

Chapter 30. GOLD AND SILVER JEWELLERY

Contents of collection

OF THE 213 items of jewellery, almost all gold, which are described below, the majority, to the number of 180, come from the later strata in the city of Sirkap, and belong with few exceptions to the first century A.D. Of the remaining pieces, twenty-seven are from the Bhir Mound and date from the fifth to the early second century B.C., while six come from the Buddhist settlements at the Dharmarājikā, Jauliāñ and Giri (see Stratigraphical Chart, p. 622).

Prevailing Greek and Graeco-Roman character

In style, the jewellery is, for the most part, distinctively Greek or Graeco-Roman; and this is true of the few pieces from the Bhir Mound as well as of the much larger number from Sirkap. Among the former, the only piece that may possibly be Indian in design is the silver necklace no. 55, but even this is questionable. The rest of the Bhir Mound pieces, or those at any rate that possess a distinctive character, viz. nos. 1, 52, 80-3, 133-6 and 166, are all clearly copied from Hellenistic prototypes. Similarly, of the objects from Sirkap, the vast majority are Greek or Graeco-Roman. The only ones that are characteristically Indian are: the anklets nos. 148-65, the decoration of which is akin to that found in the Early School of Central India; the swastika device on the amulets nos. 85, *a-d*; and the *nandipada* on the hair-pin no. 101, and on the torque no. 147, but the hair-pin itself is not of Indian pattern and the torque, like its fellows, is definitely traceable to a foreign—probably Scythic or Persian—source. Scythic and Sarmatian influence may also be seen in the heavy incrustate bracelets nos. 137-43, the closest analogies to which are furnished by certain bracelets from the Crimea and neighbouring districts dating from the fourth century B.C.¹ Among the Sirkap jewellery there are also a few patterns and motifs of which the origin is doubtful. Such are the kidney-shaped bangles with trumpet ends nos. 116-32; the bell-like pendants nos. 11-13; the heart-shaped ear-rings nos. 48-51 (though the clustered granules at their base are certainly a Western touch); the circlet pattern of the necklaces nos. 60 and 61; the spearhead-and-drop pattern of necklace no. 62; and the interlocking merlon motif of the breast-chain no. 75. Apart from these, the whole collection of this first-century jewellery from Sirkap is typically Greek or Graeco-Roman in character and fundamentally different from contemporary Indian

¹ Cf. Dar. et Sag. *s.v.* 'Armilla', p. 436 and fig. 529, where, however, the design of the bracelet is treated as Greek, not as Scytho-Greek. For Greek, Scythic and Sarmatian jewellery from South Russia, see Rostovtzeff, *Iranians and Greeks in South Russia* and *The Animal Style in Russia and China*; Dalton, *Treasure of the Oxus* (2nd ed.).

jewellery, as we see it depicted in the reliefs of Sāñchī, Bharhut and other monuments of the Early Indian School.

It is significant also, as indicating the extent of foreign influence on craftsmanship as well as design, that the technical processes employed in the manufacture of this Taxila jewellery are identical with those employed throughout the Greek and Graeco-Roman world. These processes are as follows:

Much of the jewellery from Taxila was made with the help of moulds or dies. Specimens of the former are illustrated among 'Stone Objects', ch. 25, nos. 141-53; specimens of the latter among 'Copper and Bronze Objects', ch. 28, nos. 37-203. The stone moulds were of two types, according as they were intended for the production of solid or hollow pieces of jewellery. In the former case the mould was a closed one. It was made, that is to say, of two or more pieces which fitted together, and was provided with a channel cut in the stone for pouring in the molten metal. Examples of this type of mould are the 'Stone Objects', nos. 141-3 and 146-50. With them may be compared the moulds figured in *Dar. et Sag. s.v. 'forma'*, fig. 3178, and in Schreiber's *Die Alexandrinische Toreutik*, fig. 1, etc. The other type was an open mould of one piece only and without any channel for pouring in the metal. Examples of this type are the 'Stone Objects', nos. 144, 145, 151 and 152. This latter type was used chiefly for taking an impression on a thin sheet of gold or silver by pressing it into the cavities of the design—the work being subsequently finished off by hand with the help of punches and gravers. But moulds of this type might also be used (as nos. 151 and 152 appear to have been used) for casting the copper dies for goldwork which are described below. An inherent disadvantage of these 'impression' moulds is that the thinnest sheet-metal only could be used for pressing into the cavities of the stone, and the resultant jewellery would be of the flimsiest kind and, unless a very small piece, would have to be made up on a core of lac, mastic, sulphur, or other such substance. To overcome this difficulty, the jewellers of Taxila had recourse to copper or bronze dies, on which heavier gold or silver sheeting could be hammered out. A large assortment of such dies, evidently cast in moulds, was found amidst a jeweller's stock-in-trade in the Šaka-Parthian city of Sirkap and is described and illustrated among 'Copper and Bronze Objects', nos. 37-203. Whether specimens of Greek or Roman dies of this kind have been discovered is not known to the writer. If they have, their existence appears to have gone unnoticed by the many writers on ancient jewellery. It is noteworthy, however, that Pernice, one of the foremost authorities on the subject, held the view, which he reinforced by practical experiment, that gold and silver ornaments could not be satisfactorily cast in stone moulds of the kind described above, and he concluded that such moulds, even if they were provided with channels, were used only for the production of wax models from which the metal casts were afterwards taken.¹ Pernice's view, however, has been contested by other writers. In the light afforded by the

Technical processes

Moulds

Dies

¹ Cf. Pernice in *Jahreshefte d. Oesterr. Archäol. Instituts in Wien* (1904), pp. 180 ff., and *B.M. Cat. of Jewellery*, p. lii.

recovery of these metal dies at Taxila, the suggestion may now be advanced that, in some cases at any rate, the moulds were used for the production of metal dies on which the more precious metals were beaten into shape preparatory to their being graved and finished off by hand.

Granulation

The technique of granulation, by which is meant the decoration of a gold surface with fine granules (Lat. *pulvisculus aureus*) was known in Greece and the Near East almost from time immemorial. It was known to the jewellers of Egypt in the VIth Dynasty and to those of Troy and Mycenae; to the Phoenicians and Etruscans and to the Greeks of the Geometric Period; and it continued to be practised in Greece and Italy and Asia Minor well down into Roman times, though as time went on the granulation tended to become relatively coarse.¹ In the medieval age, however, the technique was wholly forgotten, and though rediscovered in part by Castellani in 1878, has never been satisfactorily explained until quite recently, when Mr W. T. Blackband succeeded in producing granulated work as perfect as the best of that turned out by Etruscan jewellers.² The outcome of his long and successful experiments is to show: (a) that the gold granules were made by precipitating the molten metal from varying heights (according to the size of granule required) on to a baffle and thence on to a bed of charcoal dust, the effect of which is to cause the granules to roll into perfect spheres; (b) that the solder used for this work by the ancient jewellers was an alloy of gold and copper, and that when the work was finished, all signs of the copper were removed from the surface by heating it in sal-ammoniac; (c) that the granules were controlled and held in position by capillary attraction, a filament of the solder described above being used for this purpose, which was then melted on the surface and disappeared without leaving any trace. In view of the difficulties involved in this technique and the fact that it was so long forgotten by the jewellers of Europe and not entirely rediscovered until the last decade, it is safe to conclude that it could not have been independently evolved in the Panjab, but must have been introduced there along with so many other arts and crafts of the Hellenistic and Graeco-Roman world. The most perfect examples of patterned granulation at Taxila are to be seen on the tooth-amulet no. 80, and the amulet case no. 82, both of which date from the third or early second century B.C. Of 'field grainwork', as it is known, that is, of granulation covering the whole surface, the finest specimens are afforded by the ear-pendants nos. 11 and 12, and the necklaces nos. 56 and 59, where the granules covering the alternate pendant knobs are as fine almost as dust.

Filigree

Another method of decorating gold and silver ornaments which India learnt from the Graeco-Roman world, was that known as filigree. This is effected by soldering fine wire to the surface of the metal, the wire being either plain, twisted, plaited into a chain or beaded. Examples of the first three types of wire-work may be seen in the disk pendants nos. 3-6, as well as in nos. 81, 137, 138, 140 and 141.

¹ For fuller details of the history of this technique, see the writer's article 'Buddhist Gold Jewellery' in *A.S.R.* (1902-3), pp. 189-90, and the list of authorities there cited. Also *B.M. Cat. of Jewellery*, pp. liii and lv.

² Cf. *Illus. London News* (April 1934), pp. 658-9.

Examples of beaded filigree are nos. 7, 8, 26–8, 52, 61, 142 and 143. Fine wire was also plaited into chains, as in nos. 2–6, or fashioned into openwork beads like nos. 56 and 70, which might or might not be filled with coloured paste.

If the art of granulation and filigree was a Western one, it is certain that the art of incrusting jewellery and other objects with gems was of Eastern origin, and that it was rarely practised in the Mediterranean area until the Graeco-Macedonian period, when the conquests of Alexander had opened up the Orient, and that it was still further popularised there after Pompey's victories in the East.¹ But in whatever country the art originated, whether in India itself² or in Persia³ or among the Scythians, with whom it seems to have been peculiarly popular, it is evident from the designs themselves of the jewellery found at Taxila and the manner in which the gems are applied, that the vogue for incravatation which arose at Taxila in the first century A.D. was the direct outcome of the Parthian occupation. In this jewellery the incravatation is of two kinds. In one, the gems or paste are enclosed in small compartments or cloisons, contiguous to one another and covering the whole surface, e.g. nos. 167 and 168; in the other, they are studded here and there about the design either in cloisons or in box-settings, e.g. nos. 137–9. In the necklaces nos. 56–8, half the pendants are cloisonné, the rest centred with a single gem.

The semi-precious stones used in jewellery at Taxila were: carnelian or sard, chalcedony, agate, onyx, garnet, jasper, lapis-lazuli, rock-crystal, turquoise and turquoise paste, black marble and white orthoclase felspar. Most of these stones and their provenance are discussed in chapters 25 (pp. 477–9) and 37 (pp. 731 ff.), and further details will be found in H. Beck's Memoir (no. 65), *The Beads from Taxila*.⁴ It is noteworthy that the semi-precious stones used at Taxila for incravatation were much the same as those used by Greek and Graeco-Roman and Graeco-Scythic jewellers, though orthoclase felspar was not, so far as I am aware, used by the latter, and turquoise is commoner in India, no doubt because it was more easily procured.⁵

Gold, which, to judge by the number of gold ornaments found at Taxila, seems to have been abundant there under the Parthians, has a wide distribution in India. Most Indian rivers, as well as those in Assam and Northern Burma, yield alluvial gold in small quantities, and those which flow north and east from the plateau of Chota Nagpur, including the Sōn river (Sk. *Hiranya-vaha* = gold-carrying) are

¹ Cf. Pliny, *N.H.* xxxvii, 12; Furtwängler, *Antike Gemmen*, III, pp. 153 ff.; Marshall, 'Buddhist Gold Jewellery', *loc. cit.* p. 191; *B.M. Cat. of Jewellery*, p. lviii; Dar. et Sag. s.v. 'Gemma'.

² The Indian King Sopeithes is said to have worn golden sandals studded with jewels and to have carried a golden staff studded with beryls (Q. Curtius, *Hist. Alex.* ix, 1, 5). And the pavilions of Indian kings are said to have been bejewelled (Claudian, *Stilicho* 1, 158; and cf. Ch. de Linas, *Les Origines de l'orfèvrerie cloisonnée*, t. 1, p. 187).

³ Athenaeus (xi, 17) quoting from Parmenion's letters, speaks of quantities of bejewelled cups (ποτήρια λιθοκόλλητα) among Alexander's Persian booty.

⁴ Cf. also *M.I.C.* ch. XXXII.

⁵ The following are the Greek and Latin equivalents for these stones, so far as they are known. Carnelian or sard = σάρδιον, *sardius*; chalcedony = according to Furtwängler, *iaspis*; garnet = ἀνθραξ, *carbunculus*; lapis-lazuli = σάπφειρος, *sapphirus*; rock-crystal = κρύσταλλος, *crystallus*; turquoise = ? *callais* or *Persicus smaragdus*; pearl = μαργαρίτης, *margarita*.

Incravatation

Semi-precious stones

Gold

more than ordinarily rich in it. There are many ancient gold workings also in Hyderabad State, the Madras Presidency, and the Mysore, where the Kolar district to-day yields over 90% of India's total production (about £2,000,000 annually). In ancient times there may also have been a substantial supply from Dardistān and Tibet, which are said to have yielded the well-known 'ant-gold' (Sk. *pipilika*) of classical writers.¹ In Afghānistān, gold also occurs in the neighbourhood of Kandahār and on the north side of the Hindu Kush, while a certain amount is said to be washed from the streams draining the Kūh-i-Bāba in Kohistān and above Laghmān and Kunar. Although, however, there were many possible sources of supply in India and Afghānistān, the yield is hardly likely, even before the introduction of a gold currency by the Kushāns, to have been an adequate one, since a prodigious amount of the precious metal went into jewellery. On the eastern side of India the supply was probably supplemented by imports from Assam, Burma and Malay (Aurea Chersonesus), where gold mines of ancient date have been discovered in the State of Pahang (Schoff, *Periplus*, p. 259, para. 63). In the North-West, especially after the establishment of the Kushān Empire, the supply was supplemented by imports from the Near East by way of the Persian Gulf, through which the Kushāns must normally have conducted their trade with the West (Warmington, *op. cit.* p. 299).² In confirmation of this it may be noticed that an ingot of gold found in the Saka-Parthian city of Sirkap (no. 214 *infra*), although without a stamp, bears a significant resemblance to the ingots which were traded in the Roman world.³ The old idea that India was a land of gold, which many writers still persist in repeating, was perhaps due to the fact that so much wealth was sunk in gold jewellery, but it is certainly wide of the mark.⁴

Some general remarks on the jewellery from the Bhir Mound will be found in vol. I at pp. 101, 104, 106 and 111, and on the jewellery from Sirkap at pp. 134, 203. Other references are given in the individual entries of the catalogue below.

CLASS I. Ear-pendants and ear-rings (nos. 1-53)

Most of the specimens found at Taxila are of Greek or Graeco-Roman design. The chief types are as follows:

(a) *Amphora type*. Ear-pendants (*ἐνώτια*) of this type were in vogue in the Graeco-Roman world from the third century B.C. onwards, but became particularly fashionable in the first century A.D. From the places of their provenance it has been

¹ Cf. p. 14, n. 1 *supra*.

² Cf. Schoff, *Periplus*, pp. 258, 259. Strabo, quoting Gorgos the mining engineer, says that mines of gold and silver existed not far from the Salt Range in the Panjab (presumably in the Himālayas) but that the Indians were unacquainted with mining and the smelting of ores. That may well have been the case in the Panjab, but it is no proof that mining was not practised in the south of India, of which nothing was then known.

³ Cf. *B.M. Cat. of Jewellery*, Pl. LXXII; Dar. et Sag. s.v. 'Metalla', p. 1865.

⁴ Cf. *C.H.I.* I, pp. 343 and 403, where the supposed abundance of gold in India is said to have militated against the circulation of the Persian *dāric* in those regions, the ratio of gold to silver being 1:13·3 in Persia and 1:8 in India. Assuming that the latter ratio is correct, its explanation may lie rather in the exceptional dearth of silver than in the cheapness of gold.

inferred that the design originated in Syria or Egypt, and that the not infrequent specimens found in late Etruscan tombs of the third or second century B.C. were imports from one or other of those countries. At Taxila the earliest example (no. 1) dates from the third to second century B.C. The other example is of the first century A.D. Cf. *B.M. Cat. of Jewellery*, pp. xlili-iv and nos. 2356-7, 2442-3, and Pls. LI and LII.

(b) *Disk-and-pendant and bar-and-pendant types.* In Greece this type goes back to the early sixth century B.C. and continues without interruption to the third century A.D. Cf. *B.M. Cat.* pp. xxxiii, and 180-3; Pl. xxx, nos. 1662, 1663, 1672, 1673, 1675, etc.; Pl. XL, no. 2064.

(c) *Leech-and-pendant type.* The 'leech' ear-ring, which can be traced back to Mycenaean times, does not appear to have survived in Greece itself after the fourth century B.C., though in the modified form of a flat crescent it was still found as late as the second century A.D. In Etruria, however, it continued on until at least the third century B.C., the later examples being frequently distinguished by the pendent clusters of drops and granules attached to the leech. The bud-pendants, which are characteristic of the Taxila specimens, may have been evolved in Western Asia or Egypt during the later Hellenistic period. Cf. *B.M. Cat. of Jewellery*, pp. xxxiii, xl, and nos. 321 ff., 1653-61, 2239-40, 2252, 2256, 2258, 2259, 2262; and for the 'leech' motif in *fibulae*, nos. 1376-81, etc., and *Dar. et Sag.* III, p. 445, fig. 4017, and fn. 11, where references are given to examples from the Crimea as well as from Etruria.

(d) *Flower-and-pendant type.* In this type the pendant takes the form of a flower, usually six-petalled, hanging downward, with the tips of its leaves attached to a beaded ring from which chains and bells are suspended. The type calls to mind the 'tassel' pendants of Graeco-Roman jewellery, e.g. *B.M. Cat.* Pl. LI.

Besides the elaborate types of pendants described above, two simpler kinds of ear-rings are also found at Taxila, viz.:

(e) *Ring type.* This is a small ear-ring of solid gold with the ends twisted back in a spiral round half or more of the ring. In some specimens the ring is thickened at the base. Greek ear-rings of this type exhibit the same method of binding the drawn-out ends spirally round the ring, but in the earlier examples, which go back to the fifth century B.C. and were favourite in Hellenistic times, one apex of the ring usually terminates in an ornamental head (of a lion, bear, tiger, maenad, negro, Eros, etc.); later examples are commonly without this ornament. Cf. *B.M. Cat.* pp. xxxiii-xxxiv, and Pls. XXXI, XXXII and LIII.

(f) *Heart-shaped type.* Whether this type of ear-ring derived from Greek or Graeco-Roman prototypes is questionable. The small clusters of globules at the base of the rings is certainly a Western touch, but the shape was familiar in India as far back as the Chalcolithic period, as attested by bracelets and other articles from Harappā and Mohenjo-daro.

1. Gold ear-pendant of 'amphora' type. Height 1·7 in. It consists of two separate pieces, the upper one attached to the lower by means of a hook which passes through a hole in the

Amphora
type

STRATIGRAPHICAL CHART OF GOLD AND SILVER JEWELLERY

Class	Bhir Mound strata				Sirkap strata				Other sites (Dh. = Dharmarajika Jn. = Jaulian)	Class
	IV 5th to 6th century B.C.	III 4th century B.C.	II Maurya	I Surface	VII ?Pre- Greek	VI-V Greek	IV Early Saka	III-II Late Saka- Parthian		
I. Ear-pendants and ear-rings (nos. 1-53)	—	52	I	—	—	—	46	—	31, 32	I
II. Necklaces (nos. 54-74)	—	54, 55	—	71, 72	—	—	69	—	45, 48- 51, 53 56-68, 70, 74	73 from Dh.
III. Girdles, breast-chains and belts (nos. 75-9)	—	—	—	—	—	—	—	—	—	—
IV. Amulets and pendants (nos. 80-95)	81	87	—	80, 82, 83, a-c	—	—	—	—	84, a, b, 85, a-d, 89- 94, a-c	95, a-d from Jn.
V. Brooches (nos. 96-9)	—	—	—	—	—	—	—	—	96-9 100, 101 102-32,	97, 99 — —
VI. Hair-pins (nos. 100, 101)	—	—	—	—	—	—	—	—	137, 138, 140-3	V VI
VII. Bangles and bracelets (nos. 102-43)	—	—	—	—	—	—	—	—	—	—
VIII. Torques (nos. 144-7)	—	—	—	—	—	—	144	145, 146	147	VIII
IX. Anklets (nos. 148-65)	—	—	—	—	—	—	178, 203	148-65 107, 168, 179-98,	—	IX
X. Miscellaneous (nos. 166-219)	—	199, 200	—	166, 204- 10	—	—	—	170-7, 211-13, 215-19	169 from Giri 201, 202 from Jn.	X

Note. Nos. 99, 139 and 214, which were found in spoil earth in or near Sirkap, are not included in the above chart or in the Table on p. 623.

TABLE SHOWING DISTRIBUTION OF JEWELLERY IN SIRKAP

Block	Strata VI-V Greek	Stratum IV Early Saka	Strata III-II Saka-Parthian	Stratum I Surface
EAST SIDE OF MAIN STREET				
I	—	—	—	—
A	—	—	—	—
B	—	—	13, 14, 58, 66, 102, 103, 122-4, 167, 168	—
C	—	—	—	—
D	—	—	3-6, 15-24, 48-51, 62, 67, 74, 78, 79, 101, 125-32, 146, 148-65, 179-98	—
E	—	—	9, 10, 30, 35, 42, 43, 59, 60, 64, 68, 70, 91, a, b, 97, 99, 116-19, 211-13	(60) (97, 99)
F	—	—	177	—
G	—	—	53	—
H	—	—	—	—
I	—	—	—	—
J	—	—	—	—
K	—	—	29, 44, 45, 65, 77, 216-19	—
L	—	—	—	—
WEST SIDE OF MAIN STREET				
I'	—	—	176	—
A'	—	—	—	—
B'	—	203	215	—
C'	—	—	—	—
D'	—	46, 69, 144, 178	2, 7, 8, 11, 12, 26-8, 33, 34, 36-41, 56, 57, 61, 63, 75, 76, 84, a, b, 85, a-d, 92, a-d, 93, 94, a-c, 96, 98, 100, 104-15, 120, 121, 137, 138, 142, 143, 170-5	31, 32, 147
E'	—	—	—	—
F'	—	—	—	—
G'	—	—	25, 89, 140, 141, 145	—
H'	—	—	—	—
K'	—	—	—	—

latter. The upper piece takes the form of a full-blown flower, of which the six outer petals are granulated, the inner ones plain. At the centre of the corona was a gem (now missing) enclosed in a beaded circlet. Between the outer leaves are four clusters of granules set on wire tendrils. The lower piece consists of an amphora with dolphin handles, from the tails of which depend four chains ending in pearl drops. The body of the amphora is of turquoise adorned with granulated triangles of gold and with a cluster of gold globules beneath its base. From the Bhiṁ Mound. Stratum II. See vol. I, p. 106. For dolphin handles of amphorae in Greek ear-pendants, cf. *B.M. Cat. of Jewellery*, nos. 2331-3, and for other examples of the dolphin motif, *ibid.* nos. 1677, 1678, 1681, 2067, 2108, 2426-32, 2626, 2627, 2840. (Pl. 190, a.)

2. Gold ear-pendant in two pieces, the upper attached to the lower by means of a hook, which passes through a hollow cylinder in the latter. Height 4·37 in. The upper portion is built up on a square framework of flat gold wire, subdivided into four small squares. At the back

of this is a somewhat broader band of gold ending in two hooks which project beyond the framework on either side; at the point of projection the base of each hook is enriched with a small circlet edged with granules. The ornament on this framework consists of a quatrefoil central flower, with sprays of three small leaves springing from the tips of its four obcordate petals, and rosettes alternating with them at the corners. Both rosettes and leaves were inlaid with turquoise paste. The central flower is finely granulated and further enriched with a corona of five obcordate petals also inlaid with turquoise, on which a gold cupid is reposing. The lower piece consists of an amphora in the centre, and on either side of it an infant Eros riding on a winged sea-lion, from which hang four plaited chains ending in a pearl and leaf terminal, with a cluster of granules at the bottom of each leaf. The amphora is of beaded gold filigrain, with panels of turquoise paste between. It is set upon a three-stepped base, from which hang five gold drops with a cluster of four tiny granules on each. The granules are of solid metal; the larger drops hollow. The cylinder on the top of the amphora has a beaded rim of gold granules. The winged cupids and sea-monsters appear to have been cast in a mould, and afterwards chased with a graving tool. The hair of the cupids, which falls on the shoulders in a natural row of ringlets, is very carefully worked. The wings and ears of the monsters and the wings of their riders both front and back are inlaid with turquoise, some pieces of which are missing. First century A.D. Sk. '29-1,507/1; Block D'; sq. 64·92'; stratum II. Cf. *A.S.R.* (1929), p. 64, no. 50 and Pl. xviii, 2.

For a pair of somewhat similar gold pendants purchased by me in Rāwalgīndi, see *A.S.R.* (1902-3), pp. 186-7, Pl. xxviii, 1, 2. Other objects from the same hoard included nos. 57, 61, 96 and 137, 138 *infra*. See vol. I, p. 186, Deposit A, no. 1. (Pl. 190, c.)

3, 4. Pair of gold ear-pendants of 'disk-and-pendant' type. Diam. 1·25 in. The face of the disk is adorned with a full-blown flower surrounded by concentric bands of beading, scroll and chainwork. Between the points of the petals are globules of gold, and in the centre a beaded circlet, once filled with turquoise paste. The outer petals of the flower are embossed with imitation granules; the inner petals are plain. At the top of the disk is a trefoil fleur-de-lys with a small ring behind, the cloisons of which were once filled with paste. From the base depend five plaited chains ending in gold beads. First century A.D. Sk. '26-4,081/6; sq. 58·47'; Block D; stratum III. Cf. p. 156, no. 1 *supra*; *A.S.R.* (1926), p. 14, no. 10, and Pl. xxvi, 12, 13. From the same hoard as nos. 5, 6, 15-24, 48-51, 62, 67, 74, 78, 79, 101, 125-32, 146, 148-65, 179-98. (Pl. 190, d.)

5, 6. Similar to preceding, but no outer petals to flower, and round flower complete circle of hemispherical globules in place of fine beading; rim of double-twisted wire, and four chains beneath, ending in gold beads and leaf-points. Diam. 1·25 in. Same age and findspot as preceding (*q.v.*). Cf. p. 156, no. 2 *supra*; *A.S.R. loc. cit.* no. 11. (Pl. 190, f.)

7, 8. Pair of gold ear-pendants consisting of an oblong bar surmounted by a crescent and trefoil device, which take the place of the more usual disk. Height 1 in. The bar and trefoil are relieved with circular depressions surrounded by fine wire beading. From the base of the bar hang five small disks suspended on wires. For kindred patterns in Graeco-Roman jewellery, cf. *B.M. Cat. of Jewellery*, Pl. LV, nos. 2668-70; for the crescent motif, *ibid.* Pl. LI, nos. 2356, 2357 and 2359. First century A.D. Sk. '29-1,241/21; Block D'; sq. 62-113'; stratum III. Other objects from the same hoard included: 'Jewellery', nos. 11, 12, 26-8, 33, 34, 36-41, 56, 63, 75, 76, 85, 92, 93, 98, 100, 105-15, 120, 121, 142, 143, 170-5; 'Finger-rings', nos. 2, 3, 9, 17; 'Shell', no. 49; 'Coins', R.U.C. nos. 209, 216. See vol. I, pp. 187-8, Deposit C, no. 1. Cf. *A.S.R.* (1929), p. 61, no. 50 and Pl. xix, 10, 11. (Pl. 190, b.)

9, 10. Pair of gold ear-pendants of 'leech-and-pendant' type, consisting of a plain leech crescent with clasp and a 'bud' pendant suspended from it by a movable ring. Length 3·62 in. The leech is of thin plate-gold shaped on a core of lac or pitch. The clasp, which is attached by means of a ring hinge, is of 'double-leech' pattern ornamented with a cinquefoil

Disk-and-pendant and bar-and-pendant types

Leech-and-pendant type

rosette, two hearts and a narrow strap. The rosette and hearts were inlaid with stones or pastes which are now missing. The pendent buds are covered with fine granulation and their five points end in clusters of drops and granules. The ring to which the bud is attached is decorated on the outside with a double row of beads divided one from the other by a fine beading. At the top of the leech crescent is a small ring by which the ornament was suspended from the ear. First century A.D. Sk. '13-194/5-6; sq. 77-66'; Block E; stratum II. Cf. *A.S.R.* (1912), p. 26, nos. 5, 6 and Pl. xxi, b, 1, 2, 3, 5. The Greek practice, common among the jewellers of Taxila, of filling hollow ornaments of gold-foil with solid substances such as pitch, wax, mastic, etc., is alluded to in the temple inventories of Delos, where we read, for example, of μῆλα χρυσᾶ κηρωτῆς μεστά and μῆλα χρυσᾶ ἔνια πληρῆ γῆς. Cf. *B.M. Cat. of Jewellery*, pp. xxxvi and xxxvii. Other objects from the same hoard were: 'Jewellery', nos. 30, 35, 42, 43, 59, 64, 68, 70, 91, 116-19, 211-13. 'Finger-rings', nos. 13-16. 'Silverware', nos. 16, 21. 'Copper and Bronze', no. 417. Cf. vol. I, p. 159, no. 3. (Pl. 190, g.)

11, 12. Pair of gold ear-pendants similar to the preceding. Length 4·87 in. The double-leech clasp is ornamented at the centre with a female bust superimposed on a lotus rosette, at the top with a cinquefoil lotus with obcordate petals, and at the bottom with a beaded circlet. The pendant ring is relieved on the outside with three rows of beads and granules, and there are four small stars, besides the granulation, on the shoulders of the buds. First century A.D. Sk. '29-1, 241/2; Block D'; sq. 62-113'; stratum III. Cf. p. 187, no. 2 *supra*; *A.S.R.* (1929), p. 59, no. 2 and Pl. xviii, 1, 3. For other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 190, i.)

13, 14. Pair of gold ear-pendants similar to nos. 9 and 10. Length 3·62 in. First century A.D. Sk. '24-683/1; Block B; sq. 31-47'; stratum II. Cf. p. 147, no. 1 *supra*; *A.S.R.* (1924), p. 49, no. 1, Pl. xi, 9-10. For other objects in the same hoard, see vol. I, p. 147.

15-24. Five pairs of gold ear-pendants of leech-and-pendant type similar to the preceding, with slight variations in details of clasps. Length from 2·37 to 3 in. First century A.D. Sk. '26-4, 081/2; sq. 58-47'; stratum III. Cf. p. 156, no. 3 *supra*; *A.S.R.* (1926), p. 113, no. 8, and Pl. xxvi, 9, 10. For other objects from same hoard, see nos. 3, 4 *supra*. (Pl. 190, h.)

25. Single ear-pendant similar to the above. Length 3·5 in. First century A.D. Sk. '29-2, 193/3; Block G'; sq. 108-87'; stratum II. Cf. *A.S.R.* (1929), p. 67, no. 77. Other objects from the same hoard included: 'Jewellery', nos. 140, 141, 145; 'Finger-rings', no. 6. See vol. I, p. 180.

26, 27. Pair of gold ear-pendants of flower-and-pendant type. Height 2·62 in. The flowers are composed of six petals, strengthened by granulated ribbings, with small heart-shaped cloisons at their base, once filled with paste or stones. Attached to the points of the leaves is a beaded ring from which hang six quadruple plaited chains ending in small bells. At the top is a small ring for suspension. This may be the ornament known as κημός to the Greeks, which resembled the funnel-shaped top of a voting urn or a horse muzzle. For the pendent bell motif, cf. *B.M. Cat. of Jewellery*, Pl. LV, nos. 1576, 1660, 1661, 2078, 2668, 2996, 3008, 3009. The same motif, evidently adapted from jewellery, is frequently depicted on Indian sculptures of the Early School. From the same hoard in Block D' as nos. 7, 8 (*q.v.*). Cf. p. 187, no. 3 *supra*; *A.S.R.* (1929), p. 59, no. 3 and Pl. xviii, 7. (Pl. 190, e.)

28. Single ear-pendant similar to preceding, and from same hoard. Height 2·75 in. (Pl. 190, e.)

29. Single ear-pendant similar to preceding and of same age. Height 2·62 in. Sk. '28-2, 679; Block K (palace); sq. 157-43'; stratum II. Cf. *A.S.R.* (1928), p. 59, no. 81, a and Pl. xxi, 10. Other objects from the same hoard included: 'Jewellery', nos. 44, 45, 65, 77, 216-19; 'Finger-rings', nos. 8, 10. See vol. I, p. 174.

30. Single ear-pendant similar to preceding and of same age. Height 2·62 in. Sk. '13-194/7; sq. 77-66'; Block E; stratum II. Cf. p. 159, no. 4 *supra*; *A.S.R.* (1912), p. 26, no. 7 and Pl. xxi, b, 5. For other objects from same hoard, see nos. 9, 10 *supra*.

31, 32. Pair of small ear-rings of gold wire with the ends coiled back in a spiral and com- Ring type

Flower-and-pendant type

pletely covering the rings. False clasps of 'double-leech' pattern. As the rings have no opening, they must have been suspended from the ear by a separate ring or hook. Diam. 1·15 in. First century A.D. Sk. '33-667; Block D'; sq. 63·85'; stratum I. Cf. p. 191 *supra*. (Pl. 191, *a*.)

33, 34. Pair of ear-rings similar to preceding but with coil covering only half the rings and without false clasp. Diam. 0·75 in. First century A.D. Sk. '29-1,241/15; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 4 *supra*; *A.S.R.* (1929), p. 60, no. 14. For other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 191, *b*.)

35. Single gold ear-ring similar to nos. 33, 34. Diam. 0·62 in. Sk. '13-194/16; sq. 77·66'; Block E; stratum II. Cf. p. 159, no. 5 *supra*; *A.S.R.* (1912), p. 27, no. 16 and Pl. xxii, *a*. For other objects from same hoard, see nos. 9, 10 *supra*. (Pl. 191, *c*.)

36-41. Three pairs of small leech-like ear-rings of gold, with ends twisted back in fine spiral over two sides of the ring, leaving the base plain. Diam. 0·43-0·62 in. First century A.D. Sk. '29-1,241/23; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 5 *supra*; *A.S.R.* (1929), p. 61, no. 23. For other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 191, *d*.)

42, 43. Pair of gold ear-rings similar to preceding and of same age. Diam. 0·58 in. Sk. '13-194/15; sq. 77·66'; Block E; stratum II. Cf. p. 159, no. 6 *supra*; *A.S.R.* (1912), p. 27, no. 15 and Pl. xxii, *a*. For other objects from same group, see nos. 9, 10 *supra*.

44, 45. Pair of gold ear-rings similar to preceding and of same age. Diam. 0·56 in. Sk. '28-2,679/6; palace; sq. 157·43'; stratum II. Cf. p. 174 *supra*; *A.S.R.* (1928), p. 60, no. 81, *b* and Pl. xx, 3. For other objects from same hoard, see no. 29 *supra*. (Pl. 191, *e*.)

46. Single gold ear-ring similar to above and of same date. Diam. 0·5 in. Sk. '29-1,362/3; Block D'; sq. 62·113'; stratum IV. Cf. *A.S.R.* (1929), p. 62, no. 45. For other objects from same hoard, which was buried at the close of the Parthian period in the first century A.D., see vol. I, p. 188, Deposit D.

47. Single ear-ring of solid gold with pedestal base supporting pendant of two pearls. Height 0·95 in. This appears to be a later development of the ear-rings described above (nos. 31-41). Fifth century A.D. Dh. '14-892, between P10 and P7. See vol. I, p. 268 and no. 73 *infra*. Cf. *A.S.R.* (1914), Pl. XII, 1. (Pl. 191, *f*.)

Heart-shaped type

48-51. Two pairs of hollow gold ear-rings of heart-shape type. Diam. 0·87 in. At the top is a clasp working on a pivot hinge; at the base, a cluster of four granules. First century A.D. Sk. '26-4,081/7; sq. 58·47'; stratum III. Cf. p. 156, no. 4 *supra*; *A.S.R.* (1926), p. 113, no. 1 and Pl. xxvi, 3. For other objects from same hoard, see nos. 3, 4 *supra*. (Pl. 191, *g*.)

À baule type

52. Single gold ear-ring of cylindrical form with five parallel strips of vertical beading on the outside and five projecting knobs at the top. Length 0·31 in. The beading is stamped, not granulated, and soldered to the strips of plain gold between. This ornament appears to be an ear-ring of the *à baule* type, which was fashionable in Etruria, where it was probably introduced from the East in the sixth and fifth centuries B.C. Whether the type survived to a later date in the Near East is not known. The single specimen from Taxila was found on the Bhir Mound in a hoard referable to the last quarter of the fourth century B.C. Bm. '24-556, *c*; sq. 32·26'; stratum III. Cf. *A.S.R.* (1924), p. 48; *B.M. Cat. of Jewellery*, p. xxvii and nos. 1286 ff. For an ear-ring of kindred pattern of modern Indian manufacture, cf. Hendley, *Indian Jewellery*, Pl. xcvi, no. 659. Other objects from the same hoard were nos. 54, 55, 199, 200 *infra*. For further details of the hoard, see vol. I, pp. 104, 106. (Pl. 191, *i*.)

53. Small ear-ring of silver in form of snake with scaly body. Diam. 0·81 in. First century A.D. Sk. '12-707; sq. 115-63'; stratum II. Cf. p. 169 *supra*.

CLASS II. Necklaces (nos. 54-74)

All the more elaborate necklaces described below are easily recognisable as Greek or Graeco-Roman in design. The simpler ones may be local Indian patterns. Two only

of these necklaces (nos. 54, 55) come from the city on the Bhiṇ Mound and are assignable to the close of the fourth century B.C.; the rest date from the first century A.D.

54. Necklace of thirty spherical beads with seventeen spacer circlets. Diam. of beads, 0·31–0·37 in. The beads, of impure gold, are gadrooned and collared; the spacers, of pure gold, are embellished with bands of drops and granules in varying patterns. The collars of the beads are made separately and soldered on. From same hoard as no. 52 (*q.v.*). Cf. *A.S.R.* (1924), p. 48, l. 19. (Pl. 192, *a*.)

55. Silver necklace of thirty-seven pendants. Height 0·68 in. The pendants are hollow and consist of a hemispherical drop with a T-shaped top. The top is decorated with incised lines and pierced laterally with two holes. The back and front are made separately and soldered. From same hoard as preceding. (Pl. 192, *c*.)

56. Gold necklace of twenty-three pendants with twenty spacer beads and two terminals. Height of pendants 1·87 in. The pendants are of two patterns, alternating with one another. One pattern consists of an oval crystal *en cabochon* in a beaded setting enclosed by two dolphins affrontés, from the tails of which hang three chains ending in flat disks. At the top is a spherical knob with finely granulated surface, pierced laterally for suspension. The fishes are of thin repoussé gold with backs soldered on; the neck above is made in a separate piece. The other pattern consists of a quatrefoil device of seven cloisons inlaid with flat pieces of white orthoclase felspar, with three chains and disks hanging from the base and a knob of plain instead of granulated gold at the top. The spacing beads are of openwork metal, composed of twelve circlets inlaid with white orthoclase felspar and strengthened with studs of gold granules. The two terminals take the form of 'ox-heads' inlaid with orthoclase felspar and black agate and outlined with a granulated beading. The necklace was strung on two strings, one passing through the beads at the top of the pendants, the other through a series of small horizontal tubes soldered on to their backs. At the back of the terminals are two tubes to take the strings. For the double dolphin motif, cf. no. 1 above and references there cited, and for the openwork beads, no. 59 below and *B.M. Cat. of Jewellery*, Pl. LIII, no. 2567. First century A.D. Sk. '29–1,241/7 and 10; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 6 *supra*; *A.S.R.* (1929), p. 60, no. 7 and Pl. XIX, 16. For other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 193, no. 56.)

57. Gold necklace of thirty-one pieces, including two terminals. Height of pendants, 1·19 in. The pendants are of two patterns, alternating. One pattern consists of a small circlet of gold centred with a carbuncle and edged round with a double granulated beading; at the base is an openwork obcordate attachment enclosing a triple cluster of granules, and above it a spherical bead covered with fine granulation and pierced laterally for a string. The other pattern is of quatrefoil form made up of seven cloisons inlaid with white orthoclase felspar; the obcordate attachment below encloses a tiny heart-shaped cloison inlaid with white orthoclase felspar instead of granule clusters, while the bead at the top is plain instead of granulated. The terminals, which are composed of nine cloisons, are inlaid with white orthoclase felspar and lapis-lazuli. The necklace was strung in the same way as no. 56. First century A.D. Sk. '29–1,507; Block D'; sq. 64·92'. Cf. p. 186, Deposit A, no. 2 *supra*; *A.S.R.* (1929), p. 65, no. 53 and Pl. XIX, 4. For other objects from the same hoard, see no. 2 *supra*. (Pl. 193, no. 57.)

58. Gold necklace of twenty-seven pendants including two terminals. Height of pendants 1·06 in. The design resembles that of no. 57, but half the pendants were inlaid with rock crystal *en cabochon* instead of carbuncles, and the others with blue turquoise paste in the centre and top cloisons and white orthoclase felspar in the four leaves. There are triple clusters of granules also in all the obcordate attachments at the base of the pendants and small spacing beads on the upper string. First century A.D. Sk. '24–683/2; sq. 31·47'; stratum II. From same hoard as nos. 13, 14 (*q.v.*). Cf. p. 147, no. 2 *supra*; *A.S.R.* (1924), p. 49, no. 2 and Pl. XI, 2. (Pl. 193, no. 58.)

59, *a-f.* Six cylindrical pendants belonging to a necklace; length 0·83 in. The casing is of gold openwork of various designs, in which network, figures-of-eight and clustered granules are prominent; the cores are of green jasper and turquoise paste. To the upper side of the cylinders two small rings are attached for suspension. For the use of cylinders in necklaces, cf. *B.M. Cat. of Jewellery*, pp. xlviii, xlix and Pl. LVII, no. 2697, etc., and for openwork in gold, *ibid.* no. 2030. First century A.D. Sk. '13-194/13; Block E; sq. 77·66'; stratum II. Cf. p. 159, no. 7 *supra*; *A.S.R.* (1912), p. 27, no. 13 and Pl. XXII, *a*. For other objects from same hoard, see nos. 9, 10 *supra*. (Pl. 191, *h*.)

60. Gold necklace of seventy-four pieces, pierced laterally with two holes for strings. The pieces are hollow, and made in two sections with soldered backs. On the face of each is a row of five tangent circlets with depressed centres. Length 0·75 in. They were fashioned by pressing a thin gold sheet into a metal matrix, like those illustrated in nos. 42-4 of the 'Copper and Bronze Objects' (Pl. 179). First century A.D. Sk. '13-194, *a/7*; Block E; sq. 77·65'; strata I-II. Cf. *A.S.R.* (1912), p. 28, no. 7 and Pl. XXII, *b, 4*. Other objects from the same hoard are: 'Jewellery', nos. 97, 99; 'Finger-rings', nos. 71-3; 'Coins', R.U.C. nos. 201-8, 211-15, 217-21, 258-60. Cf. vol. I, p. 160, no. 3.

61. Gold necklace of eighty-four pieces, similar to no. 60, but with four instead of five circlets on each piece. Length of each piece 1 in. First century A.D. Sk. '29-1,507/3; Block D'; sq. 64·92'; stratum II. Cf. p. 186, Deposit A, no. 3; *A.S.R.* (1929), p. 65, no. 52 and Pl. XVIII, 10. For other objects from the same hoard, see no. 2 *supra*. (Pl. 193, no. 61.)

62. Gold necklace of eighty-nine pieces of the 'spearhead-and-drop' pattern (Gr. λόγχιον = Indian *campā-kāli*). The pieces are hollow and pierced laterally through the head and middle for two strings. Length of each piece 1 in. Examples of the copper matrices on which they were fashioned or cast are figured among the 'Copper and Bronze Objects', nos. 45, 47, 50, 51, 129 (Pls. 179, 180). First century A.D. Sk. '26-4,081/4; sq. 58·47'; stratum III. Cf. p. 156, no. 5 *supra*; *A.S.R.* (1926), p. 114, no. 12; and for similar motif in Greek jewellery, *B.M. Cat. of Jewellery*, nos. 1943, 1946. For other objects from same hoard, see nos. 3, 4 *supra*. (Pl. 192, *d*.)

63. Gold necklace of 132 hollow spherical beads. Diam. 0·19-0·25 in. As usual, they are made in two hemispheres soldered together. First century A.D. Sk. '29-1,241/9; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 7 *supra*; *A.S.R.* (1929), p. 60, no. 9. For other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 192, *e*.)

64. Gold necklace of sixty beads of similar pattern to the preceding. First century A.D. Sk. '13-194/20; Block E; sq. 77·66'; stratum II. Cf. p. 159, no. 8 *supra*; *A.S.R.* (1912), p. 27, no. 20 and Pl. XXII. For other objects from same hoard, see nos. 9, 10 *supra*. (Pl. 192, *e*.)

65. Gold necklace of forty-four hollow beads similar to preceding. Diam. 0·12-0·19 in. First century A.D. Sk. '28-2,679/5; palace; sq. 157·43'; stratum II. From same hoard as nos. 29 (*q.v.*), 44, 45, etc. Cf. p. 174 *supra*; *A.S.R.* (1928), p. 60, no. 81, *f* and Pl. XXI, 4.

66. Gold necklace of eighty-three plain tubular beads. Length 0·37-0·62 in. First century A.D. Sk. '24-683/6; sq. 31·47'; stratum II. From same hoard as nos. 13, 14 (*q.v.*). Cf. p. 147, no. 6 *supra*; *A.S.R.* (1924), p. 49, no. 6. (Pl. 192, *f*.)

67. Similar to the preceding, with twenty-three tubular beads. Length 0·5 in. First century A.D. Sk. '26-4,081/3; sq. 58·47'; stratum III. Cf. p. 156, no. 6 *supra*; *A.S.R.* (1926), p. 114, no. 14. For other objects from same hoard, see nos. 3, 4 *supra*.

68. Gold neck-chain composed of four double plaits fitted with hook-and-ring fastener. Length 19·62 in. First century A.D. For similar plaited chains, cf. *B.M. Cat. of Jewellery*, Pl. XXXIII, 1954, 1955; Pl. LIX, 2725, 2735; Pl. LXVII, 2845, 2846, etc. Sk. '13-194/12; Block E; sq. 77·66'; stratum II. Cf. p. 159, no. 9 *supra*; *A.S.R.* (1912), p. 27, no. 12 and Pl. XXII, *a*. For other objects from same hoard, see nos. 9, 10 *supra*. (Pl. 192, *g*.)

69. Five links of small gold chain of 'reel-and-link' pattern. Length 1·25 in. First century B.C. For chains of similar pattern of the Hellenistic period, cf. *B.M. Cat. of Jewellery*, Pl. XXXVI,

1974 and Pl. XXXVIII, 1976, 1977. Sk. '29-1,204; Block D'; sq. 58·117'; stratum IV. Cf. *A.S.R.* (1929), p. 65, no. 55 and Pl. XIX, 7. Although found in stratum IV, this chain may date from the Parthian period. See vol. I, pp. 134, 191. (Pl. 191, j.)

70. Seven spacer beads of openwork gold, originally inlaid with paste. Diam. 0·3 in. For similar spacer beads, cf. no. 56 *supra*. First century A.D. Sk. '13-194/14; Block E; sq. 77·66'; stratum II. Cf. p. 159, no. 10 *supra*; *A.S.R.* (1912), p. 27, no. 14 and Pl. XXII, a. For other objects from same hoard, see nos. 9, 10 *supra*.

71. Five lozenge-shaped beads of gold. From same hoard as nos. 72, 80, 82, 83, 88, 166, 204-10; 'Copper and Bronze', no. 7; 'Pottery', no. 173; 'Seals', nos. 11, 28, a; 'Coins', R.U.C. no. 39. Length 0·43 in. Third to second century B.C. Bm. '12-20/5; stratum I. Cf. *A.S.R.* (1912), p. 41, no. 7. For details of hoard, see vol. I, pp. 110-11.

72. Two gadrooned and collared beads of gold similar to the beads belonging to necklace no. 54 above. Diam. 0·37 in. Bm. '12-20/4. From same hoard as preceding. Cf. *A.S.R.* (1912), p. 41, no. 6.

73. Four spherical beads of gold, two plain and two fluted. Diam. 0·4 and 0·48 in. Fifth century A.D. Dh. '14-892. Found with the ear-ring no. 47 (*q.v.*). Cf. p. 268 *supra*; *A.S.R.* (1914), Pl. XII, 2-5.

74. Four necklace terminals of gold, composed of two small fishes with one tail. The fishes are of thin gold and hollow. There are holes in the fishes' heads for two strings which meet together in the tail. Length 0·75 in. First century A.D. Sk. '26-4,081/8; sq. 58·47'; Block D; stratum III. Cf. p. 156, no. 7 *supra*; *A.S.R.* (1926), p. 113, no. 7; and for other objects from same hoard, see nos. 3, 4 *supra*. Fishes used as ornamental motifs or as amulets were common in India, as in other countries, from the earliest times. For the Indus period, for example, cf. *M.I.C.* p. 557 and Pl. CXXXII, 19, 30, 32, 40; on punch-marked and tribal coins, Allan, *B.M. Cat. of Anc. Ind. Coins*, pp. xix, xxix, lxii, 44, 56, 83, etc.; and for other examples at Taxila, no. 78 *infra*; 'Finger-rings', no. 24; 'Copper and Bronze', no. 28. (Pl. 191, k.)

CLASS III. *Girdles, breast-chains and belts* (nos. 75-9)

Besides the necklaces described above, there are some longer or larger ornaments of a kindred kind which seem likely to have been used as breast-chains or belts or girdles rather than as necklaces. Such ornaments (Gr. γάνη, γωστήρ; Skr. *mekhalā*) were used by both Greeks and Indians. All date from the first century A.D.

75. Gold breast-chain or girdle of 494 pieces. Width 0·31 in. The pieces, which are of thin sheet-gold, resemble stepped merlons, alternately reversed, so as to fit one into another. They are pierced with two sets of holes for threading. For the stepped merlon motif in modern Indian jewellery from Hazāra, cf. T. H. Hendley, *Indian Jewellery*, Pl. 42, no. 287. First century A.D. Sk. '29-1,241/11; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 8 *supra*; *A.S.R.* (1929), p. 60, no. 10, and Pl. XVIII, 8. For other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 194, c.)

76. Gold girdle or necklace of 130 pieces of double crescent shape. The pieces are of thin metal and hollow, fashioned on a matrix such as those illustrated in 'Copper and Bronze', nos. 37, 38, 40, 41, 106-8, 168-76. Width 0·62 in. First century A.D. Sk. '29-1,241/8; Block D'; sq. 62·113'; stratum III. For the shape, see also 'Beads', p. 741. Cf. p. 187, no. 9 *supra*; *A.S.R.* (1929), p. 60, no. 8 and Pl. XVIII, 9. For other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 194, d.)

77. Gold girdle or necklace of 116 pieces of lily pattern. The pieces are of thin gold, hollow within and pierced with two transverse holes for strings. Width 0·56 in. First century A.D. Sk. '28-2,679; palace; sq. 157·43'; stratum II. Cf. *A.S.R.* (1928), p. 60, no. 81, e and Pl. XXI, 1. For other objects from same hoard, see no. 29 *supra* and p. 174. (Pl. 194, a.)

Miscellaneous
necklace beads

78. Seven pieces of gold belt or girdle of fish pattern, comprising six groups of three fishes abreast, and a circular medallion for the clasp. The fishes, which are 1·37 in. long, are of thin, stamped gold, hollow within, and united on the underside by thin transverse strips of gold. Holes are pierced in their mouths and tails for three strings. Pl. 179, no. 79 illustrates the type of copper matrix on which they were fashioned. The face of the medallion (diam. 1·37 in.) is decorated in cloisonné with a heart and leaf stellate design within a beaded border. The hearts and beading are inlaid with white orthoclase felspar; the centre and leaves with rock-crystal. Attached to its back are three small rings on one side and a single ring on the other, intended for uniting the three threads of the belt. First century A.D. Sk. '26-4,081/9; sq. 58·47'; Block D; stratum III. Cf. p. 156, no. 8 *supra*; *A.S.R.* (1926), p. 113, nos. 2, 5 and Pl. xxvi, 4, 7. For the fishes see no. 74 *supra* and cf. Furtwängler, *Goldfund von Vetttersfelde*, Pl. I, republished in his *Kleine Schriften*, I, pp. 469-516 and Pl. xviii; Schreiber, *Alexandrinische Toreutik*, p. 301, fig. 21; Dalton, *Treasure of the Oxus*, Pl. vi, no. 16 and other examples cited. For other objects from the same hoard in Block D, see nos. 3, 4 *supra*. (Pl. 194, b.)

79. Two groups of three fishes each, belonging to a gold belt or girdle similar to no. 78. Length of fishes, 1·62 in. Same age and findspot as preceding (*q.v.*). Cf. p. 156, no. 9 *supra*; *A.S.R.* (1926), p. 113, no. 6 and Pl. xxvi, 8.

CLASS IV. *Amulets and pendants* (nos. 80-95)

Amulets and pendants have been classed together in this section because it is impossible in some cases to be sure whether a particular pendant has an amuletic value or not. That the claw or tooth pendant (no. 80), the swastikas (no. 85), the pipal leaves (no. 88), the bell (no. 89), and the clubs (nos. 91, 92), were employed as amulets is beyond question, and it is equally certain that nos. 82-4 were intended to hold relics or charms of some sort. But it is not so clear whether nos. 86, 87, 90, 93, 94 and 95 were designed as amulets or merely as ornaments. Coins, for example, or coin impressions, were certainly used as amulets in Roman times and became very popular during the third century A.D. (e.g. *B.M. Cat. of Jewellery*, nos. 2727, 2735, 2860, 2868-70, 2875, etc.), but whether the same superstition attached to them in India is doubtful.

80. Claw or tooth amulet. Length 1·12 in. The core is of lead covered, except at the point, with a thin sheath of gold. On the front side the gold is decorated with a granulated design of small hexagons enclosed in beaded borders. In the centre of each hexagon is a rosette of granules. The tooth or claw is pierced transversely by three holes for suspension. Third to second century B.C. Bm. '12-20/1. For other articles from the same hoard, see no. 71 *supra* and p. 111. Cf. *A.S.R.* (1912), p. 41, no. 2 and Pl. xxxix, d, 2. Amulets of this kind were fashionable among both Greeks and Romans, being credited with specific apotropaic and other powers. Cf. Dar. et Sag. s.v. 'Amuletum', I, p. 254, and for two specimens from Chiusi of about the third century B.C., cf. *B.M. Cat. of Jewellery*, Pl. xlvi, nos. 2278, 2304. On the other hand, the tiger tooth or claw was probably prized as an amulet as highly in ancient as in modern India. (Pl. 191, o.)

81. Gold sheath of tooth-amulet (length 0·75 in.) decorated on surface with fine filigree wire in criss-cross pattern. Found in stratum IV, of fifth to sixth century B.C., but may be a later stray. Bm. '19-1,858; sq. 10·38'. Cf. p. 101 *supra*.

82. Oblong amulet-case or reliquary of silver (length 0·87 in.), decorated on three sides with fine granulated designs of flowers and geometric patterns in beaded borders. One side is pierced with two holes for suspension. Bm. '12-20; stratum I. For other articles from the same hoard, see no. 71 above. Cf. *A.S.R.* (1912), p. 41, no. 1 and Pl. xxxix, d, 1. (Pl. 191, p.)

83. Oblong amulet case of gold, square in section. Length 0·62 in. The decoration is obliterated. From the same hoard as preceding.

84, a, b. Two cylindrical amulet cases of gold, furnished with two rings each for suspension and decorated with parallel circles round middle. Length 0·62 in. First century A.D. Sk. '19-933/4; Block D'; sq. 59·114'; stratum II. For cylindrical amulet cases of modern Indian pattern, see T. H. Hendley, *Indian Jewellery*, Pls. 57, no. 353 and Pl. 96, no. 648. Other objects from the same hoard include 'Jewellery', nos. 94, 104; 'Finger-rings', no. 5; 'Silverware', no. 14; 'Copper and Bronze', nos. 211, 291, 310; 'Stone Objects', nos. 138-40, 148; 'Shell', no. 42; 'Glass', nos. 1, 4, 18, 19. See vol. I, p. 188, no. 7. (Pl. 191, q.)

85, a-d. Four square amulets of gold, decorated on the face with swastika outlined in repoussé beading. Size 2·12 x 2·12 x 0·19 in. At the centre is a diamond-shaped depression, and at the four corners of the arms are heart-shaped depressions intended for inlays of stone or paste. The amulets are of sheet-gold on a core of lac or mastic. Attached to the back are four copper rings. First century A.D. The swastika, which was virtually unknown to Sumer, Akkad, Babylon and Assyria, was common in India from the earliest times. For other examples at Taxila, see 'Finger-rings', no. 42; 'Bone and Ivory Objects', no. 91; 'Pottery', no. 265. Sk. '29-1,241/6; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 10 *supra*; A.S.R. (1929), p. 60, no. 6; and for other objects from the same hoard, see nos. 7, 8 *supra*. (Pl. 191, v.)

86. Gold fleur-de-lys pendant with hook at top. Height 0·56 in. Third to second century B.C. Bm. '19-227; sq. 15·16'; stratum I. Cf. p. 111 *supra*.

87. Triangular pendant, made of double sheet of gold with small rim at apex and row of three beads at base. Height 0·56 in. Fourth to third century B.C. Bm. '20-1,198; sq. 27·27'; stratum III. Cf. p. 104 *supra*.

88, a-c. Three gold pendants in the form of pipal leaves. Length 0·56 in. Third to second century B.C. Bm. '12-20/9; stratum I. For other articles from the same hoard, see no. 71 above. Cf. A.S.R. (1912), p. 41, no. 5.

89. Bell pendant of gold, like those attached to the ear-pendants nos. 26-30 above (*q.v.*). Height 0·69 in. Beaded border round upper rim of bell. First century A.D. Sk. '28-1,917; Block G'; sq. 114·87'; stratum II. See vol. I, p. 181.

90. Diamond-shaped pendant of thin sheet-gold, provided with ring at one corner for suspension. Length 0·5 in. Sk. '21-76; spoil earth.

91, a, b. Two hollow club-shaped pendants of gold. Length 1·06 in. First century A.D. Sk. '13-194/19; Block E; sq. 77·66'; stratum II. For the club motif, which was common in Greek and Graeco-Roman jewellery, cf. B.M. Cat. of Jewellery, nos. 1952, 2036-9, 2369, 2412-24, 2686, 2718, 3024. As a rule the club takes the form of a pendant, but sometimes is strung from end to end on a necklace. Cf. p. 159, no. 11 *supra*; A.S.R. (1912), p. 27, no. 19. For other objects from same hoard, see nos. 9, 10 *supra*. (Pl. 191, l.)

92, a-d. Four hollow club-shaped pendants similar to preceding. Length 0·87 and 1·12 in. First century A.D. Sk. '29-1,241/14; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 11 *supra*; A.S.R. (1929), p. 60, no. 13, and for other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 191, m.)

93. Globular pendant of gold with ringed projection for suspension. Diam. 0·5 in. First century A.D. Sk. '29-1,241/31. From same hoard as preceding. Cf. p. 187, no. 12 *supra*; A.S.R. (1929), p. 61, no. 33.

94, a-c. Three globular pendants of gold similar to preceding. Diam. 0·25-0·5 in. First century A.D. Sk. '19-933/5; Block D'; sq. 59·114'. Cf. p. 188, no. 8 *supra*, and for other objects from same hoard, see no. 84 *supra*.

95, a-d. Four gold coin pendants, with square tubular attachment at top. Height 1 in. One of the tubes is set with a carbuncle in beaded circlet; the others are plain. The coins are

of the later Kushān, King Sīta(?) type. Three are identical, viz.: Obv. 'King nimbate standing to left at altar'. In r. hand, trident with streamers; in l. hand, staff; Brāhmī legends vertically arranged: r. Shāka(?); under arm, Sīta(?) l. *bha*. Rev. 'Enthroned goddess' (? Ardochsho), holding cornucopia in l. hand. Marginal legend defaced. Cf. V. Smith, *Cat. of Coins in the Indian Museum*, vol. I, pt. I, p. 89, nos. 6-10. In the fourth coin, the legend in r. field appears to read *tasu*. Jn. '16-F61-3. Mon. cell no. 19, where nos. 201, 202 *infra* were also found. See vol. I, p. 385; *Jn. Mem.* p. 57, nos. 4-7 and Pl. xxix, *j-m.* (Pl. 191, *n.*)

CLASS V. Brooches (nos. 96-9)

96. Gold repoussé figure of winged Aphrodite or Psyche. Height 3·31 in. The goddess is standing on a lotus(?) pedestal, resting her left elbow on a pillar and her right hand on her hip. Her drapery falls across her thighs, leaving the rest of the body bare. She wears armlets, bracelets and a crossed breast-band. Her hair is gathered in a knot on the crown of her head, with curls falling in front over her ears. Behind her shoulders appear two wings, roughly depicted. The relief, which is of thin plate-gold, was probably fashioned with the help of a stone or metal matrix, and afterwards finished with punches and graving tools. The back was made in a separate piece and soldered to it. Attached to the latter are three small rings, two behind the wings and one behind the feet. The type appears to go back to an original of the Praxitelean School (c. 300 B.C.). For the pose, cf. Reinach, *Répertoire de la Statuaire gr. et rom.* II, p. 334, nos. 5, 6; p. 335, nos. 1, 2, 6; IV, p. 201, no. 4, etc.; VI, p. 80, no. 4. For the crossed breast-band, cf. Winter, *Die Antiken Terrakotten*, III, 2, p. 209, no. 7 *et passim*; Dennison, *A Gold Treasure from Egypt* (late Roman), p. 150, fig. 43. First century A.D. Sk. '29-1,507/2; Block D'; sq. 64·92'; stratum II. Cf. p. 186, Deposit A, no. 4, *supra*; *A.S.R.* (1929), p. 65, no. 51 and Pl. XVI, 3. For other objects from the same hoard, see no. 2 *supra*. (Pl. 191, *s.*)

97. Gold brooch with figure of winged Aphrodite or Psyche, similar to the preceding but of coarser workmanship, though the wings of the goddess are slightly more realistic. Height 2·5 in. First century A.D. Sk. '13-194A/1; Block E; sq. 77·65'; strata I-II. Cf. p. 160, no. 1 *supra*; *A.S.R.* (1912), p. 27, no. 1, Pl. XXII, *b*, 1. For other objects from the same hoard, see no. 60 *supra*. (Pl. 191, *t.*)

98. Gold brooch, with figures of Eros and Psyche in repoussé relief. Height 1·81 in. The figures are standing side by side caressing each other, Eros holding Psyche's breast with his right hand. The technique is the same as in no. 96, but the workmanship is superior. At the back are three small rings for attachment, two at the middle and one behind the feet. In the base are two small holes, one larger than the other, through which the core of lac or mastic was inserted. For figures of Eros and Psyche as lovers, cf. Collignon, *Monuments relatifs au mythe de Psyché*, pp. 369 ff.; Stephani, *Comptes Rendus* (1877), p. 160; Pottier et Reinach, *Nécropole de Myrina*, p. 411; Winter, *Die Antiken Terrakotten*, II, 224-32. For a group on a bronze hydria in the British Museum, see Walters in *Arch. Zeit.* (1884), Pl. I, and pp. 1 ff., and Furtwängler, *Coll. Sabouroff*, II, Pl. 135. Also Dar. et Sag. IV, 748 and nn. 13-21. First century A.D. Sk. '29-1,241/1; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 13 *supra*; *A.S.R.* (1929), p. 59, 1 and Pl. XIX, 2; and for other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 191, *u.*)

99. Circular gold medallion brooch, decorated on face with winged Eros reclining(?) on flowing draperies. Diam. 1·12 in. The brooch is made of two pieces of sheet-metal joined at the edges. The relief, which is of rough workmanship, appears to have been fashioned in a matrix like nos. 96-8. First century A.D. Sk. '13-194, a/2; Block E; sq. 77·65'; strata I-II. Cf. p. 160, no. 2 *supra*; *A.S.R.* (1912), p. 28, no. 2 and Pl. XXII, *b*. For other objects from the same hoard, see no. 60 *supra*. (Pl. 191, *w.*)

CLASS VI. *Hair-pins* (nos. 100, 101)

100. Gold hair-pin with flat 'wheel' head decorated on both sides with cinquefoil rosette inlaid with white orthoclase felspar and encircled by double beading. Length 4·37 in. First century A.D. Sk. '29-1,241/20; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 14 *supra*; *A.S.R.* (1929), p. 61, no. 19 and Pl. xix, 14; and for other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 191, z.)

101. Hair-pin of silver with gold head. Length 5·65 in. The head consists of a crescent resting on a small cube and surmounted by a *triratna* device. Four pearl drops on gold wire hang from the crescent and two from the *triratna*. Three circlets of gold with double rows of beading support each of the three component parts. A particular interest attaches to this hair-pin because of the combination of Indian and Greek motifs, the crescent (Gr. μήνισκος) being characteristically Greek (e.g. *B.M. Cat. of Jewellery*, nos. 2360-5, 2449-62, etc.) and the *triratna* just as characteristically Indian. A similar pin but without the crescent is figured on the west gateway of Sāñchī fastening the knotted thong over the scabbard of a broad sword (Marshall and Foucher, *The Monuments of Sāñchī*, Pl. LXVI, a). The *triratna*, an age-old device in India, was specially adopted by the Buddhists as a symbol of the Buddhist Trinity, and is figured in great profusion on the early Buddhist monuments at Sāñchī, Bharhat and elsewhere. It also occurs as a monogram on the coins of contemporary Indo-Parthian and Kushān kings. First century A.D. Sk. '26-4,081/1; Block D; sq. 58·47'; stratum III. Cf. p. 156, no. 10 *supra*; *A.S.R.* (1926), p. 113, no. 9 and Pl. xxvi, 11. For other objects from the same hoard, see nos. 3, 4 *supra*. (Pl. 191, z.)

CLASS VII. *Bangles and bracelets* (nos. 102-43)

The gold and silver specimens of bangles, armlets and bracelets comprise five types, viz.:

Type *a*. Solid bangles of heavy wire with open knobbed ends. Cf. 'Copper and Bronze', ch. 28, Class I, type *a*.

Type *b*. Solid bangles of wire with spirally twisted ends. Cf. 'Copper and Bronze', Class I, type *b*, no. 6.

Type *c*. Hollow bangles of thin metal with expanded ends. Not found in copper or bronze.

Type *d*. Solid or hollow bangles with ends terminating in lion-heads.

Type *e*. Openwork bracelets with square 'gate' clasps adorned with jewels.

Of these, types *d* and *e*, the most ornamental, are copied from Greek prototypes. At Taxila, the former dates back to the third or early second century B.C.; the latter to the first century A.D.

For a copper bracelet covered with gold-leaf (third to second century B.C.), cf. 'Copper and Bronze', Class I, no. 7.

Type *a*:

102, 103. Two solid bangles of heavy silver wire with cubical knobbed ends. Diam. 3·37 in. Cf. 'Copper and Bronze', nos. 1, 2. A similar bangle, figured at the top of the illustration, was also found in the jeweller's hoard in Block D' (p. 187, no. 33). First century A.D. Sk. '24-683/7; Block B; sq. 31·47'; stratum II. Cf. p. 147, no. 7 *supra*; *A.S.R.* (1924), p. 49, no. 7. For details of other objects from the same hoard, see nos. 13, 14 *supra*. (Pl. 195, a.)

Type *b*:

104. Solid bangle of gold wire, with ends twisted spirally round opposite sides to permit of the bangle being expanded. Diam. 2·25 in. First century A.D. Sk. '19-933/2; Block D'; sq. 59·114'; stratum II. Cf. 'Copper and Bronze', no. 6, and for Roman examples, *B.M. Cat. of Jewellery*, nos. 2803, 2809. Cf. p. 188, no. 6 *supra*, and for other objects from same hoard, see no. 84 *supra*.

105-15. Eleven gold bangles similar to preceding. Diam. 1·5-2·75 in. First century A.D. Sk. '29-1,241/13; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 15 *supra*; *A.S.R.* (1929), p. 60, no. 12, and for other objects from same hoard, see nos. 7, 8 *supra*. (Pl. 195, *b*.)

Type *c*:

116-19. Four hollow gold bangles with expanded trumpet-shaped ends. Diam. 3·12 in. They are made of thin sheet-gold on a core of lac or mastic, and the ends were closed with a separate disk of gold. The same shape occurs in Mycenaean and Archaic Greece (cf. *B.M. Cat. of Jewellery*, nos. 801, 1248) but does not appear to have survived into later times. It may have been evolved independently in India. Sk. '13-194/3, 4; Block E; sq. 77·66'; stratum II. Cf. p. 159, no. 12 *supra*; *A.S.R.* (1912), p. 26, nos. 3, 4 and Pl. xxi, 1-4. For other objects from the same hoard, see nos. 9, 10 *supra*. (Pl. 195, *c*.)

120, 121. Two gold bangles similar to preceding. Diam. 3·62 and 3·75 in. First century A.D. Sk. '29-1,241/4; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 16 *supra*; *A.S.R.* (1929), p. 59, no. 4. For other objects from the same hoard, see nos. 7, 8 *supra*. (Pl. 195, *f*.)

122-4. Three gold bangles similar to preceding, but one of them is provided with a tenon and socket-hinge in the middle of the back. Diam. 3 in. First century A.D. Sk. '24-683/4; sq. 31·47'; stratum II. Cf. p. 147, no. 4 *supra*; *A.S.R.* (1924), p. 49, no. 4. For other objects from same hoard, see nos. 13, 14 *supra*.

125-32. Eight gold bangles of similar shape to preceding. Diam. 2·75-3·12 in. The trumpet-ends were joined together, and a section cut out from the back of the bangle was provided with hinge and fastener, so as to act as a movable clasp. First century A.D. Sk. '26-4,081/11; Block D; sq. 58·47'; stratum III. Cf. p. 156, no. 11 *supra*; *A.S.R.* (1926), p. 114, no. 13. For other objects from the same hoard, see nos. 3, 4 *supra*. (Pl. 195, *d, g*.)

Type *d*:

133-6. Four gold bangles or armlets with ends terminating in lions' heads. Diam. 4·2-4·65 in. They are made of thin beaten gold on a core of shellac or mastic. The lion heads, which are made in separate pieces, are decorated with wavy lines in imitation of manes, and finished at the back with a double-plaited border. This type of bangle was familiar in Eastern Greece as far back as the archaic period and survived down to Roman times. For examples, see *B.M. Cat. of Jewellery*, nos. 1204-7, 1985, 1989, 1991, 1992, 2763. The Taxila specimens are probably of the early second century B.C. Bm. '21-858; sq. 41·138'; stratum I. Cf. p. 111 *supra*; *A.S.R.* (1920), Pl. xvii, 27 and no. 166 *infra*. (Pl. 195, *i*.)

Type *e*:

137, 138. Pair of gold bracelets with square gate clasp encrusted with gems. Diam. 2·5 in.; width 1·62 in. The hoop or body of the bracelet is of fretted sheet-gold with a running acanthus pattern relieved with comma-shaped leaves, circular box-settings and knots, the whole enclosed in plaited-chain borders. The leaves are inlaid with white orthoclase felspar with convex surface, and the circular settings with amber. The design on the gate clasps takes the form of five circular settings inlaid with amber and crescent and circle devices in the corners inlaid with white orthoclase felspar. The hinge and fastening of the clasp consist of short sections of beaded tubing held together by a pin. The clasp is strengthened by cross-strips of gold soldered to its back. First century A.D. Sk. '29-1,507; Block D'; sq. 64·92'; stratum II. Cf. p. 186, Deposit A, no. 5 *supra*; *A.S.R.* (1929), p. 64, no. 49 and Pl. xviii, 61.

This type of clasped bracelet goes back to the fourth or fifth century B.C. in the Near East, but appears to have been Scytho-Greek rather than Greek. For a fine specimen of the fourth century B.C., found in a royal tomb at Koul-Oba in the Crimea and closely resembling this bracelet from Taxila, cf. Dar. et Sag. s.v. 'Armilla', I, p. 436, fig. 529, and *Antiquités du Bosphore cimmérien* (Russian Government Publication, St Petersburg, 1854, Paris, 1892), Pl. XIV, 4. For other objects from the same hoard, see no. 2 *supra*. (Pl. 196, a.)

139. Gold bracelet similar to preceding. Diam. 2·4 in.; width 1·75 in. The hoop is decorated with leaf design, knots and oval box-settings, inlaid with carbuncles—the whole surrounded by a beaded border. There were traces of turquoise or turquoise paste in the leaf cloisons when first discovered. The design of the square gate-clasp is the same as in nos. 137 and 138, but the gems in the circular settings are different. The gems from the corner crescent and circle cloisons are missing. The hinge and fastening of the clasp are of plain instead of beaded tubing. First century A.D. Sk. '17-A 1, a. From field near Sirkap. (Pl. 196, b.)

140, 141. Pair of gold bracelets of similar type to the preceding. Diam. 2·5 in.; width 1·87 in. The decoration on the hoop consists of four rows of S-shaped figures alternately reversed so as to form an ivy-leaf pattern. Enclosing it is a plaited-chain border. The clasp is solid and enriched with leaf-shaped cloisons once filled with gems or paste and with an oval box-setting in the centre. In one setting the inlay is rock-crystal *en cabochon*. In the other it is glass paste, now much decayed. The border is the same as that round the hoop. For the S-shaped fretted pattern, cf. *B.M. Cat. of Jewellery*, no. 2735 (Pl. LIX) of the first to second century from Egypt. The ivy pattern is common at all periods in Greek and Graeco-Roman jewellery. First century A.D. Sk. '29-2, 193/1; Block G'; sq. 108·87'; stratum II. Cf. p. 180 *supra*; *A.S.R.* (1929), p. 67, no. 75 and Pl. XVIII, 5. For other objects from same hoard, see no. 25 *supra*. (Pl. 196, c, e.)

142, 143. Pair of gold bracelets of similar pattern to the preceding but narrower. Diam. 1·81 in. The design in the hoop consists of a double S repeat fretted from sheet-gold, enclosed in a beaded border. The leaf cloisons on the clasp are filled with orthoclase felspar; the gem from the central setting is missing. There is no gold backing to the clasp, as in nos. 140, 141. First century A.D. Sk. '29-1, 241/5; Block D'; sq. 62·113'; stratum III. Cf. p. 187, no. 17 *supra*; *A.S.R.* (1929), p. 60, no. 5 and Pl. XVIII, 4. For other objects from same hoard, see nos. 7, 8 above. (Pl. 196, d.)

CLASS VIII. *Torques* (nos. 144-7)

The torque, which was as foreign to India as it was to Greece and Italy, was a characteristic ornament among the Scythic and Celtic peoples, and was worn as a mark of distinction by the Medes, Persians and Parthians, all of whom were of the same Iranian stock as the Scythians. (Cf. Dar. et Sag. s.v. 'Torques'; Wroth, *Cat. of the Coins of Parthia, passim*; and for deities offering this token, see ch. 38, p. 771 and n. 2.) The specimens found at Taxila were doubtless the property of people of Saka or Parthian nationality.

144. Hollow gold torque of beaten sheet-gold on a core of lac, with trumpet-shaped ends in front. Diam. 5·75 in. It is composed of two semicircles united at the narrow ends by a tenon-and-socket hinge and provided with a push-fastener at the expanded ends, very much like the modern patent 'push' fastener. Sk. '29-1, 362/1; Block D'; sq. 62·113'; stratum IV. From same hoard as no. 46 *supra* (q.v.). Cf. p. 188, no. 1 *supra*; *A.S.R.* (1929), p. 62, no. 43. (Pl. 195, k.)

145. Gold torque of similar design and make to the preceding. Diam. 5·75 in. First century A.D. Sk. '29-2, 193/2; Block G'; sq. 108·87'; stratum II. Cf. p. 180 *supra*; *A.S.R.* (1929), p. 67, no. 76. For other objects from same hoard, see no. 25 *supra*.

146. Torque of beaten gold on core of lac(?). Diam. 5·87 in. It is made in one piece with expanded ends, the thickness of the tube increasing gradually from back to front. The ends are

closed with separate disks of beaten gold. First century A.D. Sk. '26-4,081/5; sq. 58·47'; Block D; stratum III. Cf. p. 156, no. 12 *supra*; *A.S.R.* (1926), Pl. xxvi, 6 and p. 113, no. 4. For other objects in the same hoard, see nos. 3, 4 *supra*. (Pl. 195, h.)

147. Torque of solid gold wire. Diam. 6·5 in. The ends of the wire are thinned out and coiled round the wire core covering about two-thirds of the torque. The clasp in front is decorated with a *triratna* device, which also occurs on the gold-headed hair-pin no. 101 (*q.v.*). First century A.D. Sk. '33-626; Block D'; sq. 63·85'; stratum I. Parthian or early Kushān date. See vol. I, p. 191, and for the *triratna* device, 'Beads', p. 747 and n. 8.

CLASS IX. Anklets (nos. 148-65)

Anklets, such as those described below, are a class of ornament essentially Indian, and it is noteworthy that the decoration which distinguishes these specimens from Taxila is predominantly Indian in character.

148-51. Four hollow double-ringed anklets of silver. Diam. 6·25 in. The anklets are open in front and provided with a movable socket to cover the aperture. The upper ring is fluted and further decorated on the upper surface with three lotus cones or bosses. Below each boss, connecting the two rings together, is a lotus medallion centred with a human bust in relief. The movable sockets are enriched with a variety of repoussé designs, viz. on the upper sockets, a band of full and half-lotus rosettes in diamond-shaped panels, between borders of quatrefoil flowers and cable edgings; on lower socket, band of tortoises following one another, with leaves between, and sinuous vine borders. Ornamentation of this kind, characterised by bands of lotus rosettes, sinuous vine borders, full-blown lotuses centred with human busts, etc., can readily be paralleled among the sculptures of Sāñchī and Bharhat and other reliefs of the Early Indian School. Some of the motifs (e.g. the vine), which were adopted by that School, were doubtless of Greek or Western Asiatic origin, having been introduced by the Bactrian Greeks or still earlier, under Maurya rule, but the character of the art is indisputably Indian. First century A.D. Sk. '26-4,081/27; Block D; sq. 58·47'; stratum III. Cf. p. 156, no. 13 *supra*; *A.S.R.* (1926), p. 114, no. 2. For other objects from the same hoard, see nos. 3, 4 *supra*. (Pl. 196, g.)

152-65. Fourteen single-ring anklets of silver. Diam. 4·75-5·5 in. The anklets are open in front and provided with a sliding socket to cover the aperture. The sockets are decorated with a band of overlapping lotuses between ribbed and beaded borders. Most of the anklets are fragmentary. Same age and findspot as preceding and nos. 3, 4 (*q.v.*). Cf. *A.S.R. loc. cit.* no. 1. (Pl. 196, f.)

CLASS X. Miscellaneous (nos. 166-219)

166. Lion-headed terminal of gold bracelet, similar to nos. 133-6. Length 1·62 in. Third to second century B.C. Bm. '12-20/3. For other articles from the same hoard, see no. 71 and p. 111 *supra*. Cf. *A.S.R.* (1912), p. 41, no. 3 and Pl. xxxix, d.

167, 168. Pair of hollow barrel-shaped ornaments of gold cloisonné work inset with turquoise. The pattern is made up of scales with a chevron band in the middle and another at each end. Their purpose is uncertain, but they may have been suspended from the ears. Length 1·37 in. First century A.D. Sk. '24-683/3; sq. 31·47'; stratum II. Cf. p. 147, no. 3 *supra*; *A.S.R.* (1924), p. 49, no. 3, Pl. xi, 4. For other objects from same hoard, see nos. 13, 14 *supra*. (Pl. 191, x, y.)

169. Cubical clasp of flimsy sheet-gold set with four garnets *en cabochon*, one on each of four sides. The other two sides are pierced at the centre with a round hole. It is made in two halves fastened on one side by a pair of hinges. Height 1 in. Gr. '27-170, mon. D, room 7. See vol. I, p. 347 and *A.S.R.* (1927-8), p. 59, no. 1 and Pl. xx, fig. 3.

170-2. Three rosettes of gold with beaded circlet in centre and five obcordate petals inlaid with green paste. Diam. 0·5-0·43 in. First century A.D. Sk. '29-1,241/22; Block D'; sq. 62·113';

stratum III. Cf. p. 187, no. 18 *supra*; *A.S.R.* (1929-30), p. 61, no. 21 and Pl. xix, 15. For other objects from same hoard, see nos. 7, 8 above.

173. Similar to preceding but with petals inset with orthoclase felspar. From same hoard as preceding. *Ibid.* Pl. xix, 8. (Pl. 191, aa.)

174, 175. Similar, but with six plain petals from which the paste is missing. From same hoard as preceding. Cf. p. 187, no. 19 *supra*.

176. Similar to nos. 170-2 but without circlet at centre. Inlay missing. Diam. 0·43 in. First century A.D. Sk. '22-223; Block 1'; sq. 11·93'; stratum II. See vol. I, p. 196.

177. Gold rosette of eight plain petals, one of which is missing. Diam. 1·12 in. First century A.D. Sk. '27-1,108; Block F; sq. 82·52'; stratum II. See vol. I, p. 166.

178. Similar to preceding with six petals. Diam. 0·75 in. Sk. '29-1,000; Block D'; sq. 66·113'; stratum IV. Cf. *A.S.R.* (1929), p. 65, no. 59. Although found in stratum IV, this rosette may be of Parthian date. Cf. pp. 134, 191 and no. 46 *supra*.

179-98. Twenty rosettes of gold with six petals. Diam. 0·5 in. Each rosette is provided with four small hoops at the back for attachment to a garment. First century A.D. Sk. '26-4,081/2; sq. 58·47'; Block D; stratum III. Cf. p. 156, no. 15 *supra*; *A.S.R.* (1926), p. 113, no. 3 and Pl. xxvi, 5. For other objects from the same hoard, see nos. 3, 4 *supra*. (Pl. 191, r.)

199, 200. Two bowl-shaped buttons or possibly *phulas* (head ornaments) of gold, with ring on concave side for attachment. Diam. 0·69 in. Bm. '24-556, b; sq. 32·26'; stratum III. Cf. *A.S.R.* (1924), p. 48, l. 23. For other objects from same hoard, see no. 52 *supra*.

201, 202. Two cup-shaped ornaments of gold with hoops on concave side for attachment. Crude floral design outside. Diam. 0·37 in. Fifth century A.D. Jn. '16-F58; cell 19. From same cell as no. 95, a-d (*q.v.*). Cf. *Jn. Mem.* Pl. xxix, 2, 3.

203. Hollow bead of gold, hemispherical and gadrooned. Diam. 0·69 in. Sk. '29-1,923; Block B'; sq. 36·95'; stratum IV. See vol. I, p. 134.

204-10. Seven circular disks of thin gold, with triangular piece cut in centre and turned outward. Diam. 0·73 in. Used for closing the trumpet-ends of gold bangles made of thin sheet-metal on a core of shellac. Third to second century B.C. Bm. '12-20/15; stratum I. For other articles from the same hoard, see no. 71 and p. 111 *supra*.

211. Plain oval locket(?) of gold; gem missing. Length 1 in. First century A.D. Sk. '13-194/17; Block E; sq. 77·66'; stratum II. Cf. p. 159, no. 13 *supra*; *A.S.R.* (1912), p. 27, no. 17. For other objects from same hoard, see nos. 9, 10 *supra*.

212, 213. Two box-settings of gold, one diamond-shaped, one oval; each with two ribbed hoops at back for attachment. Length 0·5 in. The gem from one is missing; the other is inlaid with a garnet *en cabochon*. First century A.D. Sk. '13-194/18; Block E; sq. 77·66'; stratum II. Cf. p. 159, no. 14 *supra*; *A.S.R.* (1912), p. 27, no. 18 and Pl. xxiii, a, 9. For other objects from same hoard, see nos. 9, 10 *supra*. (Pl. 191, bb.)

214. Sk. '17-1, a. From spoil earth. First century A.D. Rectangular gold bar, weight 6694·5 gr.; size 3 x 1 x 0·5 in.

215. Sk. '29-1; Block 2B'; sq. 32·86'; stratum II. One solid gold bar, weight 2258 gr.; size 3 x 0·5 x 0·3 in. Cf. p. 194 *supra*.

216. Sk. '28-2,679; Block K (palace); sq. 157·43'; stratum II. One hemispherical lump of pure gold cast in crucible; weight 2192 gr.; diam. 1·25 in. *A.S.R.* (1928-9), p. 60 (f) and Pl. xxi, 11. For other objects from the same hoard, see no. 29 and pp. 174-5 *supra*.

217. Sk. '28-2,679. From same hoard as preceding. Part of hemispherical lump of gold cast in crucible; weight 1110 gr.; diam. 1·12 in. *Ibid.* p. 60 (h) and Pl. xxi, 6.

218. Sk. '28-2,679. From same hoard as preceding. Oval-shaped flat piece of gold and silver alloy; weight 91 gr.; length 0·5 in. *Ibid.* p. 60 (i) and Pl. xxi, 7.

219. Sk. '28-2,679. From same hoard as preceding. Hemispherical lump of silver cast in crucible; weight 1724·5 gr.; diam. 1·5 in. *Ibid.* p. 60 (k) and Pl. xxi, 9.