

- (b) Nearly square offering-room west of north end of room (a), 2.35×2.0 m.; area, 4.7 sq. m.; entered from east from (a) by doorway in south end of east wall; with two plain compound niches in west wall.
- (c) Pillared alcove altered during excavation; apparently originally designed as N-S room separated from (a) by two pillars and two pilasters; before completion the space between the north pillar and the north end was converted into a serdab (d) and rest of the room extended a little to the south separated from (a) by one pillar and one

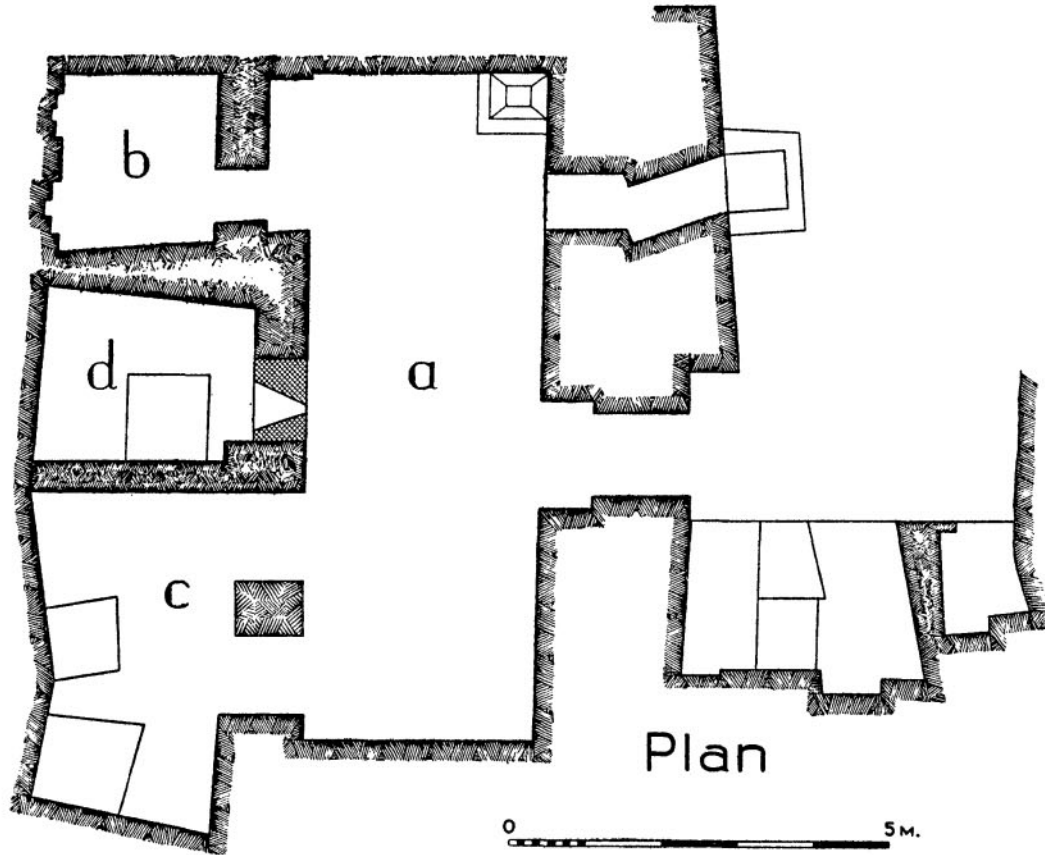


Fig. 136. Prince Ankh-ma-ra

pilaster on the south; this N-S room is now room (c); very irregular in outline; 4.4×2.5 m.; area, 11.0 sq. m.; in this room are two burial-shafts.

- (d) Serdab formed by building with masonry a wall closing the space between the north pillar and the north pilaster and leaving a rock wall between the north pillar and the west wall of c-d; the masonry wall contained a serdab slot; later, apparently, the rock wall was broken down and a shaft constructed in the floor of the old serdab; 2.2×2.85 m.; area, 6.27 sq. m.

Total area, a, b: 31.5 sq. m.

Total area, a-d: 48.67 sq. m.

Inscription on doorway.

See Fig. 136.

Type RC (i f): with the old type reduced to two parallel halls separated by pillars; with or without room opening in west wall of western hall.

Examples:

- (14) Selim Hassan: Prince Neweserra, *sr nšwt n ht-f, hry hb hry wdb n it-f smr wcty šdwti bity*.
In upper scarp north of Debehen.

Type RC (i f): two parallel N-S halls, (a) on east and (c) on west.

- (a) Eastern hall entered from east by long doorway near south end of east wall; 10.75×1.75 m.; area, 18.81 sq. m.; separated from hall (c) by two pillars and a pilaster on south (north pilaster probably removed by alterations).
- (c) Eastern hall, separated from (a) by pillars; 10.80×1.75 m.; area, 18.90 sq. m.; with shallow recess in north end of west wall (perhaps to receive monolithic stela) opening to an unfinished cutting north of middle of west wall; large shaft in NW corner.

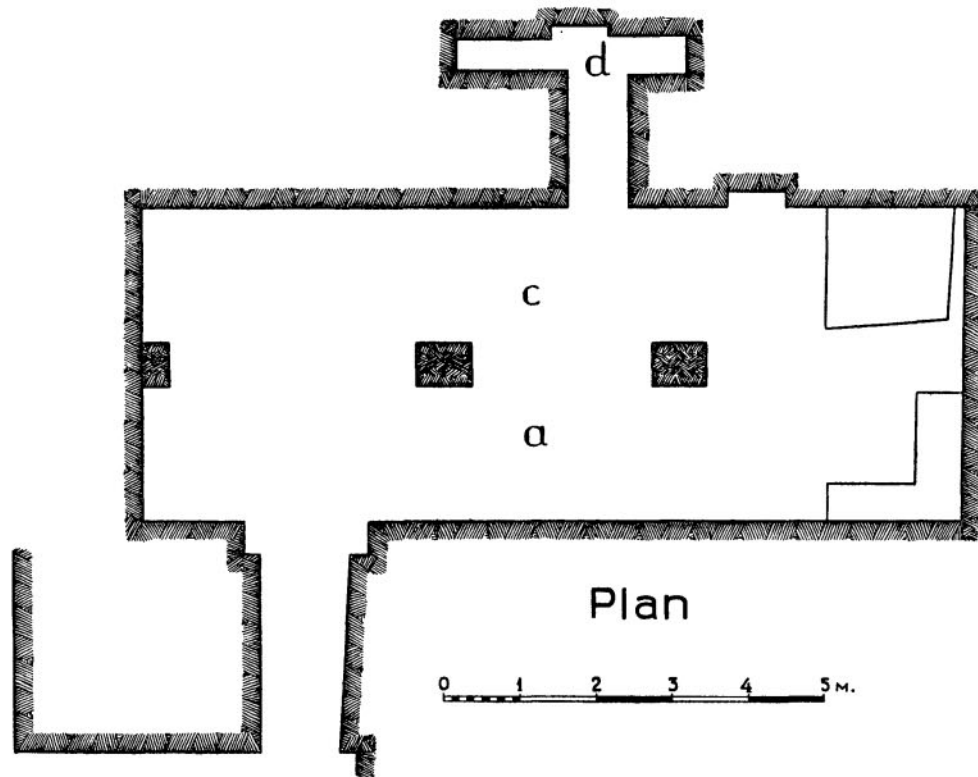


Fig. 137. Prince Neweserra

- (d) Unfinished room opening by passage in west wall of (c); perhaps intended as lateral burial-chamber.

Total area, a-c: 37.71 sq. m.

Figure on south door-jamb and inscription on drum of outer door.

See Fig. 137.

- (15) Selim Hassan: *Zefa-Nesuwt, Excavations at Giza, I, Fig. 115*; in Rawer complex; partly built and partly rock-cut, two large N-S halls separated by two pillars and two pilasters.

(a) Small E-W room, perhaps offering-room, opening in middle of west wall of hall (b); 1.05×1.7 m.; area, 1.79 sq. m.; entered by doorway in east wall.

(b) Western N-S hall with (a) in middle of west wall; no niches; 5.2×2.1 m.; area, 10.92 sq. m.

(c) Eastern N-S hall; 5.6×2.1 m.; area, 11.76 sq. m.; entered from east by doorway in middle of east wall.

(d) Exterior N-S corridor roofed in middle; 21.3×1.1 m.; area, 23.43 sq. m.; entered from the ends; with two compound niches in west wall of which the south niche is the larger.

Total area, a, b, c: 24.47 sq. m.

Total area, a-d: 47.9 sq. m.

Two shafts in room (b) and four in mastaba.

Not decorated, but inscriptions.

(16) G 7818: upper scarp in Eastern Cliff: no name.

Type RC (i f): two N-S rooms separated by two pillars and two pilasters.

(a) Western room, offering-room: 4.4×1.55 m.; area, 6.82 sq. m.; entered from (b) by three openings; compound niche in middle of west wall; in north end of west wall opening of passage to lateral burial-chambers.

(b) Eastern room: 4.4×1.7 m.; area, 7.48 sq. m.; entered from east by doorway in middle of east wall; opening into (a) by three openings; unfinished cuttings in north and south walls.

Total area, a-b: 14.3 sq. m.

No decorations or inscriptions.

Type RC (ii): the rock-cut cruciform chapel, sometimes partly in rock and partly built of masonry; the characteristic feature is that the doorways and passages connecting the several apartments lie in the E-W medial axis of the tomb.

Type RC (ii a): with N-S offering-room and N-S outer rooms.

Examples:

(1) Selim Hassan: *Excavations at Giza*, I, Fig. 22; Rawer (?); N-S offering-room (r.c.) with niche in middle of west wall; E-W passage opening in embrasure cut in rock; white casing and masonry continue chapel eastwards; elaborate great door embrasure (with serdabs on each side); E-W passage; roofed pillared portico on façade; serdabs enclosed in the masonry; burial-shaft in rock NW of offering-room.

Measurements and areas:

(a) offering-room: 5.35×2.75 m.; area, 14.71 sq. m.; prop. 1/1.95.

(b) embrasure portico: area, 6.68 sq. m.

(c) E-W corridor: 1.0×2.4 m.; area, 2.4 sq. m.

(d) façade portico: 5.4×1.65 m.; area, 8.91 sq. m.

Total area: 32.70 sq. m.

See Fig. 138.

(2) Selim Hassan: *Excavations at Giza*, I, Fig. 152; uninscribed; N-S offering-room with niche in west wall on south and opening of sloping-passage burial-place (type 9) on north; long E-W passage opening in embrasure; façade cased with x-masonry; outside, great open N-S court of c.b. panelled on east and south sides of court; in middle of east wall of court a bent passage leads to the east; in SE corner of court, passage leads east to N-S room leading south to another small chamber.

Measurements and areas:

(a) offering-room: 8.38×3.45 m.; area, 28.91 sq. m.; prop. 1/2.43.

(b) court: 39.6×6.7 m.; area, 265.32 sq. m.

Total area, a and b: 294.23 sq. m.

Type RC (ii b): with N-S offering-room and E-W hall.

(1) LG 71: N-S offering-room with two niches; doorway middle of east wall; E-W hall with entrance in middle in east end; in south wall of hall, pillared alcove with second offering-room opening in middle of south wall of alcove; shaft in second offering-room.

Measurements and areas:

- (a) offering-room: 7.82×2.85 m.; area, 22.29 sq. m.; prop. 1/2.74.
 (b) E-W hall: 3.65×5.8 m.; area, 21.17 sq. m.
 (c) pillared alcove: 3.18×4.5 m.; area, 14.31 sq. m.

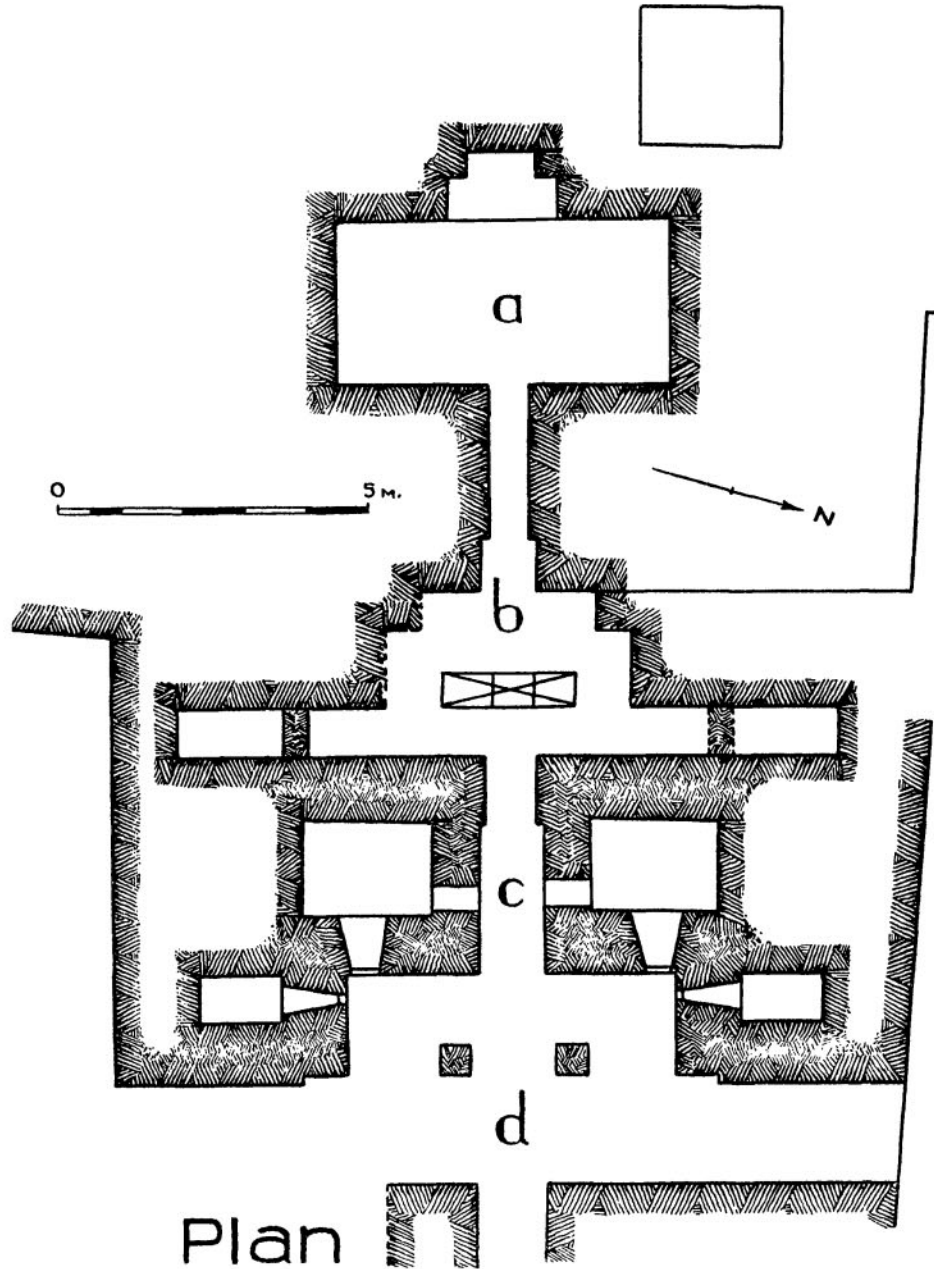


Fig. 138. Rower

(d) southern shaft-room: 5.31×3.1 m.; area, 16.46 sq. m.

Total area, a, b: 43.46 sq. m.

Area, sum total, a-d: 74.23 sq. m.

See Fig. 139.

- (2) LG 76: Khufuw-hetep; N-S offering-room with one niche near north end of west wall and entrance to small N-S room (burial-chamber?) south of niche; long E-W hall with entrance in east end.

Measurements and areas:

- (a) N-S offering-room: 2.25×1.25 m.; area, 2.81 sq. m.
 (b) E-W hall: 2.9×1.65 m.; area, 4.79 sq. m.
 (c) burial (?) chamber west of (a): 1.8×4.8 m.; area, 8.64 sq. m.
 Total area, a, b: 7.6 sq. m.

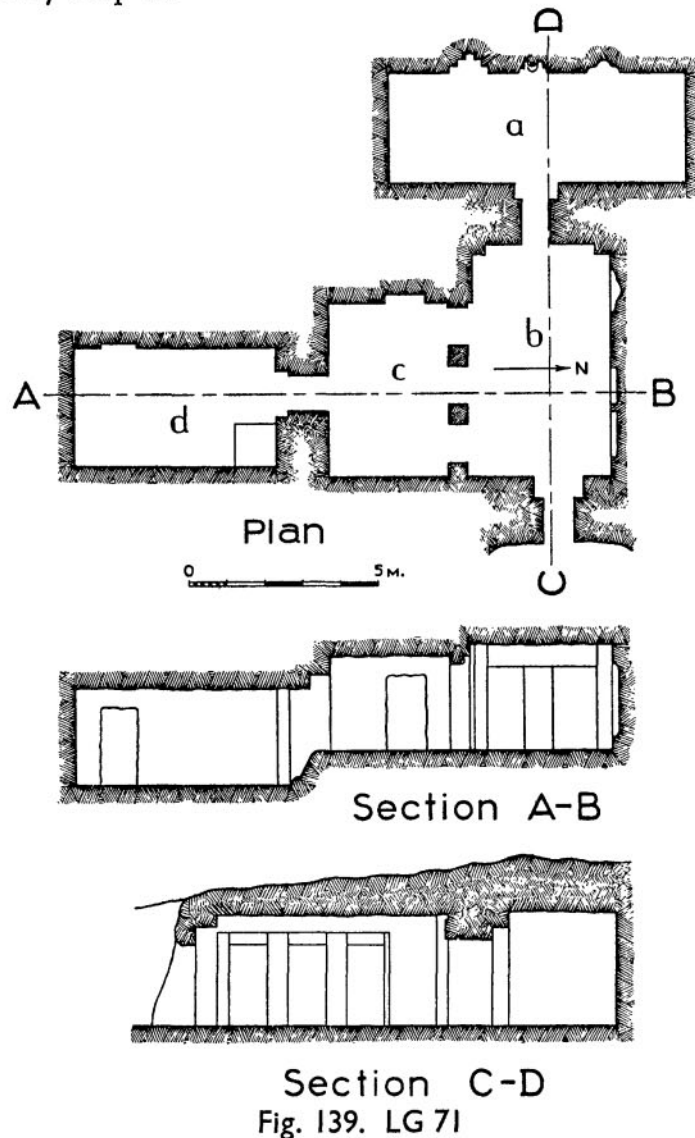


Fig. 139. LG 71

- (3) LG 80: Ipy; E-W hall with entrance from east, in east end; in middle of west end, a small N-S chamber (offering-room or burial-chamber?); in north wall, a doorway leading to another room or to another tomb.

Measurements and areas:

- (a) small N-S room: 1.4×0.85 m.; area, 1.19 sq. m.
 (b) E-W hall: 2.15×3.15 m.; area, 6.77 sq. m.
 Total area, a, b: 7.96 sq. m.

- (4) Selim Hassan: *Excavations at Giza*, I, Fig. 130; Akhet-hetep. Original form, long N-S offering-room with three niches and palace-façade panelling on west wall and rock-cut burial-places opening in walls; long E-W passage with doorway at each end; exterior corridor with doorway to passage in middle of its west wall and with two niches in the west wall, one on each side of

doorway (large south niche); altered later by widening north end of offering-room and cutting small room in north side of passage.

Measurements and areas:

(a) N-S offering-room, originally 7.13×1.18 m.; area, 8.41 sq. m.; prop. $1/6.04$.

(b) E-W hall: 1.3×1.7 m.; area, 2.21 sq. m.

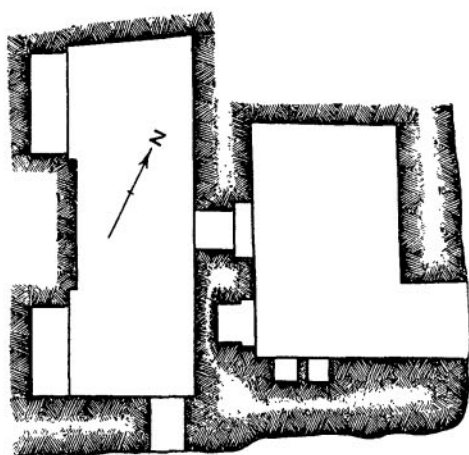
(c) N-S corridor: 8.25×1.4 m.; area, 11.55 sq. m.

Total original area, a, b: 10.62 sq. m.

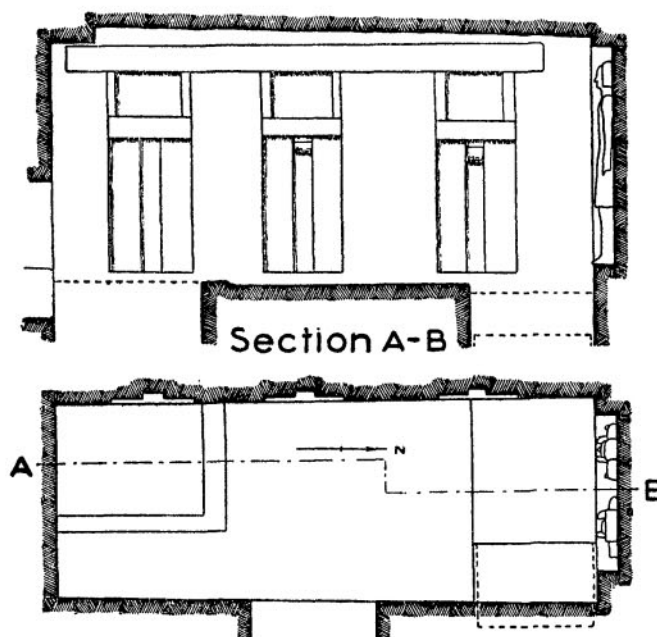
Total original area, a, b, c: 22.17 sq. m.

Area of later enlargement, not reckoned.

Type RC (ii c): with N-S offering-room with entrance in middle of east wall; with or without vestibule or other exterior rooms.



Plan 0 5m
Fig. 140. LG 86



Plan 0 1 2m
Fig. 141. G 7759 a

Examples:

(1) LG 86: Prince Nebemakhet, son of Chephren and Meresankh III. N-S offering-room with two niches in west wall; 9.5×3.3 m.; area, 31.35 sq. m.; prop. $1/2.88$; vestibule room, 6.17×3.85 m.; area, 23.75 sq. m.; outer entrance in south end of east wall of vestibule.

See Fig. 140.

(2) G 7759 a: long N-S room, with entrance in middle of east wall; 3.52×1.32 m.; area, 4.65 sq. m.; prop. $1/2.66$; in west wall, three false doors of which the middle niche is opposite entrance; in north wall, male and female statuette in r.c. recess; two shafts in floor, in NW and SW corners.

See Fig. 141.

Type RC (iii): N-S offering-room with entrance at one end of east wall.

Type RC (iii a): large tomb with asymmetrical outer rooms.

Example:

(1) Galarza Tomb (in Chephren Quarry Cem.): Queen Kha-merer-nebty I, wife of Chephren, mother of Mycerinus (see Daressy, *Annales*, X, pp. 41-49). N-S offering-room, 11.0×3.7 m.; area, 40.7 sq. m.; with deep recess in south end of west wall and entrance to chief burial-place

in north end; outer N-S corridor (altered at north end), with two niches in r.c. face north of doorway to offering-room; pillared hall, asymmetrical, with open aisle in middle leading to outer entrance; four burial-chambers and seven statues; only decorations on doorway to offering-room.

See Fig. 142.

Type RC (iii b): N-S offering-room (imitating form of L-shaped room) with entrance from east and multiple-niched or two-niched west wall; with or without additional rooms; burials in lateral chambers or in shafts in floor.

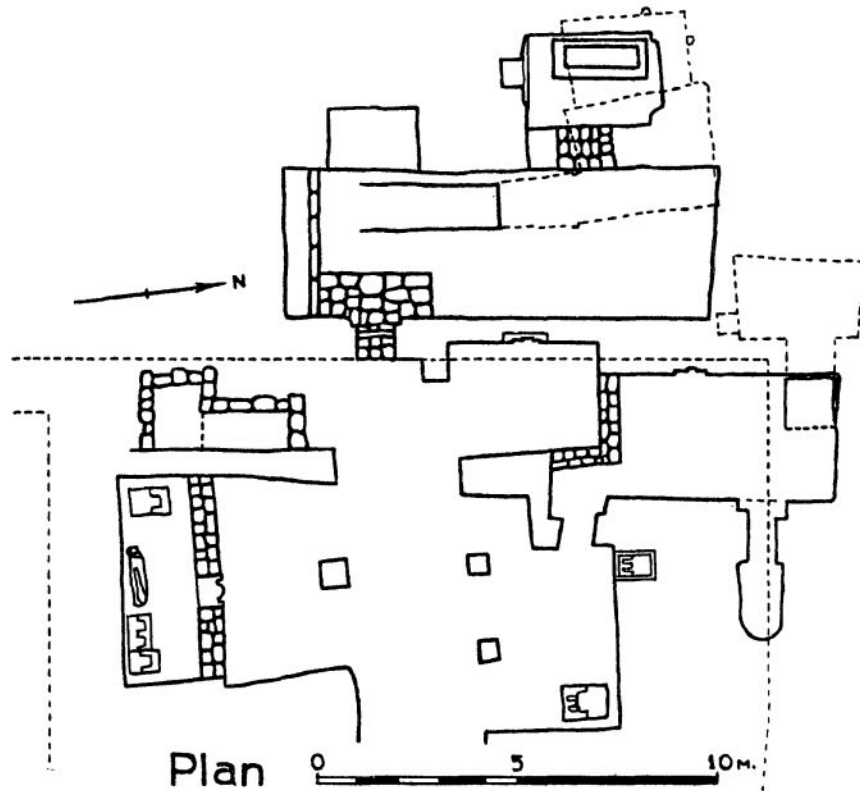


Fig. 142. Queen Kha-merer-nebty I

Examples:

- (1) LG 77: Thenty. Two similar rooms, (a) on east and (b) on west; room (a), 4.56×1.45 m.; area, 5.61 sq. m.; prop. $1/3.15$; entrance from east at north end of east wall; in west wall, four pairs of niches; between the third and fourth pairs of niches opens the doorway to (b); room (b), like (a) in form, 1.8×0.8 m.; area, 1.44 sq. m.; prop. $1/2.25$; in west wall two pairs of niches, and a fifth on the south. No shafts reported.

Total area, a, b: 8.05 sq. m.

See Fig. 143.

- (2) G 7814: upper rock-scarp middle of Eastern Cliff; Ka-aper, *rh nswt imy-r kst*; wife also *rht nswt* but no name preserved. Two N-S rooms, large hall (a) on east and offering-room (b) on west, shifted southwards.
- (a) N-S hall: 5.6×2.5 m.; area, 14.0 sq. m.; entered from platform by doorway in east wall south of middle; doorway to (b) in west wall opposite entrance; two shafts in floor.
- (b) N-S offering-room: west of south end of (a); 3.65×1.3 m.; area, 4.74 sq. m.; with two niches in west wall (south niche compound, north niche simple); uninscribed; entered by doorway from (a) in north end of east wall; 18.74 sq. m.

Decorated entrance doorway.

See Fig. 144.

- (3) Selim Hassan: Prince Yuwen-ra, *nswt-bit Hcf-rc, s3-f smsw, rpt hsty-c, hry-hb hry tp n it-f, smr wcty n it-f, hrp ch, hry sst3 n pr dwst, imy-r3 kst nbt nt nswt, imshw hr it-f.*

(a) N-S offering-room with two compound niches in west wall: originally, 5.7×3.55 m.; area, 20.23 sq. m.; prop. $1/1.6$; entered from east by doorway north end of east wall; afterwards enlarged northwards by a cutting contained in the NW corner partly in the rock wall, a square shaft.

(b) Shaft-room cut later in north wall of (a); 2.45×3.1 m.; area, 7.59 sq. m.

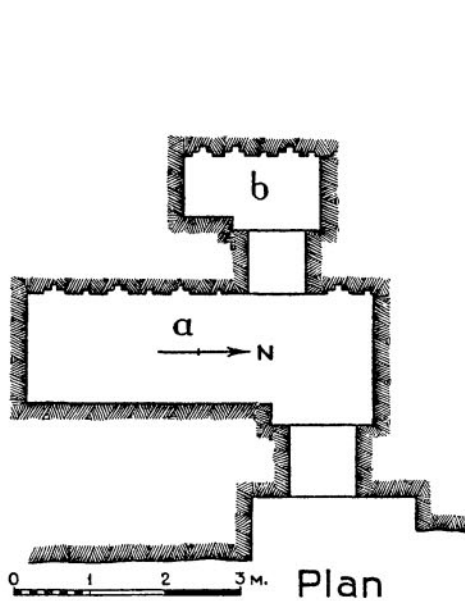


Fig. 143. LG 77

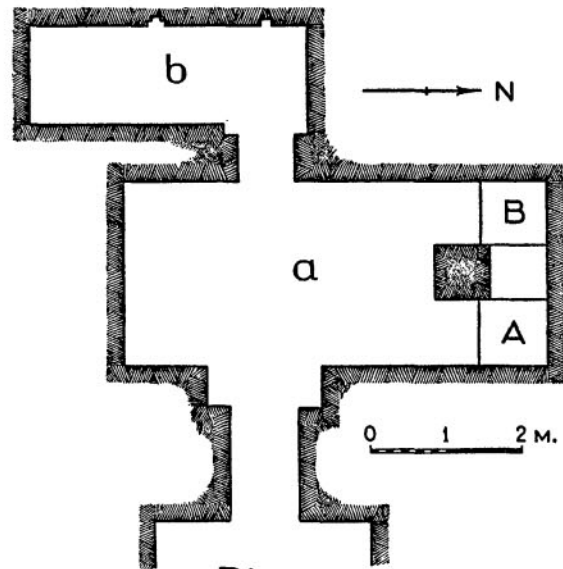


Fig. 144. G 7814

Total area, a, b: 27.82 sq. m.

The cutting of the façade was not finished and in the irregular N-S cutting is another shaft; from the unfinished cutting an open passage runs eastwards, 1.7 m. wide.

Walls not decorated; inscription on entrance door (drum architrave).

In the north wall of the E-W passage is cut the tomb of Sewaz-r-ka.

See Fig. 145.

- (4) LG 75: Khafra-ankh; N-S hall with entrance from east in north end of east wall; 7.3×3.3 m.; area, 23.76 sq. m.; prop. $1/2.18$; in west wall three pairs of niches and statue recess on south; small subsidiary room excavated later through north wall of hall; shaft in floor of hall; decorated with reliefs.
- (5) LG 73: Dendenuw; N-S hall with entrance from east in south end of east wall; 3.1×2.4 m.; area, 7.44 sq. m.; prop. $1/1.28$; five compound niches in west wall; other rooms are unreported.
- (6) LG 78-x (north of 78): N-S hall, with entrance from east at south end of east wall; in west wall, two compound niches and at north a r.c. statue in a recess; 6.5×2.2 m.; area, 14.3 sq. m.; prop. $1/2.9$; no shafts recorded.
- (7) G 7837: Ankh-ma-ra; a second similar chamber had been made south of G 7837 (G 7843), and when G 7837 was made its south end was broken through into the north end of G 7843 and the walls used in part at least for the decorations of Ankh-ma-ra. The two parts of Ankh-ma-ra's chamber have a slightly different orientation and a different floor-level, and the north part is

called (a) and the south part (b); each is entered from the east by a doorway at north end of east wall.

- (a) G 7837: 6.3×2.6 m.; area, 16.38 sq. m.; prop. 1/2.42; with two niches in west wall and three statues between the niches; numerous statues in walls under reliefs.
- (b) G 7843: 4.65×2.65 m.; area, 12.69; prop. 1/1.79; with one rough niche at south end of west wall; not finished at south end; walls partly decorated (east wall north of doorway) with reliefs of Ankh-ma-ra; east wall, south of doorway, and west wall had traces of decoration.

Total area: 29.07 sq. m.

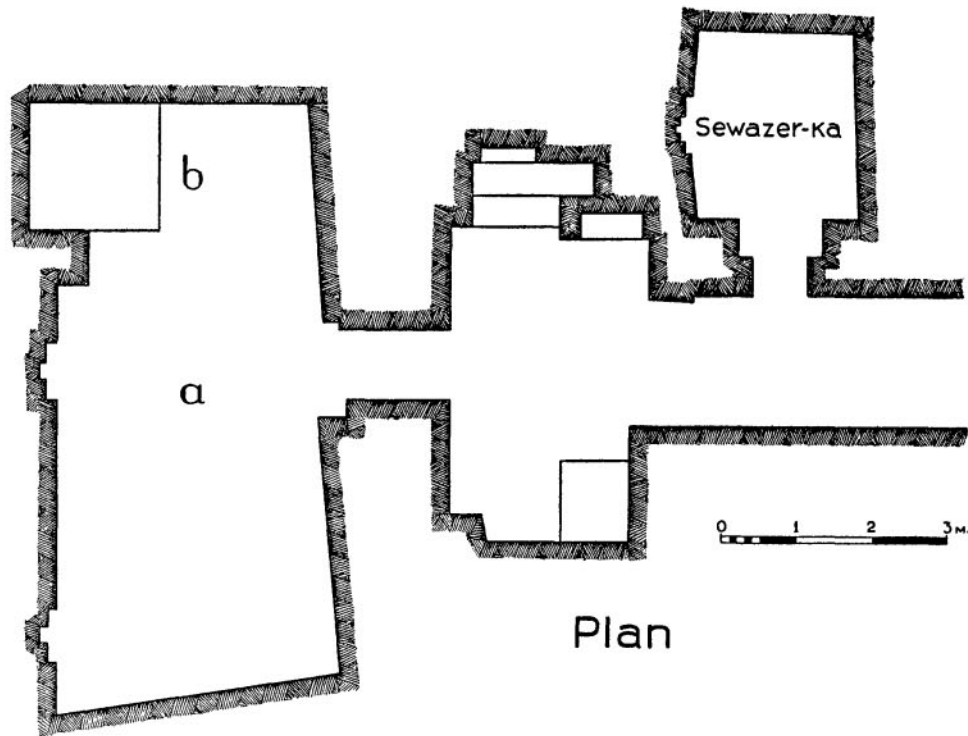


Fig. 145. Prince Yuwen-ra

- (8) G 7851: with entrance from east; in west wall, on south, opening of burial-chamber, statuette in recess, and niche at north; 4.75×2.4 m.; area, 11.4 sq. m.; prop. 1/1.97; three other lateral burial-chambers and two shafts.
- (9) G 7845: with entrance from east; large niche at north end of west wall; 5.55×2.5 m.; area, 13.87 sq. m.; prop. 1/2.22; shaft in floor near middle of west wall.
- (10) G 7846: with entrance from east; in west wall, niche (?) at south; 3.7×2.1 m.; area, 7.77 sq. m.; prop. 1/1.76; shaft in NW corner.
- (11) G 7761 a: with entrance from east; two compound niches in west wall; 3.5×2.15 m.; area, 7.52 sq. m.; prop. 1/1.63; two shafts in south end in floor; altered by Ptolemaic cuttings.
- (12) G 7847: entrance from east; rough niche at north end of west wall; 3.2×1.75 m.; area, 5.6 sq. m.; prop. 1/1.83; shaft in SW corner of floor.
- (13) LG 79: Ptah-nefer-sefekh; with entrance from east in south end of east wall; in west wall, at south, opening of lateral burial-chamber, and at north, small r.c. statuette in recess; 2.25×1.1 m.; area, 2.48 sq. m.; prop. 1/2.5.
- (14) G 7766 Y: with entrance from east at south end of east wall; niches in west wall probably

removed by Ptolemaic alterations; 5.25×2.3 m.; area, 12.08 sq. m.; prop. 1/2.28; sloping passage of type 9 opening in south wall; remains of mastaba on rock above.

- (15) G 7762 a: unfinished N-S chamber with entrance near south end of east wall; 4.1×2.1 m.; area, 8.61 sq. m.; prop. 1/1.95; southern end from north side of door to south finished with shallow false door and statue in recess in west wall with compartment list above them; shaft in floor in front of statue; unfinished part altered in Ptolemaic times.

Type RC (iii c): small N-S chambers with shaft or shafts in floor ('shaft-chamber'); entered from east. Usually attached to large chambers of type RC (i); with a few examples cut independently for very poor tombs.

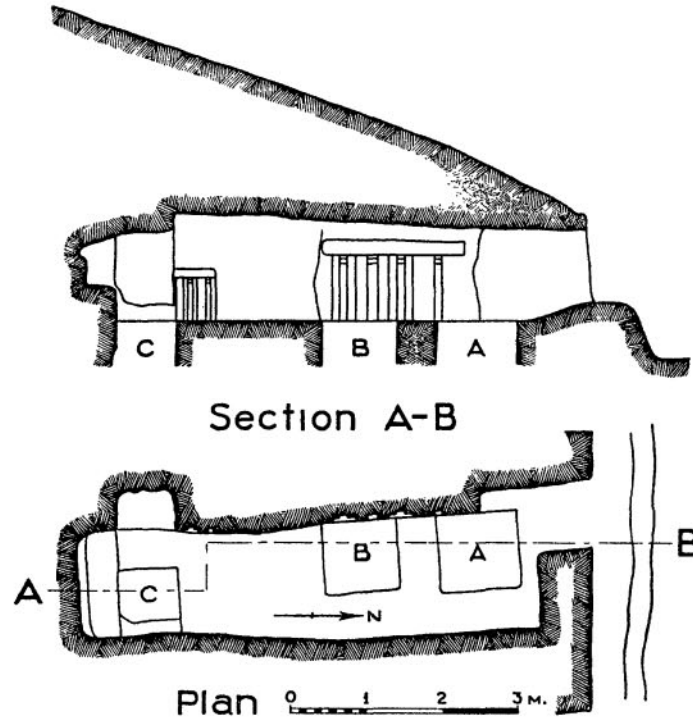


Fig. 146. G 1607

Example:

- (1) G 7853: entrance from north, 0.74×0.65 m.; area, 0.41 sq. m.; prop. 1/1.32; shaft in NE corner.

Type RC (iii d): N-S offering-room opening in west end of E-W hall.

Examples:

- (1) G 7821: in eastern cliff; Ptah-nefer-seshem, *rḥ nswt, imy-rj pr ḥt-cst*.

(a) N-S offering-room, 3.15×1.45 m.; area, 4.56 sq. m.; prop. 1/2.16; no niche in west wall, but at north end of that wall an offering-recess with an offering-stone cut in rock in recess; shaft C in SW corner.

(b) E-W hall connecting (a) with entrance; 1.78×3.7 m.; area, 6.58 sq. m.; west end opens directly into room (a) through north half of its east wall; entered by doorway from east in south end of east wall; in floor, two shafts, A and B.

Total area, a, b, and recess: 12.09 sq. m.

- (2) G Service No. 2: lower scarp north end of Eastern Cliff; Ka-n-neb, *šmsw ḥsyw, šḥd n nfrw*.

(a) Unfinished N-S offering-room broken into chamber (c) of Service No. 1; 4.4×2.75 m.; area, 12.1 sq. m.; without niche in west wall but large lateral burial-chamber in south end of that wall; shaft in floor in NW corner.

- (b) E-W wall: $2.75 \times 3.0 \times 3.45$ m.; area, 9.91 sq. m.; two lateral chambers and one shaft in floor; entered from east by doorway in middle of east wall.

Total area: 22.01 sq. m.

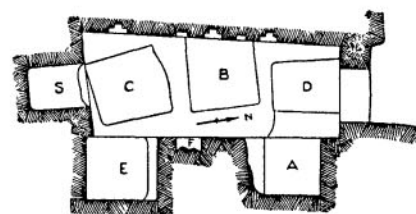
The examples of type RC (iii) bear a general relation to the L-shaped chapels of types (3) and (4). Many of the chapels of type RC (i) present degenerate forms resembling the corridor chapel of type (5). The type of chapel which I now list, type RC (iv), is a true corridor chapel in the sense of the mastaba chapel of type (5).

Type RC (iv): N-S hall or corridor with entrance from the north or south.

Type RC (iv a): N-S hall or corridor with entrance from the north or south.

Examples:

- (1) G 1607: Ian and Neferi. Exterior r.c. platform; corridor entered from north; 5.5×1.5 m.; area, 8.25 sq. m.; prop. $1/3.66$; in west wall three pairs of niches and wide shallow recess on south; three shafts in floor; unfinished decoration. See Fig. 146.
- (2) G 1609: unfinished. Exterior c.b. platform; N-S corridor with entrance from north; 2.8×1.0 m.; area, 2.8 sq. m.; prop. $1/2.8$; no niche preserved (perhaps painted); two shafts in floor.
- (3) G 1608: Sennuw. Exterior c.b. platform; N-S corridor with doorway on north; 3.3×1.3 m.; area, 4.29 sq. m.; prop. $1/2.53$; two pairs of niches in west wall and extra compound niche on north; six shafts, three in floor and three in recess in east wall; partly decorated; intact serdab in south wall. See Fig. 147.
- (4) G 7822: in upper scarp in middle of Eastern Cliff; Mesuw, *rh nswt hrp kmnyw*. N-S offering-room, $3.4 \times 1.4-1.8$ m.; area, 5.44 sq. m.; prop. $1/2.12$; entered by doorway from south in east end of south wall; destroyed niche in middle of west wall; three shafts in floor.
- (5) LG 65: N-S corridor; doorway on north; 2.8×1.55 m.; area, 4.34 sq. m.; prop. $1/1.74$; in west wall, deep niche on south and two compound niches together on north; three statues in recess in south wall; shafts unreported.
- (6) LG 66: N-S corridor with doorway on north; 3.85×2.0 m.; area, 7.7 sq. m.; prop. $1/1.93$; in west wall, compound niche at south and rest unrecorded; shafts unrecorded.
- (7) G 7838: N-S room with entrance from north; 4.1×2.8 m.; area, 11.48 sq. m.; prop. $1/1.46$; compound niche at south end of west wall; shaft in NW corner of floor.
- (8) G 1643: rectangular room entered from north; exterior open corridor; 2.4×1.7 m.; area, 4.08 sq. m.; prop. $1/1.41$; two pairs of niches in west wall; two shafts in floor along west wall.
- (9) G 1646: exterior open corridor; room entered from north; 2.2×1.6 m.; area, 3.62 sq. m.; prop. $1/1.37$; two pairs of niches in west wall; two shafts in floor.
- (10) G 1647: exterior open corridor; N-S room with doorway on north; 2.1×1.52 m.; area, 3.19 sq. m.; prop. $1/1.35$; one niche in west wall; two shafts in floor in SW and NW corners and unfinished shaft-chamber south of SE corner.
- (11) G 7853: entrance from north; 1.75×1.4 m.; area, 2.45 sq. m.; prop. $1/1.25$; no niches preserved; shaft in NE corner of floor.
- (12) G 1612: exterior N-S corridor entered from west; N-S room with entrance from north; 1.36×0.86 m.; area, 1.16 sq. m.; prop. $1/1.28$; roofed with slabs; in west wall two niches; one shaft in floor.



Plan 0 1 3m
Fig. 147. G 1608

Type RC (iv b): N-S room with alcove corridor opening in south end of west wall.

Example:

(1) G 1611: exterior r.c. platform; N-S corridor with entrance from north.

(a) 3.0×1.1 m.; area, 3.3 sq. m.; prop. $1/2.73$; with parallel alcove opening in south end of west wall.

(b) 2.3×1.1 m.; area, 2.53 sq. m.; prop. $1/2.09$; one niche in west wall of (a) and large recess in west wall of (b); two shafts in (a) and two in (b).

See Fig. 148.

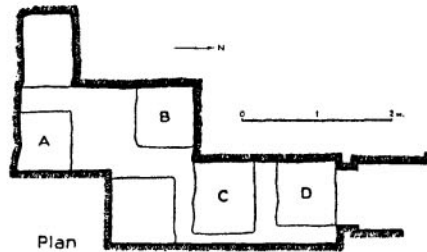
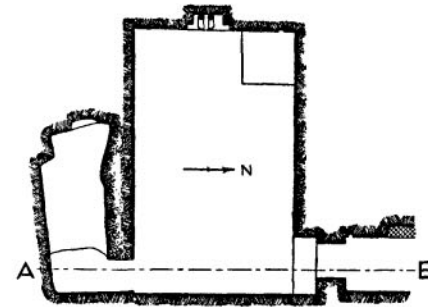
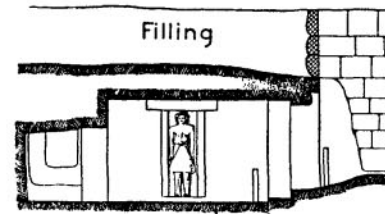


Fig. 148. G 1611



Plan



Section A-B 0 1 2 3m

Fig. 149. G 2196

Type RC (iv c): corridor with entrance vestibule on south; entered from south.

Example:

(1) G 7815: in Eastern Cliff; Hap-n-nebty, *rht nswt hm ntr Nt, hm ntr Ht-Hr*.

(a) N-S offering-corridor; 4.4×1.55 m.; area, 6.82 sq. m.; prop. $1/2.83$; near south end of west wall a decorated rock-cut stela; entered from vestibule alcove; two shafts in floor.

(b) Vestibule alcove, east of south end of (a); 1.65×0.9 m.; area, 1.48 sq. m.; entered from south by doorway in south wall.

Total area: 8.3 sq. m.

Type RC (v): E-W hall or offering-room, entered by doorway or by long passage in east end of north or south wall.

Type RC (v a): E-W offering-room, entered from north or south; with burial-shafts in floor or lateral burial-chamber in walls.

Examples:

(1) G 2196: Yaseu; large hall fully decorated entered at east end of north wall by doorway approached by long built corridor (N-S) with outer doorway from east at north end of corridor; 3.17×5.23 m. and 2.06 m. high; area, 16.52 sq. m.; capacity, 34.17 cu. m.; prop. $1/0.61$; statue in recess in west wall; small shallow niche north of statue; small rock-cut serdab in east end of south wall; shaft in floor in NW corner. See Fig. 149.

(2) G 7823: E-W offering-room, entered by doorway in east end of north wall; 1.9×2.9 m.; area, 5.51 sq. m.; prop. $1/0.65$; in floor two shafts, A and B.

- (3) G 7836: Eastern Cliff; Nebty-her-kauw-s, *rht nšwt hm ntr Ht-Hr nbt nht*, husband, Khnum-hesuw-f, *sš šnwt ht-ct*. E-W offering-room, 1.6–2.0 × 3.2 m.; area, 5.76 sq. m.; prop. 1/0.56; with framed stela cut in rock in middle of west wall; entered from south by doorway in east end of south wall; one shaft in floor and four lateral burial-chambers in walls.
- (4) G 7839: in Eastern Cliff; E-W offering-room, 1.3 × 2.6 m.; area, 3.38 sq. m.; prop. 1/0.5; no niche in west wall; one shaft in NW corner.

Type RC (v b): E-W offering-room entered from north by long rock-cut passage opening in east end of north wall.

Example:

- (1) LG 68: Iteti; entered from north by long rock-cut passage; 3.2 × 4.2 m.; area, 13.44 sq. m.; prop. 1/0.76; no niches preserved in west wall; several lateral burial-chambers in south and west walls.

Type RC (v c): E-W hall entered from east by doorway in middle of east wall.

Example:

- (1) Service No. 1: lower scarp north of Eastern Cliff; Ka-zeded, *sš nšwt n ht-f*.

(a) Great E-W hall, 5.87 × 10.5 m.; area, 61.63 sq. m.; prop. 1/0.55; in west wall two large compound niches with statue recess between them (contained a life-size pair statue of red granite); entered by doorway in middle of east wall; doorway to room (b) opening in north wall east of middle; doorway to (c) in south wall west of middle; in north wall west of doorway to (b), a palace-façade panelling; in each part of north wall, in each half of east wall, and in each part of south wall, two compound niches.

(b) Lateral burial-chamber of type 4 a (2); 4.15 × 4.7 m.; area, 19.5 sq. m.; on each of four walls a 'great door'.

(c) Lateral burial-chamber, type 4 a (2); 3.5 × 4.55 m.; area, 15.92 sq. m.

Total area, a, b, c: 97.05 sq. m.

Type RC (vi): square or nearly square offering-room (prop. 1/1.2 to 1/0.6); entered from north, south, or east.

Type RC (vi a): nearly square offering-room; entered from north or south.

Examples:

- (1) Selim Hassan: 'Prince' Ni-ankh-ra, *sš nšwt, šmr wcty, hry ššt: n pr dwst, hry ššt: nšwt m šwt-f nbt, imy-ib n nb-f, mrr nb-f, hry hb, imy-r: kst nbt nt nšwt, tpy hr nšwt*.

Situated in higher rock-scarp between Debehen and Sekhemkara.

See Fig. 150.

- (2) Selim Hassan: Sewaz-r-ka; situated in north wall of passage leading to tomb of Chephren's son Yuwen-ra; entered from south by doorway in middle of south wall of (a).

(a) Offering-room, 2.5 × 2.0 m.; area, 5.0 sq. m.; with shallow compound niche in middle of west wall.

Inscribed doorway.

- (3) LG 64: Nes-m-nehuw; large room with entrance from north; enlarged by excavations at south end of chamber; 2.8 × 2.4 m.; area, 6.72 sq. m.; prop. 1/1.17; with two niches in west wall (compound on south and simple on north); addition on south added another compound niche on south; add., 0.6 × 2.25 m.; area, 1.35 sq. m.

Total final area, 8.07 sq. m.; shafts not reported.

See Fig. 151.

- (4) G 1642: square room entered from north at east end of north wall with an exterior open N-S corridor; 2.24×2.2 m.; area, 4.4 sq. m.; prop. 1/1.02; one niche in west wall of exterior corridor; no niches preserved in west wall of chamber (perhaps painted); one shaft in floor and one in recess in north wall at west end.
- (5) LG 67: small room with entrance from north; 1.7×1.4 m.; area, 2.38 sq. m.; prop. 1/1.21 m.; two shafts; no niches visible.
- (6) G 1618: square room with entrance from north; no niches; 2.1×2.0 m.; area, 4.2 sq. m.; height, 1.02 m.; prop. 1/1.05; four shafts, one in each corner.

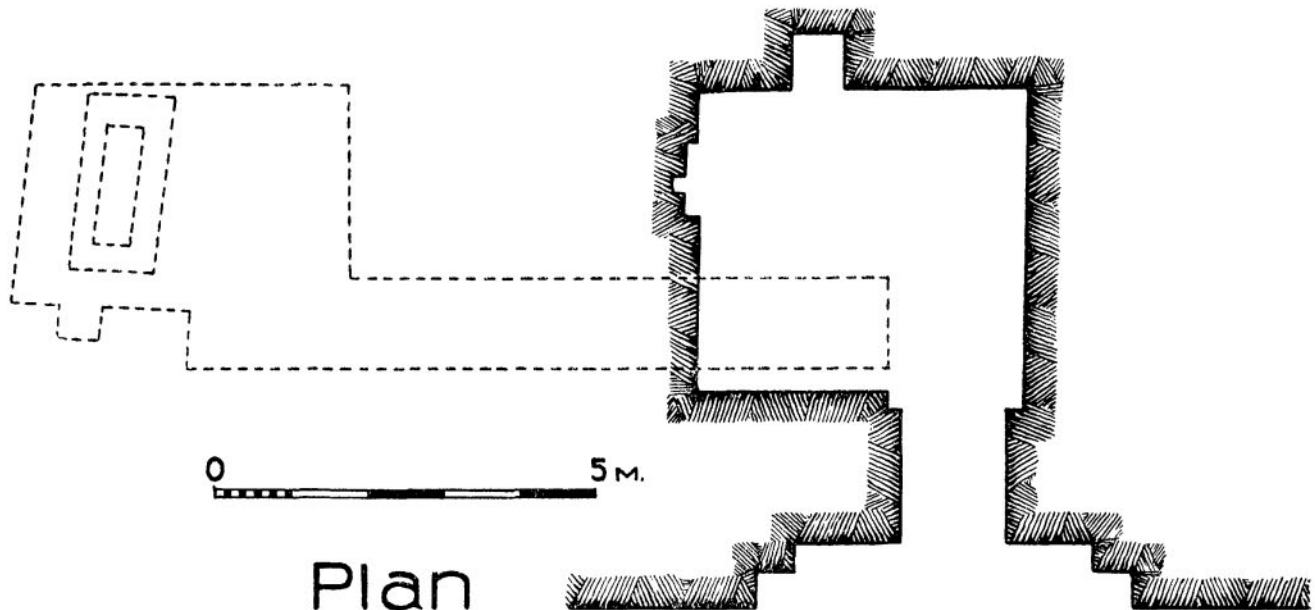


Fig. 150. Ni-ankh-ra

- (7) G 7832: in upper scarp of Eastern Cliff; no decoration.
- (a) square offering-room, 2.75×2.55 m.; area, 7.01 sq. m.; prop. 1/1.07; compound niche in middle of west wall; entered from north by doorway in west end of north wall; shaft in floor of chamber.

Type RC (vi b): nearly square room entered from east.

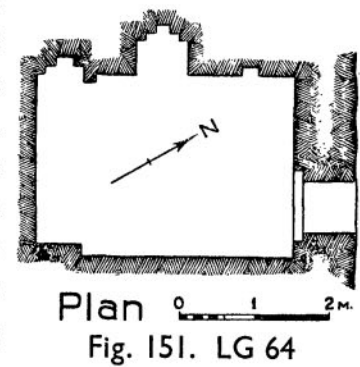
- (1) G 7826: upper scarp in Eastern Cliff; no decoration. Irregular E-W offering-room; $c. 2.0 \times 2.35$ m.; area, 4.7 sq. m.; prop. 1/0.85; without niche in west wall; entered by doorway in north end of east wall; three shafts in floor.

The rock-cut chapels of type RC (i) are clearly the earliest of the rock-cut chapels at Giza and, as far as we know, in Egypt. The largest of the mastaba chapels with L-shaped offering-room are those of Ka-wab, Meresankh II, and Khufuw-khaf, which have exterior stone rooms. These three have different plans, but the chief exterior room is a N-S room placed directly east of the interior L-shaped chapel, and the approach was from the north, the south, or the east. In the chapels of type RC (i) the approach was limited by the direction of the rock-scarp and was functionally from the east. The first room (a) corresponds, therefore, to the exterior chapel of the mastabas and like them was decorated. This room leads northwards to the offering-room with its offering-niches (one or two) in its west wall. This by its position deep in the rock was an E-W room replacing the L-shaped chapel and, like it, decorated with painted reliefs (when finished). The pillared alcove does not appear in the mastaba chapels of earlier date, for it is not to be identified with the pillared portico which occurs in

front of the north entrance of the exterior chapel of Ka-wab. The alcove generally leads to a shaft-chamber, and I conclude that this feature was introduced expressly to provide a connexion between the chapel and the burial-place. The fact that the recess in the middle of the west wall of the alcove was sometimes converted into a serdab presents an alternative origin of the alcove, but I believe that it arose in the way stated above. The final conclusion is that type RC (i) was based on the large L-shaped chapels of the reign of Cheops and Chephren, which had exterior stone chapels, but that the relative position of the chambers was altered by the fact that they were excavated in solid rock, not built on the surface, and further altered by the necessity of placing the burial-places in the side walls or in the floor. The chapels of type RC (i c and i f), two of which had the entrance from the south, present an approach to the corridor type of chapel, and one of the chapels of type (i c) may be reconstructed as a cruciform chapel.

The chapels of type RC (i) also present the greatest areas of wall surface which might be, and in many cases actually are, used for reliefs and inscriptions. The extent of these areas is indicated approximately by the floor areas of the chapels. The floor areas of the chapels of the five twin-mastabas in Cem. G 7000 range from 5 to 7 sq. m. for the L-shaped offering-room and do not exceed 20 sq. m. for the whole chapel, including the exterior stone rooms. The areas of the rock chapels of type RC (i) range from 32.26 sq. m. to 82.95 sq. m., with a mean area of 54.15 sq. m. By reason of the increased wall space, the scenes represented were greatly expanded, and from this point onwards the scenes in the mastaba chapels were also altered in character. It is to be noted that the decoration of these walls, cut in grey nummulitic limestone, required a technique differing from that employed on the mastaba chapels of white limestone. The description of this process will be given in another place, but the essential fact is that in the finished form the reliefs appeared partly cut in the stone and partly formed in a heavy sizing of white plaster. The reliefs were painted, as were the reliefs in white limestone. The records contained on each side of the doorway of the tomb of Meresankh III testify to the conclusion that the largest of these tombs could have been excavated and decorated in less than a year. The cost in labour of the excavation was certainly far less than that of building a mastaba like G 7120. The decoration of the chapels involved a far greater area of reliefs, but it is probable that the labour was lessened by the cheaper process of finishing the reliefs and by the omission of the transport of stone for both mastaba and chapel.

The cruciform chapels of type RC (ii) appear not to be based on the chapels of type RC (i) but on the pyramid chapels of Dyns. IV–V. The essential feature is the series of doors and passages in the E–W medial axis of the tomb, with rooms N–S placed symmetrically in this axis. In the chapels of the Second and Third Pyramids the outer part consists of a great open court with an offering-place on the west side, consisting of a N–S pillared portico the west wall of which has the form of a compound niche (great door niche) and a long E–W chamber opening in the middle westwards. The inner offering-place with the offering-room are placed asymmetrically behind these outer rooms: and each temple has its own ground-plan. In the temple of the queen's pyramid G III–a, the ground-plan is more nearly like that of the largest rock-cut cruciform chapels. On the east is a panelled open court on the west side of which is a pillared portico. From the middle of the portico a doorway opens westwards giving a view westwards, through the doorways of the three remaining rooms, to the offering-niche against the middle of the pyramid. In this medial E–W axis lie three rooms (3, 9, and 12) placed symmetrically on the axis. Room 3 is a vestibule, room 9 is a N–S corridor with palace-façade panelling in the west wall and with the



doorway to room 12 in the middle of the panelling; room 12 is a N-S offering-room with compound niche in the middle of the west wall. Other rooms lie north and south of the axis rooms. The chapels of the other two small pyramids, G III-b and c, were forced by the narrow space available into a N-S direction, and while presenting the same functional chambers have an asymmetrical ground-plan. It seems to me probable that the cruciform chapels of type RC (ii) were based on the c.b. temple of G III-a, which must have remained in good condition with its funerary service still functioning until late in Dyn. V. The two first examples mentioned under type RC (ii a) appear to have been designed with the pyramid chapel of G III-a in mind. It will be remembered that the r.c. chapel of Khuwnera (son of the queen assigned to G III-a) may have been originally designed as a cruciform chapel of type RC (ii a). If so, it was probably the first of this type to be excavated. Type RC (ii b) presents a modification of the cruciform type by replacing the outer N-S apartments with a large E-W hall, but keeps the symmetrical plan based on the E-W axis. Type RC (ii c) presents the cruciform chapel reduced to its simplest element, the N-S offering-room with doorway from the east in the middle of the east wall. One of the chapels of type RC (ii c), Nebemakhet, appears to be only a little later than the examples of type RC (i). Nebemakhet, as son of Chephren, was probably a younger brother of the queen of G III-a (Kha-merer-nebty II?) and an uncle of Prince Khuwnera. His other tomb, LG 12, which may be earlier or later than the LG 86, is apparently of type RC (i c) but has the higher chamber on the south (cf. the tomb of his mother, Meresankh III). Nearly opposite the doorway is the room c, which was probably a serdab. This tomb has a cruciform appearance by the situation of the entrance in the middle of the east wall of a+b, with the serdab (?) nearly opposite, but I suspect that this appearance is accidental.

The remaining types of the rock-cut chapels, RC (iii-vi), have an asymmetrical arrangement of entrance and rooms. The great majority of the examples indicate that these types were based on mastaba chapels of Dyns. V-VI. The proportions of many of the examples do not correspond to those of the mastaba chapels because the soundness of the rock made possible the cutting of chambers wider than those roofed with stone slabs. Taking the general appearance of the type RC (iii), it is obvious that it was an imitation of the mastaba chapels of the L-shaped form. The niche-work in the west wall is, however, seldom like the chapels of types (3) and (4), although examples occur with one or two niches clearly cut. Other examples have apparently no niches and others, generally of larger size, have a series of pairs of niches like mastaba chapels of type (5). The place of one of the niches in a chapel was often taken by a burial-chamber or a serdab cut laterally in the wall of the chamber. The type RC (iv) is a true corridor chapel imitating mastaba chapels of type (5) with the same irregularities in the niche-work, as Type RC (iii). Types RC (v) and (vi) originate in the mastaba chapels of type (10). Chapels of type (10) of larger size have the roof supported by one or more pillars.

The examples of RC (v) and (vi) do not require any support for the rock-cut roof. The two examples of RC (5 a) have large E-W offering-rooms entered by a N-S corridor and are much larger than any of the mastaba chapels of type (10).

It is clear that as a whole the RC types (iii)-(vi) were imitations of built chapels of Dyns. V-VI. Variations from the mastaba type arose out of the manner of excavating the rock-cut chapels and the necessity for making the burial-places in the chapel itself.

One example of type RC (iii b) (No. 3), the tomb of Yuwen-ra, son of Chephren, may be dated to the end of Dyn. IV, but no other example of types RC (iii)-(vi) can be dated previous to Dyn. V.¹ The general range is Dyns. V-VI. It is apparent that the selection of one or other of these contemporaneous types (RC (iii)-(vi)) depended largely on the orientation of the rock-scarp in which they were excavated.

¹ Recently two other tombs have been dated to late Dyn. IV, Service No. 1 (see p. 243) and Service No. 6.

In conclusion, the origin and development of the rock-cut tombs at Giza lead to the following deductions:

- (a) The early rock-cut tombs were those of the family of Chephren made in the old Cheops-Chephren Quarry, probably in the reign of Mycerinus. They are large tombs of the main line of development, and in their day correspond to the great twin-mastabas of the time of Cheops. These early tombs are of type RC (i), based on the L-shaped offering-room with exterior stone rooms.
- (b) Type RC (i) increases considerably the wall space available for reliefs and introduces a great expansion of the scenes used in the previous mastaba chapels.
- (c) The carving of the expanded reliefs on the nummulitic walls of the chapels of type RC (i) led to the invention of the process of making sized-plaster reliefs and trained a body of craftsmen skilled in that process. These craftsmen made possible the use of the cheaper nummulitic stones in the mastaba chapels from this time onwards.
- (d) The examples of cruciform chapels RC (ii) are not numerous in any of the variations. The earliest is perhaps the simple chapel of Prince Nebemakhet, made in the end of the reign of Mycerinus or soon thereafter. The more elaborate examples of Dyn. V appear to be modelled on the cruciform chapel of G III-a.
- (e) The types RC (i) and (ii) present examples of simplified form which approach the corridor or hall form with N-S offering-room. In the mastabas the corridor form predominates, accompanied by square forms and complex forms of more than one room. The remaining types of r.c. chapels are imitations of the later mastaba chapels.

(6) *Mastaba Chapels of the Cruciform Type, Type (6)*

The cruciform chapel appears first at Giza in pyramid temples, and was not directly derived from the old cruciform chapel of Dyn. III. The old cruciform chapel had only one niche, placed in the middle of the west wall directly opposite the doorway. At Giza the one-niched cruciform chapel with the niche opposite the doorway is rare (see G III-a and *Excavations at Giza*, I, Fig. 22). The majority have two niches with doorway opposite the space between, or one niche set at one end of the west wall, not opposite the entrance. The earliest example appears to be the chapel of the small pyramid G I-b which is a two-niched cruciform chapel built against the front of the sloping façade of the pyramid and is in fact an exterior chapel like chapel type (2) in construction. It is possible that the chapel of G I-c was of the same type, but it has been badly damaged and perhaps altered when it was enlarged to become the temple of Isis (Mistress of the Pyramids), and now the entrance appears to be north of the medial axis, while only one niche is preserved at the south end of the west wall. The temple of G I-b has an entrance corridor on the east, an E-W hall with a doorway at each end (cf. entrance halls of G I-III). The next of the chapels of the small pyramids preserved to us is that of G III-a, a c.b. chapel with five apartments, placed symmetrically in the E-W medial axis of the temple, consisting of an open panelled court, a pillared portico, a N-S vestibule-room, a N-S offering-room with palace-façade panelling on the west wall, and a small one-niched offering-room against the pyramid. After these cruciform pyramid chapels come the rock-cut chapels of type RC (ii) (see above, section 5). The finest of these appear to be based on the temple of G III-a, but other simplified examples occur, in particular type RC (ii c) with two examples. One of the two cruciform rock-cut chapels of simplified form is that of Prince Nebemakhet, son of Chephren and Meresankh III. In the Western Field the mastaba G 5110 is assigned to Prince Duwanera, a younger brother of Nebemakhet, and this mastaba has an interior chapel set in the middle of the mastaba with its entrance in the middle of the east façade, and apparently with subsidiary niche on north and south.

The chapel with two niches in the west wall extends symmetrically north and south of the entrance, and the whole plan is very like the plan of the actual two-niched offering-room of Nebemakhet. The offering-room of Nebemakhet is like that of G I-b, but has a N-S vestibule room instead of the E-W hall.

The list of built cruciform chapels, including both pyramid and mastaba chapels, is as follows:

Type (6 a): exterior pyramid chapels of stone or c.b. each built on a separate plan.

Examples:

(1) G I-b: pyramid of queen; x-masonry; offering-room and E-W vestibule hall.

(a) 10.5 × 2.05 m.; area, 21.52 sq. m.; prop. 1/5.14; two compound niches in west wall; entrance in middle of east wall.

(b) 1.1 × 3.9 m.; area, 4.29 sq. m.; not including jambs of two doorways.

Total floor area: 25.81 sq. m.

See Fig. 120.

(2) G I-c: pyramid of Queen Henutsen (?); white limestone; N-S offering-room, partly destroyed and partly obscured by construction of the Isis Temple; offering-room reconstructed as two-niched N-S room; 9.25 × 2.15 m.; area, 19.89 sq. m.; prop. 1/4.3; with entrance in middle of east wall; on outside face of east wall, on each side of doorway, palace-façade panelling which must have been exposed either in an open court or in N-S room, or in a hall wider than that of G I-b.

(3) G III-a: pyramid of Queen Kha-merer-nebty II (?); built of c.b.; five apartments placed symmetrically in E-W medial axis; see Reisner, *Mycerinus*; inner one-niched cruciform offering-room and outer N-S offering-room with palace-façade panelling on west wall.

Type (6 b): interior mastaba chapels; form based on RC (ii c).

Example:

(1) G 5110: Prince Duwanera, younger brother of Prince Nebemakhet. Mastaba core: type IV iii cased with x-masonry as type VIII x; area, 1261.75 sq. m.; prop. 1/2.1; with chapel in medial E-W axis with entrance in middle of east façade; subsidiary north niche in façade and probably subsidiary south niche (now destroyed); offering-room, 7.85 × 1.75 m.; area, 13.73 sq. m.; prop. 1/4.18; relation, 1/91.89; with two niches in west wall and serdab behind south wall; decorations unfinished.

See Fig. 152.

Type (6 c): exterior mastaba chapel with cruciform design.

Example:

(1) G 5230: 'Prince' Khnumbaf, son (?) of Prince Duwanera. Mastaba: type IX a; area, 651.07 sq. m., with single compound niche in the middle of the façade, and two subsidiary niches, one north and one south of the middle niche; on each side an exterior offering-room with four large serdabs thrown out to east; large space between two outlying constructions, probably intended for open court or large offering-room.

See Fig. 153

The cruciform chapel is not adapted to mastabas crowded together in a great cemetery. It can only be used for a mastaba on an independent site with free space in front unhampered by existing structures. All the examples listed above are attached to pyramids or large mastabas fulfilling these conditions. There are a number of later mastabas which also present the required circumstances, such as the nucleus mastabas of the complexes of Senezem-ib (Yenty) (G 2370) and Shepseskaf-ankh (G 6040), but neither of these mastabas used the cruciform design. It is noteworthy that the cruciform rock-cut chapels were also very rare. The two mastabas with cruciform chapels, G 5110 and G 5230, side by side, are the tombs