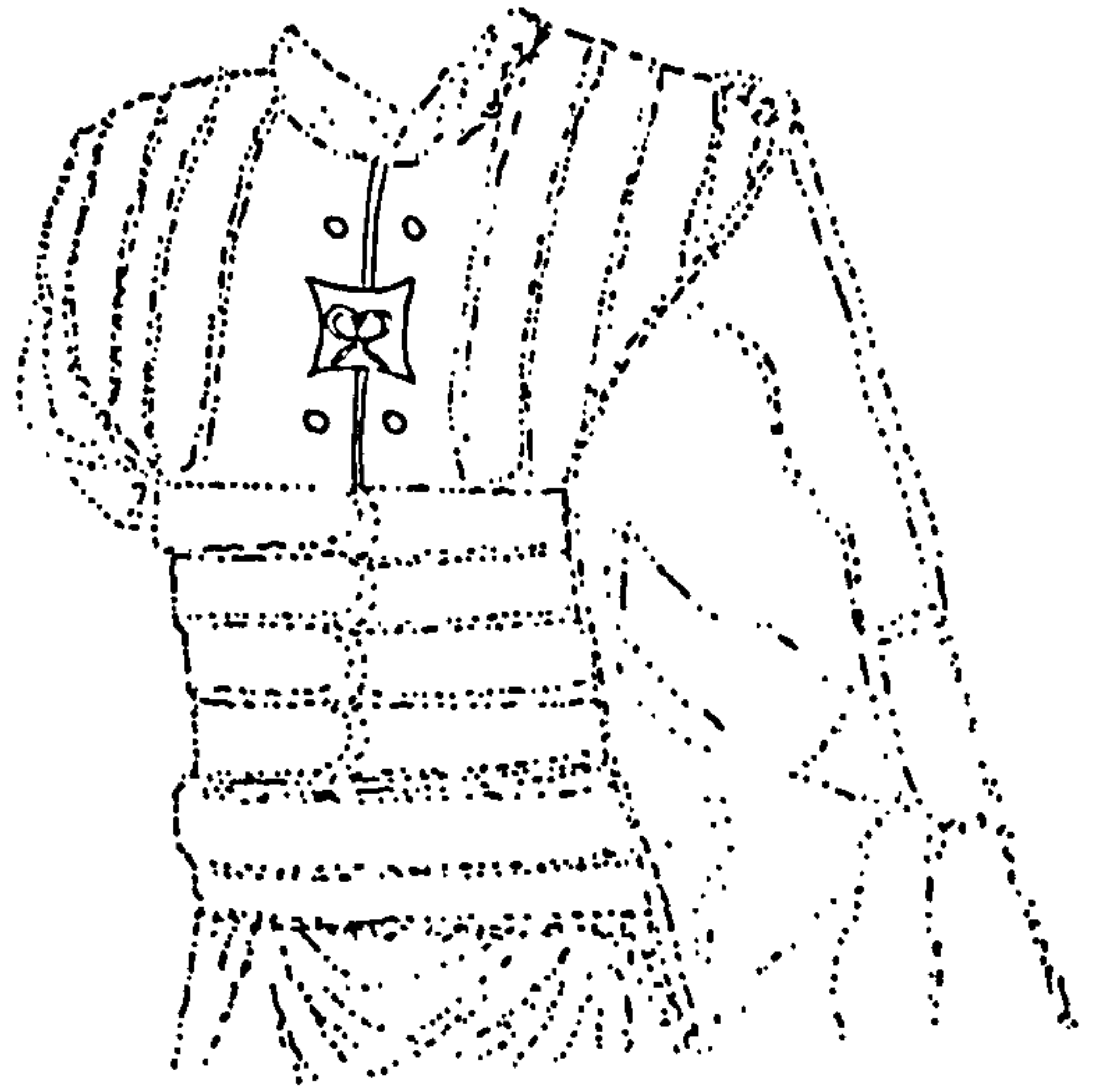
LX, LXIX.

Pl.53, 74.

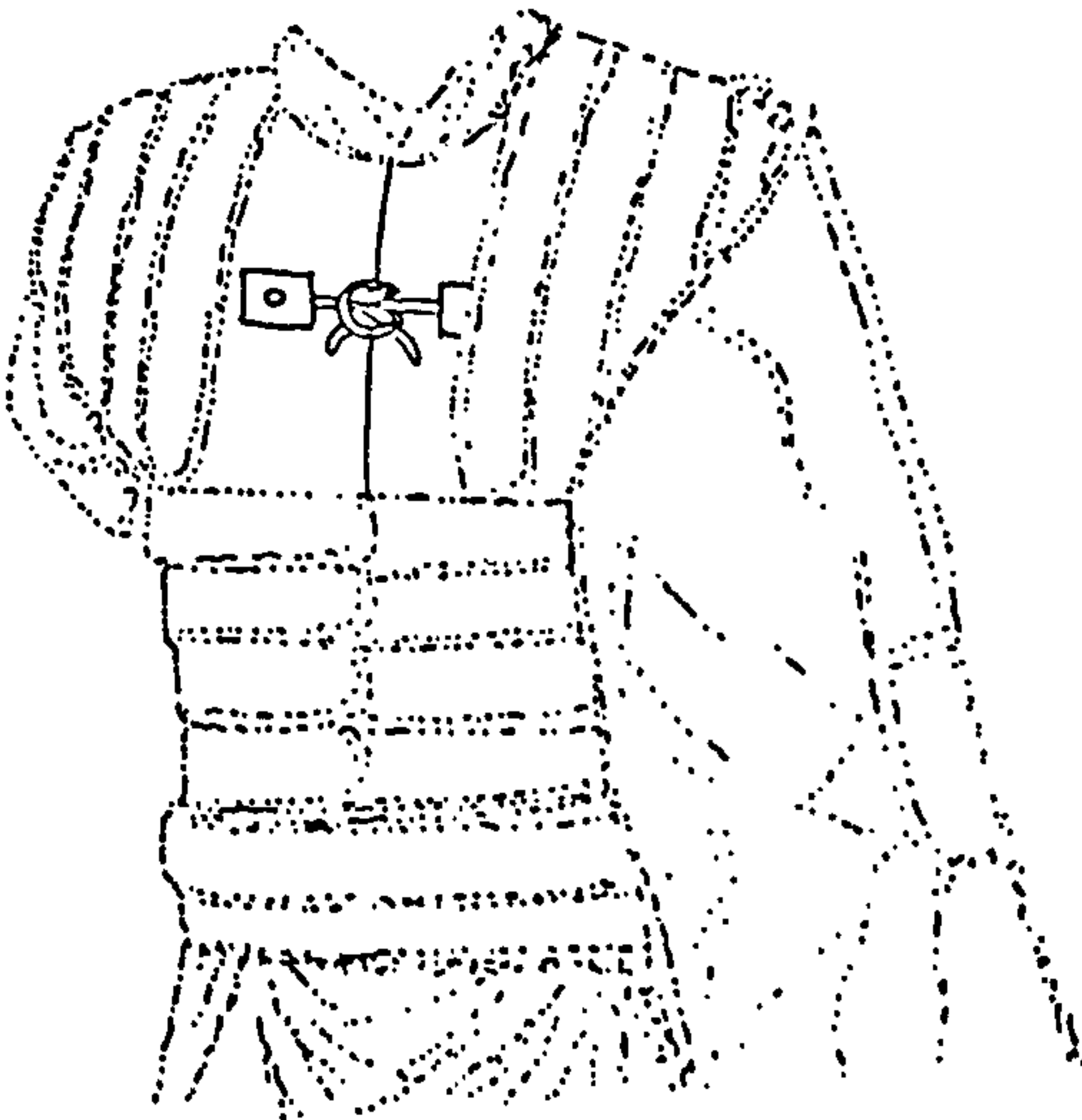
These variations of fittings group into seven super-categories: lobate (Type 1), tie (2-6, 26), stud (7-9), rectangular (10-6), rectangular and curvilinear (17), curvilinear (18-22) and toothed (23-5) fastenings (Fig.14).



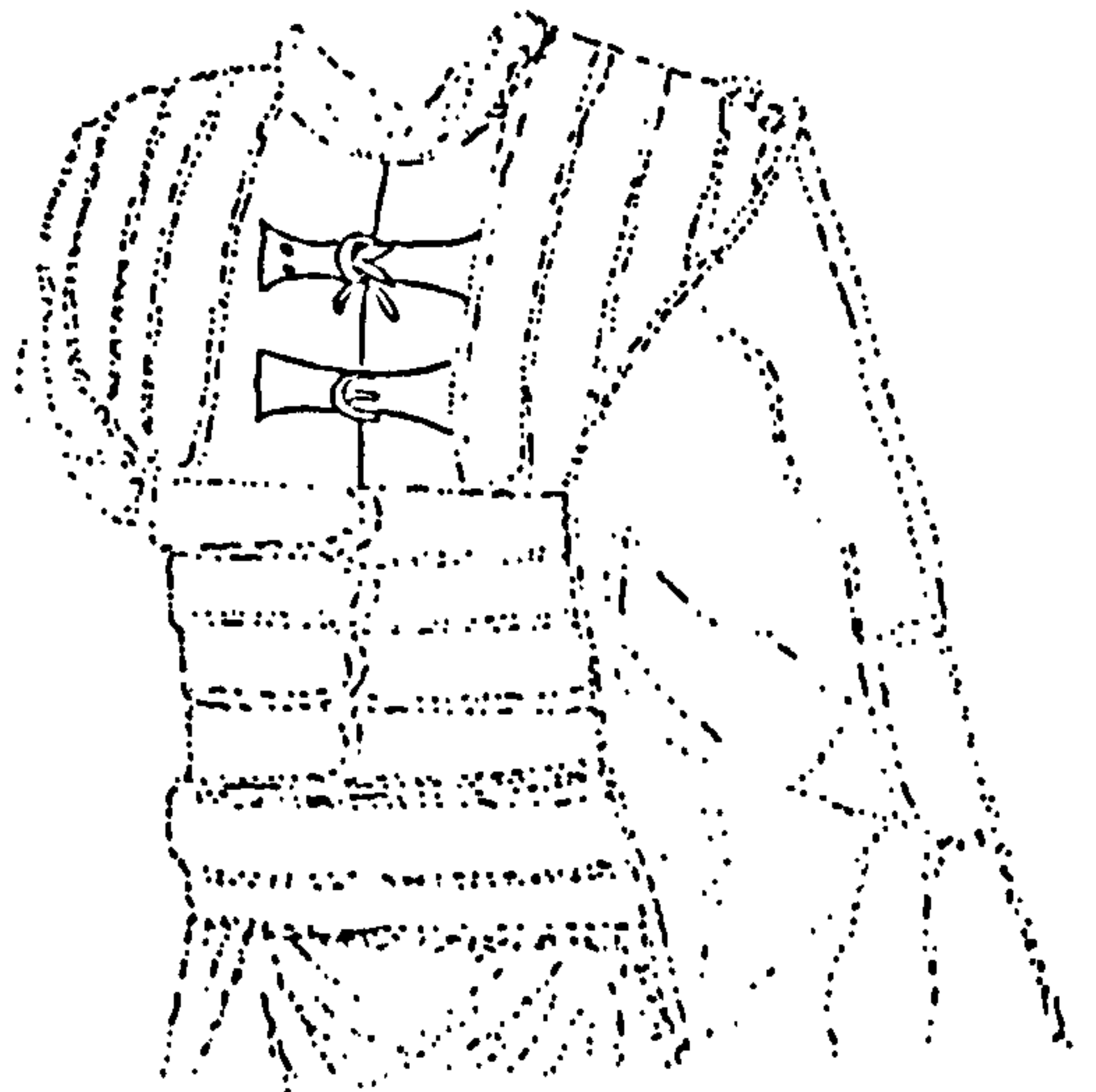
Type 1



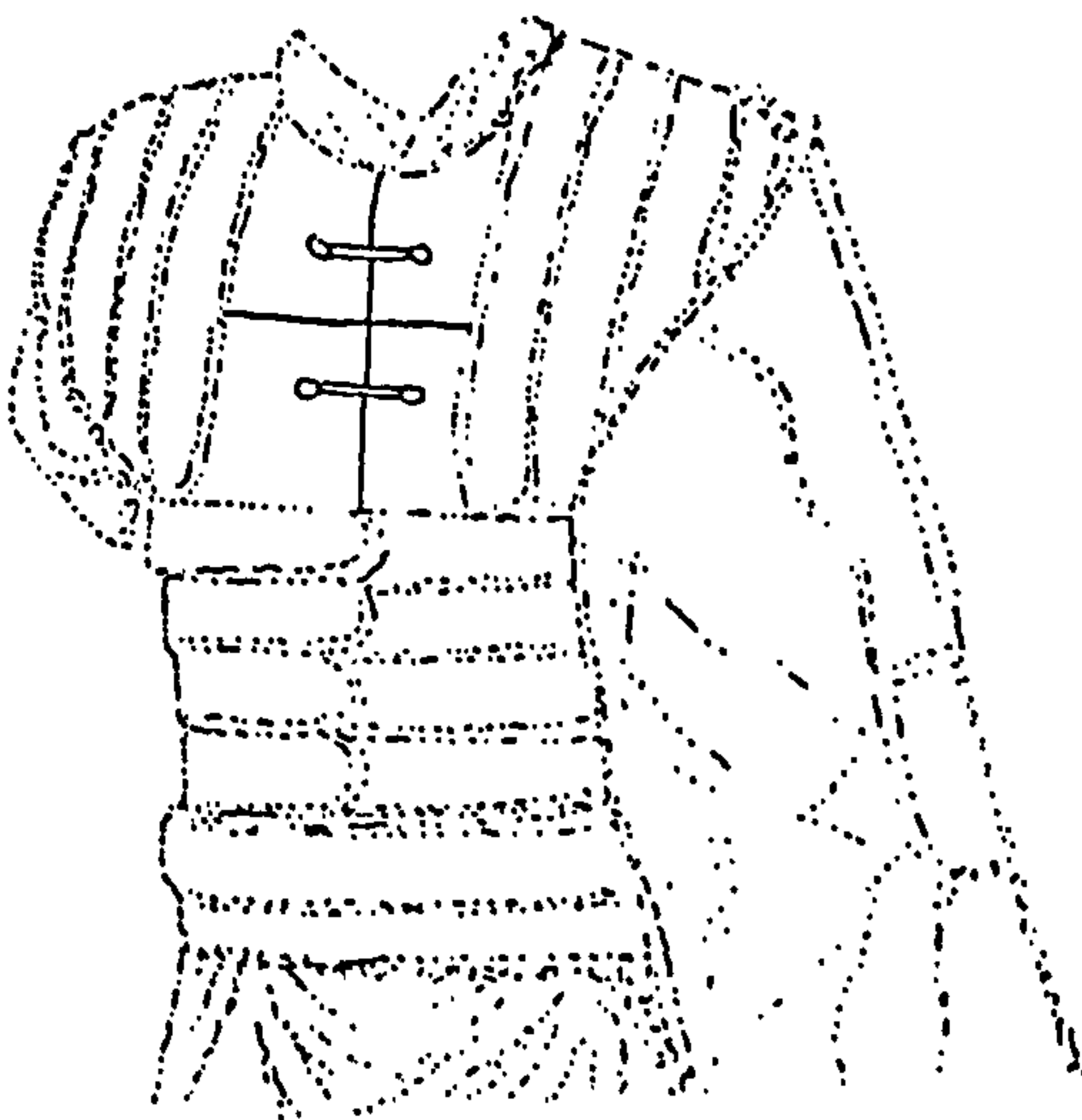
Type 2



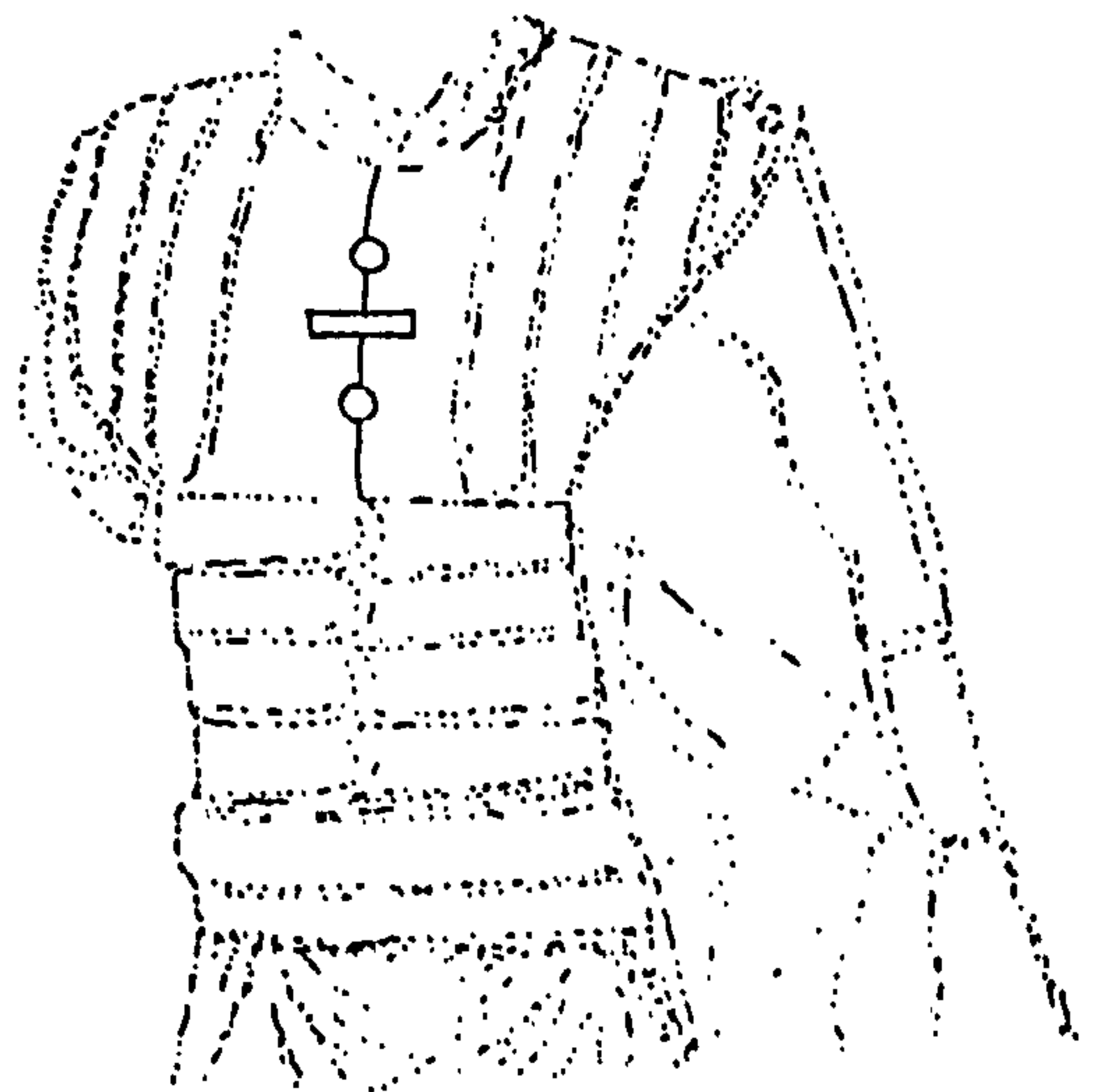
Type 3



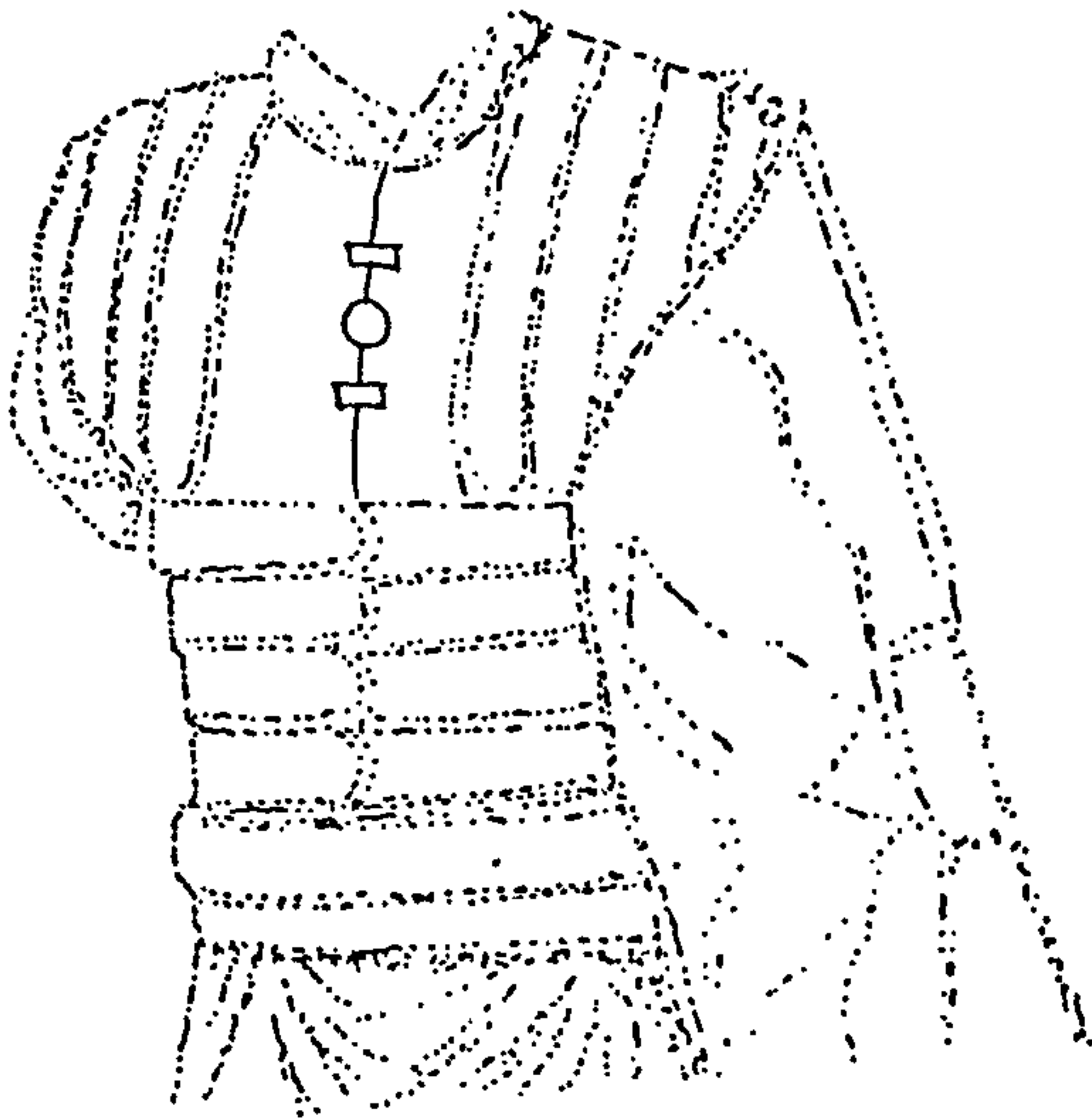
Type 4



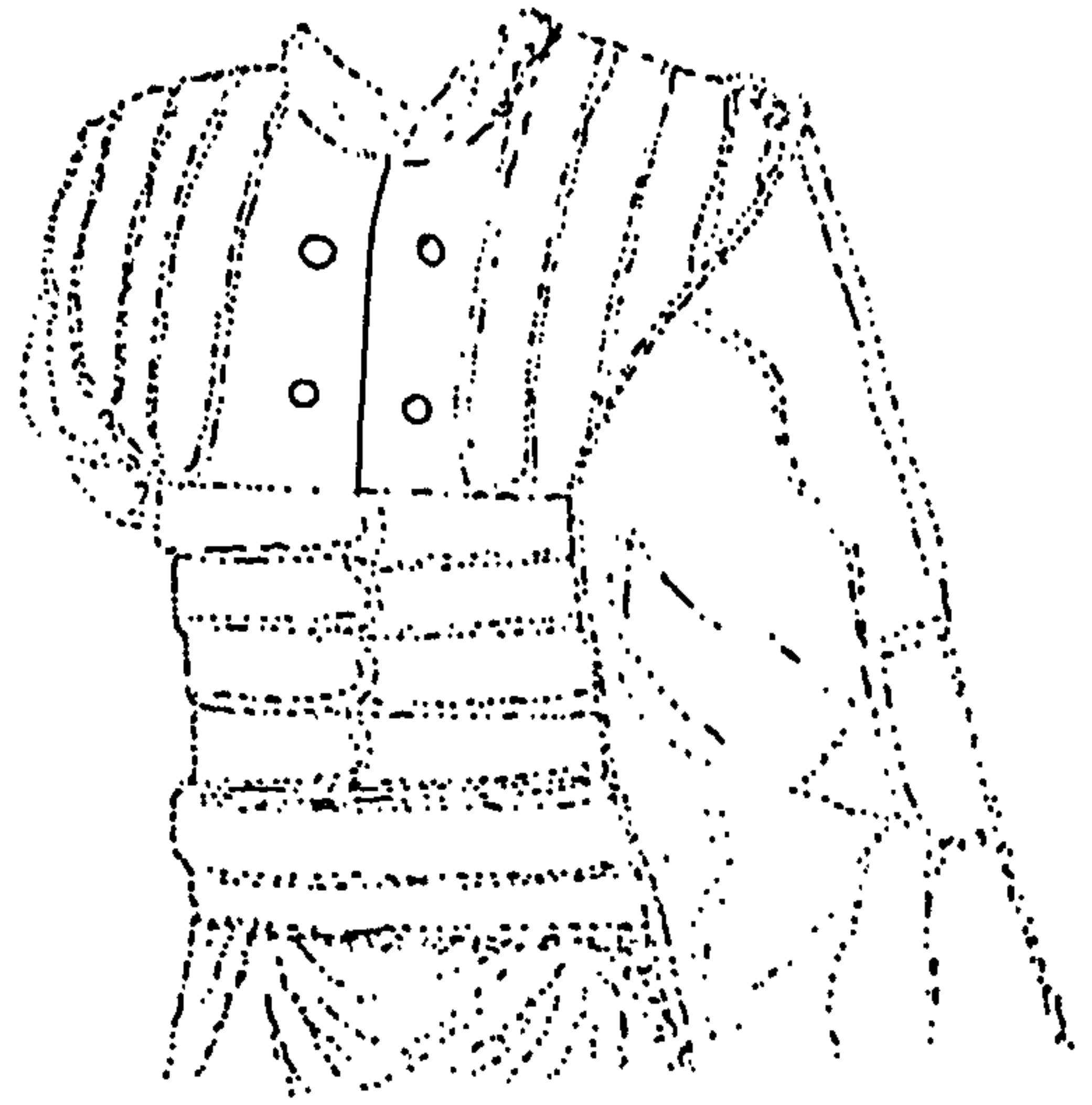
Type 5



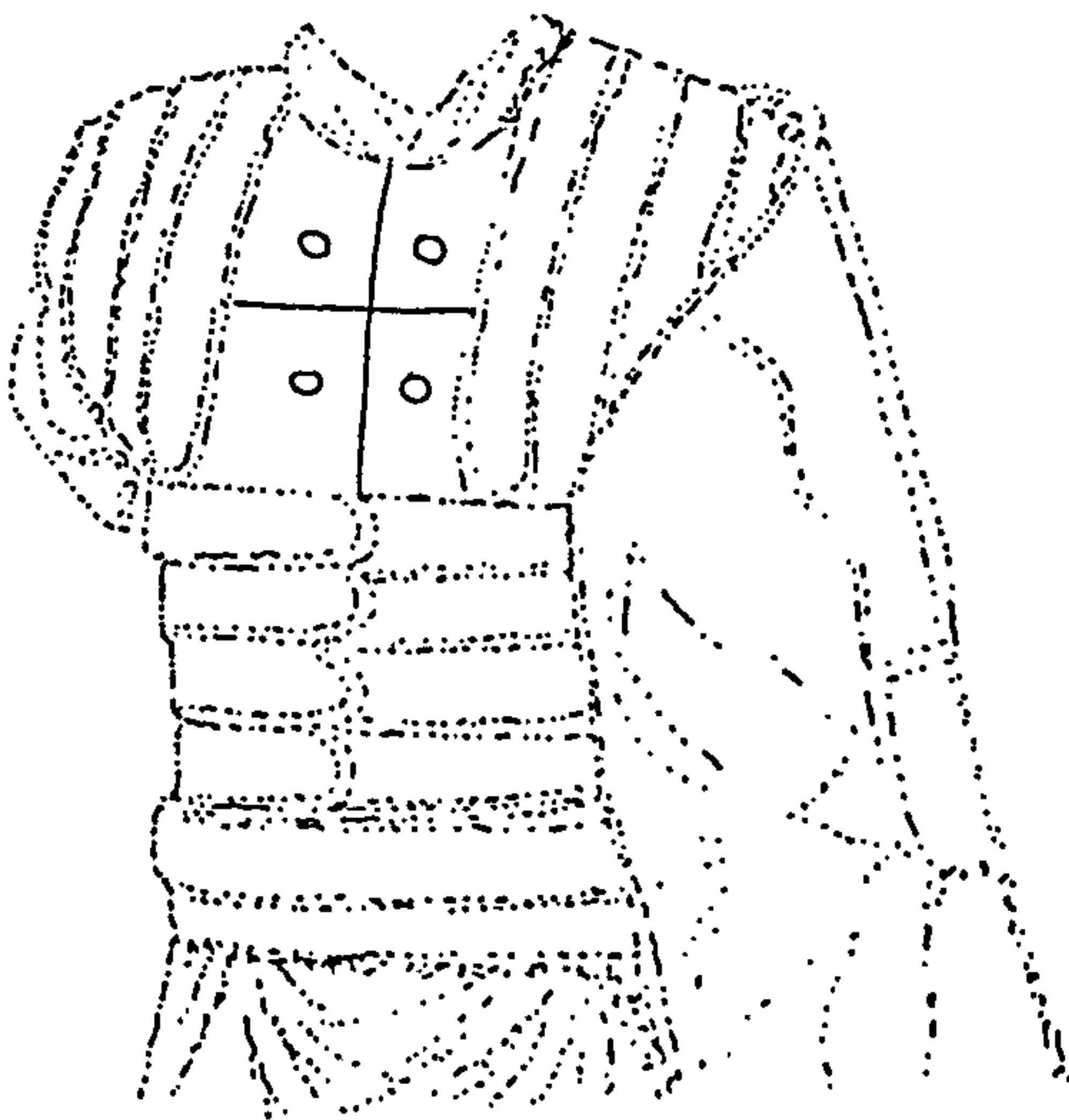
Type 6



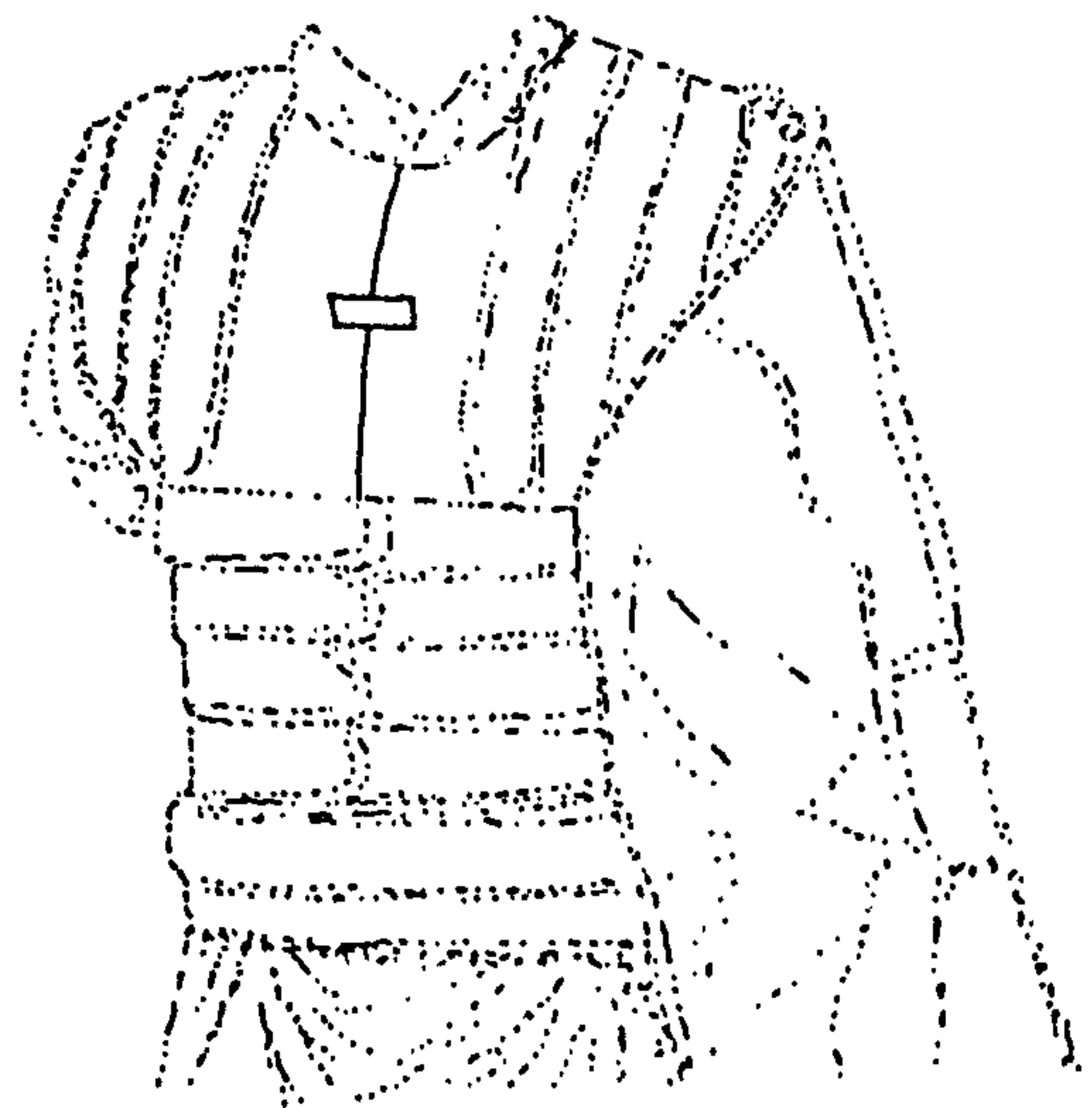
Type 7



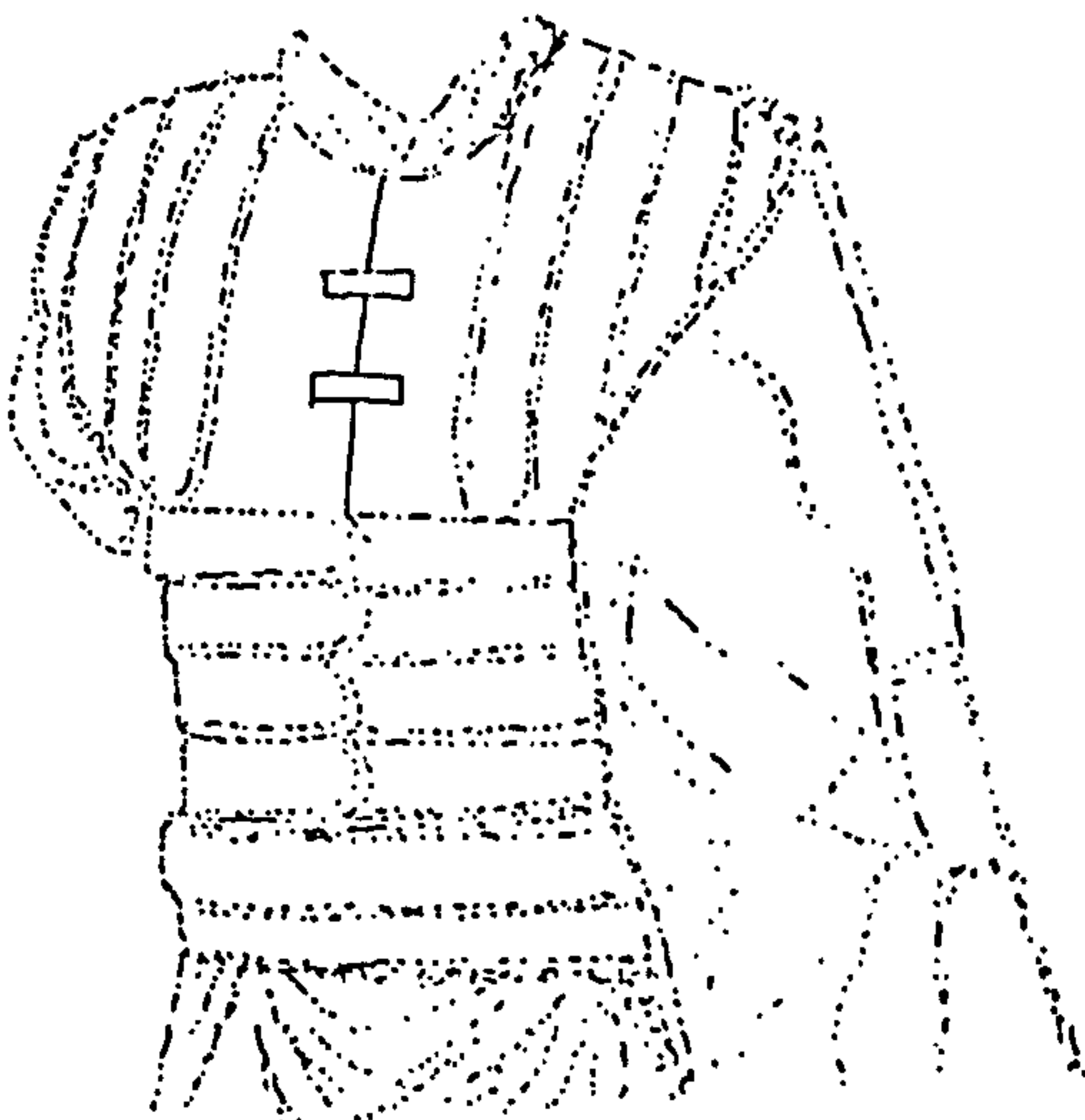
Type 8



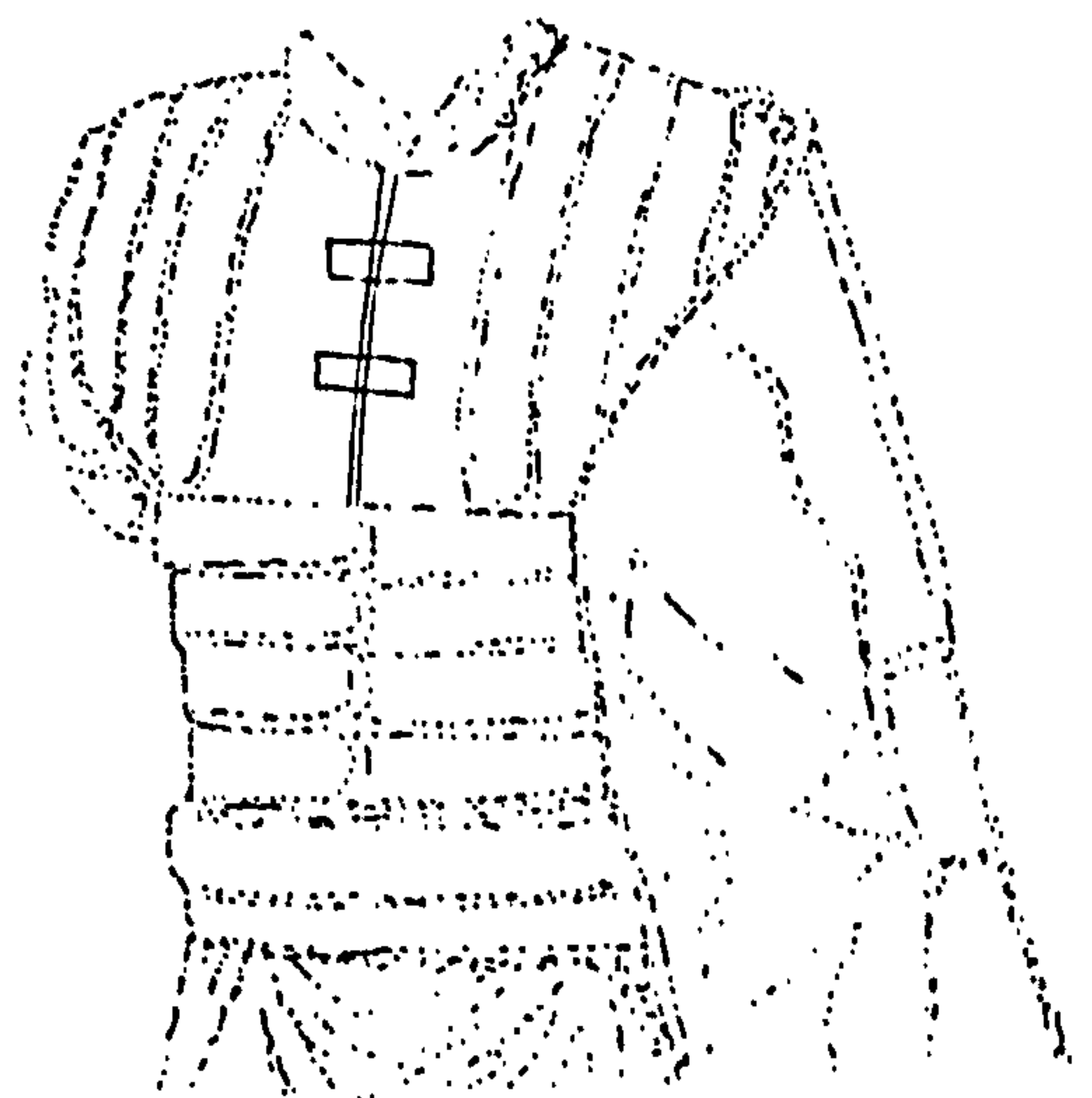
Type 9



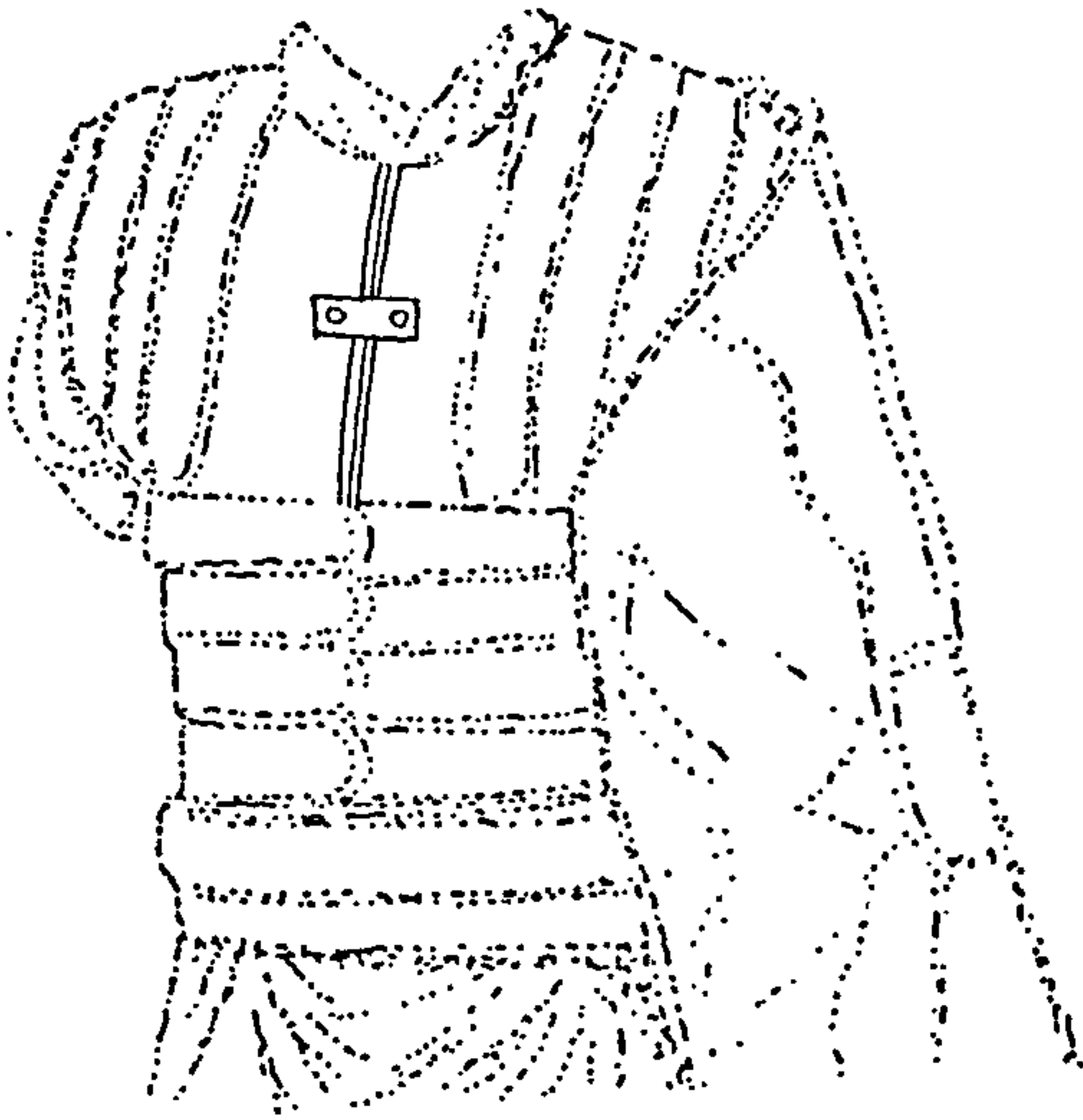
Type 10



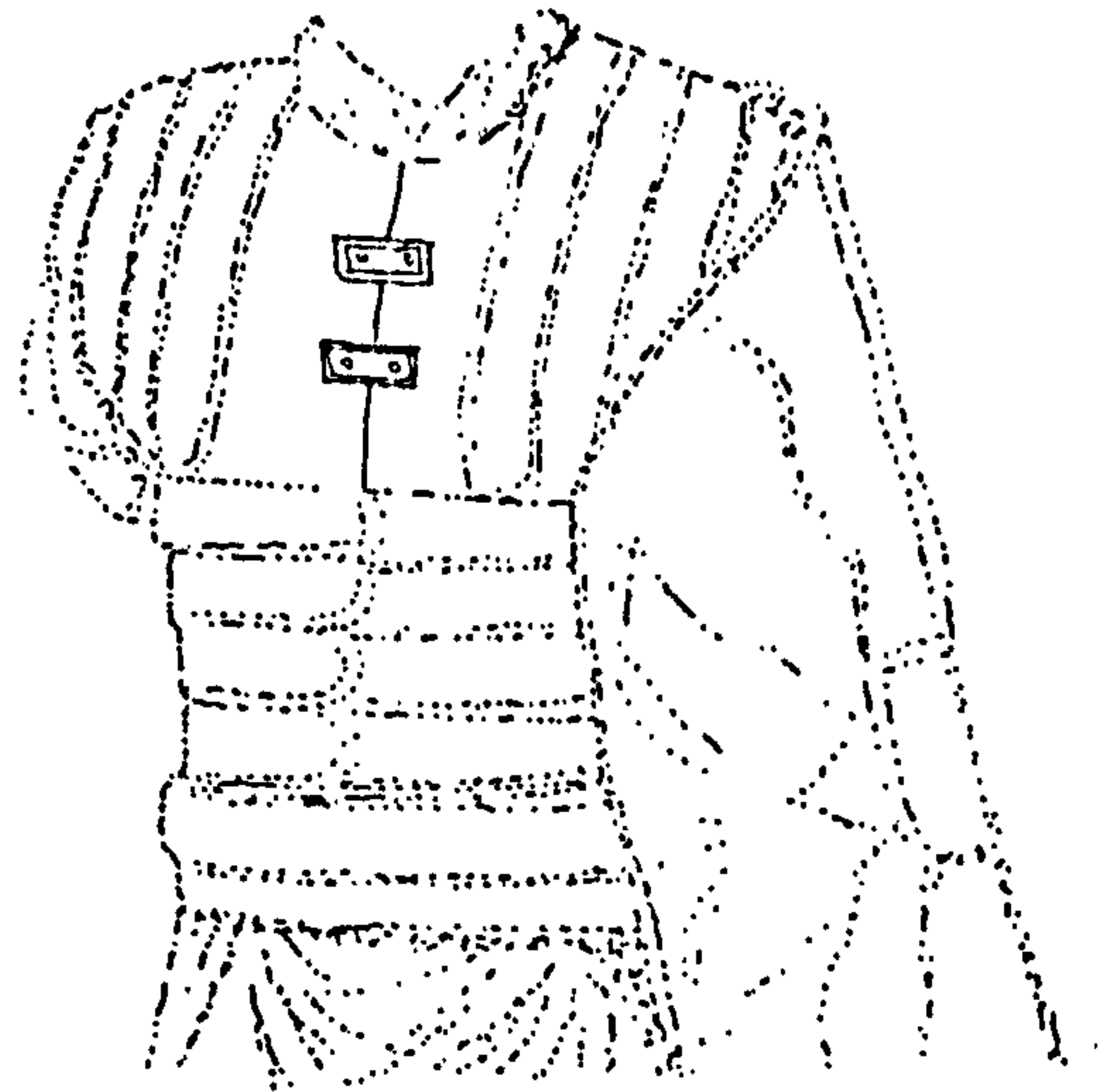
Type 11



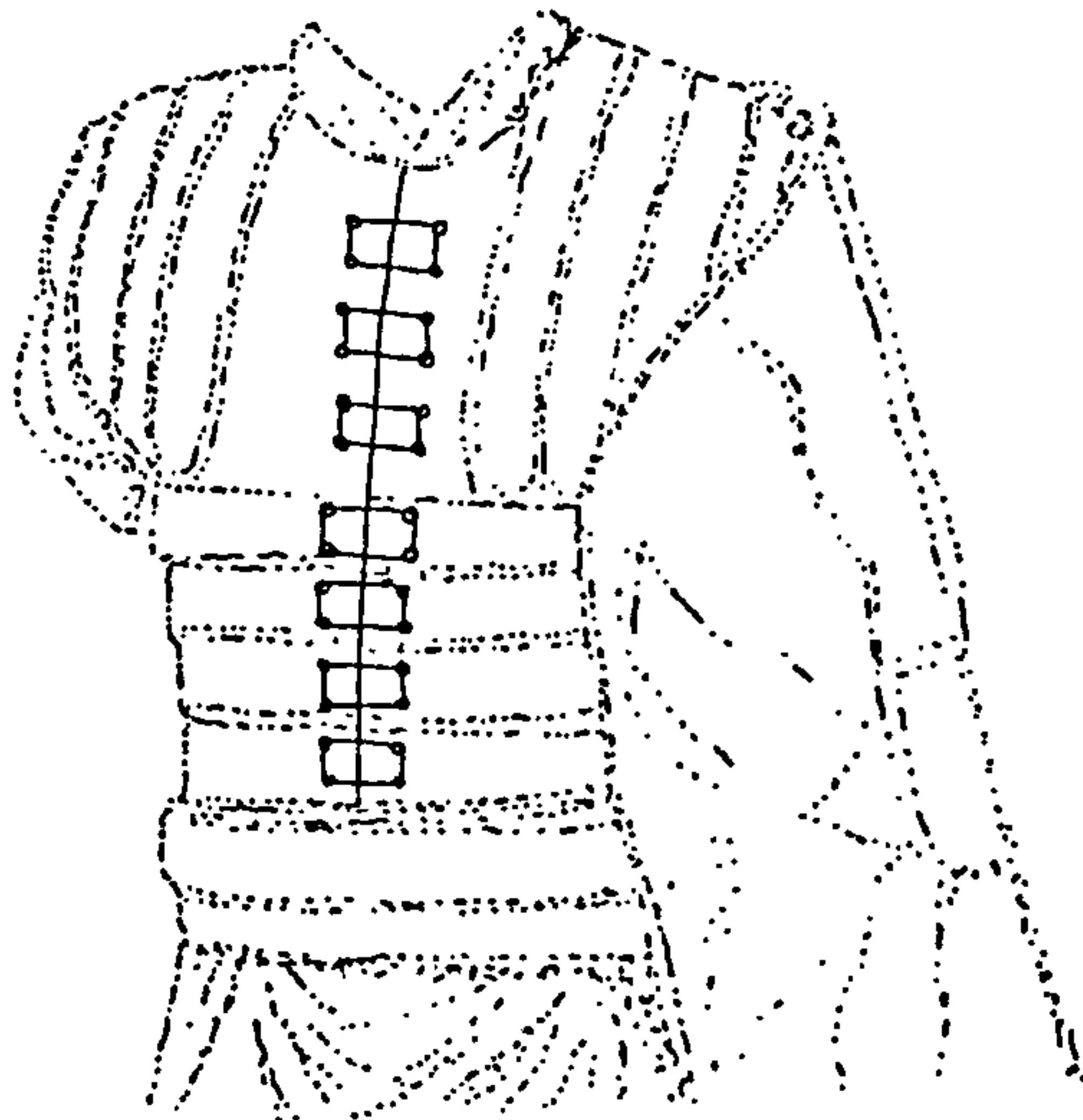
Type 12



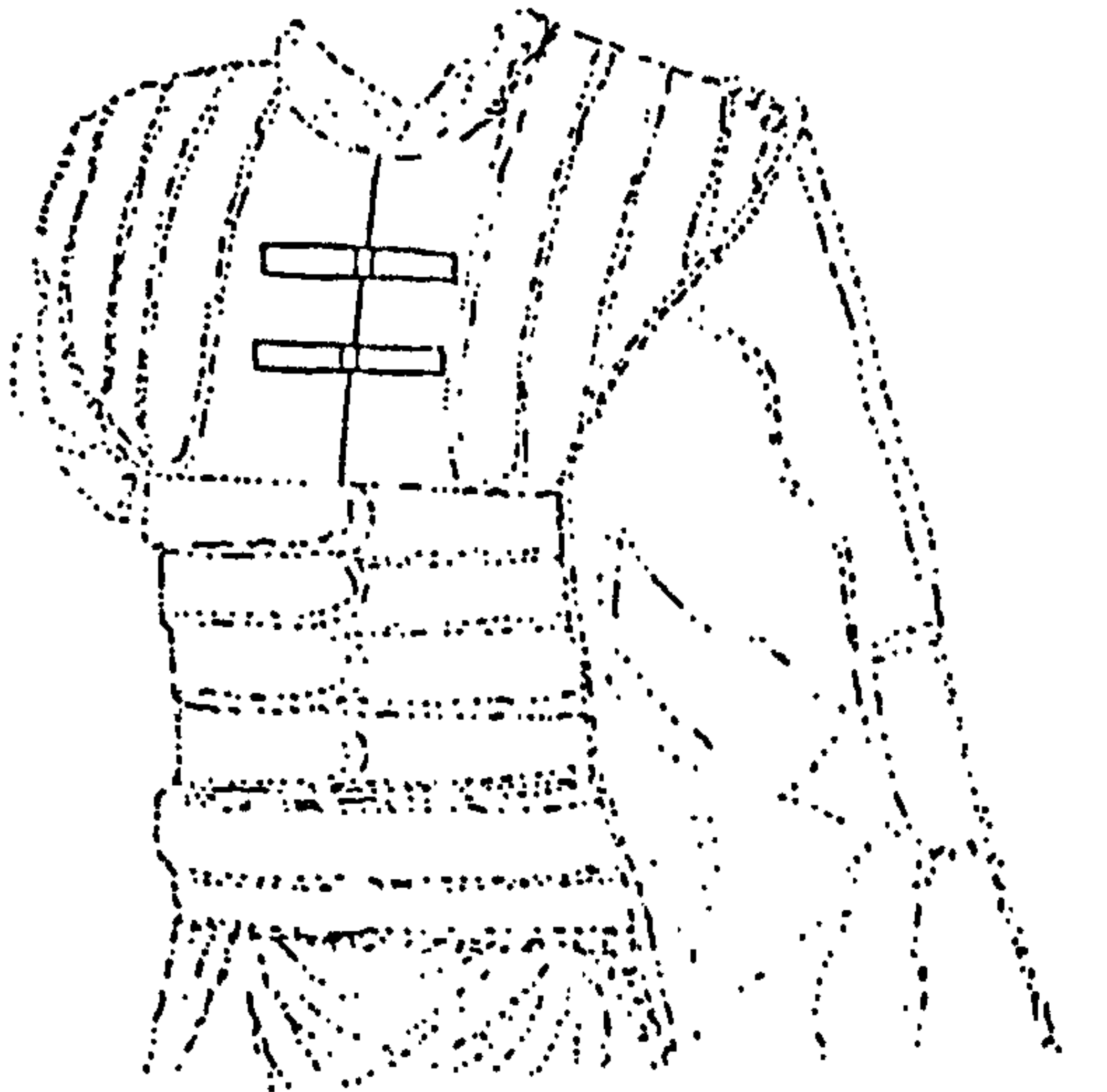
Type 13



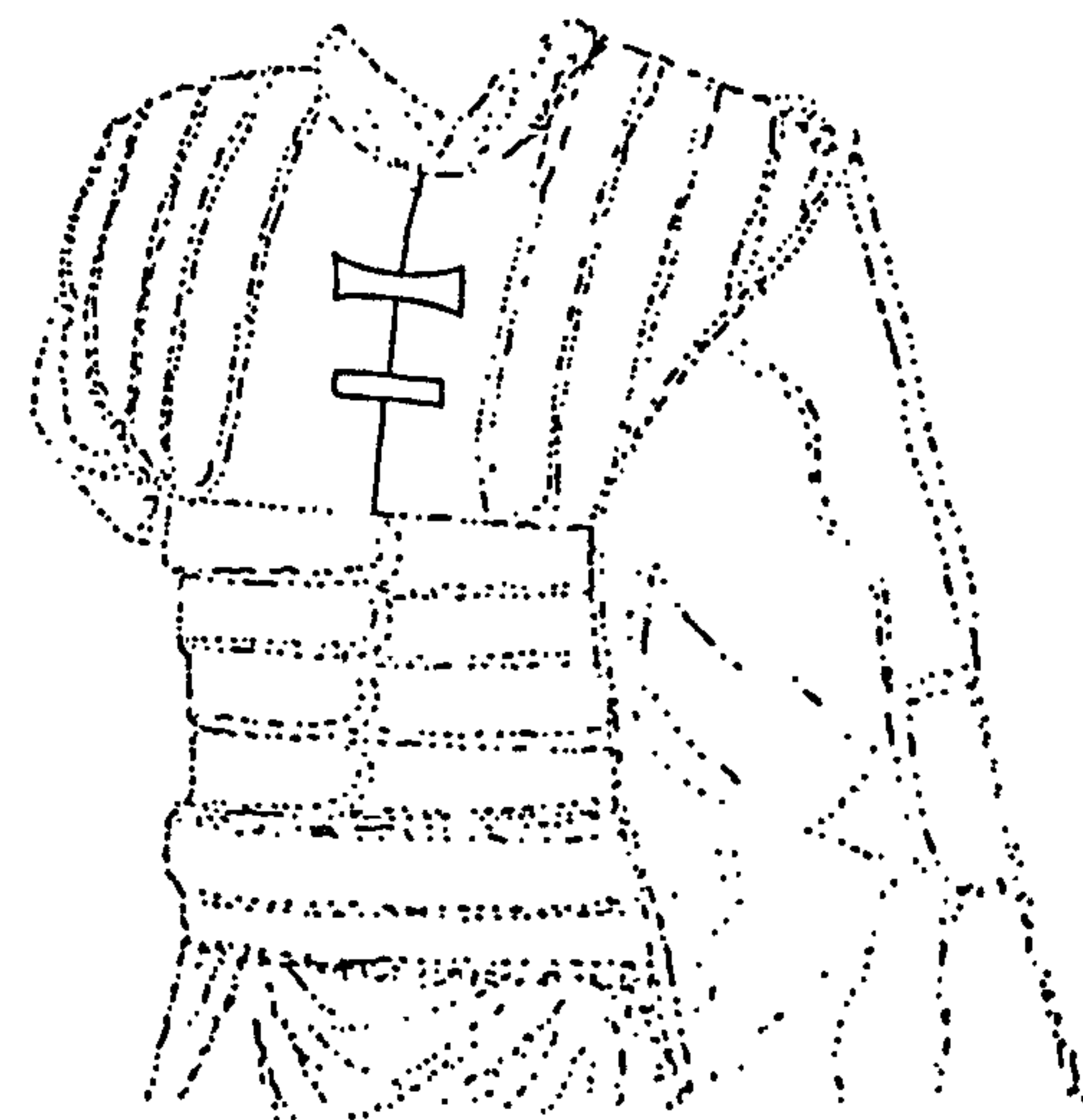
Type 14



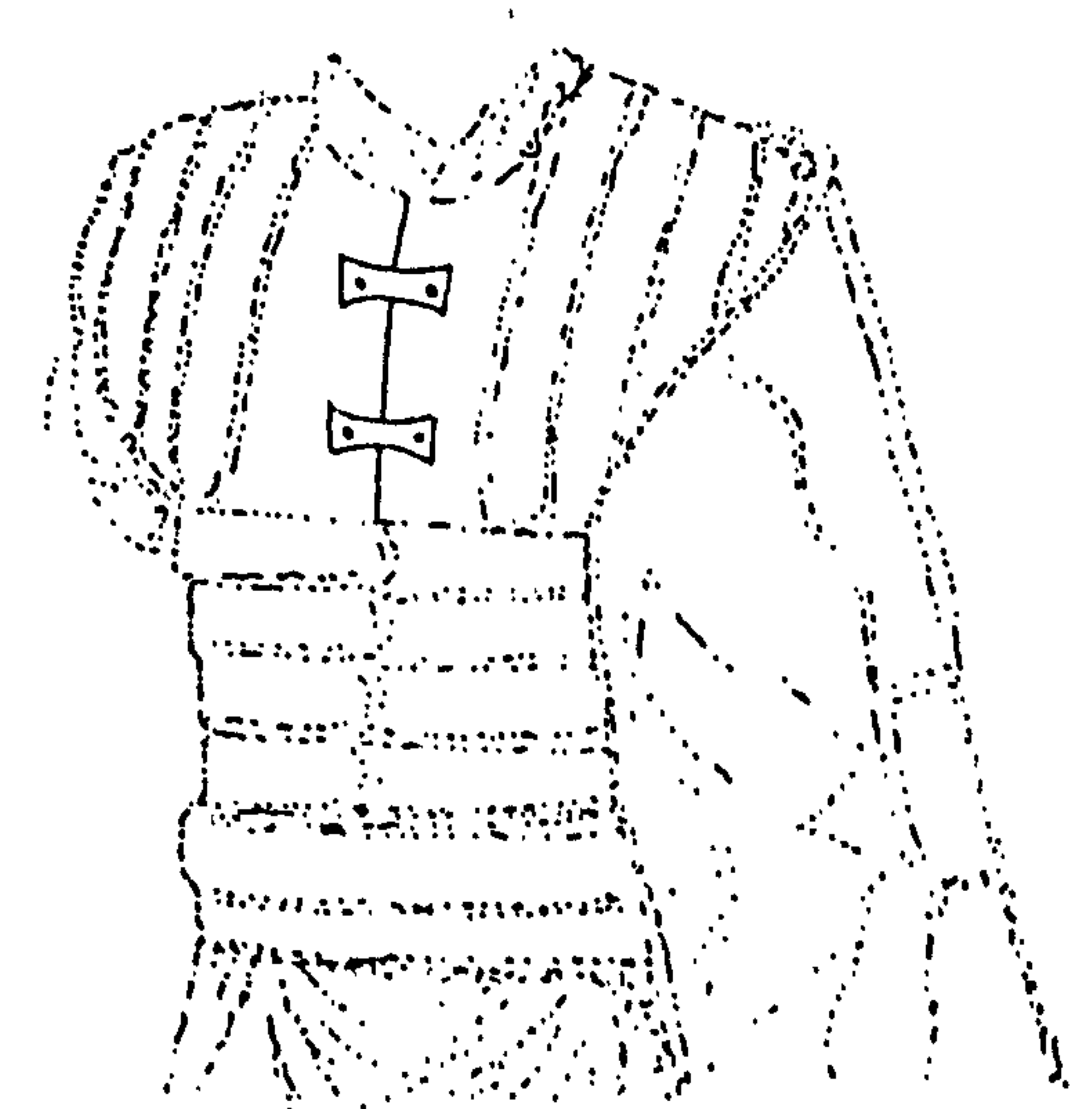
Type 15



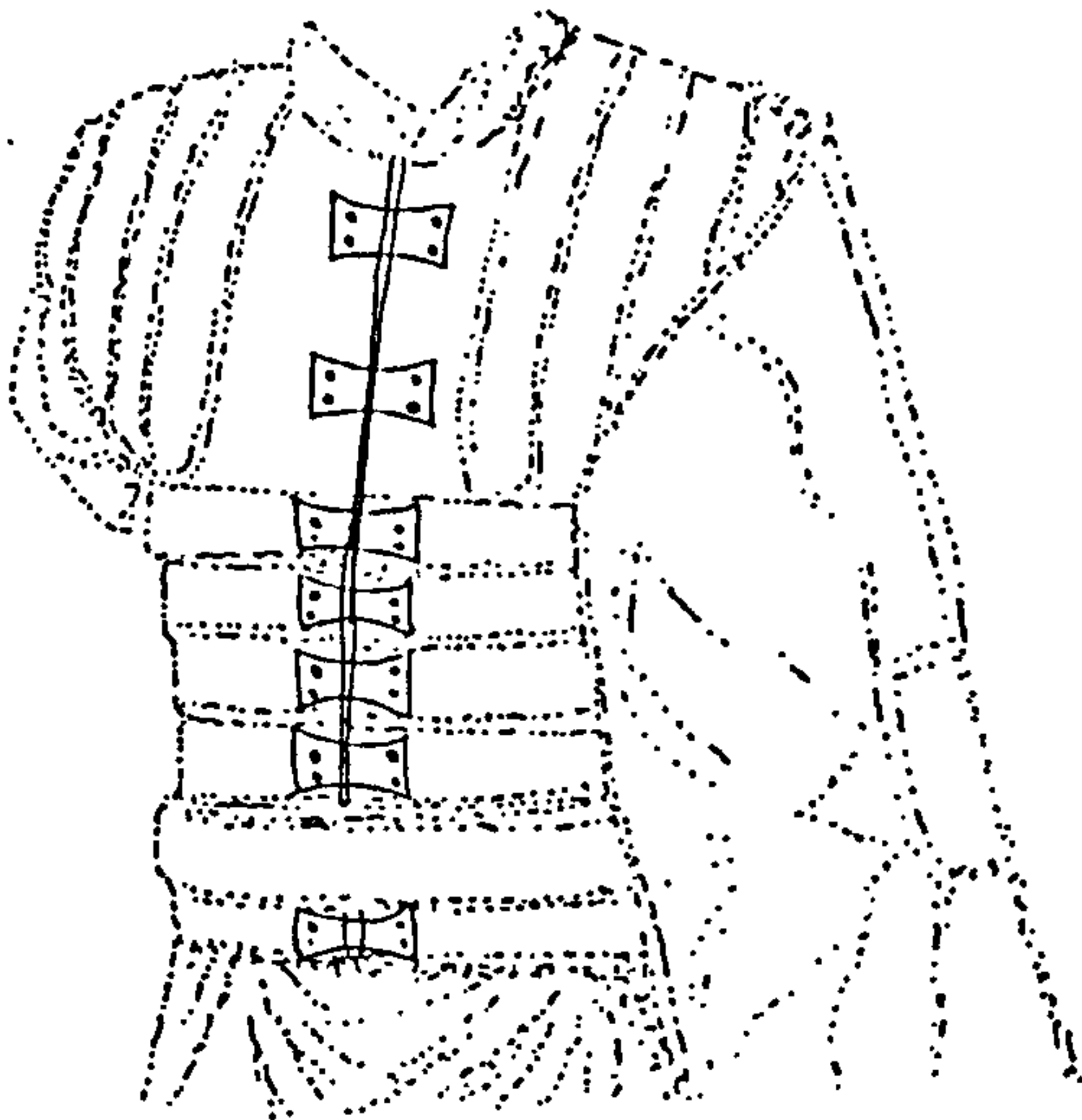
Type 16



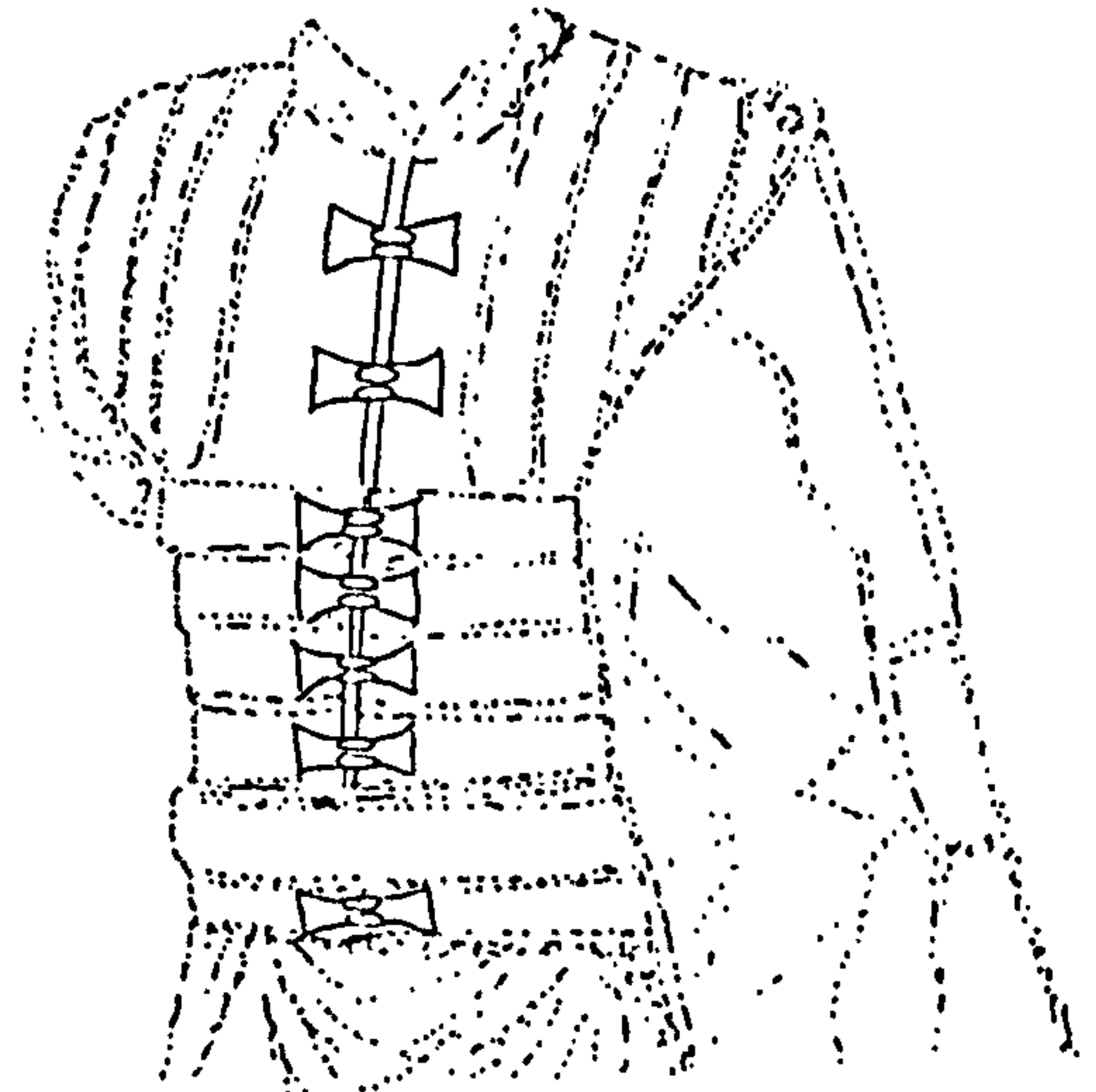
Type 17



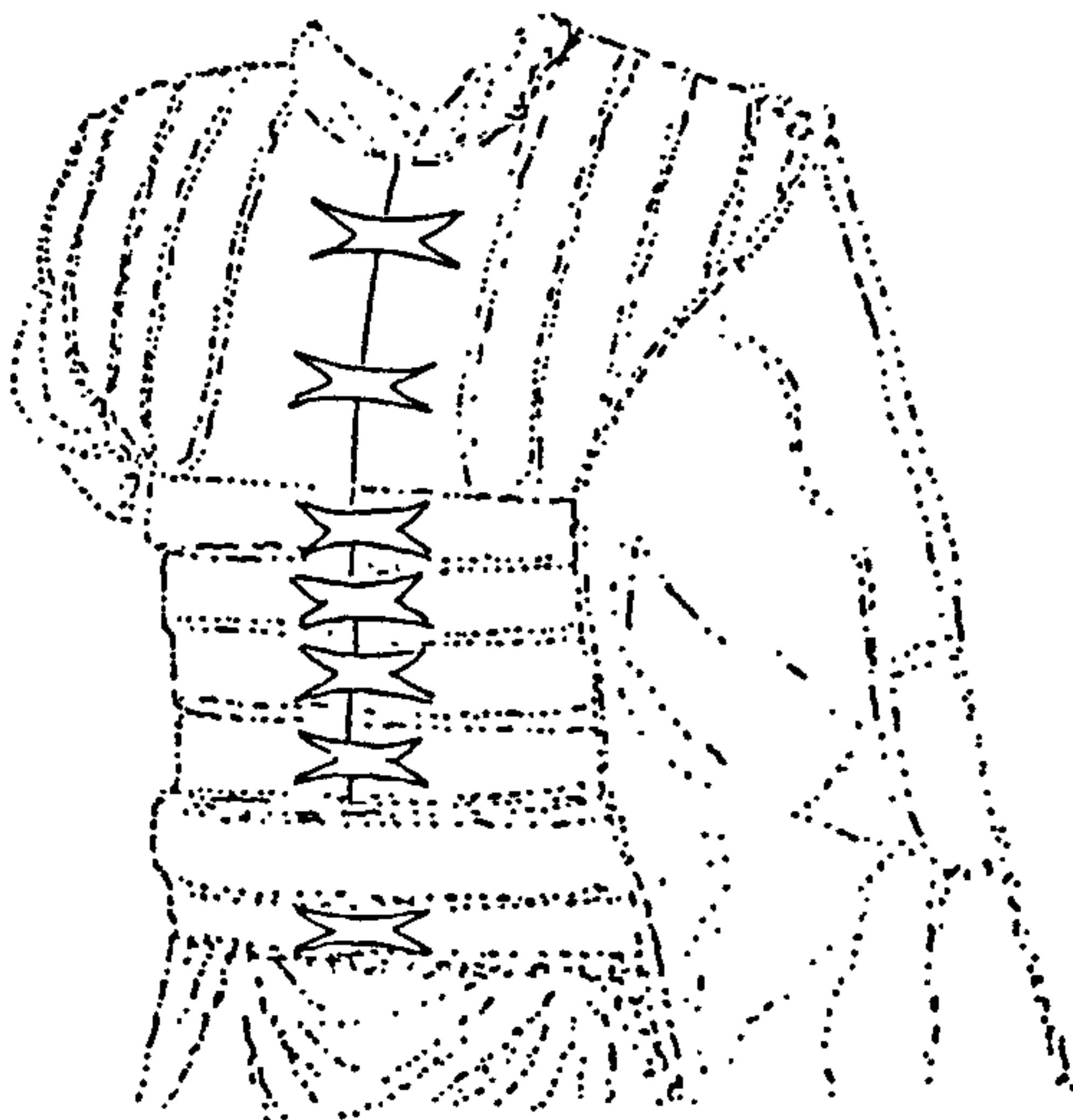
Type 18



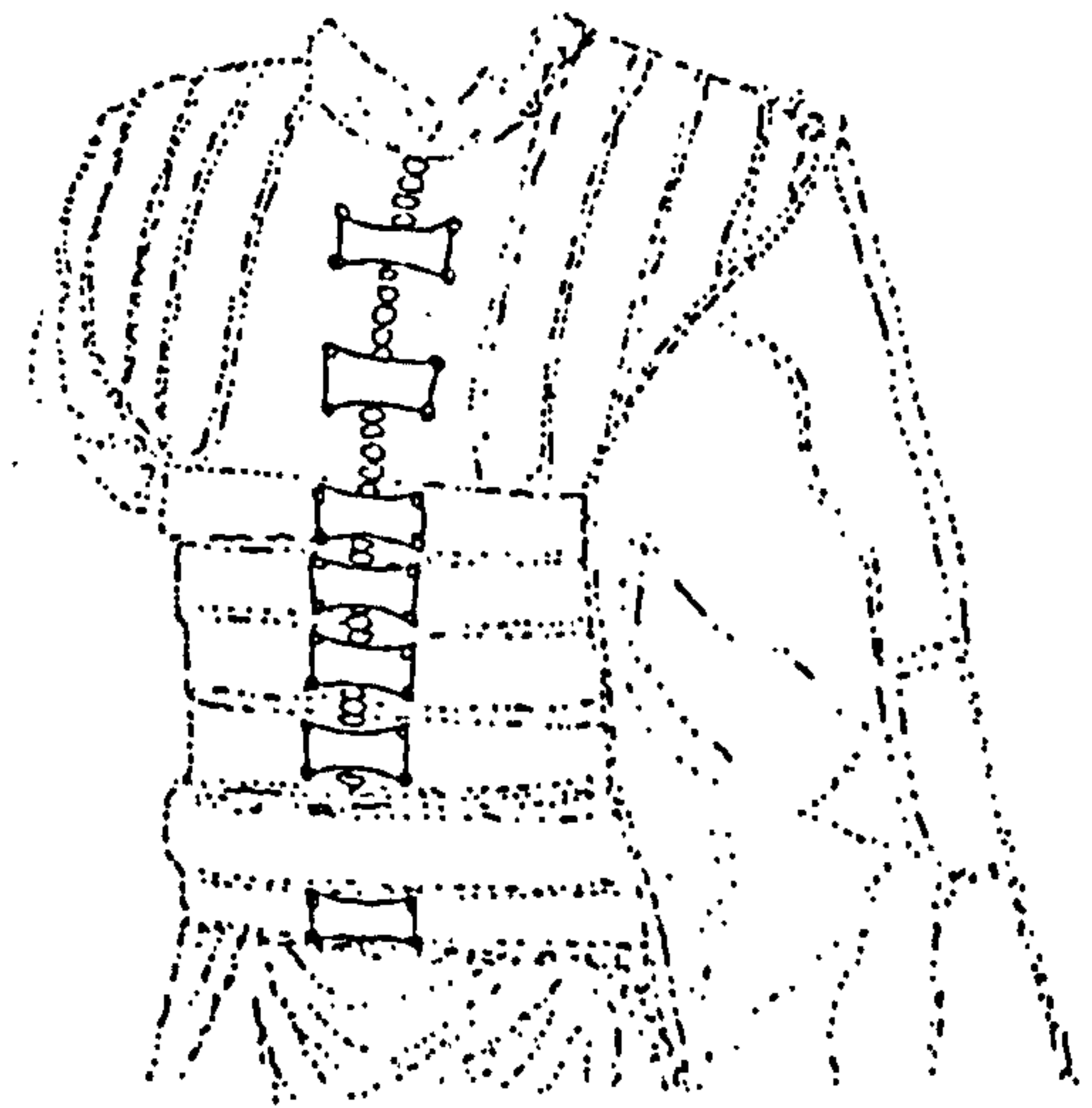
Type 19



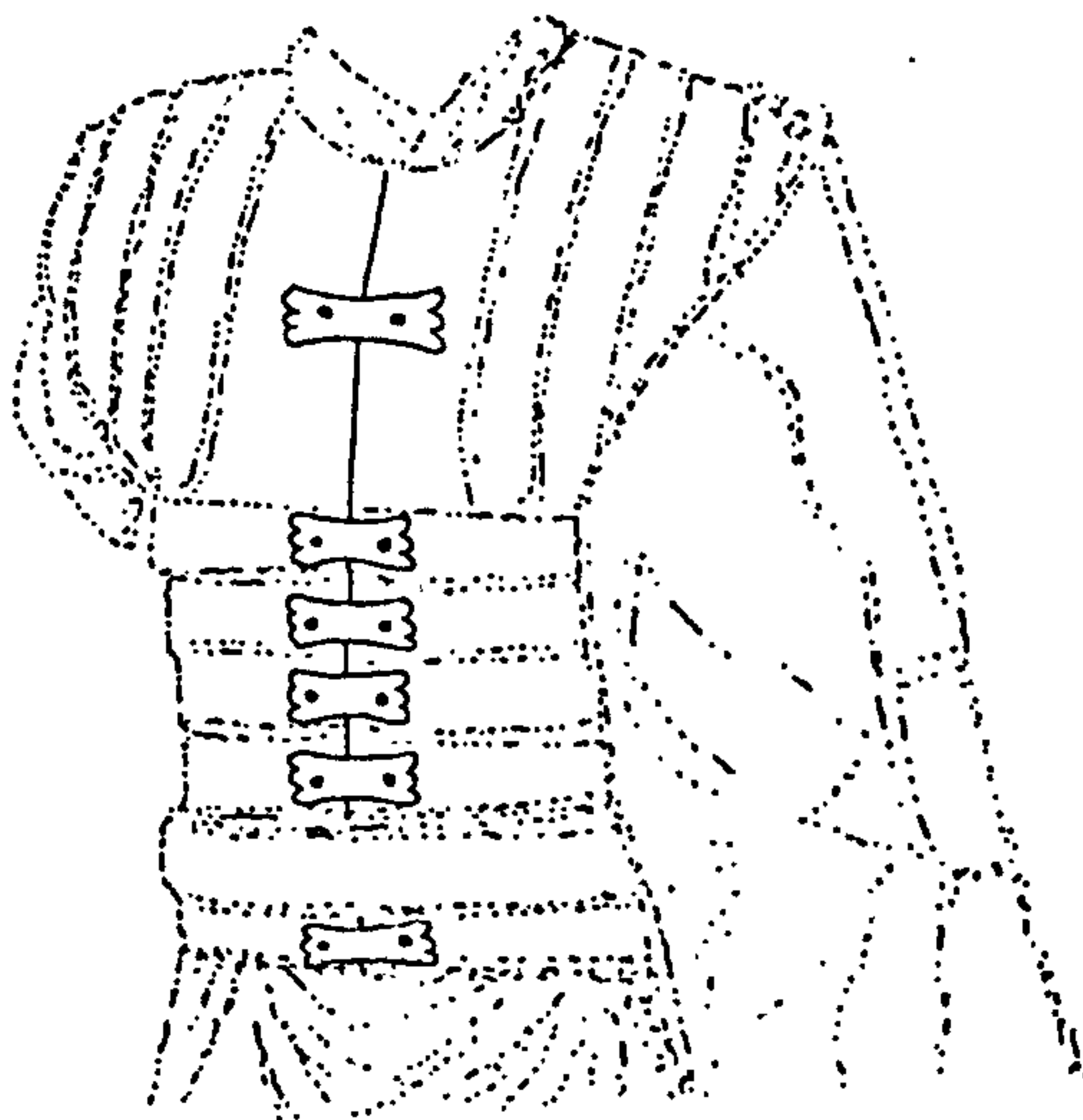
Type 20



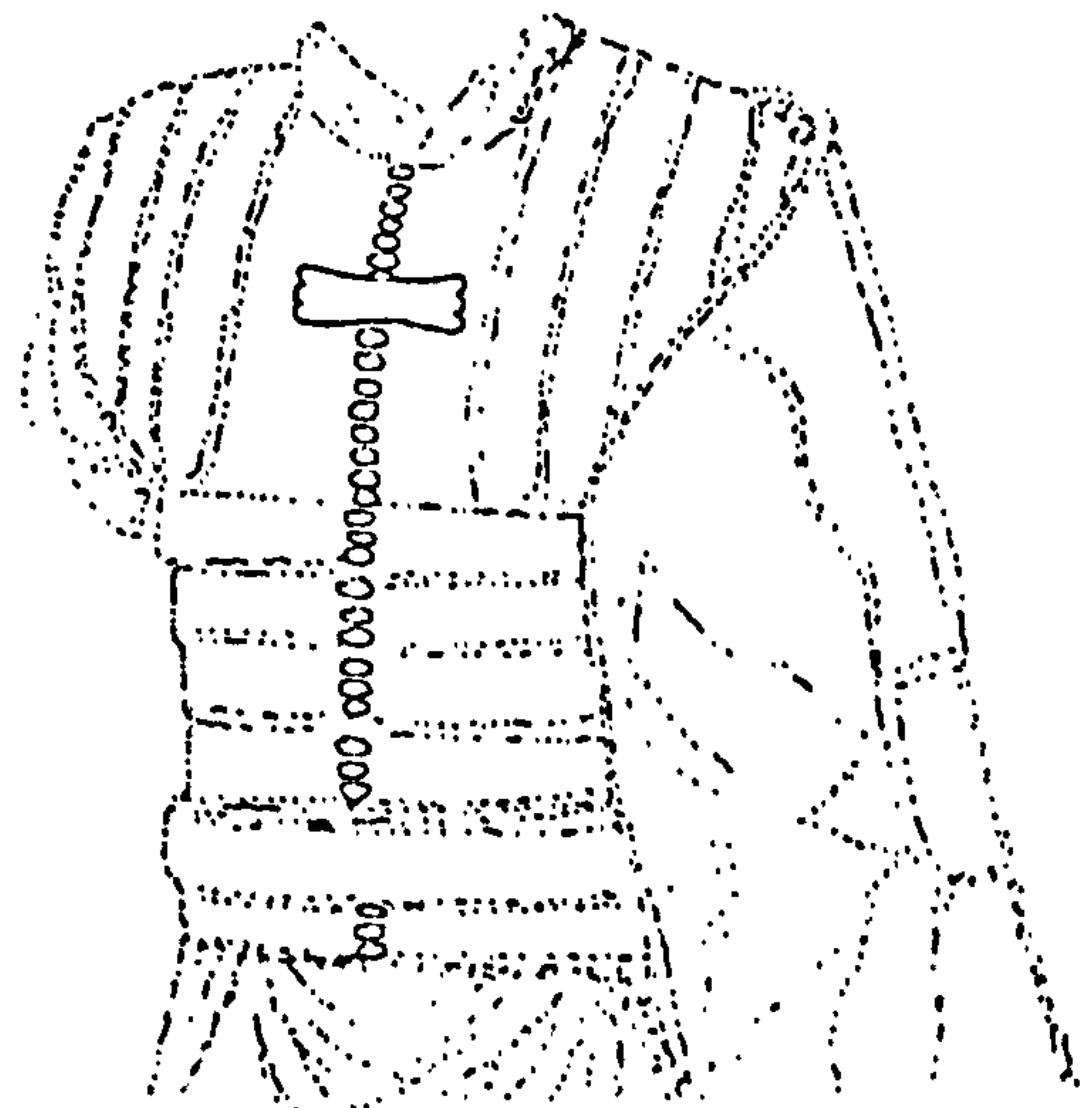
Type 21



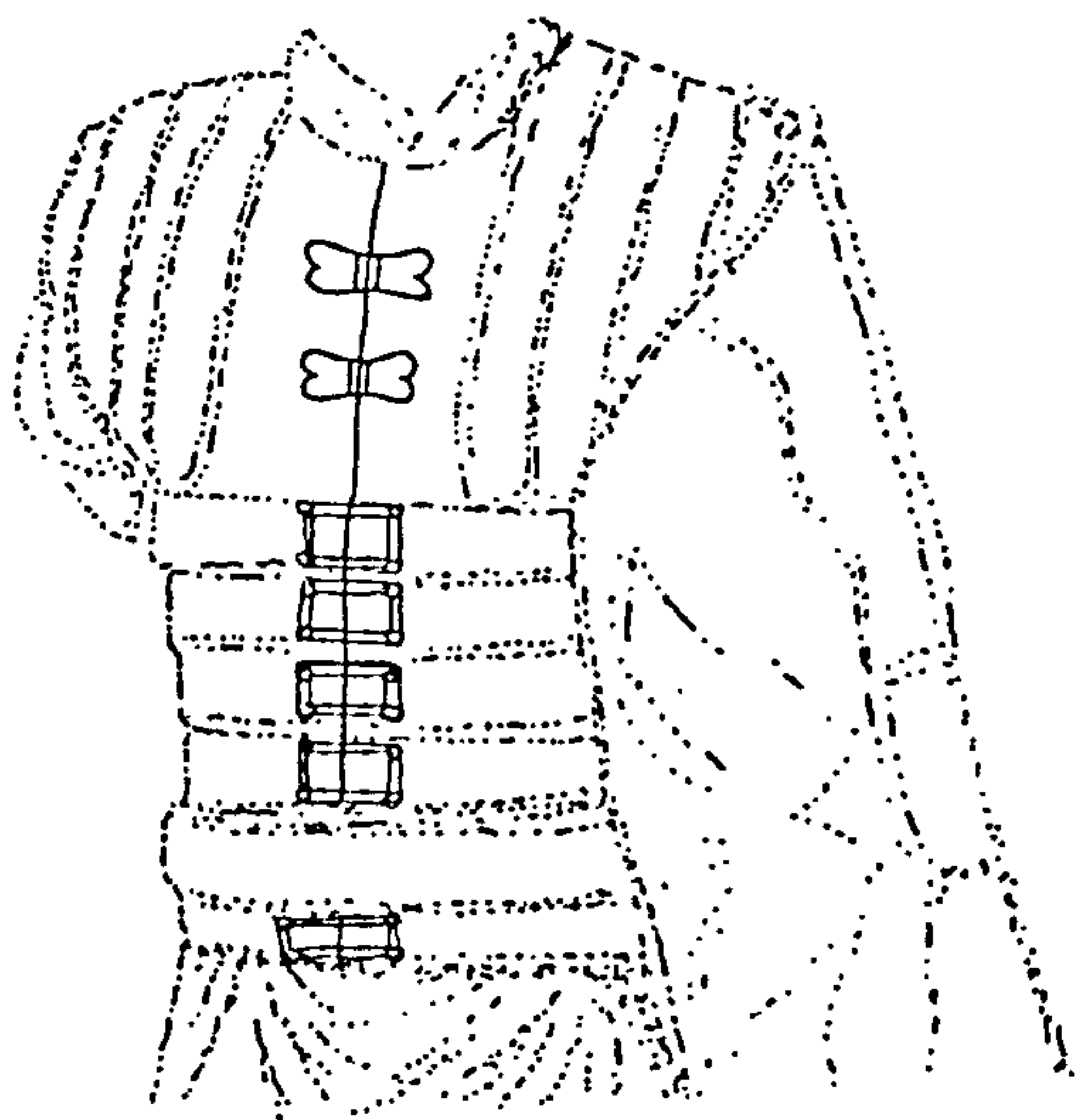
Type 22



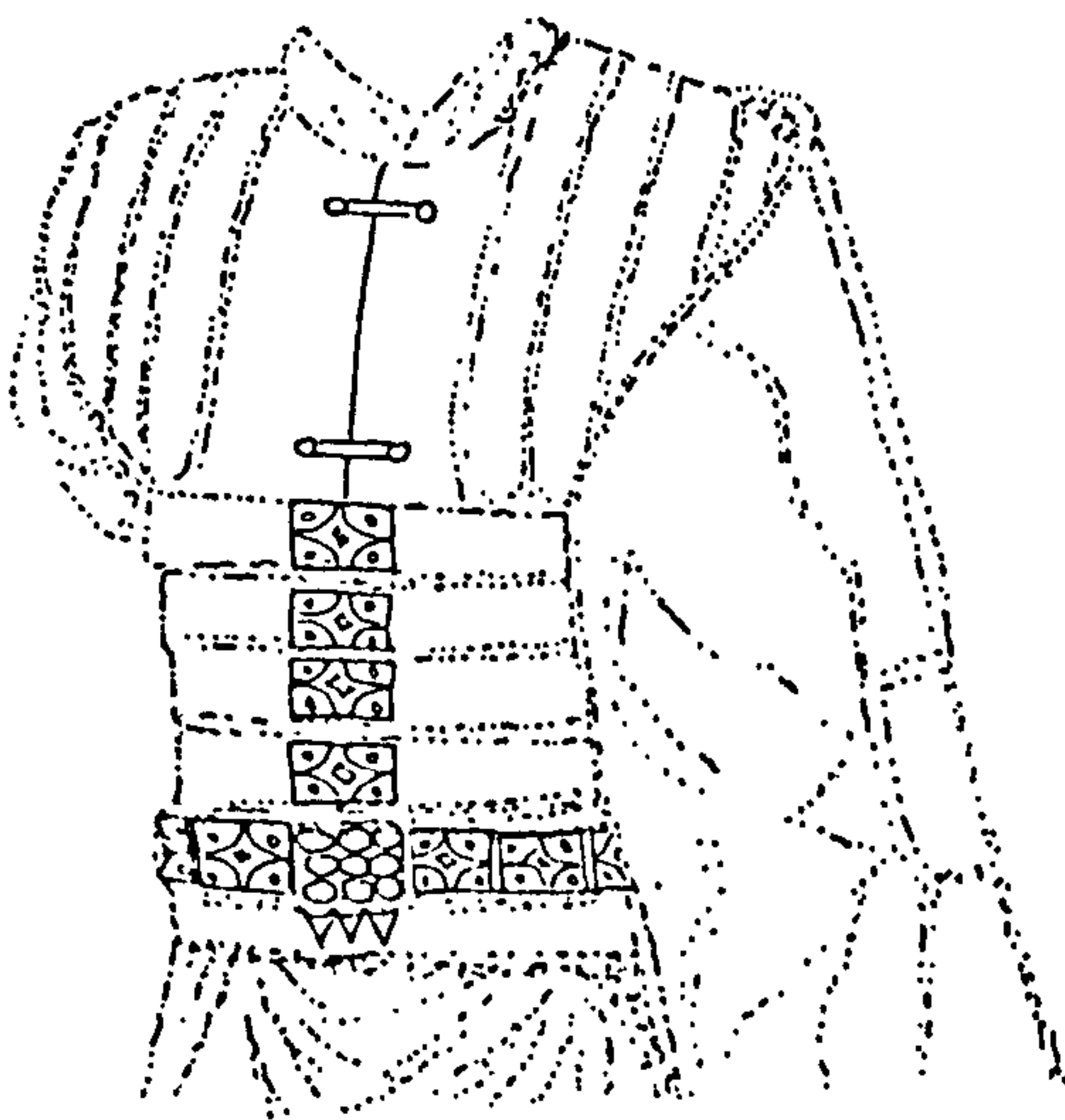
Type 23



Type 24



Type 25



Type 26

Appendix 3: Helmets

Helmets are primarily categorised by whether or not they have a frontal brow plate on the bowl; a ridge or peak on the front and forward sides of the bowl; or a ridge or peak all round the bowl. The latter feature may be horizontal or at an angle, higher at the front than at the back. The apex of the bowl further defines the helmet type because it can be plain and featureless, have a standing ring, a crest, or a point. The bowl may or may not be divided up by ribs or have decorative features such as a wreath or studs. The neck flange may curve down and be large, or squared off and small. Some helmets belong to specific figure types, the archers and Sarmatians, and others are only seen from above because they are not being worn (Fig.11-2).

Scenes in which each type is to be found are as follows.

1. XIV, XVIII, XXIV, XL, XLVI, LXXXV.
2. XXI, XXIV, XXVIII, XL.
3. LIV, CVI.
4. XXIV, LIV, CXIII.
5. XXII.
6. XCV, XCVII.
7. CV, CXI, CXIII, CXIV.
8. XI, XVIII, XXI.
9. XIII.
10. XCV, XCVI, CIV.
11. LXXIII.
12. CXIV.
13. LXII, CXXIII.
14. LXI, LXII, LXIII, LXVI, LXXII, CXXIII.
15. CXIV.
16. XXIV, XXIX, LXI, CXV, CXLI.
17. XXXII, XL, LXXV, C, CXLII, CXLIII, CXLV, CXLVI, CXLVIII, CL, CLI, CLII, CLIII.
18. XXXII, LXII, CXXIII.
19. XCV, CIX.
20. XXIV, XXV, XXXVI, XL, LX, CXXVII, CXXVIII, CXXXIII.

21. CXIII, CXV, CXVI, CXXIII.
22. X, XXIII, XXX, XL, LIV, LX, LXV, LXVI, LXIX, LXX, LXXI, LXXV, CVII, CXIII, CXV, CXVI, CXXV, CXXVI, CXXVII, CXLV, CL, CLI, CLII.
23. XXXVIII, CXIII.
24. XVIII.
25. XIV, XXIV, XXXVI, XL, XLII, XLIII, XLVI, LXVI, LXXII, XCVII, CV, CVIII.
26. XXIV, XXXVI, XXXVII, XXXVIII, XL, XLII, LVII, LVIII, LIX, LXII, LXIII, LXVIII, XCIV, XCV, XCVI, CIV, CVI, CXII, CXLII.
27. XXI.
28. XXXVI.
29. LXX, CVIII, CXV.
30. XXXI, XXXVII, LXVI.
31. XL, CXIII.
32. IV, XXXIII, XLVIII, XLIX, CI.
33. XXXIII, XL, XLII, LIV, LXXXVI.


	Plate	Peak	Round Peak	Angled Round Peak	Plain Bowl	Apex Ring	Crest	Apex Point	Bowl Ribs	Bowl Decoration	Curved Neck Flange	Squared Neck Flange	Archer	Sarmatian	Top View	Plate
1	*				*						*				16, 40	
2	*					*					*				20, 40	
3	*					*				*		*			100	
4	*					*			*		*				49	
5	*							*	*		*					
6		*			*						*					
7		*			*							*			99	
8		*				*						*			19	
9		*				*					*					
10		*					*				*				91-2	
11		*					*		*		*				83	
12		*				*			*			*			106	
13		*				*			*		*				58	
14		*						*	*		*				56, 66, 78	
15		*						*	*			*			106	
16			*		*						*				21-2, 55	
17			*			*					*				113-4, 116	
18			*			*						*			28	
19			*				*					*				
20			*		*				*		*				31	
21			*					*	*			*			105, 108	
22			*			*			*		*				112, 114, 117	
23			*			*			*			*			36, 105	
24				*	*						*					
25				*	*							*			31, 80, 99	
26				*		*						*			31, 52, 113	
27				*		*				*					18	
28					*				*	*					31	
29													*		75, 103, 108	
30														*	27, 35, 69	
31					*										*	
32									*						* 4, 42, 98	
33			*						*						* 41, 49, 88	

Appendix 4: Shield Blazons

A. Rectangular Shield Blazons (Fig.16)

1. Thunderbolts and wings. Thunderbolts radiating out from the shield boss and eagle-wings on the sides of the boss. With or without small additional motifs: stars, crescents and 'L' shapes.
Pl.18, 30, 41, 66, 77-9
2. Wreath. Laurel wreath encircling the boss, with or without fillets trailing below. Sometimes provided with additional small motifs.
Pl.5, 77.
3. Tendrils. Abstract curling tendrils filling the field.
Pl.51.

B. Oval Shield Blazons (Fig.17-20)

1. Roman. 'Roman' motifs of thunderbolts, wings, eagle with fulmen, lupercal or combinations of these.
Pl.28-9, 41, 57, 63, 69, 99.
2. Wreath. Laurel wreath encircling the boss, with or without fillets and small additional motifs of stars and crescents. Alternatively, circular wreaths appear above, below and flanking the boss.
Pl.12, 36, 41, 91, 112, 114, 117.
3. Tendrils. Dominant pattern of curling tendril decoration over the whole field, with or without rosettes and other small motifs.
Pl.49, 77, 81, 84, 114, 118.
4. Palmette. Sprays of palmette fronds above, below and flanking the boss.
Pl.36, 113, 118.
5. Rings. Concentric rings encircling the boss, with or without small motifs. Some of these may represent unfinished laurel wreath blazons.
Pl.74, 79.
6. Piles. Dominant triangular motifs above and below the boss, and sometimes flanking it in addition. With or without additional small motifs and tendrils.
Pl.25, 27, 41, 77, 91, 104, 119.
7. Small Motifs. Blazon with only the small motifs alluded to above: stars, crescents, peltae, hearts, torques and  motifs.
Pl.76
8. Unfinished. Shields with completely undecorated fields.
Pl.19.

C. Oval Shield Blazon Percentages

Figures in the tables for Roman shields include auxiliary infantry and cavalry, bare-chested irregulars, and slingers. Dacian figures include Dacian infantry and cavalry, and Germans. The first set are quantities and percentages calculated for all the oval shields whilst the second table is adjusted after the exclusion of unfinished blazons.

1. Blazons	<u>Roman</u>		<u>Dacian</u>	
	<u>Total</u>	<u>205</u>	<u>Total</u>	<u>183</u>
Unfinished	27	13%	24	13%
Roman	17	8%	3	1.5%
Wreath	60	30%	10	5.5%
Tendrils	25	12%	28	15.5%
Palmettes	11	5%	17	9%
Rings	5	2.5%	9	5%
Piles	42	20.5%	80	44%
Small Motifs	19	9%	12	6.5%

2.	<u>Roman</u>		<u>Dacian</u>	
	<u>Total</u>	<u>178</u>	<u>Total</u>	<u>159</u>
Roman	17	9%	3	2%
Wreath	60	34%	10	6%
Tendrils	25	14%	28	17.5%
Palmettes	11	6%	17	11%
Rings	5	3%	9	5.5%
Piles	42	23.5%	80	50.5%
Small Motifs	19	10.5%	12	7.5%

ABBREVIATIONS

<u>A.A.</u>	<u>Archäologische Anzeiger</u>
<u>A.Ael.</u>	<u>Archaeologia Aeliana</u>
<u>A.E.</u>	<u>l'Année Epigraphique</u>
<u>A.H.</u>	<u>Acta Archaeologica Hungaricae</u>
<u>A.J.</u>	<u>Archaeological Journal</u>
<u>A.J.A.</u>	<u>American Journal of Archaeology</u>
<u>A.J.P.</u>	<u>American Journal of Philology</u>
<u>A.K.</u>	<u>Archäologisches Korrespondenzblatt</u>
Amm.	Ammianus Marcellinus
<u>A. Mus. Nap.</u>	<u>Acta Musei Napocensis</u>
<u>A.N.R.W.</u>	H. Temporini (ed.), <u>Aufstieg und Niedergang der römischen Welt</u>
<u>Ant.</u>	<u>Antiquity</u>
<u>Ant. Class.</u>	<u>l'Antiquité Classique</u>
<u>Ant. J.</u>	<u>Antiquaries Journal</u>
Appian, <u>B.Civ.</u>	Appian, <u>bellum civile</u>
Arrian, <u>Ek.</u>	Arrian, <u>ektaxis kat Alanon</u>
Arrian, <u>T.T.</u>	Arrian, <u>techne taktika</u>
B.A.R.	British Archaeological Reports
<u>B.J.</u>	<u>Bonner Jahrbücher</u>
<u>Boll. Comm.</u>	<u>Bolletino della Commissione Archeologica del Governatorato di Roma</u>
<u>B.R.G.K.</u>	<u>Bericht der Römisch-Germanischen Kommission</u>
<u>Brit.</u>	<u>Britannia</u>
Caes., <u>B.C.</u>	Caesar, <u>de bello civili</u>
Caes., <u>B.G.</u>	Caesar, <u>de bello Gallico</u>
<u>C.A.H.</u>	<u>Cambridge Ancient History</u>

C.B.A.	Council for British Archaeology
<u>C.I.L.</u>	<u>Corpus Inscriptionum Latinarum</u>
<u>C.S.I.R.</u>	<u>Corpus Signorum Imperii Romani</u>
<u>C.W.</u>	<u>Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society</u>
D.A.I.	Deutsche Archäologische Institut, Rome
<u>E.A.A.</u>	<u>Enciclopedia dell'Arte Antica Classica e Orientale</u> , Rome
<u>Epig. Stud.</u>	<u>Epigraphische Studien</u>
E.U.R.	Esposizione ^{is} Universale di Roma
Fronto, <u>Ver. Imp.</u>	Fronto, <u>Epistulae ad Verum Imperatorem</u>
Gell., <u>Noct. Att.</u>	Aulus Gellius, <u>Noctes Atticae</u>
<u>Ger.</u>	<u>Germania</u>
<u>G.p.V.</u>	<u>Veröfientlichen der Gesellschaft pro Vindonissa</u>
<u>G.R. III</u>	<u>Germania Romana: ein Bilder-Atlas, III</u> , Bamberg, 1926
Hyg., <u>de mun. castr.</u>	Hyginus, <u>de munitionibus castrorum</u>
<u>I.L.S.</u>	<u>Inscriptiones Latinae Selectae</u>
<u>J.d.I.</u>	<u>Jahrbuch des deutschen archäologischen Instituts</u>
<u>J.K.S.W.</u>	<u>Jahrbuch der kunsthistorischen Sammlung in Wien</u>
Jos., <u>B.J.</u>	Josephus, <u>Bellum Iudaicum</u>
<u>J.R.G.Z.M.</u>	<u>Jahrbuch des römische-germanischen Zentralmuseum, Mainz</u>
<u>J.R.S.</u>	<u>Journal of Roman Studies</u>
Juv., <u>Sat.</u>	Juvenal, <u>Saturae</u>
<u>K.R.I.</u>	<u>Kölner Römer Illustrierte</u>
<u>M.A.A.R.</u>	<u>Memoirs of the American Academy in Rome</u>
<u>M.D.A.I.(R.)</u>	<u>Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung</u>

<u>M.E.F.R.</u>	<u>Mélanges de l'Ecole Française de Rome</u>
<u>M.Z.</u>	<u>Mainzer Zeitschrift</u>
<u>N.D.</u>	<u>Notitia Dignitatum</u>
<u>N.Sc.</u>	<u>Notizie degli Scavi di Antichità communicate alla Romana Accademia dei Lincei</u>
<u>O.M.R.O.L.</u>	<u>Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden</u>
<u>O.R.L.</u>	<u>Der obergermanisch-raetische Limes des Römischen</u>
<u>P.B.A.</u>	<u>Proceedings of the British Academy</u>
<u>P.B.S.R.</u>	<u>Proceedings of the British School at Rome</u>
<u>Pet., Sat.</u>	<u>Petronius, Satyricon</u>
<u>Pliny, Ep.</u>	<u>Pliny, Epistulae</u>
<u>Pliny, N.H.</u>	<u>Pliny, Naturalis Historiae</u>
<u>Pliny, Pan.</u>	<u>Pliny, Panegyricus</u>
<u>P.P.S.</u>	<u>Proceedings of the Prehistoric Society</u>
<u>Prisc., Inst. Gram.</u>	<u>Priscianus, Institutiones Grammaticae</u>
<u>R.A.</u>	<u>Révue Archéologique</u>
<u>R.E.</u>	<u>Paulys Real-Encyclopädie der classischen Altertums</u>
<u>Rend. Linc.</u>	<u>Rendiconti della Pontificia Accademia Romana di Archeologia</u>
<u>Rend. Pont.</u>	<u>Rendiconti della Pontificia Accademia Romana di Archeologia</u>
<u>R.I.B.</u>	<u>R.G. Collingwood and R.P. Wright, The Roman Inscriptions of Britain, I, Oxford, 1965</u>
<u>R.I.C.</u>	<u>H. Mattingly and E.A. Sydenham, The Roman Imperial Coinage, London</u>
<u>Sallust, B. Jug.</u>	<u>Sallust, bellum Iugurthinum</u>
<u>S.C.I.V.A.</u>	<u>Studii și cervetari de istorie veche</u>
<u>S.H.A.</u>	<u>Scriptores Historiae Augustae</u>
<u>S.J.</u>	<u>Saalburg-Jahrbuch</u>

Suet.	Suetonius, <u>de vita caesarum</u>
Tac., <u>Ag.</u>	Tacitus, <u>Agricola</u>
Tac., <u>Ann.</u>	Tacitus, <u>Annales</u>
Tac., <u>Ger.</u>	Tacitus, <u>Germania</u>
Tac., <u>Hist.</u>	Tacitus, <u>Historiae</u>
<u>T.I.R.</u>	<u>Tabula Imperii Romani</u>
Veg.	Vegetius, <u>de re militari</u>
Vitruv., <u>Arch.</u>	Vitruvius, <u>de Architectura</u>
Zos.	Zosimus, <u>Historia Nova</u>

BIBLIOGRAPHY

- ABDUL-HAK, S. 1954-55: 'Rapport préliminaire sur des objets provenant de la nécropole romaine située à proximité de Nawa (Hauran)', Les Annales Archéologiques de Syrie 4-5, 1954-55, 163-88
- ADAM, J.-P. 1984: La Construction Romaine: Matériaux et Techniques, Paris, 1984
- ADAM, J.-P. & VARENE, P. 1980: 'Une peinture romaine représentant une scène de chantier', R.A. 1980 2, 213-38
- ADAM, S. 1966: The Techniques of Greek Sculpture in the Archaic and Classical Periods, London, 1966
- ALEXANDRESCU-VIANU, M. 1977: 'Sur la chronologie de la stèle de Quintus Philippicus', Epigraphica (Travaux dédiés au VII^e Congrès d'épigraphie grecque et latine), Bucarest, 1977, 65-8
- ALEXANDRESCU-VIANU, M. 1979: 'Le programme iconographique de monument triomphal d'Adamklissi', Dacia XXIII, 1979, 124-9
- ALFÖLDI, A. 1939: 'Dacians on the southern bank of the Danube', J.R.S. 29, 1939, 28-31
- ALFÖLDI, A. 1959: 'Hasta - Summa Imperii. The spear as embodiment of sovereignty in Rome', A.J.A. 63, 1959, 1-27
- ALFS, J. 1941: 'Der bewegliche Metallpanzer in römischen Heer', Zeitschrift für historische Waffen- und Kostumkunde 3-4, 1941, 69-126
- ALLASON-JONES, L. & BISHOP, M.C. 1988: Excavations at Roman Corbridge: The Hoard, (HBMCE Archaeological Report 7), London, 1988
- ALLASON-JONES, L. & MIKET, R. 1984: The Catalogue of Small Finds from South Shields Roman Fort, Newcastle, 1984
- AMELUNG, W. 1903: Die Sculpturen des Vaticanischen Museums, Berlin, 1903
- AMICI, C.M. 1982: Foro di Traiano: Basilica Ulpia e biblioteche, (Studi e materiali dei musei e monumenti comunali di Roma), Rome, 1982
- AMY, R., DUVAL, P.-M., FORMIGÉ, J., HATT, J.-J., PIGANIOL, A., PICARD, C. & PICARD, G.-C. 1962: L'Arc d'Orange, (Gallia supplement XV), Paris, 1962
- ANDERSON, J.C. 1983: 'A topographical tradition in fourth century chronicles: Domitian's building programme', Historia 32, 1983, 93-105
- ANDERSON, J.C. 1984: The Historical Topography of the Imperial Fora, (Collections Latomus 182), Brussels, 1984

- ANDERSON, M.L. 1976: 'The head of a Roman soldier in New York', A.A. 1976, 131-7
- ANDREAE, B. 1956: Motivgeschichtliche Untersuchungen zu den römischen Schlachtsarkophagen, Berlin, 1956
- ANDREAE, B. 1977: The Art of Rome, London, 1977
- ANDREAE, B. 1979: 'Zum Triumphfries des Trajansbogens von Benevent', M.D.A.I.(R.) 86, 1979, 325-9
- ANDREAE, B. 1980: Die Sarcophage mit Darstellungen aus dem Menschenleben, II, Die römischen Jagdsarcophage, Berlin, 1980
- ANTONESCU, D. 1980: 'Sanctuarul circular complex Geto-Dac (propuneri de reconstituire)', S.C.I.V.A. 31, 1980, 499-518
- AOSTA 1982: Archeologia in Valle d'Aosta dal Neolitico alla Caduta dell'Impero Romano, 3500 a.C. - V sec.d.C., Aosta, 1982
- ARMSTRONG, G. 1983: 'Trajan's Column in the wars', Sunday Times Magazine, February 20th 1983, 32-4
- ASGARI, N. 1978: 'Roman and early Byzantine marble quarries of Proconnesos', Proceedings of Xth International Congress of Classical Archaeology, Ankara, 1973, 467-80
- AURIGEMMA, S. 1926: I Mosaici di Zliten, Milan, 1926
- AVIGAD, N. 1980: Discovering Jerusalem, London, 1980
- BAATZ, D. 1966: 'Zur Geschützbewaffnung römischer Auxiliärtruppen in der frühen und mittleren Kaiserzeit', B.J. 166, 1966, 194-207
- BAATZ, D. 1975: Der römische Limes, Berlin, 1975
- BAATZ, D. 1976: Die Wachttürme am Limes, Stuttgart, 1976
- BAATZ, D. 1978: 'Recent finds of ancient artillery', Brit. IX, 1978, 1-17
- BAATZ, D. 1980: 'Ein Katapult der Legio IV Macedonica aus Cremona', M.D.A.I.(R.) 87, 1980, 283-99
- BAATZ, D. 1983: 'Town walls and defensive weapons', in J. Maloney & B. Hobley (ed.), Roman Urban Defences in the West, London, 1983, 136-40
- BAATZ, D. 1983a: 'Lederne Gürteltaschen römischer Soldaten?', A.K. 13.3, 1983, 359-61
- BACCINI LEOTARDI, P. 1979: Scavi di Ostia, X, Marmi di Cava Rinvenuti ad Ostia e considerazioni sul commercio dei marmi in età Romana, Rome, 1979

- BANDIERA, L. 1977: Il Museo Archeologico Nazionale Praenestino, Palestrina, 1977
- BANDINELLI, R.B. 1938-39: 'Una problema di arte romana: il maestro delle imprese di Traiano', Le Arti I, 1938-39, 325-34
- BANDINELLI, R.B. 1958: 'Apollodorus di Damasco', E.A.A. I, Rome, 1958, 476-80
- BANDINELLI, R.B. 1970: Rome - the Centre of Power, London, 1970
- BANDINELLI, R.B. 1971: Rome - the Late Empire, London, 1971
- BANDINELLI, R.B. & GIULIANO, A. 1973: Etruschi e Italici prima del dominio di Roma, Milan, 1973
- BARADEZ, J. 1971: 'Le trophée d'Adamclissi témoin de deux politiques et de deux stratégies', Apulum 9, 1971, 505-22
- BĂRCĂCILĂ, A. 1966: 'Les piliers du pont Trajan sur la rive gauche du Danube et la scene CI de la Colonne Trajane', S.C.I.V.A. 17, 1966, 645-63
- BARKÓCZI, L. 1944: Brigetio, (Dissertationes Pannonicae Ser. II, No.22), Budapest, 1944
- BARKÓCZI, L., ERDÉLYI, G., FERENCZY, E., FÜLEP, F., NEMERSKÉRI, J., ALFÖLDI, M.R. & SAGI, K. 1954: Intercisa, I, Budapest, 1954
- BARNETT, R.D. 1975: Assyrian Sculpture in the British Museum, Toronto, 1975
- BARTOLI, P.S. 1672: Colonna Traiana, eretta dal Senato e Popolo Romano all'imperatore Traiano Augusto nel suo foro in Roma, Rome, 1672
- BARTON, P. 1987: 'On making a cornu', in DAWSON, 1987, 28-39
- BATTEN, M. 1957: Stone Sculpture by Direct Carving, London, 1957
- BAUCHHENB, G. 1978: C.S.I.R., Deutschland, III, 1, Germania Inferior, Bonn und Umgebung Militärische Grabdenkmäler, Bonn, 1978
- BECATTI, G. 1957: Colonna di Marco Aurelio, Milan, 1957
- BECATTI, G. 1959: 'Colonna coclide istoriata', E.A.A. II, Rome, 1959, 754-6
- BECATTI, G. 1959b: 'Colonna di Marco Aurelio', E.A.A. II, Rome, 1959, 760-3
- BECATTI, G. 1959c: 'Colonna di Teodosio I', E.A.A. II, Rome, 1959, 763-5
- BECATTI, G. 1959d: 'Colonna di Arcadio', E.A.A. II, Rome, 1959, 765-7
- BECATTI, G. 1960: La Colonna Coclide Istoriata, Rome, 1960

- BECATTI, G. 1982: 'La Colonna Traiana, espressione somma del rilievo storico romano', A.N.R.W. II, 12.1, 1982, 536-78
- BEESER, J. 1979: 'Pilum murale?', Fundberichte aus Baden-Württemberg 4, 1979, 133-42
- BEHN, F. 1912: 'Die Musik im römischen Heere', M.Z. VII, 1912, 36-47
- BELLEN, H. 1981: Die germanisch Leibwache der römischen Kaiser des julisch-claudischen Hauses, (Akademie der Wissenschaften und der Literatur. Abhandlungen der geistes- und sozialwissenschaftlichen Klasse 1), Wiesbaden, 1981
- BELLONI, G.G. 1973: Le Monete di Traiano, Catalogo del civico gabinetto numismatico Museo archeologico di Milano, Milan, 1973
- BENEVOLO, L. (ed.) 1985: Roma, studia per la sistemazione dell'area archeologica centrale, Rome, 1985
- BENNDORF, O. & SCHÖNE, R. 1867: Die Antiken Bildwerke des Lateranensischen Museums, Leipzig, 1867
- BENNETT, J. 1980: 'Temporary camps along Hadrian's Wall' in HANSON & KEPPIE, 1980, 151-72
- BENNETT, J. 1982: 'The Great Chesters "Pilum Murale"', A. Ael. Ser. 5, X, 1982, 200-5
- BENSEDDIK, N. 1979: Les troupes auxiliaires de l'armée romaine en Maurétanie Césarienne sous le Haut-Empire, Algiers, 1979
- BERCIU, D. 1978: Daco-Romania, Geneva, 1978
- BERGQUIST, A. & TAYLOR, T. 1987: 'The origin of the Gundestrup Cauldron', Ant. 61, 1987, 10-24
- BERNARD, P. 1964: 'Une pièce d'armure perse sur un monument lycien', Syria 41, 1964, 195-212
- BERTINETTI, M., DE LACHENAL, L. & PARMA, B. (ed.) 1985: Museo Nazionale Romano. Le Sculture, I, 8, i (Catalogo delle Sculture esposte nelle aule delle terme), Rome, 1985
- BETHE, E. 1945: Buch und Bild im Altertum, Leipzig, 1945
- BIRLEY, A.R. 1987: Marcus Aurelius. A Biography, London, 1987
- BIRT, T. 1907: Die Buchrolle in der Kunst. Archäologische-antiquarische Untersuchungen zum antiken Buchwesen, Leipzig, 1907
- BISHOP, M.C. (ed.) 1983a: Roman Military Equipment. Proceedings of a Seminar Held in the Department of Ancient History and Classical Archaeology at the University of Sheffield, 21st March 1983, Sheffield, 1983

- BISHOP, M.C. 1983b: 'The Camomile Street soldier reconsidered', Transactions of the London and Middlesex Archaeological Society 34, 1984 (1985), 31-48
- BISHOP, M.C. (ed.) 1985a: The Production and Distribution of Roman Military Equipment, Proceedings of the Second Roman Military Equipment Research Seminar, (B.A.R. Suppl. Ser. No.275), Oxford, 1985
- BISHOP, M.C. 1985b: 'The military fabrica and the production of arms in the early principate', in BISHOP, 1985a, 1-42
- BISHOP, M.C. 1986a: 'The distribution of military equipment within Roman forts of the first century A.D.', in PLANCK & UNZ, 1986, 717-23
- BISHOP, M.C. 1986b: Roman Military Equipment in the First Century A.D., Unpublished Ph.D Thesis, University of Sheffield, 1986
- BISHOP, M.C. 1987: '"The evolution of certain features"', in DAWSON, 1987, 109-31
- BISHOP, M.C. forthcoming a: 'On parade: status, display, and morale in the Roman army' in 14. Internationaler Limeskongresses, Kongressakten. Der römische Limes in Österreich, Sonderband
- BISHOP, M.C. forthcoming b: 'O Fortuna: a sideways look at the archaeological record and Roman military equipment', in VAN DRIEL-MURRAY, forthcoming
- BIVAR, A.D.H. 1972: 'Cavalry tactics and equipment on the Euphrates', Dumbarton Oaks Papers 26, 1972, 273-91
- BLAKE, M.E. 1947: Ancient Roman Construction in Italy from the Prehistoric Period to Augustus, Washington, 1947
- BLAKE, M.E. Roman Construction in Italy from Tiberius through the Flavians, Washington, 1959
- BLAKE, M.E. & BISHOP, D.T. 1973: Roman Construction in Italy from Nerva through the Antonines, Philadelphia, 1973
- BLANCHET, A. 1924: La polychromie des bas-reliefs de la Gaule romaine, Sens, 1924
- BOATWRIGHT, T. 1987: Hadrian and the City of Rome, Princeton, 1987
- BOËTHIUS, A. 1978: Etruscan and Early Roman Architecture, London, 1978
- BÖHME, H.W. 1975: 'Archäologische Zeugnisse zur Geschichte der Markomannenkriege', J.R.G.Z.M 22, 1975, 153-217
- BOGDAN-CATANIȚIU, J. 1977: 'Le limes du sud-est de la Dacie et les relations des romains avec la population de la Valachine (IIe-IIIe s.)', in D. Haupt & G. Horn, Studien zu den Militärgrenzen Roms, II, Vorträge des 10. Internationalen

Limeskongresses in der Germania Inferior, Köln, 1977, 267-75

BOLLINI, M. 1968: Antichità Classiarie, Ravenna, 1968

BÓNA, I. 1955: 'Der Fund von Káloz', A.H. 6, 1955, 71-7

BONANNO, A. 1976: Roman Relief Portraiture to Septimius Severus, (B.A.R. Suppl. Ser. No.6), Oxford, 1976

BONANNO, A. 1983: 'Sculpture' in M. Henig (ed.), A Handbook of Roman Art, A Survey of the Visual Arts of the Roman World, Oxford, 1983, 66-96

BONI, G. 1907: 'Esplorazione del Forum Ulpium', N.Sc. 1907, 361-427

BONI, G. 1907-8: 'The Column of Trajan', P.B.A. III, 1907-8, 93-8

BONI, G. 1912: 'Colonna Traiana', Nuova Antologia, 1st January 1912, 5-20

BOON, G.C. 1972: Isca, The Roman Legionary Fortress at Caerleon, Mon., Cardiff, 1972

BOSSERT, H.T. 1951: Altsyrien, Tübingen, 1951

BOSWORTH, A.B. 1977: 'Arrian and the Alani', Harvard Studies in Classical Philology 81, 1977, 217-55

BRACKER-WESTER, U. 1974: 'Militär erschliesst das Land', K.R.I. I, 1974, 40

BREEZE, D.J. 1982: The Northern Frontiers of Roman Britain, London, 1982

BREGLIA, L. 1968: Roman Imperial Coins, Their Art and Technique, London, 1968

BRILLIANT, R. 1963: Gesture and Rank in Roman Art. The Use of Gestures to Denote Status in Roman Sculpture and Coinage, (Memoires of the Connecticut Academy of Arts and Sciences, XIV), New Haven, 1963

BRILLIANT, R. 1967: The Arch of Septimius Severus in the Roman Forum, (M.A.A.R. XXIX), Rome, 1967

BRILLIANT, R. 1984: Visual Narratives, Storytelling in Etruscan and Roman Art, Ithaca, 1984

BRODRIBB, G. 1987: Roman Brick and Tile, Gloucester, 1987

BROGAN, O. & SMITH, D.J. 1984: Ghirza. A Libyan Settlement in the Roman Period, (Libyan Antiquities Series 1), Tripoli, 1984

BROUWER, M. 1982: 'Römische Phalerae und anderer Lederbeschlag aus dem Rhein', O.M.R.O.L. 63, 1982, 145-87

- BUCKLAND, P. 1978: 'A first-century shield from Doncaster, Yorkshire', Brit. IX, 1978, 247-69
- BUJUKLIEV, H. 1986: La Necropole Tumulaire Thrace pres de Catalka, Sofia, 1986
- BÜLOW, G. VON 1980: 'Thrakerdarstellungen in der römischer Kunst', Klio 62, 1980, 139-55
- BURFORD, A. 1960: 'Heavy transport in classical antiquity', Economic History Review Ser.2, XIII, 1960, 1-18
- BURFORD, A. 1972: Craftsmen in Greek and Roman Society, London, 1972
- BÜSING, H. 1982: Römische Militärarchitektur in Mainz, (Römisch-Germanische Forschungen 40), Mainz 1982
- BÜTTNER, A. 1957: 'Untersuchungen über Ursprung und Entwicklung von Auszeichnungen in römischen Heer', B.J. 157, 1957, 127-80
- BUSHE-FOX, J.P. 1932: Third Report on the Excavations of the Roman Fort at Richborough, Kent, Oxford, 1932
- CAGIANO DE AZEVEDO, M. 1939: 'Una dedica abrasa e i rilievi puteolani dei musei di Filadelfia e Berlino', Boll. Comm. LXVII, 1939, 45-56
- CAGIANO DE AZEVEDO, M. 1951: Le Antichità de Villa Medici, Rome, 1951
- CALABI-LIMENTANI, I. 1958a: Studi sulla società Romana: il lavoro artistico, Milan, 1958
- CALABI-LIMENTANI, I. 1958b: 'Architetto', E.A.A. I, Rome, 1958, 572-8
- CALABI-LIMENTANI, I. 1961: 'Marmorarius', E.A.A. IV, Rome, 1961, 870-5
- CALLIES, H. 1964: 'Die fremden Truppen im römischen Heer des Principat und die sogenannten nationalen Numeri', B.R.G.K. 45, 1964, 130-227
- CALZA, R. 1977: Antichità di Villa Doria Pamphilj, Rome, 1977
- CAMPBELL, D.B. 1986: 'Auxiliary artillery revisited', B.J. 186, 1986, 117-32
- CAMPBELL, J.B. 1984: The Emperor and the Roman Army 31 B.C. - A.D.235, Oxford, 1984
- CAPRINO, C., COLINI, A.M., GATTI, G., PALLOTINO, M. & ROMANELLI, P. 1955: La Colonna di Marco Aurelio, Roma, 1955
- CARCOPINO, J. 1956: Daily Life in Ancient Rome, the People and the City at the Height of the Empire, Harmondsworth, 1956
- CARDUCCI, C. 1968: Arte Romana in Piemonte, Turin, 1968

- CASALONE, C. 1962: 'Note sulle pitture dell'ipogeo di Trebio Giusto a Roma', Cahiers Archéologiques XII, 1962, 53-64
- CASSON, L. 1965: 'Harbour and river boats of Ancient Rome', J.R.S. LV, 1965, 31-9
- CASTAGNOLI, F. 1980: 'Installazioni portuali a Roma', M.A.A.R. XXXVI, 1980, 35-42
- CHAMPLIN, E. 1980: Fronto and Antonine Rome, Cambridge Mass. & London, 1980
- CHEESMAN, G.L. 1914: The Auxilia of the Roman Army, Oxford, 1914
- CHEVALLIER, R. 1980: 'Dessins du XVI^e siècle de la Colonne Trajane dans une collection Parisienne', Rend. Pont. ser.3, L, 1980, 27-42
- CHIRILA, E., GUDEA, N., LUCACEL, V. & POP, C. 1972: Castrul roman de la Buciumi, Cluj, 1972
- CHRISTESCU, V. 1937: Istoria Militară a Daciei Romane, Bucarest, 1937
- CICHORIUS, C. 1896, 1900: Die Reliefs der Traianssäule, Berlin, II 1896, III 1900
- CICHORIUS, C. 1904: Die römischen Denkmäler in der Dobrudscha, Berlin, 1904
- CIZEK, E. 1983: L'Époque de Trajan Circonstances Politiques et Problèmes Idéologiques, Bucarest & Paris, 1983
- CLAIRMONT, C.W. 1975: Excavations at Salona (1969-1972), Park Ridge, 1975
- CLARIDGE, A. 1981-83: 'Sulla lavorazione dei marmi bianchi nella scultura dell'età Romana', Studi Miscellanei 26, 1981-83, 113-7
- CLARIDGE, A. 1983: 'Roman methods of fluting corinthian columns and pilasters', in Città e Architettura nella Roma Imperiale, (Separatum, Analecta Romana), Rome, 1983, 119-28
- CLARKE, D.L. 1978: Analytical Archaeology, London, 1978
- CLEERE, H. 1974: 'The Roman iron industry of the Weald and its connections with the Classis Britannica', A.J. 131, 1974, 171-99
- CLEMEN, U. 1975: 'De la colonne trajane à la mosaïque de Saint-Marie-Majeure: le massacre des enfants', Ant. Class. XLIV, 1975, 581-8
- COARELLI, F. 1980: Guida archeologica di Roma, Roma, 1980
- COLINI, A.M. 1944: Storia e Topografia del Celio nell'Antichità, (Memorie della Pontificia Accademia Romana di Archeologia VII), Rome, 1944

- COLLEDGE, M.A.R. 1976: The Art of Palmyra, London, 1976
- COLLEDGE, M.A.R. 1977: Parthian Art, London, 1977
- COLLINGWOOD, R.G. & RICHMOND, I.A. 1969: The Archaeology of Roman Britain, London, 1969
- COLONNA 1988: La Colonna Traiana e gli artisti Francesi da Luigi XIV a Napoleone I, Rome, 1988
- COLONNE 1976: La Colonne Trajane (les dossiers de l'archéologie 17, July-August 1976), Dijon, 1976
- COMSTOCK, M.B. & VERMEULE, C.C. 1976: Sculpture in Stone: the Greek, Roman and Etruscan Collections of the Museum of Fine Arts, Boston, 1976
- CONDURACHI, E. 1982: 'Riflessi della propaganda politica e della strategia militare sui rilievi della Colonna di Traiano', in L'ESAME, 1982, 7-19
- CONDURACHI, E. & DAICOVICIU, C. 1971: The Ancient Civilisation of Romania, Geneva, 1971
- CONNOLLY, P. 1977: The Greek Armies, London, 1977
- CONNOLLY, P. 1981: Greece and Rome at War, London, 1981
- CONNOLLY, P. 1986: 'A reconstruction of a Roman saddle', Brit. XVII, 1986, 353-5
- CONNOLLY, P. 1987: 'The Roman saddle', in DAWSON, 1987, 7-27
- CONNOLLY, P. 1988: 'Experiments with the Roman saddle', Military Illustrated, Past and Present 13, June/July 1988, 26-32
- CONOLE, P. & MILNS, R.D. 1983: 'Neronian frontier policy in the Balkans: the career of Ti. Plautius Silvanus', Historia 32, 1983, 183-200
- LE COQ, A. VON 1925: Bilderatlas zur Kunst- und Kulturgeschichte Mittel Asiens, Berlin, 1925
- COUISSIN, P. 1926: Les Armes Romaines, Paris, 1926
- COUISSIN, P. 1928: 'Les triomphes de Domitian', R.A. XXVIII, July-December 1928, 65-94
- COULSTON, J.C. 1981: 'A sculptured Dacian falx from Birdoswald', A. Ael. Ser.5 IX, 1981, 348-51
- COULSTON, J.C. 1983: 'Arms and armour in sculpture', in BISHOP, 1983a, 24-6
- COULSTON, J.C. 1985: 'Roman archery equipment', in BISHOP, 1985a,

220-366

- COULSTON, J.C. 1986: 'Roman, Parthian and Sassanid tactical developments', in P. Freeman & D. Kennedy (eds.), The Defence of the Roman and Byzantine East, (B.A.R. Suppl. Ser. No.297), Oxford, 1986
- COULSTON, J.C. 1987: 'Roman military equipment on 3rd century tombstones', in DAWSON, 1987, 141-56
- COULSTON, J.C. (ed.) 1988a: Military Equipment and the Identity of Roman Soldiers: Proceedings of the Fourth Roman Military Equipment Conference, (B.A.R. Suppl. Ser. No.394), Oxford, 1988
- COULSTON, J.C. 1988b: 'Three legionaries from Croy Hill', in COULSTON, 1988a, 1-29
- COULSTON, J.C. & PHILLIPS, E.J. 1988: C.S.I.R., Great Britain, I, 6, Hadrian's Wall West of the North Tyne, and Carlisle, Oxford, 1988
- COULTON, J.J. 1977: Greek Architects at Work, London, 1977
- COULTON, J.J. 1985: 'Incomplete preliminary planning in Greek architecture: some new evidence', Actes du colloque de Strasbourg, 26-28 janvier 1984, Strasbourg, 1985, 103-21
- CROUS, J.W. 1933: 'Florentiner Waffenpfieler und Armilustrum', M.D.A.I.(R.) 48, 1933, 1-119
- CROWFOOT, J.W., CROWFOOT, G.M. & KENYON, K.M. 1957: The Objects from Samaria, Samaria-Sebaste III, London, 1957
- CUMONT, F. 1926: Fouilles de Doura-Europos, Paris, 1926
- CUMONT, F. 1942: Recherches sur le Symbolisme Funéraire des Romains, Paris, 1942
- CURLE, J. 1911: A Roman Frontier Post and its People. The Fort at Newstead, Glasgow, 1911
- DACIANS 1980: The Dacians, Exhibition Catalogue for 11th April - 7th June, Billingham Art Gallery, London, 1980
- DAICOVICIU, H. 1959: 'Osservazioni intorno alla Colonna Traiana', Dacia N.S. 3, 1959, 311-23
- DAICOVICIU, C. & H. 1963: Sarmizegethusa, Bucarest, 1963
- DAICOVICIU, H. 1965: 'Nouvelles données concernant le sanctuaire - calendrier Dace', Dacia IX, 1965, 383-5
- DAICOVICIU, H. 1970: 'Notes sur la première guerre dacique de Trajan', A. Mus. Nap. 7, 1970, 109-24
- DAICOVICIU, H. 1971: 'Un sanctuar circular Dacic la Fetele Albe',

Apulum IX, 1971, 257-62

- DAICOVICIU, H. 1974: 'Dion Cassius et Sarmizegethusa', in H. Daicoviciu (ed.), In Memoriam C. Daicoviciu, Cluj, 1974, 111-16
- DAICOVICIU, C., CONDURACHI, E., NESTOR, I., ȘTEFAN, G. & MATEI, M.D. 1960: Istoria României, I, Bucurest, 1960
- DAICOVICIU, C. & DAICOVICIU, H. 1966: Columna lui Traian, Bucurest, 1966
- DANIELS, C.M. 1970: The Garamantes of Southern Libya, North Harrow, 1970
- DAVIES, G.A.T. 1917: 'Trajan's first Dacian war', J.R.S. VII, 1917, 74-97
- DAVIES, G.A.T. 1920: 'Topography and the Trajan's Column', J.R.S. X, 1920, 1-28
- DAWSON, M. 1987: Roman Military Equipment: the Accoutrements of War. Proceedings of the Third Roman Military Equipment Research Seminar, (B.A.R. Suppl. Ser. No.336), Oxford, 1987
- DEGEN, R., DRACK, W. & WYSS, R. (ed.) 1966: Helvetia Antiqua, Festschrift Emil Vogt Beiträge zur Prähistorie und Archäologie der Schweiz, Zürich, 1966
- DENSEM, R. 1980: 'Pilum-heads from Roman Britain', Exercitus I.3, 1980, 27-33
- DILKE, O.A.W. 1971: The Roman Land Surveyors. An Introduction to the Agrimensores, Newton Abbot, 1971
- DILKE, O.A.W. 1985: Greek and Roman Maps, London, 1985
- DINTIS, P. 1986: Hellenistische Helme, Rome, 1986
- DOBIĂȘ, J. 1960: 'À propos de l'expeditio Suebica et Sarmatica de l'Empereur Hadrian en l'an 118', Omagia Lui Constantin Daicoviciu, Academia Republicii Popolare Române, Bucurest, 1960, 147-53
- DOBSON, B. 1969: 'C. Sulpicius Ursulus, symmachiarii and the bellum Dacicum', Epig. Stud. VIII, 1969, 122-4
- DODGE, H. 1984: Building Materials and Techniques in the Eastern Mediterranean from the Hellenistic Period to the Fourth Century A.D., Unpublished Ph.D. thesis, University of Newcastle, 1984
- DODGE, H. 1988: 'Decorative stones for architecture in the Roman empire', Oxford Journal of Archaeology 7.1, March 1988, 65-80
- DOMASZEWSKI, A. VON 1885: 'Die Fahnen in römischen Heere', Abhandlungen des Archäologisch-Epigraphischen Seminares der Universität Wien, V, 1885, 1-80

- DOMASZEWSKI, A. VON 1967: Die Rangordnung des römischen Heeres, (2. durchgesehene Auflage Einführung, Berichtigungen und Nachträge von Brian Dobson), Köln, 1967
- DORUȚIU, E. 1961: 'Some observations on the military funeral altar of Adamclissi', Dacia V, 1961, 346-63
- DOWN, A. 1981: Chichester Excavations V, Chichester, 1981
- VAN DRIEL-MURRAY, C. 1986: 'Shoes in perspective', in PLANCK & UNZ 1986, 139-45
- VAN DRIEL-MURRAY, C. 1988: 'A fragmentary shield cover from Caerleon', in COULSTON, 1988a, 51-66
- VAN DRIEL-MURRAY, C. forthcoming: Roman Military Equipment: the Sources of Evidence. Proceedings of the Fifth Roman Military Equipment Conference, (B.A.R. Suppl. Ser.), Oxford, forthcoming
- VAN DRIEL-MURRAY, C. & GECHTER, M. 1984: 'Funde aus der fabrika der Legio I Minerva aus Bonner Berg', Rheinische Ausgrabungen 23, Beiträge zur Archäologie des römischen Rheinlands IV, 1984, 1-83
- DUDLEY, D.R. 1967: Urbs Roma: A Source Book of Classical Texts on the City and its Monuments, Aberdeen, 1967
- DUDLEY, D.R. 1968: The World of Tacitus, London, 1968
- DURRY, M. 1928a: 'Un autel militaire a la Villa Medici', R.A. XXVII, Jan.-June 1928, 309-19
- DURRY, M. 1928b: 'Note sur la tenue des centurions (la crista transversa)', R.A. XXVII, Jan.-June 1928, 303-8
- DURRY, M. 1938: Les Cohortes Prétoriennes, Paris, 1938
- DURRY, M. 1954: 'Praetoriae cohortes', R.E. XXII.2, Stuttgart, 1954, 1607-34
- EADIE, J.W. 1967: 'The development of Roman mailed cavalry', J.R.S. 57, 1967, 161-73
- ECKHARDT, L. 1976: C.S.I.R., Österreich, III, 2, Die Skulpturen des Stadtgebietes von Lauriacum, Wien, 1976
- ECKHARDT, L. 1981: C.S.I.R., Österreich, III, 3, Die Skulpturen des Stadtgebietes von Ovilava, Vienna, 1981
- EDGE, D. & PADDOCK, J.M. 1988: Arms and Armour of the Medieval Knight, London, 1988
- EHLERS, W. 1948: 'Triumphus', R.E. VII.A, Stuttgart, 1948, 493-511
- ENGELHARDT, C. 1863: Thorsbjerg Fundet, Copenhagen, 1863

- L'ESAME 1982: L'Esame Storico-artistico della Colonna Traiana, (Atti dei Convegni Lincei 50), Rome, 1982
- ÉSPÉRANDIEU, E. 1907-66: Récueil général des bas-reliefs, statues et bustes de la Gaule romaine, Paris, 1907-66
- ÉSPÉRANDIEU, E. 1931: Récueil général des bas-reliefs, statues et bustes de la Germanie romaine, Paris, 1931
- EVANS, M.M. 1906: 'Hairdressing of Roman ladies as illustrated on coins', Numismatic Chronicle Ser.4, VI, 1906, 37-65
- FARINELLA, V. 1981: 'La Colonna Traiana: un esempio di lettura verticale', Prospettiva No.26, July 1981, 2-9
- FARRAR, R.A.H. 1980: 'Roman signal-stations over Stainmore and beyond', in HANSON & KEPPIE, 1980, 211-31
- FELLMANN, R. 1957: Das Grab des L. Munatius Plancus bei Gaeta, Basel, 1957
- FELLMANN, R. 1966: 'Hölzerne Schwertgriffe aus dem Schutthügel von Vindonissa', in DEGEN et al., 1966, 215-22
- FERENCZI, I. 1978: 'Considérations d'ordre géomorphologique et topographique sur le mode de déroulement des campagnes de l'empereur Trajan pour la conquête des citadelles daces des Monts du Sebes', Apulum 16, 1978, 119-34
- FIEBIGER, A. 1905: 'Draco', R.E. V, Stuttgart, 1905, 1633-4
- FIRATLI, N. 1976: 'Trakya dan bazi yeni buluntular', VIII Türk Tarih Kongresi, Ankara, 1976, 439-45
- FISCHER, H. 1912: 'Der germanische Nodus und verwantes', Zeitschrift für deutsche Altertum und deutsche Literatur 53, 1912, 183-97
- FITTSCHEN, K. 1972: 'Das Bildprogramm des Trajansbogens zu Benevent', A.A. LXXXVII, 1972, 742-88
- FITTSCHER, K. 1979: 'Bildnisse numidischer Könige', in HORN & RÜGER, 1979, 209-25
- FLORESCU, F.B. 1959, 1961: Monumental de la Adamklissi Tropaium Traiani, Bucarest, Ed.1 1959, Ed.2 1961
- FLORESCU, F.B. 1965: Das Siegesdenkmal von Adamklissi, Ed.3, Bonn, 1965
- FLORESCU, F.B. 1969: Die Trajanssäule, Bucarest and Bonn, 1969
- FLORESCU, R. 1971: 'Study and archaeological commentary', in I. Miclea, The Column, Cluj, 1971, 207-19
- FORESTIER, A. 1928: The Roman Soldier, London, 1928

- FOWDEN, G. 1987: 'Pagan Versions of the Rain Miracle of A.D.172', Historia XXXVI, 1987, 83-95
- DI FRAIA, G. & D'ORIANO, M.R. 1982: 'Scheletri sulla Battigia', Archeologia Viva I.9, December 1982, 18-25
- FRANZONI, C. 1987: Habitus atque habitudo militis. Monumenti funerari di militari nella Cisalpina Romana, Rome, 1987
- FREIS, H. 1967: Die Cohortes Urbanae, (Epig. Stud. 2), Köln, 1967
- FRERE, S.S. & ST.JOSEPH, J.K. 1974: 'The Roman fortress at Longthorpe', Brit. V, 1974, 1-129
- FRERE, S.S. & ST.JOSEPH, J.K. 1983: Roman Britain from the Air, Cambridge, 1983
- FRESHFIELD, E.H. 1922: 'Notes on a Vellum Album containing some original sketches of public buildings and monuments, drawn by a German artist who visited Constantinople in 1574', Ant. LXXII, 1922, 87-104
- FROEHNER, W. 1872-4: La Colonne Trajane, Paris, 1872-4
- FROVA, A. 1961: L'Arte di Roma e del Mondo Romano, (Ser. Storia Universale dell' Arte, II), Turin, 1961
- FUENTES, N. 1983: 'On the scutum, legionary marching order, surveying and colour in the Roman army', in BISHOP, 1983a, 14-15
- FUENTES, N. 1987: 'The Roman military tunic', in DAWSON, 1987, 41-75
- FUENTES, N. 1988: 'The turf-cutter and the Roman army', Exercitus 2.4, Spring 1988, 57-60
- FUHRMANN, H. 1937: 'Ein Fragment des verlorenen Reliefs am Sockel der Markussäule', A.A. 52, 1937, 261-5
- FUKAI, S. & HORIUCHI, K. 1972: Taq-i-Bustan, II, Tokyo, 1972
- FURTWÄNGLER, A. 1903: Das Tropaion von Adamklissi und provinzialrömische Kunst, Munich, 1903
- GABELMANN, H. 1973: 'Römische Grabmonumente mit Reiterkampfszenen in Rheingebiet', B.J. 173, 1973, 132-200
- GABRICI, E. 1909: 'Pozzuoli - Bassorilievi marmorei rappresentanti soldati romani, e pezzi di una iscrizione onoraria latina del periodo degli Antonini', N. Sc. 1909, 212-15
- GAITZSCH, W. 1979: 'Ein römischer Stechbeitel aus Aquileia', A.K. 9, 1979, 203-7
- GAITZSCH, W. & MATTHÄUS, H. 1980: 'Schreinenwerkzeuge aus dem Kastell Altstadt bei Miltenberg', A.K. 10, 1980, 163-71

- GALINSKY, G.K. 1975: Ovid's Metamorphoses, Oxford, 1975
- LE GALL, J. 1944a: 'Les bas-reliefs de la statue du "Tibre" au Louvre', R.A. XXI, Jan-June 1944, 115-37
- LE GALL, J. 1944b: 'Les bas-reliefs de la statue du "Tibre" au Louvre, II', R.A. XXII, July-Dec. 1944, 38-55
- GAMBER, O. 1964: 'Dakische und sarmatische Waffen auf der Traianssäule', J.K.S.W. 60, 1964, 7-34
- GAMBER, O. 1968: 'Kataphrakten, Clibanarier, Normannenreiter', J.K.S.W. 64, 1968, 7-44
- GANSER-BURCKHARDT, A. 1942: 'Das Leder und seiner Verarbeitung im römischen Legionslager Vindonissa', G.p.V. I, Basel, 1942
- GARBSCH, J. 1978: Römische Paraderüstungen, Munich, 1978
- GARCÍA Y BELLIDO, A. 1949: Esculturas Romanas de España y Portugal, Madrid, 1949
- GARZETTI, A. 1974: From Tiberius to the Antonines. A History of the Roman Empire A.D. 14-192, London, 1974
- GAUER, W. 1973: 'Ein Dakerdenkmal Domitians. Die Trajanssäule und das sogenannte grosse trajanische Relief', J.d.I. 88, 1973, 318-50
- GAUER, W. 1977: Untersuchungen zur Trajanssäule; Erste Teil. Darstellungsprogramm und künstlerischer Entwurf, (Monumenta Artis Romanae, herausgegeben von Forschungsarchiv für römische Plastik am archäologischen Institut der Universität in Köln, XIII), Berlin, 1977
- GAUER, W. 1981: 'Die Triumphsäulen als Wahrzeichen Roms und der Roma secunda und als Denkmäler der Herrschaft im Donauräume', Antike und Abenland 27, 1981, 179-92
- GECHTER, M. & KUNOW, J. 1983: 'Der frühkaiserzeitliche Grabfund von Mehrum', B.J. 183, 1983, 449-68
- GHIRSHMAN, R. 1962: Iran: Parthians and Sassanids, London, 1962
- GINTERS, W. 1928: Das Schwert der Skythen und Sarmaten, Berlin, 1928
- GIRKE, G. 1922: Die Tracht der Germanen in der vor- und frühgeschichtlichen Zeit, Leipzig, 1922
- GIULIANO, A. (ed.) 1981: Museo Nazionale Romano, Le Sculture, I, 2 (Alae I-IV), Rome, 1981
- GJODESEN, M. 1976: 'A fragment of the Arch of Titus', in K. Ascani, T. Fischer-Hansen, F. Johansen, S.S. Jensen and J.E. Skydsgaard (eds.), Studia Romana in honorem Petri Kramp Septuagenarii, Odense, 1976, 72-86

- GLOB, P.V. 1977: The Bog People, London, 1977
- GLODARIU, I. 1965: 'Das dakische Sarmizegethusa in römischer Zeit', A. Mus. Nap. 2, 1965, 119-33
- GLODARIU, I. 1971: 'Un econ al cuceririi Daciei in torentica romana?', Apulum IX, 1971, 297-303
- GLODARIU, I. 1974: 'Itinéraires possibles de la cavalerie maure dans les guerres Daces', in H. Daicoviciu (ed.), In Memoriam C. Daicoviciu, Cluj, 1974, 151-64
- GLODARIU, I. 1976: Dacian Trade with the Hellenistic and Roman World, (B.A.R. Suppl. Ser. 10), Oxford, 1976
- GLODARIU, I. & IAROSLAVSCHI, E. 1979: Civilizația Fierului la Daci, Cluj-Napoca, 1979
- GNOLI, R. 1971: Marmora Antica, Rome, 1971
- VON GONZENBACH, V. 1966: 'Tiberische Gürtel- und Schwertscheidenbeschläge mit figürlichen Reliefs', in DEGEN et al., 1966, 183-208
- GOODMAN, W. 1964: A History of Woodworking Tools, London, 1964
- GÖPFRICH, J. 1986: 'Römische Lederfunde aus Mainz', S.J. 42, 1986, 5-67
- GORE, R. 1984: 'The dead do tell tales at Vesuvius', National Geographic 165:5, May 1984, 557-613
- GOSTAR, N. 1977: 'Sur l'inscription de Ti. Claudius Maximus de Grammeni (Macédonie)', Epigraphica, 1977, 79-98
- GOSTAR, N. 1979: 'L'armée romaine dans les guerres daces de Trajan (101-102, 105-106)', Dacia N.S. 23, 1979, 115-22
- GRANT, M. 1971: Gladiators, Harmondsworth, 1971
- GREEP, S. 1984: 'Ribbed gladius handles of the first century A.D.', Exercitus I.8, 1984, 122-3
- GREEP, S.J. 1987: 'Lead sling-shot from Windridge Farm, St.Albans and the use of the sling by the Roman army in Britain', Brit. XVIII, 1987, 183-200
- GREW, F. & HOBLEY, B. (eds.) 1985: Urban Topography in Britain and the Western Empire, (C.B.A. Research Report 59), London, 1985
- GRIFFITHS, W.B. forthcoming: 'The sling and its place in the Roman imperial army' in VAN-DRIEL MURRAY, forthcoming
- GRIGG, R. 1983: 'Inconsistency and lassitude: the shield emblems of the Notitia Dignitatum', J.R.S. 73, 1983, 132-42
- GROAG, E. 1927: 'Lusius Quietus', R.E. XIII.2, 1927, 1874-90

- GROENMAN-VAN WAATERINGE, W. 1967: Romeins lederwerk uit Valkenburg (Z.H.), Groningen, 1967
- GROH, V. 1925: 'La colonna di Traiano', Rend. Linc. 1925, 40-57
- VON GROLLER, M. 1901: 'Römische Waffen', Der römische Limes in Österreich, II, Vienna, 1901, 84-131
- GROUSSET, R. 1970: The Empire of the Steppes: a History of Central Asia, New Brunswick, 1970
- GRÜNEWALD, M. 1986: Die Römer in Worms, Stuttgart, 1986
- GUDEA, N. 1979: 'The defensive system of Roman Dacia', Brit. X, 1979, 63-87
- GUDEA, N. & BAATZ, D. 1974: 'Teile spätrömischer Ballisten aus Gornea und Orșova (Rumänien)', S.J. XXXI, 1974, 50-72
- GUERRINI, L. 1971: Marmi Antichi nei disegni di Pier Leone Ghezzi, Vatican, 1971
- GUERRINI, L. 1982: Palazzo Mattei di Giove, le Antichità, Rome, 1982
- GUSMAN, P. 1914: L'Art Dècoratif de Rome de la Fin de la Republique au IV^e Siècle, Paris, 1914
- HALDON, J.F. 1975: 'Some aspects of Byzantine military technology from the 6th to 10th centuries', in Byzantine and Modern Greek Studies I, 1975, 11-47
- HALE, J.R. 1985: War and Society in Renaissance Europe, 1450-1620, London, 1985
- HAMBERG, P.G. 1945: Studies in Roman Imperial Art, with Special Reference to the State Reliefs of the 2nd Century, Copenhagen and Uppsala, 1945
- HANNESTAD, N. 1986: Roman Art and Imperial Propaganda, Aarhus, 1986
- HANSLIK, R. 1965: 'M. Ulpius Traianus', R.E. Suppl. X, 1965, 1035-1102
- HANSON, W.S. 1982: 'Roman military timber buildings: construction and reconstruction', in S. McGrail, Woodworking Techniques Before A.D.1500, Oxford, 1982, 169-86
- HANSON, W.S. & KEPPIE, L.J.F. 1980: Roman Frontier Studies, 1979. Papers Presented to the 12th International Congress of Roman Frontier Studies, (B.A.R. Suppl. Ser. No.71), Oxford, 1980
- HARMAND, J. 1967: L'Armée et le Soldat à Rome de 107 à 50 avant notre ère, Paris, 1967
- HARMATTA, J. 1950: Studies in the History of the Sarmatians, Budapest,

- HARTLEY, B.R. & WACHER, J.S. (eds.) 1983: Rome and Her Northern Provinces, Gloucester, 1983
- HASELBERGER, L. 1985: 'The construction plans for the Temple of Apollo at Didyma', Scientific American 253, 1985, 114-22
- HASSALL, M. 1973: Review of ROSSI, 1971a, Bulletin of the Institute of Archaeology 11, 1973, 172
- HASSALL, M. 1983: 'The internal planning of Roman auxiliary forts', in HARTLEY & WACHER, 1983, 96-131
- HASSALL, M.W.C. & TOMLIN, R.S.O. 1974: 'Inscriptions', Brit. XV, 1984, 333-56
- HASSEL, F.J. 1966: Der Traiansbogen in Benevent: ein Bauwerk des römischen Senates, Mainz, 1966
- HAZELL, P.J. 1981: 'The pedite gladius', Ant. J. LXI.1, 1981, 73-82
- HELBIG, W. 1966: Führer durch die öffentlichen Sammlungen klassischer Altertümer in Rom, II, die städtischen Sammlungen (kapitolinischen Museen und Museo Barracco), Die staatlichen Sammlungen (Ara Pacis, Galleria Borghese, Galleria Spada, Museo Pigorini, Antiquarium auf Forum und Palatin), Tübingen, 1966
- HERRMANN, K.R. 1969: 'Der Eisenhortfund aus dem Kastell Künzing, Vorbericht', S.J. 26, 1969, 129-41
- HOBLEY, B. 1982: 'Roman military structures at "The Lunt" Roman fort: experimental simulations 1966-1977', in P.J. Drury (ed.), Structural Reconstruction: Approaches to the Interpretation of the Excavated Remains of Buildings, (B.A.R. British Series No.110), Oxford, 1982, 223-73
- HOFFILLER, V. 1910-11, 1912: 'Oprema rimskoga vojnika ũ prvo doba carstva', Vjesnik Hrvatskoga Arheološkoga Društva (Zagreb) 11, 1910-11, 145-230; 12, 1912, 16-123
- HOFMANN, A. 1905: Römische Militärgrabsteine der Donauländer, (Sonderschriften des Österreichischen archäologischen Instituts in Wien, V), Vienna, 1905
- HÖLSCHER, T. 1967: Victoria Romana. Archäologische Untersuchungen zur Geschichte und Wesenart der römische Siegesgöttin von den Anfängen bis zum Ende des 3. Jhs. n.Chr., Mainz, 1967
- HÖLSCHER, T. 1970: 'Die Victoria von Brescia', Antike Plastik X.6, Berlin, 1970, 67-81
- HÖLSCHER, T. 1979: 'Beobachtungen zu römischen historischen Denkmälern', A.A. 1979.3, 337-48
- HÖLSCHER, T. 1980: 'Die Geschichtsanfassung in der römischen Repräsentationskunst', J.d.I. 95, 1980, 265-321

- HOPKINS, K. 1978: 'Rules of evidence', review of MILLAR, 1977, J.R.S. 68, 1978, 178-86
- HORN, H.G. & RÜGER, C.B. (eds.) 1979: Die Numider, Reiter und Könige nördlichen der Sahara, Köln, 1979
- VAN HOVE, D. 1987: 'À propos d'un chariot servant à transporter le marbre', Ant. Class. LVI, 1987, 284-9
- JACOPI, I. 1976: The Antiquarium of the Forum Romanum, Rome, 1976
- JAHN, M. 1916: Die Bewaffnung der Germanen in der älteren Eisenzeit, Leipzig, 1916
- JAMES, S. 1980: 'Two Roman shield-bosses from London', Brit. XI, 1980, 320-3
- JAMES, S. 1983: 'The arms and armour from Dura-Europos', in BISHOP, 1983a, 5-7
- JAMES, S. 1986: 'Evidence from Dura-Europos for the origins of Late Roman helmets', Syria LXIII, 1986, 107-34
- JAMES, S. 1988: 'The fabricae: state arms factories of the Later Roman Empire', in COULSTON, 1988a, 257-331
- JENKINS, I. 1985: 'A group of silvered-bronze horse-trappings from Xanten (Castra Vetera)', Brit. XVI, 1985, 141-64
- JONES, C.P. 1970: 'Sura and Senecio', J.R.S. 60, 1970, 98-104
- JOHNSON, A. 1983: Roman Forts of the 1st and 2nd Centuries A.D. in Britain and the German provinces, London, 1983
- JONES, M.J. 1975: Roman Fort Defences to A.D. 117, (B.A.R. British Series No.21), Oxford, 1975
- JUDGE, J. 1982: 'A buried Roman town gives up its dead', National Geographic Magazine 162, 1982, 686-93
- JUNKELMANN, M. 1986: Die Legionen des Augustus, Mainz, 1986
- KÄHLER, H. 1951: 'Der Traiansbogen in Puteoli', in G.E. Mylonas (ed.), Studies Presented to David Moore Robinson On His Seventieth Birthday, I, St.Louis, 1951, 430-9
- KÄHLER, H. 1965: Der Frieze von Reiterdenkmal des Aemilius Paulus in Delphi, (Monumenta Artis Romanae V), Berlin, 1965
- KÄHLER, H. 1966: Seethiasos und Census. Die Reliefs aus dem Palazzo Santa Croce in Rom, Berlin, 1966
- KAPITÄN, G. 1961: 'Schiffsfrachten antiker Baugesteine und Architekturteile vor den Küsten Ostsiziliens', Klio XXXIX, 1961, 276-318

- KASCHNITZ-WEINBERG, G. 1937: Le Sculture del Magazzino del Museo Vaticano, Vatican, 1937
- KENNEDY, D.L. 1978: 'Some observations on the Praetorian Guard', Ancient Society 9, 1978, 275-301
- KEPPIE, L.J.F. 1973: 'Vexilla Veteranorum', P.B.S.R. XLI, 1973, 8-17
- KEPPIE, L.J.F. 1984: The Making of the Roman Army from Republic to Empire, London, 1984
- KEPPIE, L.J.F. 1986: Scotland's Roman Remains. An Introduction and Handbook, Edinburgh, 1986
- KEPPIE, L.J.F. & ARNOLD, B.J. 1984: C.S.I.R., Great Britain, I, 4, Scotland, Oxford, 1984
- KHAZANOV, A.M. 1984: Nomads and the Outside World, Cambridge, 1984
- KIECHLE, F. 1964: 'Die "Taktik" des Flavius Arrianus', B.R.G.K. 45, 1964, 87-129
- KIENAST, D. 1966: Untersuchungen zu den Kriegsflotten der römischen Kaiserzeit, (Antiquitas I, 13), Bonn, 1966
- KIESERITZKY, G. & WATZINGER, C. 1909: Griechische Grabreliefs aus Südrussland, Berlin, 1909
- KIMMIG, W. 1940: 'Ein Keltenschild aus Ägypten', Germania XXIV, 1940, 106-11
- KINSELLA, T. 1970: The Tain, Oxford, 1970
- KLEINER, F.J. 1980: 'The Glanum cenotaph reliefs, Greek or Roman?', B.J. 180, 1980, 106-26
- KLUMBACH, H. 1966: 'Drei römische Schildbuckel aus Mainz', J.R.G.Z.M. XIII, 1966, 165-89
- KLUMBACH, H. 1973: Spätrömische Gardehelme, Munich, 1973
- KLUMBACH, H. 1974: Römische Helme aus Niedergermanien, Köln, 1974
- KNAUER, E.R. 1985: 'Ex oriente Vestimenta - trachtsgeschichtliche Beobachtungen zu Ärmelmantel und Ärmeljacke', A.N.R.W. II, Principat 12.3, Berlin, 1985, 578-741
- KOEPPPEL, G. 1969: 'Profectio und Adventus', B.J. 169, 1969, 130-94
- KOEPPPEL, G. 1979: Revie Gauer Trajanssäule, AJA 83, 1979, 368-9
- KOEPPPEL, G.M. 1980: 'A military itinerarium on the Column of Trajan', M.D.A.I.(R.) 87, 1980, 301-6
- KOEPPPEL, G. 1982a: 'Official state reliefs of the city of Rome in the

imperial age. A bibliography', A.N.R.W. II, Kunste 12.1, Berlin, 1982, 477-506

KOEPPEL, G. 1982b: 'The grand pictorial tradition of Roman historical representation during the early empire', A.N.R.W. II, Kunste 12.1, 1982, 507-35

KOEPPEL, G.M. 1983a: 'Two reliefs from the Arch of Claudius in Rome', M.D.A.I.(R.) 90, 1983, 103-9

KOEPPEL, G.M. 1983b: 'Die historischen Reliefs der römischen Kaiserzeit, I, Stadtrömische Denkmäler unbekannter Bauzugehörigkeit aus augusteischer und julisch-claudischer Zeit', B.J. 183, 1983, 61-144

KOEPPEL, G.M. 1984: 'Die historischen Reliefs der römischen Kaiserzeit, II, Stadtrömische Denkmäler unbekannter Bauzugehörigkeit aus flavischer Zeit', B.J. 1984, 1-65

KOEPPEL, G.M. 1985: 'Die historischen Reliefs der römischen Kaiserzeit, III, Stadtrömische Denkmäler unbekannter Bauzugehörigkeit aus trajanischer Zeit', B.J. 185, 1985, 143-213

KOEPPEL, G.M. 1986: 'Die historischen Reliefs der römischen Kaiserzeit, IV, Stadtrömische Denkmäler unbekannter Bauzugehörigkeit aus hadrianischer bis konstantinischer Zeit', B.J. 186, 1986, 1-90

KOLB, F. 1973: 'Römische Mäntel: paenula, lacerna, μανδύη', M.D.A.I.(R.) 80, 1973, 69-167

KOLNIK, T. 1986: 'Neue Ergebnisse der Limesforschungen in C.S.S.R.', in PLANCK & UNZ, 1986, 355-61

KORFMANN, M. 1972: Schleuder und Bogen in Südwestasien von den frühesten Belegen bis zum Beginn der historischen Stadtstaaten, Bonn, 1972

KOS, M.S. 1978: 'A Latin epitaph of a Roman legionary from Corinth', J.R.S. 68, 1978, 22-5

KRAUS, T. 1974: 'Platz und Denkmal', M.D.A.I.(R.) 81, 1974, 115-30

KUNZL, E. 1977: 'Cingula di Ercolano e Pompeii', Cronache Pompeiane III, 1977, 177-97

KUNZL, E. 1983: 'Les Celtes dans l'Art de Pergame', Histoire et archéologie, les dossiers 77, 1983, 61-9

KUSZINSZKY, B. 1934: Aquincum. Ausgrabungen und Funde, Budapest, 1934

DE LACHENAL, L., PALMA, B. & SAPELLI, M. (eds.) 1984: Museo Nazionale Romano, Le Sculture I, 7, ii, Catalogo delle sculture esposte nel giardino cinquecento, Rome, 1984

LANCIANI, R. 1899: The Destruction of Ancient Rome. A Sketch of the History of the Monuments, London, 1899

- LANDER, J. 1984: Roman Stone Fortifications. Variation and Change from the First Century A.D. to the Fourth, (B.A.R. Suppl. Ser. No.206), Oxford, 1984
- LAUBSCHER, H.P. 1975: Der Reliefschmuck des Galeriusbogens in Thessaloniki, Berlin, 1975
- LAWSON, A.K. 1978: 'Studien zum römischen Pferdegeschirr', J.R.G.Z.M. 25, 1978, 131-72
- LAWSON, A.K. 1980: 'Zu den römischen Reiterspielen', A.K. 10, 1980, 173-84
- LAZENBY, J.F. 1978: Hannibal's War. A Military History of the Second Punic War, Warminster, 1978
- LEHMANN-HARTLEBEN, K. 1923-24: 'Ein Siegesdenkmal Domitians', M.D.A.I.(R.) XXXVIII-IX, 1923-24, 185-92
- LEHMANN-HARTLEBEN, K. 1926: Die Trajanssäule. Ein römisches Kunstwerk zu Beginn der Spätantike, Berlin, 1926
- LEHNER, H. 1986: 'Wiederverwendete römische Grabsteine im frühmittelalterlichen Friedhof', Archäologie der Schweiz 9, 1986, 23
- LENOIR, M. 1977: 'Lager mit claviculae', M.E.F.R. 89, 1977, 697-722
- LEON, C. 1971: Die Bauornamentik des Trajansforum, Wien, 1971
- LEPPER, F.A. 1969: Review of HASSEL, 1966, J.R.S. 59, 1969, 250-61
- LESSING, E. & OBERLEITNER, W. 1978: Ephesos: Weltstadt der Antike, Vienna-Heidelberg, 1978
- LEVI, A. 1931: Sculture Greche e Romane del Palazzo Ducale di Mantova, Rome, 1931
- LINDENSCHMIT, L. 1864, 1870: Die Altertümer unserer heidnischen Vorzeit nach den in öffentlichen und Privatsammlungen befindlichen Originalien zusammengestellt und herausgegeben von dem römisch-germanischen Centralmuseum in Mainz, Mainz, I 1864, II 1870
- LING, R. 1976: 'Stuccowork', in STRONG & BROWN, 1976, 208-21
- LING, R. 1985: 'The mechanics of the building trade', in GREW & HOBLEY, 1985, 14-27
- LISSI-CARONNA, E. 1986: Il Mitreo dei Castra Peregrinorum, Leiden, 1986
- LIVERSIDGE, J. 1976: 'Woodwork', in STRONG & BROWN, 1976, 154-65
- LÖWY, E. 1924: 'Apollodor und die Reliefs der Trajanssäule', Strena Buliciana, Zagreb, 1924, 73-6

- LORENZ, T. 1973: Leben und Regierung Trajans auf dem Bogen in Benevent, Amsterdam, 1973
- LUGLI, G. 1943: 'Il triplice significato: topografico, storico e funerario della colonna Traiana', Analecta Academiei Române 1943, 835-42
- LUGLI, G. 1946: Roma Antica, il Centro Monumentale, Rome, 1946
- LUGLI, G. 1960: 'La Tomba di Traiano', Omagiu Lui Constantin Daicoviciu, (Academia Republicii Popolare Române), Bucarest, 1960, 333-8
- LUGLI, G. 1965: 'Date de la fondation du forum de Trajan', Comptes Rendus de l'Academie des Inscriptions et Belles-Lettres, 1965, 233-8
- MACDONALD, W.L. 1982: The Architecture of the Roman Empire, New Haven, 1982
- MACKENDRICK, P. 1975: The Dacian Stones Speak, Chapel Hill, 1975
- MACKENSEN, M. 1987: Frühkaiserzeitliche Kleinkastelle bei Nersingen und Burlafingen an der oberen Donau, Munich, 1987
- MACMULLEN, R. 1960: 'Inscriptions on armour and the supply of arms in the Roman empire', A.J.A. 64, 1960, 23-40
- MACREA, M. 1964: 'Exercitus Daciae Porolissensis et quelques considérations sur l'organisation de la Dacie romaine', Dacia VIII, 1964, 145-60
- MACREA, M. & BERCIU, I. 1965: 'La Citadelle Dacique de Căpîlna', Dacia IX, 1965, 201-31
- MACREA, M., FLOCA, O., LUPU, N. & BERCIU, J. 1966: Cetăți dacie din sudul Transilvaniei, Bucarest, 1966
- MAENCHEN-HELFEN, O. 1973: The World of the Huns, Berkeley, 1973
- MAGI, F. 1945: I Rilievi flavi del Palazzo Cancellaria, Monumenti Vaticani di archeologia e d'arte 6, 1945
- MALISSARD, A. 1976: 'La comparaison avec le cinéma permet-elle de mieux comprendre la frise continue de la colonne Trajane?', M.D.A.I.(R.) 83, 1976, 165-74
- MALISSARD, A. 1982: 'Une nouvelle approche de la colonne Trajane', A.N.R.W. II, Kunste 12.1, 1982, 579-606
- MANN, J.C. 1954: 'A note on the numeri', Hermes 82, 1954, 501-6
- MANNING, W.H. 1976: Catalogue of Romano-British Ironwork in the Museum of Antiquities, Newcastle upon Tyne, Newcastle, 1976

- MANNING, W.H. 1985: Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum, London, 1985
- MANNONI, L. & T. 1985: Marble. The History of a Culture, New York & Oxford, 1985
- MANO-ZISI, D. 1957: Les Trouvailles de Tekiya, Beograd, 1957
- MANSEL, A.M. 1938: 'Grabhügelforschung in Ostthrakien', Bulletin de l'Institute d'Archeologie Bulgare XII, 1938, 154-89
- MANSUELLI, G.A. 1958: Galleria degli Uffizi, le Scultura, I, Rome, 1958
- MANSUELLI, G.A. 1964: Arte e civiltà romana dell'Italia settentrionale della repubblica alla tetrarchia, Bologna Exhibition Catalogues I-II, Bologna, 1964
- MARIOTTI, C. 1986: 'Fumo di Roma', L'Espresso XXXIII, 23 Nov. 1986, 28-9
- MARSDEN, E.W. 1969: Greek and Roman Artillery: Historical Development, Oxford, 1969
- MARTIN, R. 1972: 'Agora et Forum', M.E.F.R. 84:2, 1972, 912-22
- MARTINES, G. 1980: 'Appunti sulla Colonna Traiana; guasti e patine', Ricerche di Storia dell'arte 11, 1980, 56-62
- MARTINES, G. 1983: 'La struttura della Colonna Traiana: un'essercitazione di meccanica alessandrina', Prospettiva 32, Jan. 1983, 60-71
- MASSA, S. & PARIBENI, M. 1982: 'Il deperimento delle opere d'arte: cause, evoluzione, possibilità di valutazioni qualitativi', Ricerche di Storia dell'arte 16, 1982, 11-18
- MATTINGLY, D.J. 1984: Tripolitania: a Comparative Study of a Roman Frontier Province, unpublished Ph.D. thesis, University of Manchester, 1984
- MAXFIELD, V.A. 1981: The Military Decorations of the Roman Army, London, 1981
- MAXFIELD, V.A. 1986: 'Pre-Flavian forts and their garrisons', Brit. XVII, 1986, 59-72
- MAYES, B. 1980: 'A contubernium tent', Exercitus I.2, 1980, 15-7
- MAZZARINO, S. 1978: 'I Fasti Ostienses e il primo trionfo dacico di Traiano', Epigraphica 40, 1978, 241-6
- MAZZARINO, S. 1979: 'Note sulle guerre daciche di Traiano: reditus del 102 e itus del 105', Rheinisches Museum für Philologie 122, 1979, 173-84
- MAZZARINO, S. 1982: 'Introduzione alla secunda dacica di Traiano', in

L'ESAME, 1982, 21-54

- MCINTYRE, J. & RICHMOND, I.A. 1934: 'Tents of the Roman army and leather from Birdoswald', C.W. N.S. 34, 1934, 62-90
- MEIGGS, R. 1960: Roman Ostia, Oxford, 1960
- MEIGGS, R. 1982: Trees and Timber in the Ancient Mediterranean World, Oxford, 1982
- MENDEL, G. 1914: Catalogue des sculptures Grecques, Romaines et Byzantines, Musées Imperieux Ottomans, III, Istanbul, 1914
- VON MERCKLIN, E. 1962: Antike Figuralkapitelle, Berlin, 1962
- MEYER, H. 1980: 'Die Frieszyklen am sogenannten Triumphbogen des Galerius in Thessaloniki', A.A. XCV, 1980, 374-444
- MICHAEL, N. 1983: Armies of Medieval Burgundy, 1364-1477, London, 1983
- MICHON, E. 'Les bas-reliefs historiques romaines du Musée du Louvre', Monuments et mémoires publiée par l'Académie des inscriptions et belles lettres, Fondation Piot 17, 1909, 145-253
- MICLEA, I. The Column, Cluj, 1971
- MICLEA, I. & FLORESCU, R. 1980a: Geto-Dacii, Bucarest, 1980
- MICLEA, I. & FLORESCU, R. 1980b: Decebal și Traian, Bucarest, 1980
- MILLAR, F. 1977: The Emperor in the Roman World (31 B.C.-A.D. 337), London, 1977
- MINGAZZINI, P. 1973: 'Lo sbarco di Claudio in Britannia', M.D.A.I.(R.) 80, 1973, 283-4
- MÖCSY, A. 1974: Pannonia and Upper Moesia, London, 1974
- MONNERET DE VILLARD, U. 1941: La Nubia Romana, Rome, 1941
- MONTI, P.M. 1980: La Colonna Traiana, Rome, 1980
- MORGAN, L. 1987: 'The drawn sword', in DAWSON, 1987, 175
- MORRIS, J. 1952: 'The dating of the Column of Marcus Aurelius', Journal of the Warburg and Courtauld Institutes 15, 1952, 33-47
- MORRISON, J. & COATES, J. 1986: The Athenian Trireme, Cambridge, 1986
- MOSTRA 1983: Dalla mostra al museo. Dalla Mostra archeologica dal 1911 al Museo della civiltà romana, Rome, 1983
- MÜLLER-WIENER, W. 1977: Bildlexikon zur Topographie Istanbuls, Tübingen, 1977
- MURRAY THREIPLAND, L. 1953: 'Part of a Roman lead coffin lid from

Glamorgan', Ant. J. XXXIII, 1953, 72-4

NARDI, R. 1982-4: 'L'Arco di Settimio Severo: indagini storiche e conservative', Atti della Pontificia Accademia Romana di Archeologia, Ser. III, Rendiconti LV-VI, 1982-84, 299-312

NARDONI, D. 1986: La Colonna Ulpia Traiana, Rome, 1986

NASH, E. 1981: A Pictorial Dictionary of Ancient Rome I-II, New York, 1981

NASH-WILLIAMS, V.E. 1932: 'The Roman legionary fortress at Caerleon, II', Archaeologia Cambrensis 87, 1932, 48-104

DE NAVARRO, J.M. 1972: The Finds from the Site of La Tène, I, Scabbards and the Swords Found in them, London, 1972

NOBIS, G. 1973: 'Zur Frage römerzeitlicher Hauspferde in Zentraleuropa', Zeitschrift für Säugetierkunde 38, 1973, 224-52

NOELKE, P. 1977: 'Grabsteine aus dem römischen Neuss', Neusser Jahrbuch 1977, 5-21

NYLANDER, C. 1988: 'S.O.S. for ancient monuments', Archaeology July/Aug. 1988, 54-7, 74-5

NYLEN, E. 1963: 'Early gladii found in Scandinavia', Acta Archaeologica 34, 1963

OHL, R.T. 1931: 'The incipations at the American Academy in Rome', M.A.A.R. IX, 1931, 89-133

OHLSEN, W. 1981: Monumentalschrift. Monument. Mass. Proportionierung des Inschriftalphabets und des Sockel der Traianssäule in Rom, Hamburg, 1981

OLDENSTEIN-PFERDEHIRT, B. 1984: 'Die Geschichte der legio VIII Augusta', J.R.G.Z.M. 31, 1984, 397-433

ÖNEN, U. 1983: Ephesus, Izmir, 1983

L'ORANGE, H.P. & VON GERKAN, A. 1939: Der Spätantike Bildschmuck des Konstantinsbogens, Berlin, 1939

ORLANDOS, A. 1966, 1968: Les matériaux de construction et la technique architecturale des anciens grecs, Paris, I 1966, II 1968

OVERLAET, B.J. 1982: 'Contribution to Sassanian armament in connection with a decorated helmet', Iranica Antiqua XVII, 1982, 189-206

PACKER, J., SARRING, K.L. & SHELDON, R.M. 1983a: 'A new excavation in Trajan's Forum', A.J.A. 87, 1983, 165-72

PACKER, J. 1983b: Review of AMICI, 1983, A.J.A. 87, 1983, 569-72

PALLOTTINO, M. 1938: 'Il Grande Fregio di Traiano', Boll. Comm. LXVI,

1938, 17-56

- PANAITESCU, E. 1923: 'Il Ritratto di Decebalo', Ephemeris daco-Romana I, 1923, 387-413
- PANVINI ROSATI, F. 1958-59: 'La colonna sulle monete di Traiano', Annali Istituto Italiano di Numismatica 5-6, 1958-59, 29-40
- PÁRDUCZ, M. 1941: Denkmäler der Sarmatenzeit Ungarns II, (A.H. XXV), Budapest, 1941
- PARIBENI, R. 1926, 1927: Optimus Princeps. Saggio sulla storia e sui tempi dell'imperatore Traiano, Messina, I 1926, II 1927
- PARIBENI, R. 1929: 'La Colonna Traiana in un codice del Rinascimento', Rivista del Romano Istituto d'Archeologia e Storia dell'Arte VII, 1929, 10-28
- PARKER, G. 1972: The Army of Flanders and the Spanish Road, 1567-1659. The Logistics of Spanish Victory and Defeat in the Low Countries Wars, Cambridge, 1972
- PARKER, H.M.D. 1928: The Roman Legions, Cambridge, 1928
- PÁRVAN, V. 1926: Getica: O protoistorie a Daciei, Budapest, 1926
- PASSERINI, A. 1939: Le Coorti Pretorie, Rome, 1939
- PATSCH, C. 1937: Der Kampf um den Donaauraum unter Domitian und Trajan, Vienna und Leipzig, 1937
- PAULI, L. 1973: 'Ein latenezeitliches Steinrelief aus Bormio am Stilfser Joch', Ger. LI, 1973, 85-120
- PAVOLINI, C. 1984: 'Le projet de fouille et de mise en valeur des Forums Impériaux', Rome en Péril (histoire et archéologie, les dossiers 82, April 1984), Dijon, 1984, 24-33
- PEDDIE, J. 1987: Invasion. The Roman Invasion of Britain in A.D. 43 and the Events Leading to their Occupation of the West Country, Gloucester, 1987
- PELIKÁN, O. 1982: 'Die römische Kunst und der sogenannte Manierismus am Beispiel der Skulptur', A.N.R.W. II, Principat 12.1, Künste, Berlin, 1982, 24-9
- PENSA, M. 1969-70: 'L'architettura traiana attraverso le emissioni edilizie coeve', Atti Centro Studi e Documentazione sull'Italia romana 2, Milan 1969-70, 275-96
- PETCULESCU, L. & GHERGHE, P. 1979: 'Coiful roman de la Bumbești', S.C.I.V.A. 30, 1979, 603-6
- PETCULESCU, L. & PROTASE, D. 1975: 'Coiful Roman de la Berzovia', Banatica 3, 1975, 85-9

- PETERSEN, E. 1899: Trajans dakische Kriege. I Der Erster Krieg, Leipzig, 1899
- PETERSEN, E. 1903: Trajans dakische Kriege. II Der Zweiter Krieg, Leipzig, 1903
- PETERSEN, E., DOMASZEWSKI, A. VON & CALDERINI, G. 1896: Die Marcus-Säule auf der Piazza Colonna in Rom, Monaco, 1896
- PETERSEN, L. 1968: 'Lusius Quietus, ein Reitergeneral Trajans aus Mauretanien', Das Altertum XIV, 1968, 211-17
- VON PETRIKOVITS, H. 1975: Die Innenbauten römischer Legionslager während der prinzipatszeit, (Abhandlungen der rheinisch-westfälischen Akademie der Wissenschaften, 56), Opladen, 1975
- PETRIKOVITS, H. VON 1983: 'Sacramentum', in HARTLEY & WACHER, 1983, 179-201
- PFANNER, M. 1983: Der Titusbogen, Mainz, 1983
- PHILLIPS, E.J. 1977: C.S.I.R., Great Britain, I, 1, Corbridge, Hadrian's Wall East of the North Tyne, Oxford, 1977
- PICARD, G.C. 1957: Les Trophées Romains, Paris, 1957
- PICARD, G.C. 1970: Roman Painting, London, 1970
- PICARD, G.C. 1980: 'Crupellarii', in H. LeBonniec and G. Vallet (eds.), Mélanges de littérature et d'épigraphie latines d'histoire ancienne et d'archéologie. Hommages à la mémoire de Pierre Willeumier (Coll. d'études latines, serie scientifique 25), Paris, 1980, 277-80
- PIGGOTT, S. 1950: 'Swords and scabbards of the British early Iron Age', P.P.S. 16, 1950, 1-28
- PIGGOTT, S. 1959: 'The carnyx in early Iron Age Britain', Ant. J. 39, 1959, 19-32
- PINKERNEIL, J. 1983: Dakerdarstellungen der römischen Kaiserzeit, Freiburg, 1983
- PITTS, L.F. & ST.JOSEPH, J.K. 1985: Inchtuthil, the Roman Legionary Fortress, (Britannia Monograph Series 6), London, 1985
- PLANCK, D. 1975: Arae Flaviae I. Neue Untersuchungen zur Geschichte des römischen Rottweil, (Forschungen und Berichte zur Vor- u. Frühgeschichte Baden-Württemberg), Stuttgart, 1975
- PLANCK, D. & UNZ, C. (eds.) 1986: Studien zu den Militärgrenzen Roms III, Vorträge der 13. internationalen Limeskongresses Aalen, 1983, Stuttgart, 1986
- PLATNER, S.B. & ASHBY, T. 1929: A Topographical Dictionary of Ancient

Rome, London, 1929

- PLOMMER, H. 1974: 'Trajan's Forum', Ant. 48, 1974, 126-30
- POLLEN, J.H. 1874: A Description of the Trajan Column, London, 1874
- POND ROTHMAN, M.S. 1977: 'The Thematic Organisation of the Panel Reliefs on the Arch of Galerius', A.J.A. 81, 1977, 427-54
- POPOVIĆ, B., MANO-ZISI, D., VELIČKOVIĆ, M. & JELIČIĆ, B. 1969: Antička bronza u Jugoslaviji, 1844-1969, Beograd, 1969
- POULTER, A.G. 1986: 'The Lower Moesian Limes and the Dacian Wars of Trajan', in PLANCK & UNZ, 1986, 519-28
- POULTER, A.G. 1988: 'Certain doubts and doubtful conclusions: the lorica segmentata from Newstead and the Antonine garrison', in COULSTON, 1988a, 31-49
- RADDATZ, K. 1985: 'Die Bewaffnung der Germanen vom letzten Jahrhundert vor Chr. geb. bis zur Völkerwanderungszeit', A.N.R.W. II, Principat 12.3, Künste, Berlin, 1985, 281-361
- RĂDULESCU, A. 1968: 'Elmi Bronzei di Ostrov', Dacia VII, 1963, 535-51
- RAWSON, E. 1975: 'Architecture and Sculpture: the Activities of the Cossutŕii', P.B.S.R. XLIII, 1975, 36-47
- REBUFFAT, R. 1984: 'Propugnacula', Latomus 43, 1984, 3-25
- REBUFFAT, R. 1986: 'Le bouclier de Dura', Syria 63, 1986, 85-105
- REINACH, S. 1886: La Colonne Trajane au Musée de Saint-Germain, Paris, 1886
- REINACH, S. 1909-12: Répertoire de Reliefs Grecs et Romains, Tomes I Les Ensembles, 1909; II Afrique, Iles Britanniques, 1912a; III Italie, Suisse, 1912b
- RENEL, C. 1903: Cultes Militaires de Rome: les Enseignes, Paris, 1903
- REUTERSWÄRD, P. 1960: Studien zu Polychromie der Plastik: Griechenland und Rom, Stockholm, 1960
- REYNOLDS, P.K. BAILLIE 1923: 'The troops quartered in the Castra Peregrinorum', J.R.S. 13, 1923, 168-89
- REYNOLDS, P.K. BAILLIE 1926: The Vigiles of Ancient Rome, Oxford, 1926
- RICH, J.C. 1947: The Materials and Methods of Sculpture, New York and Oxford, 1947
- RICHARDSON, L. 1977: 'The architecture of the Forum of Trajan', Archaeological News 6, 1977, 101-7
- RICHMOND, I.A. 1927: 'The relation of the praetorian camp to Aurelian's

- wall of Rome', P.B.S.R. X, 1927, 1-11
- RICHMOND, I.A. 1935: 'Trajan's Army on Trajan's Column', P.B.S.R. 13, 1935, 1-40
- RICHMOND, I.A. 1967: 'Adamklissi', P.B.S.R. XXXV, 1967, 29-39
- RICHMOND, I.A. 1968: Hod Hill, II. Excavations Carried Out Between 1951 and 1958, London, 1968
- RICHTER, G.M.A. 1930: The Sculpture and Sculptors of the Greeks, New Haven, 1930
- RICHTER, G.M.A. 1970: Perspective in Greek and Roman Art, London, 1970
- RICHTER, G.M.A. 1982: 'The relation of early imperial Rome to Greek art', A.N.R.W. II, Principat 12.1, Künste, 1982, 3-23
- RITTERLING, E. 1919: 'Ein Amtsabzeichen der beneficiarii consularis in Museum zu Wiesbaden', B.J. 125, 1919, 9-37
- RIZZARDI, C. 1970: I Sarcofagi paleocristiani con rappresentazione del passaggio del Mar Rosso, Faenza, 1970
- ROBERTSON, A., SCOTT, M. & KEPPIE, L. 1975: Bar Hill: a Roman Fort and its Finds, (B.A.R. British Series No.16), Oxford, 1975
- ROBINSON, H.R. 1967: Oriental Armour, London, 1967
- ROBINSON, H.R. 1972: 'Problems in reconstructing Roman armour', B.J. 172, 1972, 24-35
- ROBINSON, H.R. 1974: 'Roman body-armour in the 1st century A.D.', in E. Birley, B. Dobson and M. Jarrett (eds.), Roman Frontier Studies 1969, Cardiff, 1974, 5-12
- ROBINSON, H.R. 1975: The Armour of Imperial Rome, London, 1975
- ROCCHETTI, L. 1959: 'Colonna di Traiano', E.A.A. II, Rome, 1959, 756-60
- ROCKWELL, P. 1981-83: 'Preliminary study of the carving techniques on the Column of Trajan', Marmi Antichi, (Studi Miscellanei, 26), Rome, 1981-83, 101-11
- RÖDER, J. 1975: 'Technik der Römer, die Baukrane des Vitruv', K.R.I. 2, 1975, 203-7
- RODRIGUEZ-ALMEIDA, E. 1981: Forma Urbis Marmorea: Aggiornamento generale 1980, Rome, 1981
- ROLLAND, H. 1969: Le mausolée de Glanum, (Gallia Suppl. 21), Paris, 1969
- ROLLAND, H. 1977: L'Arc de Glanum, (Gallia Suppl. 31), Paris, 1977
- ROMANELLI, P. 1942: La Colonna Traiana: rilievi fotografici eseguiti in

occasione dei lavori di protezione antiaerea, Rome, 1942

ROSENBERG, C. 1937: Hjortspringfundet, Kopenhagen, 1937

ROSETTO, P.C. 1982-3: 'Le maschere del teatro di Marcello', Boll. Comm. 88, 1982-83, 17-49

ROSSI, L. 1966: 'L'exercitus nella Colonna Traiana. Criteri generali ed elementi nuovi di studio su legionari ed auxilia', Epigraphica XXVIII, 1966, 150-55

ROSSI, L. 1968: 'The representations on Trajan's Column of Trajan's rock-cut road in Upper Moesia', Ant. J. XLVIII.1, 1968, 41-6

ROSSI, L. 1971a: Trajan's Column and the Dacian Wars, London, 1971

ROSSI, L. 1971b: 'Dacian fortifications on Trajan's Column', Ant. J. LI.1, 1971, 30-5

ROSSI, L. 1972: 'Adamklissi', A.J. 129, 1972, 56-68

ROSSI, L. 1980: Rotocalchi di Pietra. Segni e disegni dei tempi sui monumenti trionfali dell'Impero Romano, Milan, 1980

ROSSI, L. 1985: 'Hasta pura: l'objet et la cérémonie du donum militiae dans l'iconographie célébrative de la Colonne Trajane', R.A. 1985.2, 231-6

ROSTOVTZEFF, M.I. 1913: Antichnaya Dekorativnaya Zheepoveec na Yuge Rossiye, Petrovgrad, 1913

ROSTOVTZEFF, M.I. 1922: Iranians and Greeks in South Russia, Oxford, 1922

ROSTOVTZEFF, M.I. 1942: 'Vexillum and Victory', J.R.S. 32, 1942, 92-106

ROSTOVTZEFF, M.I. 1946: 'Numidian horsemen on Canosa vases', A.J.A. 50, 1946, 263-7

ROSTOVTZEFF, M.I., BELLINGER, A.R., HOPKINS, C. & WELLES, C.B. 1936: The Excavations at Dura Europos; Preliminary Report of the 6th Season of Work, Oct. 1932 - Mar. 1933, New Haven, 1936

ROSTOVTZEFF, M.I., BROWN, F.E. & WELLES, C.B. 1939: The Excavations at Dura Europos; Preliminary Report of the 7th and 8th Seasons of Work: 1933-34 and 1934-35, New Haven, 1939

ROSTOVTZEFF, M.I., BELLINGER, A.R., BROWN, F.E. & WELLES, C.B. 1952: The Excavations at Dura Europos; Preliminary Report of the 9th Season of Work: 1935-36, III, New Haven, 1952

ROSVALL, J. 1986: Air Pollution. Safeguarding Our Architectural Heritage, (Interdisciplinary Symposium in Rome, October 15-17, 1986, Introductory Information), Gothenburg, 1986

RUBIN, B. 1955: 'Die Entstehung der Kataphraktenreiterei im Lichte der

- choresmischen Ausgrabungen', Historia IV, 1955, 264-83
- RUBIN, L. 1975: 'Dio, Herodian and Severus' second Parthian war', Chiron 5, 1975, 419-41
- RUMÄNIEN 1969: Römer in Rumänien, Köln, 1969
- RUPRECHTSBERGER, E.M. 1982: Römerzeit in Linz - Bilddokumentation, Linz, 1982
- RUSU, M. 1969: 'Das keltische Fürstengrab von Ciumesti in Rumänien', B.R.G.K. 50, 1969, 267-300
- RYBERG, S. 1955: Rites of the State Religion in Roman Art, (M.A.A.R. XXII), Rome, 1955
- RYBERG, S. 1967: Panel Reliefs of Marcus Aurelius, New York, 1967
- SADDINGTON, D.B. 1982: The Development of the Roman Auxiliary Forces from Caesar to Vespasian (46 B.C.-A.D.79), Harare, 1982
- SAGE, M.M. 1987: 'Eusebius and the Rain Miracle', Historia XXXVI, 1987, 83-95
- SALVIET, F. 1966: 'Symbolism Astral et Divin a propos d'une Stèle de Thasos', R.A. 1966, 33-44
- SANDARS, H. 1912-13: 'The weapons of the Iberians', Archaeologia LXIV, 1912-13, 272-6
- SAXER, R. 1967: Untersuchungen zu den Vexillationen des römischen Kaiserheeres von Augustus bis Diokletian, (Epig. Stud. 1), Köln, 1967
- SCHÄFER, T. 1979: 'Zum Schlachtsarkophag Borghese', M.E.F.R. 91, 1, 1979, 355-82
- SCHALLMAYER, E. 1984: 'Ausgrabungen eines Benefiziarier-Weihebezirks und römischer Holzbauten in Osterburken, Neckar-Odenwald-Kreis', Archäologische Ausgrabungen in Baden-Württemberg 1983, Stuttgart, 1984, 171-6
- SCHEIPER, R. 1982: Bildpropaganda der römischen Kaiser unter besonderer Berücksichtigung der Trajanssäule in Rom und Korrespondierender Münzen, Bonn, 1982
- SCHLEIERMACHER, M. 1984: Römische Reitergrabsteine. Die kaiserzeitlichen Reliefs des triumphierenden Reiters, Bonn, 1984
- SCHNURBEIN, S. VON 1979: 'Eine hölzerne Sica aus dem Römerlager Oberaden', Ger. 57, 1979, 117-34
- SCHNURBEIN, S. VON 1986: 'Dakisch-thrakische Soldaten im Römerlager Oberaden', Ger. 64, 1986, 409-31

- SCHOBER, A. 1923: Die römische Grabsteine von Noricum und Pannonien, Sonderschriften des Österreichischen archäologischen Institutes in Wien, 10), Vienna, 1923
- SCHÖNBERGER, H. VON 1985: 'Die römischen Truppenlager der frühen und mittleren Kaiserzeit zwischen Nordsee und Inn', B.R.G.K. 66, 1985, 321-497
- SCHOPPA, H. 1974: 'Ein Gladius von Typus Pompeji', Ger. 52, 1974, 102-8
- SCOTT, I.R. 1980: 'Spearheads on the British limes', in HANSON & KEPPIE, 1980, 333-43
- SCOTT, I.R. 1985: 'First century military daggers and the manufacture and supply of weapons for the Roman army', in BISHOP, 1985a, 160-213
- SEITERIE, G. 1985: 'Die Urform der phrygischen Mütze', Antike Welt 16.3, 1985, 2-13
- SEKUNDA, N. 1983: 'The rhomphaia, a Thracian weapon of the Hellenistic period', in A.G. Poulter (ed.), Ancient Bulgaria, Papers Presented to the International Symposium on the Ancient History and Archaeology of Bulgaria, University of Nottingham, 1981, Nottingham, 1983, 275-329
- SEVERIN, T. 1985: The Jason Voyage, London, 1985
- SEYRIG, H. 1937: 'Armes et costumes iraniens de Palmyre', Syria XIII, 1937, 4-31
- SHAW, T. 1982: 'Roman cloaks 1', Exercitus 1.4, 45-7; Pt.2, 1.5, 53-4
- SHERK, R.K. 1974: 'Roman geographical exploration and military maps', A.N.R.W. II, Principat 1, 1974, 534-62
- SIMKINS, M. 1979: The Roman Army from Hadrian to Constantine, London, 1979
- SIMKINS, M. 1984: The Roman Army from Caesar to Trajan, London, 1984
- SKOULIKIDIS, T., CHARALAMBOUS, D. & PAPAKONSTANTINO, P. 1976: 'Attaque atmospherique (marbres) et mesures a prendre', 2nd International Symposium on the Deterioration of Building Stones, Athens, 1976, 327-42
- SMALLWOOD, E.M. 1966: Documents Illustrating the Principates of Nerva, Trajan and Hadrian, Cambridge, 1966
- SMITH, A.H. 1904: A Catalogue of Sculpture in the Department of Greek and Roman Antiquities, British Museum, London, 1904
- SNODGRASS, A.M. 1967: Arms and Armour of the Greeks, London, 1967
- SÖRRIES, R. & LANGE, U. 1986: 'Die polychromen Fragmente in Thermenmuseum zu Rom', Antike Welt 17, 1986, 3-22

- SPANNAGEL, M. 1979: 'Wiedergefundene Antiken', J.d.I. 1973, 348-77
- SPEIDEL, M. 1965: Die equites Singulares Augusti, (Antiquitas II), Bonn, 1965
- SPEIDEL, M. 1970: 'The captor of Decebalus, a new inscription from Philippi', J.R.S. 60, 1970, 142-53
- SPEIDEL, M.P. 1971a: 'Die Schluß-Adlocutio der Trajanssäule', M.D.A.I.(R.) 78, 1971, 167-74
- SPEIDEL, M.P. 1971b: 'The suicide of Decebalus on the Tropaeum of Adamklissi', R.A. 1971, 75-8
- SPEIDEL, M.P. 1973: Review of ROSSI, 1971a, Gnomen, 1973, 727-8
- SPEIDEL, M.P. 1975: 'The rise of ethnic units in the Roman imperial army', A.N.R.W. II,3, 1975, 202-31
- SPEIDEL, M.P. 1976: 'Eagle-bearer and trumpeter', B.J. 176, 1976, 125-63
- SPEIDEL, M.P. 1978: Guards of the Roman Army: An Essay on the Singulares of the Provinces, (Antiquitas 1, Abhandlungen zur alten Geschichte 28), Bonn, 1978
- SPEIDEL, M.P. 1980: Review of GAUER, 1977, Gnomen, 1980, 590-1
- SPEIDEL, M.P. 1984: 'Germani corporis custodes', Ger. 62, 1984, 31-45
- SQUARCIAPINO, M. 1943: La Scuola di Afrodisia, Rome, 1943
- STARR, C.G. 1941: The Roman Imperial Navy, New York, 1941
- STARY, P.F. 1981: 'Ursprung und Ausbreitung der eisenzeitlichen Ovalschilde mit spindelförmigem Schildbuckel', Ger. 59, 1981, 287-306
- STEAD, I.M. 1985: The Battersea Shield, London, 1985
- STEFAN, G. 1946-47: 'Le camp romaine de Drajna-de-Sus', Dacia 11-12, 1946-47, 115-44
- STEMMER, K. 1978: Untersuchungen zur Typologie, Chronologie und Iconographie der Panzerstatuen, Berlin, 1978
- STERNQUIST, B. 1955: Simris. On Cultural Connections of Scania in the Roman Iron Age, Lund, 1955
- STEVENS, G.P. 1924: 'Entasis in Roman architecture', M.A.A.R. IV, 1924, 121-53
- STONE, G.C. 1934: A Glossary of the Construction, Decoration and use of Arms and Armour, New York, 1934

- STROBEL, K. 1984: Untersuchungen zu den Dakerkriegen Trajans, (Antiquitas 1 Abhandlungen zur alten Geschichte, 33), Bonn, 1984
- STROBEL, K. 1987: 'Der Chattenkrieg Domitians', Ger. 65, 1987, 423-52
- STROCKA, V.M. 1981: 'Römische Bibliotheken', Gymnasium 88, 1981, 298-329
- STRONG, E. 1913: 'Six drawings from the Column of Trajan with the date 1467 and a note on the date of Giacomo Ripanda', P.B.S.R. VI, 1913, 174-83
- STRONG, E. 1923: La Scultura Romana da Augusto a Constantino. I Augusto - Traiano, Florence, 1923
- STRONG, E. 1926: La Scultura Romana da Augusto a Constantino. II Adriano - Constantino, Florence, 1926
- STRONG, D.E. 1961: Roman Imperial Sculpture, London, 1961
- STRONG, D.E. 1980: Roman Art, London, 1980
- STRONG, D. & BROWN, D. (eds.) 1976: Roman Crafts, London, 1976
- STRONG, D. & CLARIDGE, A. 1976: 'Marble sculpture', in STRONG & BROWN, 1976, 194-207
- STRUVE, K.W. 1967: 'Die Moorleiche von Dätgen', Offa 24, 1967, 33-83
- STUART JONES, H. 1910: 'The historical interpretation of Trajan's Column', P.B.S.R. 5, 1910, 435-59
- STUART JONES, H. (ed.) 1912: A Catalogue of the Ancient Sculptures Preserved in the Municipal Collections of Rome. The Sculptures of the Museo Capitolino by Members of the British School in Rome, Oxford, 1912
- STUART JONES, H. (ed.) 1926: A Catalogue of the Ancient Sculptures Preserved in the Municipal Collections of Rome. The Sculptures of the Palazzo dei Conservatori by Members of the British School in Rome, Oxford, 1926
- STUCCHI, S. 1960: Contributo alla Conoscenza della Topografia dell'Arte e della Storia nella Colonna Traiana, Udine, 1960
- SULIMIRSKI, T. 1970: The Sarmatians, London, 1970
- SUTHERLAND, C.H.V. 1959: 'The intelligibility of Roman imperial coin types', J.R.S. 49, 1959, 46-55
- SYME, R. 1929: 'The Argonautica of Valerius Flaccus', Classical Quarterly 23, 1929, 129-37
- SYME, R. 1958: Tacitus I, Oxford, 1958

- SYME, R. 1971a: 'Pliny and the Dacian Wars', Danubian Papers, Bucarest, 1971, 245-52
- SYME, R. 1971b: 'The Dacian Wars', Danubian Papers, Bucharest, 1971, 152-9
- SZABÓ, K. 1986: 'Le camp romain d'Intercisa - recente trouvaille du Danube', in PLANCK & UNZ, 1986, 421-5
- TAHA, A. 1982: 'Men's costume in Palmyra', Les Annales Archéologiques Arabes Syriennes XXXII, 1982, 117-32
- TERRACE 1988: The Terrace Houses in Ephesus, Istanbul, 1988
- THOMAS, E.B. 1971: Helme, Schilde, Dolche. Studien über römisch-pannonische Waffenkunde, Budapest, 1971
- THORDEMAN, B. 1939: Armour from the Battle of Wisby, 1361, Stockholm, 1939
- TODD, M. 1975: The Northern Barbarians, 100 B.C.-A.D. 300, London, 1975
- TODD, M. 1985: 'Forum and Capitolium in the early Empire', in GREW & HOBLEY, 1985, 56-66
- TORELLI, M. 1982: Typology and Structure of Roman Historical Reliefs, Ann Arbor, 1982
- TOYNBEE, J.M.C. 1934: The Hadrianic School. A Chapter in the History of Greek Art, Cambridge, 1934
- TOYNBEE, J.M.C. 1951: Some Notes on Artists in the Roman World, Brussels, 1951
- TOYNBEE, J.M.C. 1957: The Flavian Reliefs from the Palazzo della Cancelleria in Rome, Oxford, 1957
- TOYNBEE, J.M.C. 1978: Roman Historical Portraits, London, 1978
- TOYNBEE, J.M.C. & WILKINS, A. 1982: 'The Vindolanda horse', Brit. XIII, 1982, 245-51
- TRAINA, G. 1981: 'Un'"applique" bronzee dalle Valli Grandi Veronesi', Prospettiva 26, July 1981, 51-6
- TREVOR, C.V. 1964: 'Tête de Senmurv en argent des collections de l'Ermitage', Iranica Antiqua 4.2, 1970, 162-70
- TROUSDALE, W. 1975: The Long Sword and Scabbard Slide in Asia, (Smithsonian Contributions to Anthropology, 17), Washington, 1975
- TUDOR, D. 1968a: Oltenia Romana, Bucarest, 1968
- TUDOR, E. 1968b: 'Morminte de luptători din a doua epocă a fierului descoperite la Rastu', S.C.I.V.A. 3, Tomul 19, 1968, 517-26

- TUDOR, D. 1969: Corpus Monumentorum Religionis Equitum Danuviorum, I, The Monuments, Leiden, 1969
- TUDOR, D. 1979: 'Ouverture "officiale" de la dernière guerre entre Trajan et Decebal', Dacia XXIII, 1979, 93-114
- TUFI, S.R. 1983: C.S.I.R., Great Britain, I, 3, Yorkshire, Oxford, 1983
- TUFI, S.R. 1984: '"Stehende Soldaten" nella Renania romana: problemi di iconografia e di produzione artistica', Prospettiva 38, July 1984, 16-29
- TURCAN-DÉLÉANI, M. 1958: 'Les Monuments représentés sur la colonne Trajane. Systématisme et Réalisme', M.E.F.R. 70, 1958, 149-76
- ULBERT, G. 1968: Römische Waffen des 1. Jahrhunderts n. Chr., Stuttgart, 1968
- ULBERT, G. 1969a: 'Gladii aus Pompeji: Vorarbeiten zu einen Corpus römische Gladii', Ger. 47, 1969, 97-128
- ULBERT, G. 1969b: Das frühromische Kastell Rheingönheim, (Limesforschungen 9), Berlin, 1969
- ULBERT, G. 1970: Das römische Donau-Kastell Risstissen, I, Stuttgart, 1970
- ULBERT, G. 1971: 'Römische Bronzeknöpfe mit Reliefverzierung', Fundbericht Schwaben 19, 1971, 278-97
- ULBERT, G. & FISCHER, T. 1983: Der Limes in Bayern von Dinkelsbühl bis Eining, Stuttgart, 1983
- VĂȚĂȘIANU, V. 1982: 'Rappresentazioni di costruzioni daciche sulla Colonna Traiana', in L'ESAME, 1982, 57-9
- VELKOV, I. 1928-29: 'Neue Grabhügel aus Bulgarien', Bulletin de l'Institut d'Archéologie Bulgare 5, 1928-29, 13-55
- VERCOUTTER, J., LECLANT, J., SNOWDEN, F.M. & DESANGES, J. 1976: The Image of the Black in Western Art, I, From the Pharoahs to the Fall of the Roman Empire, New York, 1976
- VERMEULE, C.C. 1959: 'Hellenistic and Roman cuirassed statues', Berytus 13, 1959, 1-82
- VERMEULE, C.C. 1960: 'A Roman silver helmet in the Toledo (Ohio) Museum of Art', J.R.S. 50, 1960, 8-11
- VERMEULE, C.C. 1981: Greek and Roman Sculpture in America: Masterpieces in Public Collections in the United States and Canada, Berkeley, 1981
- VIERECK, H.D.L. 1975: Die römische Flotte, Classis Romana, Herford, 1975

- VOGEL, L. 1973: The Column of Antoninus Pius, Harvard, 1973
- VULPE, R. 1960: 'Les Gètes de la rive gauche du Bas-Danube et les romains', Dacia IV, 1960, 309-24
- VULPE, R. 1961: 'La Valachie et la Basse-Moldavie sous les romains', Dacia V, 1961, 365-93
- VULPE, R. 1963a: 'Les Bures alliés de Décébale dans la première guerre dacique de Trajan', Studii Classice V, 1963, 223-47
- VULPE, R. 1963b: 'Les Germains du trophée de Trajan à Adamklissi', Archéologia (Warsaw) 14, 1963, 49-62
- VULPE, R. 1966: 'Capturarea surorii lui Decebal', Sangeția IV, 1966, 75-96
- VULPE, R. 1969: 'Dion Cassius et la campagne de Trajan en Mésie Inférieure', Studii Classice VI, 1969, 205-32
- VULPE, R. 1971: 'La foudre de Jupiter à Tapae', Apulum 9, 1971, 571-84
- VULPE, R. 1979a: 'Prigionieri romani suppleziati da donne dacie sul rilievo della Colonna Traiana', Rivista Storica dell'Antichità 3, 1979, 109-25
- VULPE, R. 1979b: 'À la mémoire de Jean Baradez: le trophée d'Adamklissi et la stratégie de Décébale', Apulum IX, 1979, 523-6
- WAELEKENS, M. 1985: 'From a Phrygian quarry: the provenance of the statues of the Dacian prisoners on Trajan's Forum at Rome', A.J.A. 89, 1985, 641-53
- WAHL, J. 1977: 'Gladiatorenhelm - Beschläge vom Limes', Ger. 55, 1977, 108-32
- WALKER, S. 1985: Memorials to the Roman Dead, London, 1985
- WARD-PERKINS, J.B. 1951: 'The art of the Severan age in the light of Tripolitanian discoveries', P.B.A. 37, 1951, 269-304
- WARD-PERKINS, J.B. 1970: 'From Republic to Empire: reflections on the early provincial architecture of the Roman west', J.R.S. 60, 1970, 1-19
- WARD-PERKINS, J.B. 1971a: 'Quarrying in antiquity: technology tradition and social change', P.B.A. 57, 1971, 137-58
- WARD-PERKINS, J.B. 1971b: 'Quarries and stoneworking in the early Middle Ages: the heritage of the ancient world', Congress Spoleto Settimane di Studio del Centro Italiano Studi sull'Alto Medioevo XVIII, Spoleto, 1971, 525-44
- WARD-PERKINS, J.B. 1976: 'Columna divi Antonini', Mélanges d'histoire ancienne et d'archéologie offerts à Paul Collart, (Cahiers

d'Archéologie romaine 5), Lausanne, 1976, 345-52

WARD-PERKINS, J.B. 1980: 'The marble trade and its organisation: evidence from Nicomedia', M.A.A.R XXXVI, 1980, 325-8

WARD-PERKINS, J.B. 1981: Roman Imperial Architecture, London, 1981

WARD-PERKINS, J.B. & CLARIDGE, A. 1976: Pompeii A.D.79, London, 1976

WARD-PERKINS, J.B. & THROCKMORTON, P. 1965: 'The San Pietro wreck', Archaeology 18:3, Autumn 1965, 201-9

WATERER, J.W. 1981: Leather and the Warrior, Northampton, 1981

WATERS, K.A. 1969: 'Traianus Domitiani continuator', A.J.P. 90, 1969, 385-405

WAURICK, G. 1971: 'Benefiziarierabzeichen', A.K. 1, 1971, 111-4

WAURICK, G. 1973: 'Untersuchungen zur Lage der römischen Kaisergräber in der Zeit von Augustus bis Constantin', J.R.G.Z.M. 20, 1973, 107-46

WAURICK, G. 1980: 'Die Schutzwaffen im numidischen Grab von Es Soumâa', in HORN & RÜGER, 1980, 305-32

WAURICK, G. 1983: 'Untersuchungen zur historisierenden Rüstung in der römischen Kunst', J.R.G.Z.M. 30, 1983, 265-301

WAURICK, G. 1986: 'Helm und Maske', in PLANCK & UNZ, 1986, 794-8

WAURICK, G. forthcoming: 'Die militärische Rüstung in der römischen Kunst: Fragen zur antiquarischen Genauigkeit am Beispiel der Schwerter des 2. Jahrhunderts n. Chr.', in VAN DRIEL-MURRAY, forthcoming

WEBSTER, G. 1971: 'A hoard of Roman military equipment from Fremington Hagg', in R.M. Butler (ed.), Soldier and Civilian in Roman Yorkshire, Leicester, 1971, 107-25

WEBSTER, G. 1980: The Roman Invasion of Britain, London, 1980

WEBSTER, G. 1985: The Roman Imperial Army, Ed.3, London, 1985

WEBSTER, G. 1986: 'Standards and standard-bearers in the alae', B.J. 186, 1986, 105-16

WEINBERG, S.S. 1979: 'A hoard of Roman armour', Antike Kunst 22, 1979, 82-6

WERNER, J. 1949-50: 'Zur Herkunft der frühmittelalterliche Spangenhelme', Prähistorische Zeitschrift 34-5, 1949-50, 178-93

WHEELER, M. 1954: Rome Beyond the Imperial Frontiers, London, 1954

WHITEHOUSE, H. 1976: The Dal Pozzo Copies of the Palestrina Mosaic,

(B.A.R. Suppl. Ser. No.12), Oxford, 1976

- WICKHOFF, F. 1900: Roman Art: Some of its Principles and their Application to Early Christian Painting, London, 1900
- WICKHOFF, F. 1912: Römische Kunst (die Wiener Genesis), Berlin, 1912
- WILD, J.P. 1968: 'Clothing in the North-West Provinces of the Roman Empire', B.J. 168, 1968, 166-240
- WILKES, J.J. 1983: 'Romans, Dacians and Sarmatians in the first and early second centuries', in HARTLEY & WACHER, 1983, 255-89
- WILL, E. 1954: 'De l'Euphrate au Rhin: étude sur quelques motifs ornamentaux', Syria 31, 1954, 271-85
- WILL, E. 1985: 'La maquette de l'adyton du temple a de Niha (Beqa)', Actes du colloque de Strasbourg, 26-28 janvier, Strassburg, 1985, 277-81
- WRIGHT, R.P. & RICHMOND, I.A. 1955: The Roman Inscribed and Sculptured Stones in the Grosvenor Museum, Chester, Chester, 1955
- YADIN, Y. 1966: Masada: Herod's Fortress and the Zealots' Last Stand, London, 1966
- YADIN, Y. 1971: Bar-Kochba, New York, 1971
- ZADOKS-JOSEPHUS JITTA, A.N. & WITTEVEEN, A.M. 1977: 'Roman bronze lunulae from the Netherlands', O.M.R.O.L. 58, 1977, 167-95
- ZANKER, K. 1970: 'Traiansforum' (Sitzung am 13. mai 1969), A.A., 1970, 499-544
- ZWIKKER, W. 1941: Studien zur Markussäule, I, Amsterdam, 1941