The best bit of shell-work yet unearthed at Taxila is the small portrait head in low relief (no. 42) which was found in a jar along with a number of coins and other articles referable to the middle of the first century A.D. Among the few other miscellaneous articles included in Class III are four small disks or roundels, which may have served as buttons, and a dipper or ladle, which is unique at Taxila but of a kind that had been common enough among the Indus people two or three thousand years earlier.

Portrait head and other miscellaneous articles

# CLASS I. Uncut shells (nos. 1-15)

- 1. Scallop shell of striking size and shape, identified by the Zoological Survey of India as a Japanese species, either *Pecten nobilis* Reeve or *Pecten crassicostatus* Sowerby, most probably the former. The route by which this interesting specimen found its way in the first century A.D. from the shores of the Pacific Ocean to Taxila was no doubt through Central Asia. First century A.D. Sk. '26-2,215/a; sq. 110.52'; stratum II. Cf. p. 168 (11) supra. (Pl. 202, g.)
- 2. Xancus pyrum (Linn.). Length 5.62 in. A conch shell used especially in the manufacture of bangles. Bm. '20-1,515; sq. 31.34'; stratum III. (Pl. 202, b.)
- 3. Murex (Chicoreus) anguliferus (Lamk.). Length 7·12 in. Like the preceding example, this fine-looking shell may have served as a trumpet, but did not lend itself to the manufacture of bangles. Second century B.C. Sk. '29-2,711; sq. 46·88'; stratum V. (Pl. 202, d.)
- 4. Arca (Anadara) granosa (Linn.). Length 2.62 in. A mother-of-pearl bivalve. First century B.C. Sk. '19-452; sq. 62.112'; stratum IV. (Pls. 201, no. 29; 202, e.) This species occurs throughout the coastal waters of Arabia, India, Malay Archipelago, Japan, China and Australia.<sup>2</sup> It probably found its way to Taxila from the coast of Sind.
  - 5. Pinctada margaritifera (Linn.).
    - (a) Sk. '27-560; stratum II. One valve. Diam. 8-31 in. (Pl. 202, c.)
    - (b) Sk. '933-51; stratum II. Similar; broken; length 5.4 in. (Pl. 202, f.)
  - (c) Sk. '24-270; sq. 34.48'; stratum II. Similar; length 2.75 in.

This is the pearl-oyster of the Ceylon and Tuticorin Pearl Fisheries, but Col. Sewell tells me that the shells fished at the present time average about 3.0 in. in diameter.

6. Lamellidens marginalis (Lamk.). One valve. Diam. 3.87 in. Sk. '22-231; sq. 12.88'; stratum II. Cf. p. 196 supra. (Pl. 202, i.)

A fresh-water mollusc widely distributed in the rivers of India, Burma and Ceylon, and valued for its mother-of-pearl. Several specimens of it were found among the prehistoric remains at Mohenjo-daro. (M.I.C. II, p. 664.)

- 7. Parreysia favidens (Benson).
  - (a) Sk. '29-423; sq. 46.87'; stratum III. Length 1.87 in. Cf. p. 193 supra. (Pl. 202, j.)
  - (b) Bm. '30-28; stratum II. Length 1.4 in. (Pl. 202, k.)

Another freshwater mollusc widely distributed throughout Northern India, including the Indus river and Gangetic system. Also said to have been found in East Cachar, Sylhet and the Madras Presidency. Several specimens have been found at Mohenjo-daro. (M.I.C. ibid.)

8. Cypraea arabica (Linn.). Sk. '29-487; stratum II. Length 2.5 in. (Pl. 202, i.)

A common marine species widely distributed in the Persian Gulf, coasts of India, Ceylon, Burma, New Caledonia and Australia. One specimen was found at Mohenjo-daro. (M.I.C. II, p. 665.)

- 9. Erosaria turdus (Lamk.). Bm. '30-43; stratum II. Length 1.45 in. (Pl. 202, n.) A large cowrie of light purple colour.
  - <sup>1</sup> Previously known as Turbinella pyrum (Linn.).
  - <sup>2</sup> M.I.C. p. 665.

STRATIGRAPHICAL CHART OF SHELL OBJECTS

	Class		П	III
Other sites <sup>1</sup>		15 from Dh.	19, 23, 24, 26, 29, 31–3, 36, 37 from	20, 38 from Mm. 25, 34, 40 from Ss. 35, 39, 41 from Jl. 43 from Mm. 45 from Dh.
Sirkap strata	I	1	İ	l
	III–III Late Saka- Parthian	I, 5, a-c,	30 (1, 1, 4, 6)	42, 44, 46- 9
	IV Early Śaka	4	81	I
	VI–V Greek	3	ı	ı
Bhiṛ Mound strata	I Surface		1	50
	II Maurya	7, b, 9-11,	16, 17, 21, a-d, 22, 27, 28	1
	III 4th century B.C.	7	I	l
	IV 5th to 6th century B.C.	1	ı	ı
	Class		II. Bangles (nos. 16-41)	III. Miscellaneous objects (nos. 42–50)

¹ Dh. = Dharmarājikā; Jl. = Jaṇḍiāl; Mm. = Mohṛā Morādu; Ss. = Sirsukh.

TABLE SHOWING DISTRIBUTION OF SHELL OBJECTS IN SIRKAP

	1		7			
Block	Strata VI-V	Stratum IV	Strata III-II	Stratum I		
Biock	Greek	Early Śaka	Śaka-Parthian	Surface		
	E.					
	EA					
I						
A				_		
В			47			
C			5, c, 12			
D						
E		18				
F			14			
G			I			
H		******				
I						
J						
K			30, 44			
L						
	W. C					
ı'	West side of Main Street					
A'			6			
B'			-			
C'						
	3		7, a			
D'		4	42, 49			
E'			-	_		
F'						
G'	_					
H'	_		_			
K'			<del></del>	_		

Note. Objects found in spoil earth or trial trenches are not included in the above Table.

- 10. Erosaria helvola (Linn.). Bm. '30-882; stratum II. Length, 1·1 in. (Pl. 202, 0.) Smaller than the preceding and of pale colour.
- 11. Erosaria (Monetaria) annulus (Linn.).
  - (a) Bm. '30-773; stratum II. Length o.85 in. (Pl. 202, s.)
  - (b) Bm. '30-720; stratum II. Length o.8 in. (Pl. 202, r.)
- 12. Erosaria (Monetaria) moneta (Linn.).
  - (a) Sk. '24-1,155; sq. 41.45'; stratum II. Length 0.7 in. (Pl. 202, p.)
  - (b) Sk. '24-82; sq. 41.51'; stratum II. Length 0.65 in. (Pl. 202, q.)
- 13. Oliva irisans (Lamk.). Bm. '24-267; stratum II. Length 1.2 in. (Pl. 202, m.)
- 14. Engina mendicaria (Linn.). Formerly known as Pusiostoma mendicaria (Linn.). Sk. '13-389; sq. 93.57'; stratum II. Cf. p. 166 supra.
  - 15. Pyrene flava (Brug.). Dh. '17-51; 2 ft. below surface. Cf. p. 294 supra.

## CLASS II. Bangles (nos. 16-41)

Type a. Plain.

- 16. Fragment of shell bangle, with outer face bevelled to sides. Length 2.5 in. Bm.'19-270; sq. 15.11'; stratum II. Cf. p. 109 supra. (Pl. 201, no. 4.)
  - 17. Similar. Length 2.62 in. Bm. '21-437; sq. 23.60'; stratum II. Cf. p. 109. (Pl. 201, no. 5.)
- 18. Similar with plain outer face and ribbed sides. Length 2.5 in. Repaired with two copper rivets at ends. Sk. '14-1,077; sq. 72.65'; stratum IV. Cf. p. 135 supra. (Pl. 201, no. 6.)

- 19. Similar to preceding, with projecting flange on either edge of outer face. Length 2·12 in. For this type of flanged bangle in metal, cf. nos. 7-9 in 'Copper and Bronze', ch. 28. The depression between the flanges may have been intended for enamel. Dh. '16-361; G8; I ft. below surface. Cf. p. 294 supra. (Pl. 201, no. 8.)
- 20. Similar to preceding. Two fragments. Length 2 and 2·12 in. respectively. Mm. '15-2; mon.; 4 ft. below surface. Cf. p. 363 (20) supra. (Pl. 201, no. 25.)

# Type b. Decorated with simple incised designs.

- 21, a-d. Four shell bangles bevelled on outer face and with a simple cross incised on each. Diam. 2.75 in. Bm. '21-467; sq. 33.12'; stratum II. Cf. p. 109 supra. (Pl. 201, no. 1.)
- 22. Fragment of shell bangle with repeat of hooked triangles incised. Length 1.75 in. Bm. '13-28; stratum II. Cf. p. 109 supra. (Pl. 201, no. 17.)
- 23. Similar, with file-edged outer rim and diamond pattern incised. Length 2·31 in. Dh. '16-726; mon. court A; 16 ft. below surface. Cf. p. 278 supra. (Pl. 201, no. 10.)
- 24. Similar. Length 1.87 in. Dh. '13-1,606; J (west); 2 ft. below surface. Cf. p. 294 supra. (Pl. 201, no. 11.)
- 25. Similar with two rows of alternating lines. Length 1.75 in. Ss. '15-50; Piṇḍorā; 3 ft. below surface. Cf. p. 220 supra. (Pl. 201, no. 23.)
- 26. Three fragments of shell bangle with chequered pattern incised. Length 1·5-2·37 in. Dh. '15-1,402; mon. court A; 10 ft. below surface. Cf. p. 278 supra. (Pl. 201, no. 13.)

## Type c. Decorated with designs in relief.

- 27. Fragment of shell bangle with cable pattern in relief. Length 1·25 in. Bm. '21-467; sq. 38·12'; stratum II. Cf. p. 109 supra. (Pl. 201, no. 2.)
- 28. Similar, with cable pattern between borders. Length 2 in. Bm. '19–286; sq. 8·52'; stratum II. Cf. p. 109 supra. (Pl. 201, no. 3.)
- 29. Similar, but bolder modelling. Diam. 2·5 in. Dh. '16-72; T2; 3 ft. below surface. Cf. p. 247 supra. (Pl. 201, no. 12.)
- 30. Similar, with overlapping scale pattern in relief. Length 2·12 in. Fine hatching on both sides. Sk. '14-363; sq. 164·44'; stratum II. Cf. p. 177 supra. (Pl. 201, no. 7.)
- 31. Four fragments of shell bangle, one with conch shell in relief. Length 1.75-2.62 in. Dh. '15-1,557; mon. court A; 8 ft. below surface. Cf. p. 278 supra. (Pl. 201, no. 9.)
- 32. Fragment of shell bangle with crude wave pattern in relief. Length 2·12 in. Dh. '15-1,263; mon. court A; 4 ft. below surface. Cf. p. 278 supra. (Pl. 201, no. 14.)
- 33. Similar, with beading between borders. Length 2.5 in. Dh. '12-49; H; 7 ft. 10 in. below surface. Cf. p. 294 supra. (Pl. 201, no. 15.)
- 34. Similar, with rough bead-and-reel pattern in low relief. Length 2·5 in. Ss. '15-17; Piṇḍorā; 2 ft. below surface. Cf. p. 220 supra. (Pl. 201, no. 24.)
- 35. Similar with head of snake and three projecting bezels with countersunk depressions for inlay. Length 1.87 in. Jl. '12-2; Mound D. Cf. p. 229 supra. (Pl. 201, no. 16.)
- 36. Similar, with repeat of conventionalised bird carved in low relief. Diam. 2.5 in. Dh. '16-72; T2; 3 ft. below surface. Cf. p. 247 supra. (Pl. 201, no. 19.)
- 37. Similar. Length 1.87 in. Dh. '16–198; Q1; 2 ft. below surface. Cf. p. 294 supra. (Pl. 201, no. 20.)
- 38. Similar, with copper clamp joining broken pieces. Length 2·5 in. Mm. '15-2; mon.; 4 ft. below surface. Cf. p. 363 supra. (Pl. 201, no. 26.)
- 39. Similar, with repeat of heart pattern, chevrons and medallion. Traces of red paint. Length 1.62 in. Jl. '12-7; Mound D. Cf. p. 229 supra. (Pl. 201, no. 21.)
- 40. Similar, with repeat of conventionalised bird-head pattern in relief. Length 1.87 in. Ss. '15-38; Piṇḍorā; 6 ft. below surface. Cf. p. 220 supra. (Pl. 201, no. 22.)

Type d. Inlaid with coloured stones or paste. Cf. also no. 35 supra.

41. Fragment of shell bangle with 'dot and comma' pattern sunk in outer face for inlay. Length 1.62 in. Jl. '12-258; Mound C; 4 ft. below surface. Cf. p. 224 supra. (Pl. 201, no. 18.)

## CLASS III. Miscellaneous objects (nos. 42–50)

42. Head of man in low relief. Height 1.42 in. He wears a moustache, whiskers and short beard. The eyes are large and wide open; the forehead wrinkled. The head, which is in profile, is a striking bit of work and no doubt a portrait. It was found inside a jar along with a number of other articles. Sk. '19-933/1; sq. 59·114'; stratum II. Cf. A.S.R. (1919), Pl. x, 27 and pp. 188-9 supra; Deposit E, no. 10. (Pl. 208, no. 51.)

43. Disk or roundel of shell with hole in centre. Diam. 1.25 in. Incised lines round edge on convex side. Mm. '15-207; cell 14; 8 ft. below surface. Cf. p. 363 (34) supra. (Pls. 201,

no. 27; 202, h.)

44. Similar, with decoration of three sunk circles alternating with groups of smaller circles. Sunk beading round former and round edge of disk. Diam. 1.5 in. Sk. '14-321; sq. 163.45'; stratum II. Cf. p. 177 supra. (Pl. 203, w.)

45. Similar, with four small circles alternating with 'dot and comma' rosettes. Partly

broken. Diam.  $2\cdot 3$  in. Dh. '31-17; mon. court A. Cf. p. 278 supra. (Pl. 203, x.)

46. Natural shell (fam. pecten) cut to a circle, with hole in centre. Diam. 4 in. Sk. '27; Trench D 39; stratum II. (Pl. 202, a.)

47. Rectangular piece of mother-of-pearl shell (? Pinctada margaritifera). Length 2:75 in.

Sk. '24–270; sq. 34·48'; stratum II.

- 48. Dipper or ladle, made from a sank shell. Length 3·12 in. Sk. '29-981; stratum II. (Pl. 201, no. 28.)
- 49. Necklace consisting of thirty-three beads of mother-of-pearl, roughly fashioned. Each bead is pierced with two holes for threading. Sk. '29-1,241/12; sq. 62·113'; stratum III. Cf. p. 187 (24) supra. (Pl. 205, f.)
- 50. Numerous small seed and other pearls of irregular shapes and sizes. Bm. '12-20/11; stratum I. From same hoard as coins and jewellery described in ch. 3 (pp. 110-11). Cf. A.S.R. (1912), p. 41. (Pl. 205, h.)