



Fig. 1. *Praetulites rugosus* sp. nov., holotype; a, b — side view, c — front view, d — rear view; MUZ PIG 297.II.321, Włodowice; Lower Bathonian

Plates I–XXXIV — phot. J. Modrzejewska, PGI Warsaw; mag.  $\times 1$  (except Plate VII, Figure 3d)

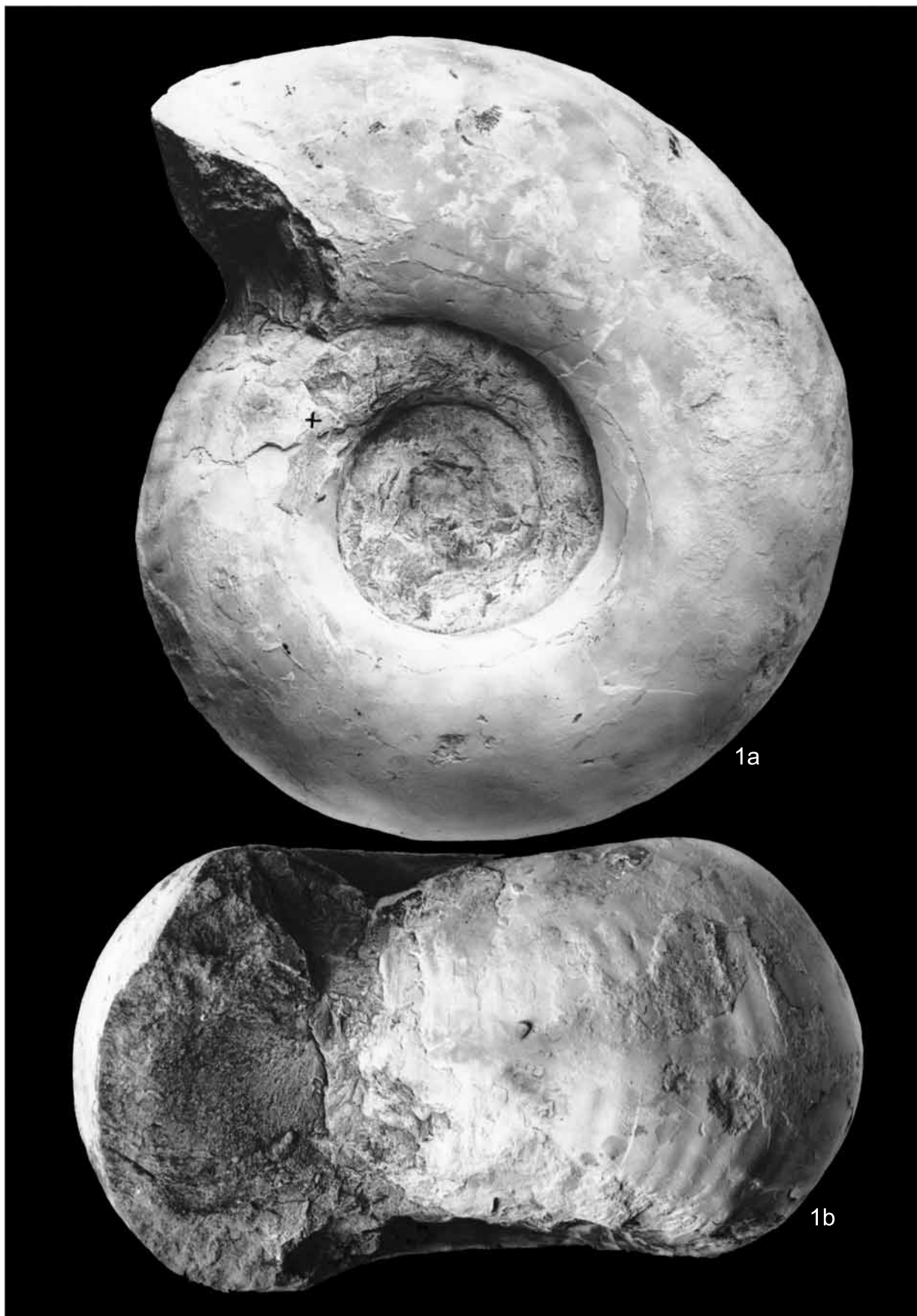


Fig. 1. *Tulites (Tulites)* sp., a — side view, b — front view; CZ. 272, Częstochowa vicinity; Lower Bathonian





Fig. 1. *Tulites (Tulites) sp.*, rear view, CZ. 272. Fig. 2. *Tulites (Tulites) tulotus (Buckman)*, a — front view; b, c — side view; CZ.V.104.50; Figs.1, 2 — Częstochowa vicinity, Lower Bathonian

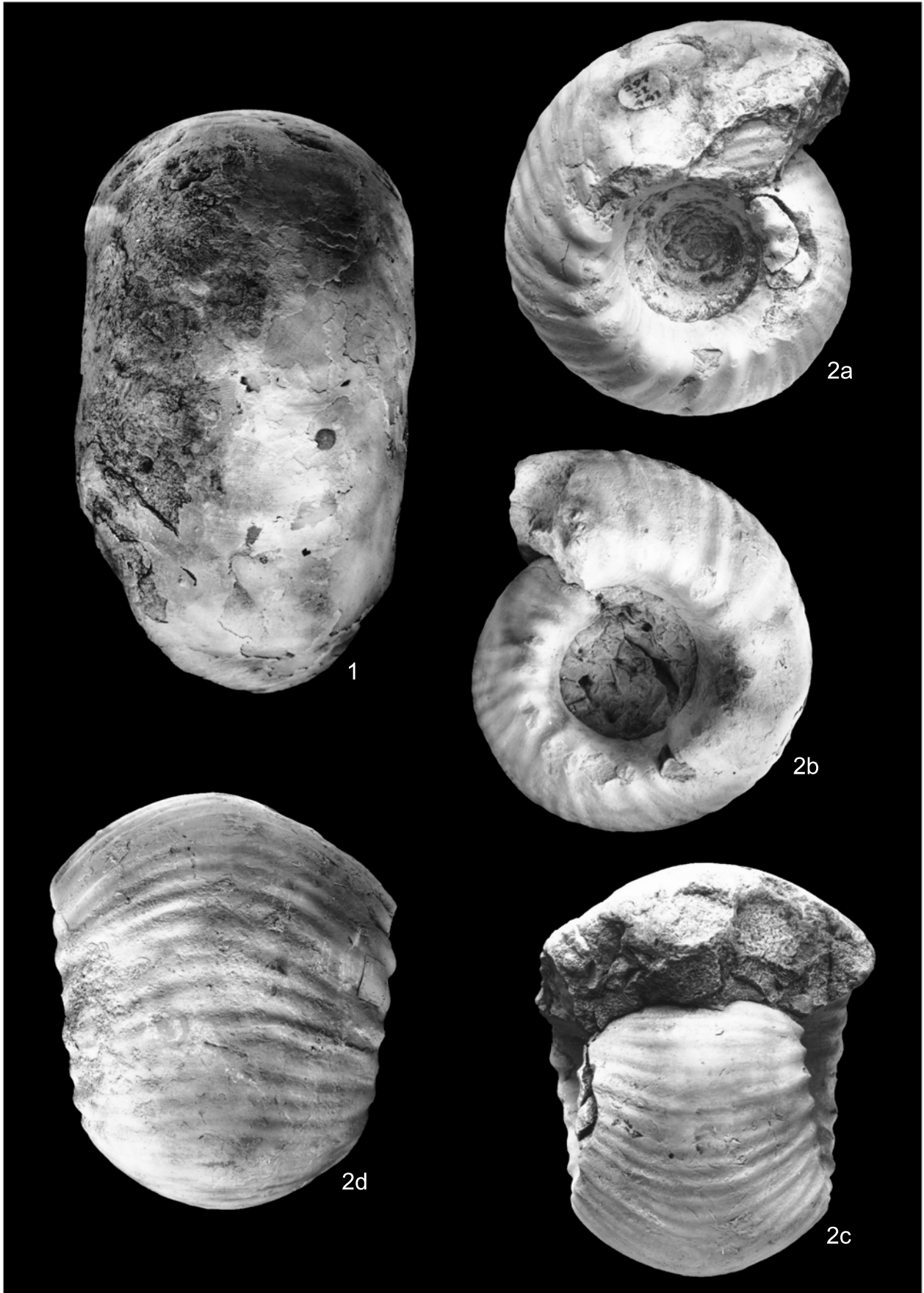
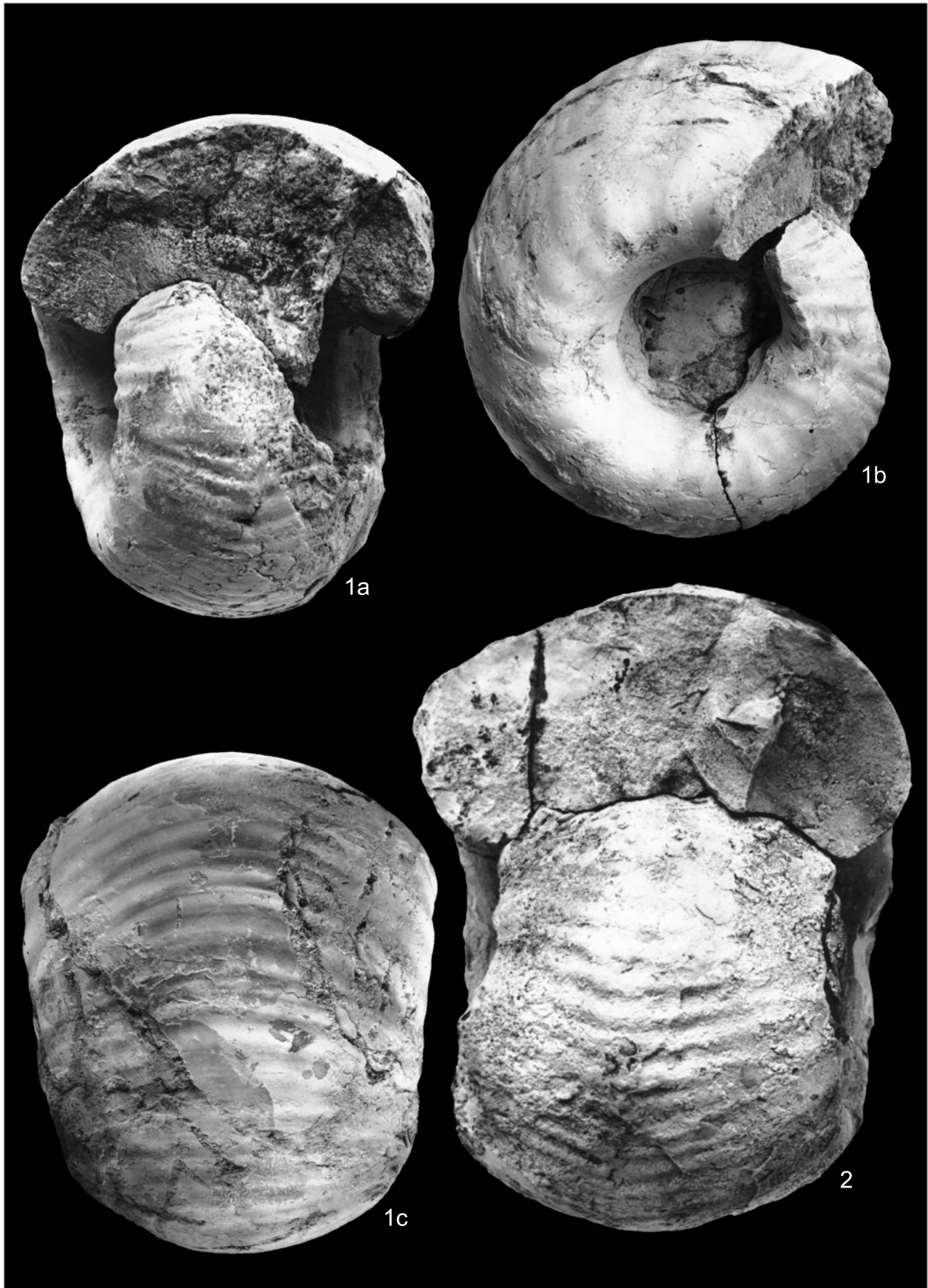


Fig. 1. *Tulites (Tulites) tulotus* (Buckman), rear view, CZ.V.104.50 Częstochowa vicinity, Lower Bathonian. Fig. 2. *Tulites (Tulites) cadus* Buckman, a and b — side view, c — front view, d — rear view; MUZ PIG 297.II.441, Włodowice; Lower Bathonian





*Tulites (Tulites) cadus* Buckman: Fig. 1. a — front view, b — side view, c — rear view; MUZ PIG 1630.II.19, Rudniki near Zawiercie (iron-ore mine), Lower Bathonian; Fig. 2. Front view, CZ.103.50, Częstochowa vicinity; Lower Bathonian

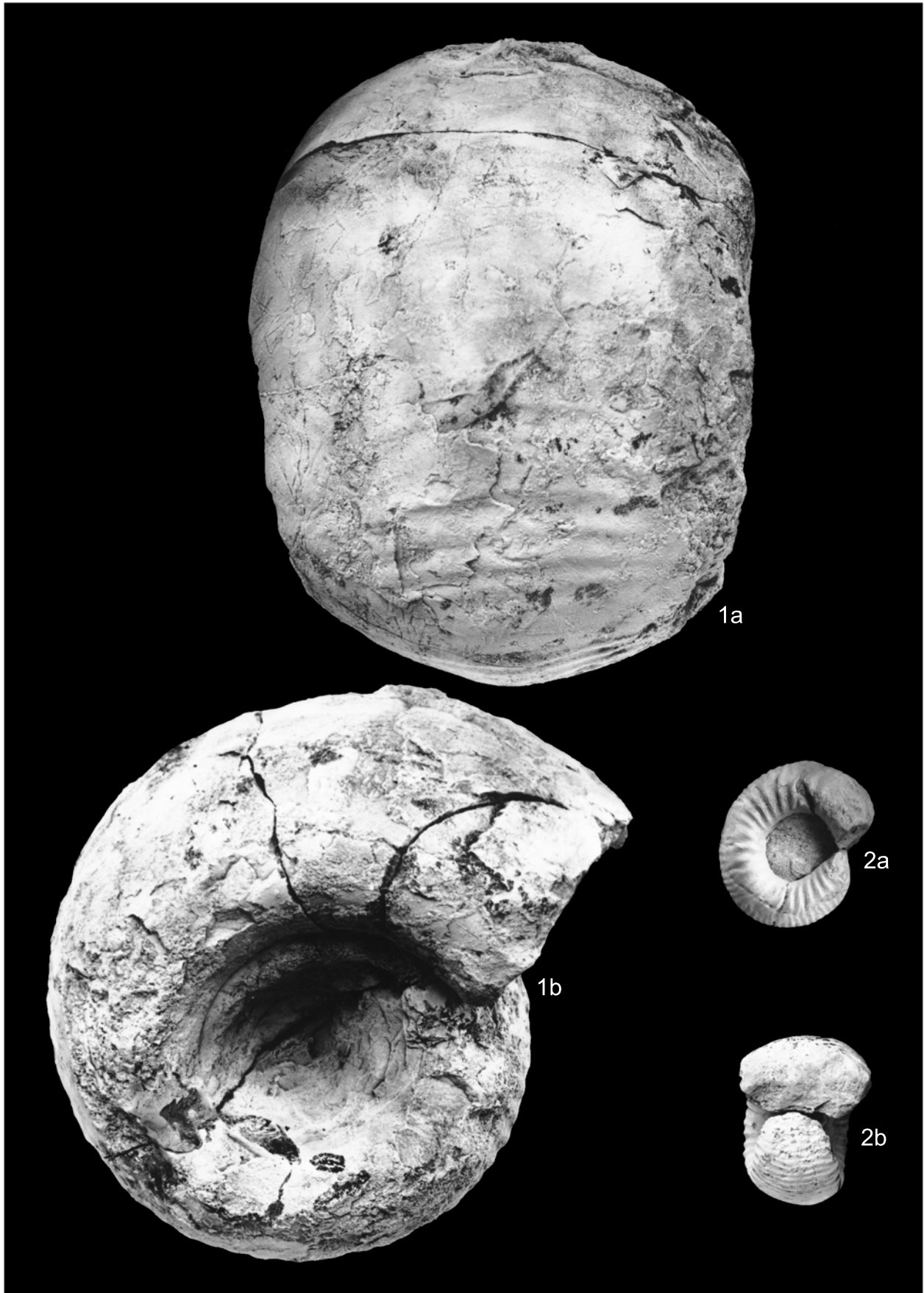
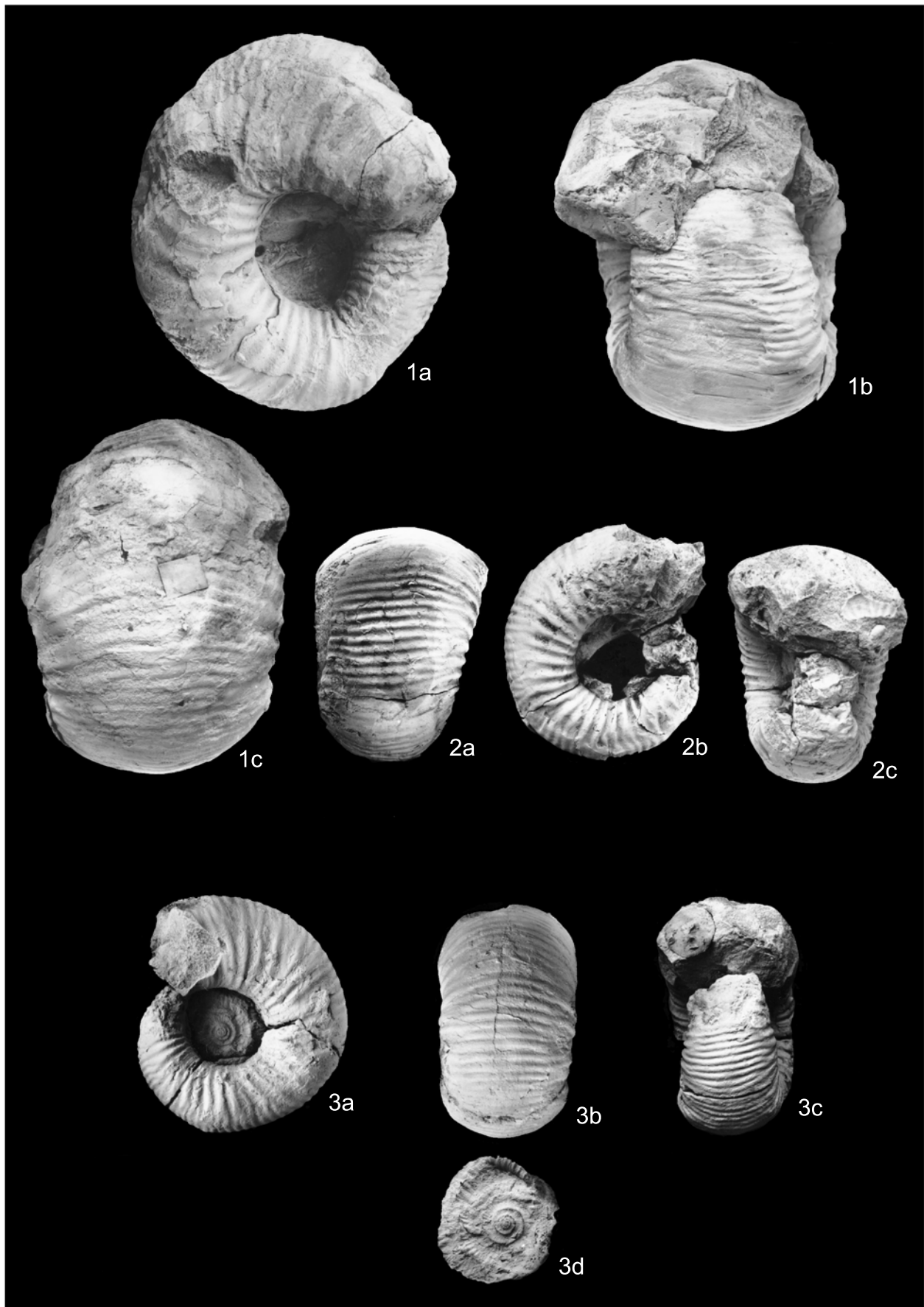


Fig. 1. *Tulites (Tulites) cadus* Buckman, a — rear view, b — side view; CZ.103.50, Częstochowa vicinity; Lower Bathonian. Fig. 2 ? *Tulites* sp. (microconch), a — side view, b — front view; MUZ PIG 297.II.327, iron-ore mine “Jan”, Włodowice; Lower Bathonian





*Tulites (Rugiferites) wlodowicensis* sp. nov.: Fig. 1. Holotype, a — side view, b — front view, c — rear view; CZ.V.108.50; Fig. 2. a — rear view, b — side view, c — front view; MUZ PIG 297.II.323c; Fig. 3. a — side view, b — rear view, c — front view, d —  $\times 1.7$ , internal whorls; MUZ PIG 297.II.323a. Figs. 1–3 — iron-ore mine “Jan”, Włodowice; Lower Bathonian

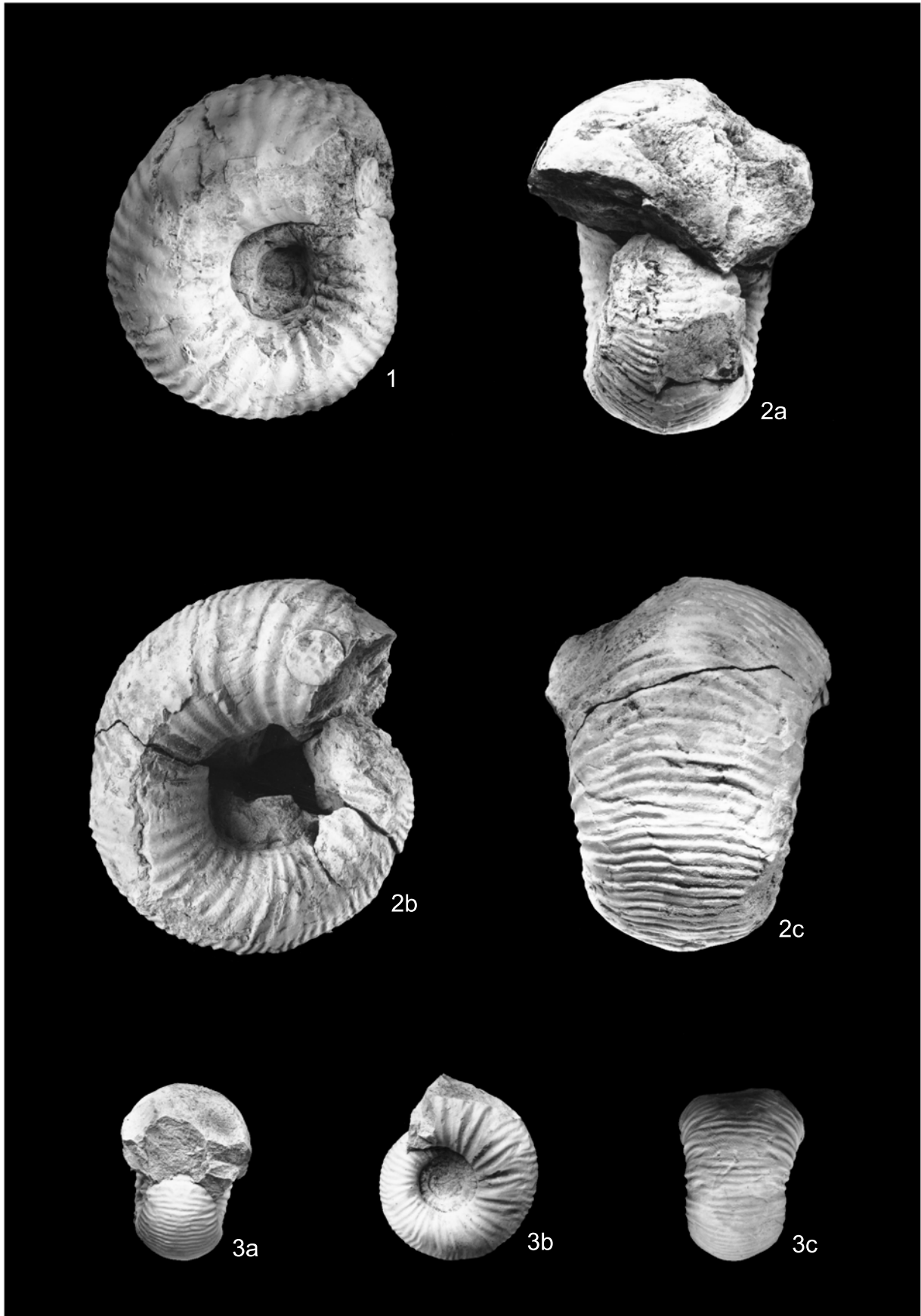


Fig. 1, 2. *Tulites (Rugiferites) wlodowicensis* sp. nov. 1 — side view, MUZ PIG 297.II.319; 2: a — front view, b — side view, c — rear view, MUZ PIG 297.II.326. Fig. 3. ? *Tulites* sp. (microconch), a — front view, b — side view, c — rear view; MUZ PIG 297.II.320. Figs. 1–3 — iron-ore mine “Jan”, Włodowice; Lower Bathonian



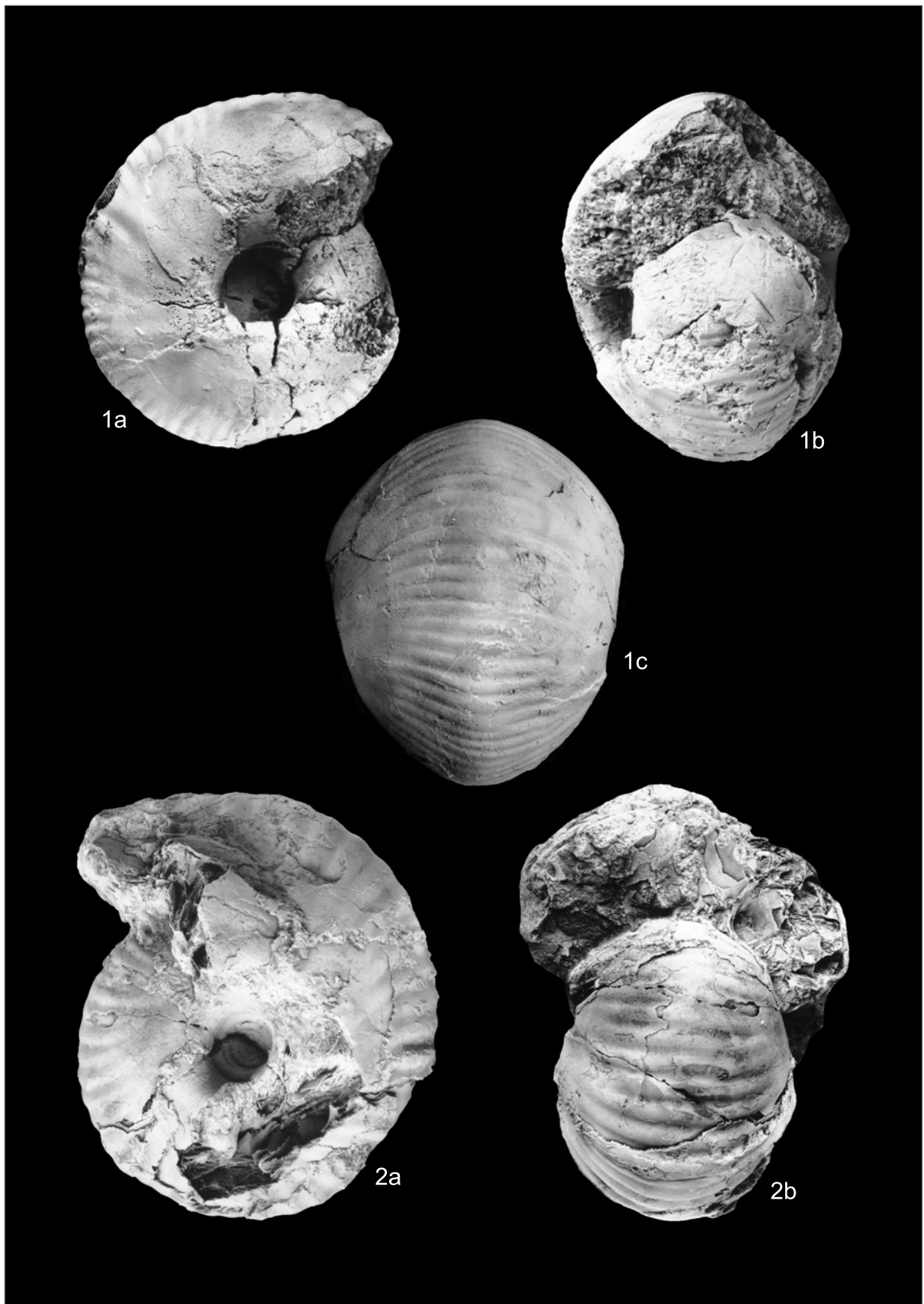
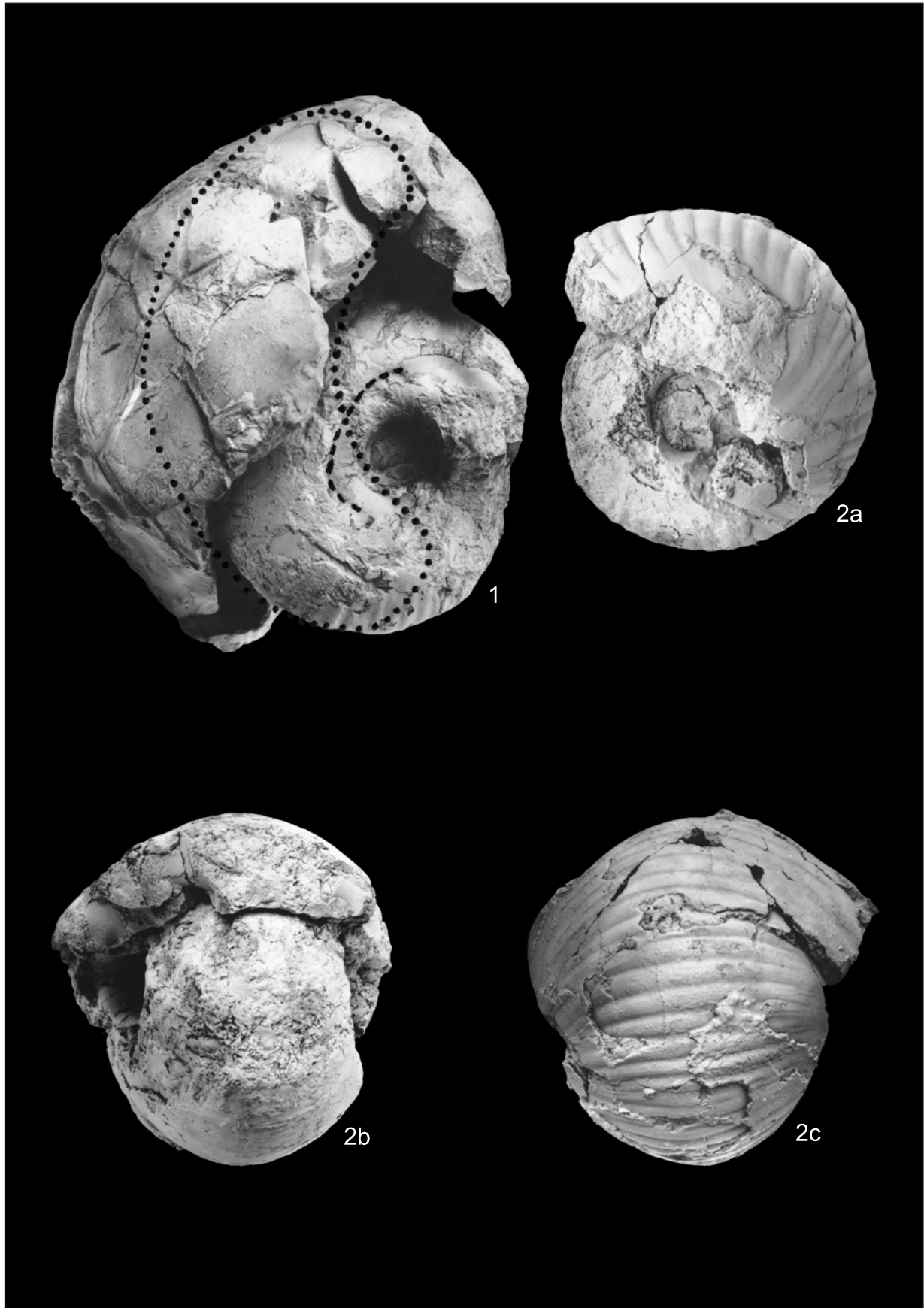
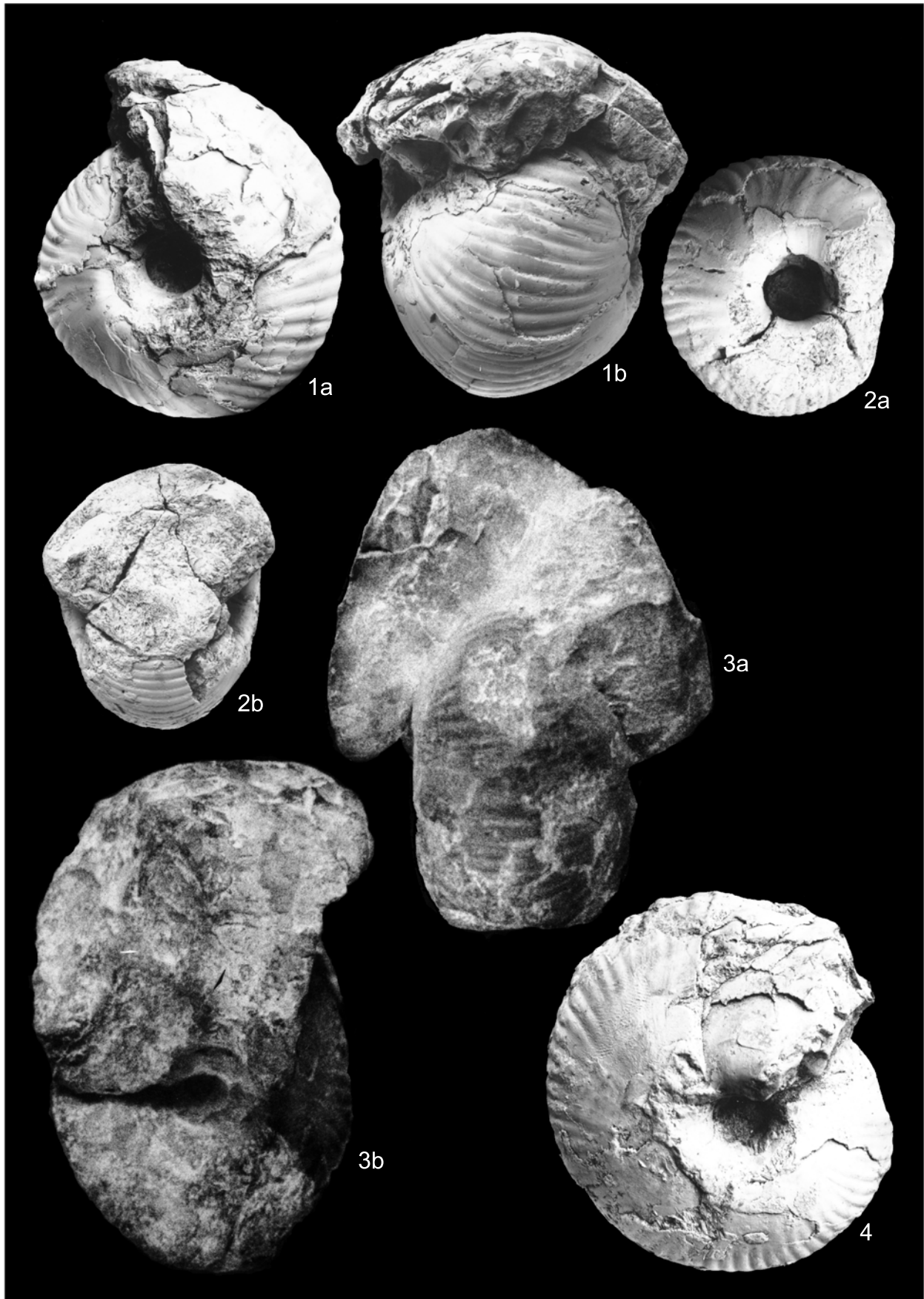


Fig. 1. *Morrisiceras fornicatum* (Buckman), a — side view, b — front view, c — rear view, MUZ PIG 1630.II.66, Częstochowa-Zacisze. Fig. 2. *Morrisiceras irregulare* Spath, a — side view, b — front view, MUZ PIG 1630.II.67, Częstochowa-Bugaj. Figs. 1, 2 — Middle Bathonian, *Morrisiceras morrissi* Zone



*Morrisiceras korustes* Buckman: Fig. 1. Side view, MUZ PIG 1630.II.46, Częstochowa-Zacisze; Middle Bathonian. Fig. 2 a — side view, b — front view, c — rear view; MUZ PIG 297.II.418a, exact locality unknown (? Częstochowa vicinity); Middle Bathonian, *Morrisiceras morrissi* Zone





Figs. 1, 2. *Morrisiceras korustes* Buckman, a — side view, b — front view; Fig. 1 — MUZ PIG 297.II.418b, Częstochowa-Bugaj; Fig. 2. — MUZ PIG 1630.II.50, Częstochowa-Zacisze. Figs. 3, 4. *Morrisiceras morrisi* (Oppel), Fig. 3 a — front view, b — side view; MUZ PIG 1630.II.62, Częstochowa-Zacisze; Fig. 4 — side view, MUZ PIG 297.II.335, Częstochowa-Bugaj. Figs. 1–4 — Middle Bathonian, *Morrisiceras morrisi* Zone

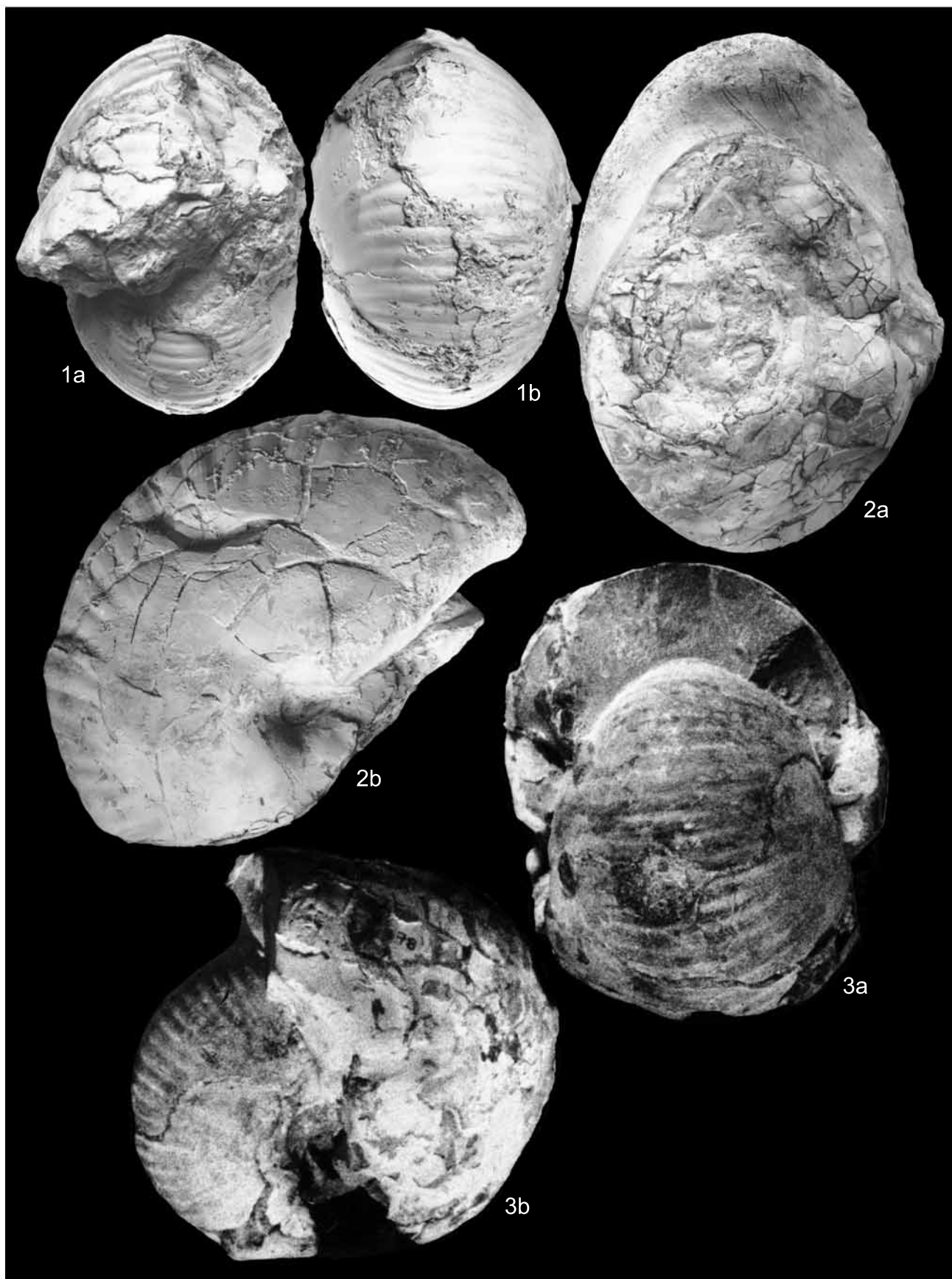


Fig. 1. *Morrisiceras morrisi* (Oppel), a — front view, b — rear view; MUZ PIG 297.II.335, Częstochowa-Bugaj. Figs. 2, 3. *Morrisiceras sphaera* Buckman, a — front view, b — side view; Fig. 2 — MUZ PIG 1630.II.8, Dąbrówka near Żarki; Fig. 3 — internal whorls of specimen, MUZ PIG 1630.II.88 (vide Pl. XIII, Fig. 1a, b), Częstochowa-Kawodrza Dolna. Figs. 1–3 Middle Bathonian, *Morrisiceras morrisi* Zone





Fig. 1. *Morrisiceras sphaera* Buckman, a — side view, b — front view, MUZ PIG 1630.II.88, Częstochowa-Kawodrza Dolna; Middle Bathonian, *Morrisiceras morrissi* Zone



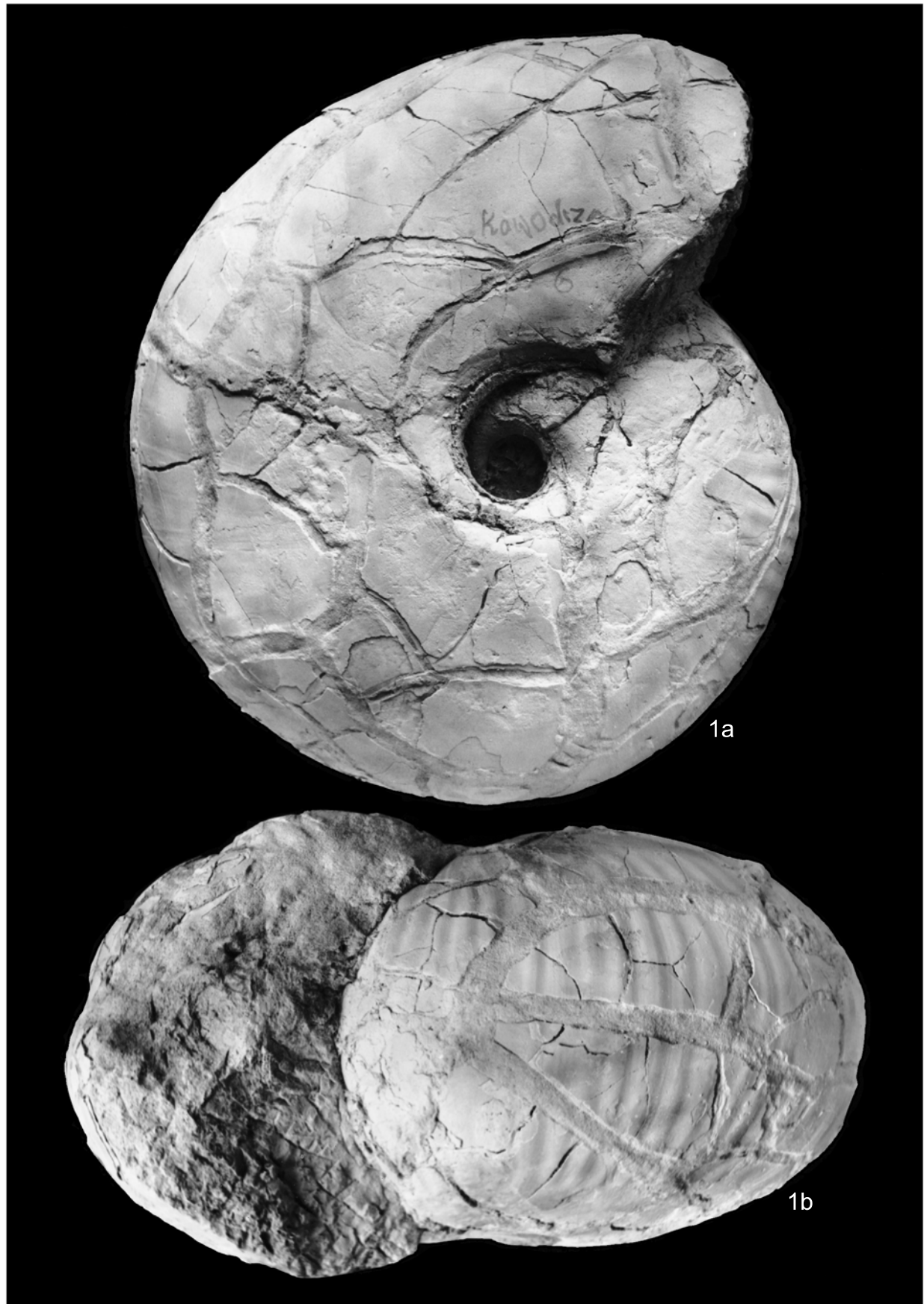


Fig. 1. *Morrisiceras sphaera* Buckman, a — side view, b — front view; private collection (coll. P. Nowacki) PN-81, Częstochowa-Kawodrza Dolna; Middle Bathonian, *Morrisiceras morrissi* Zone

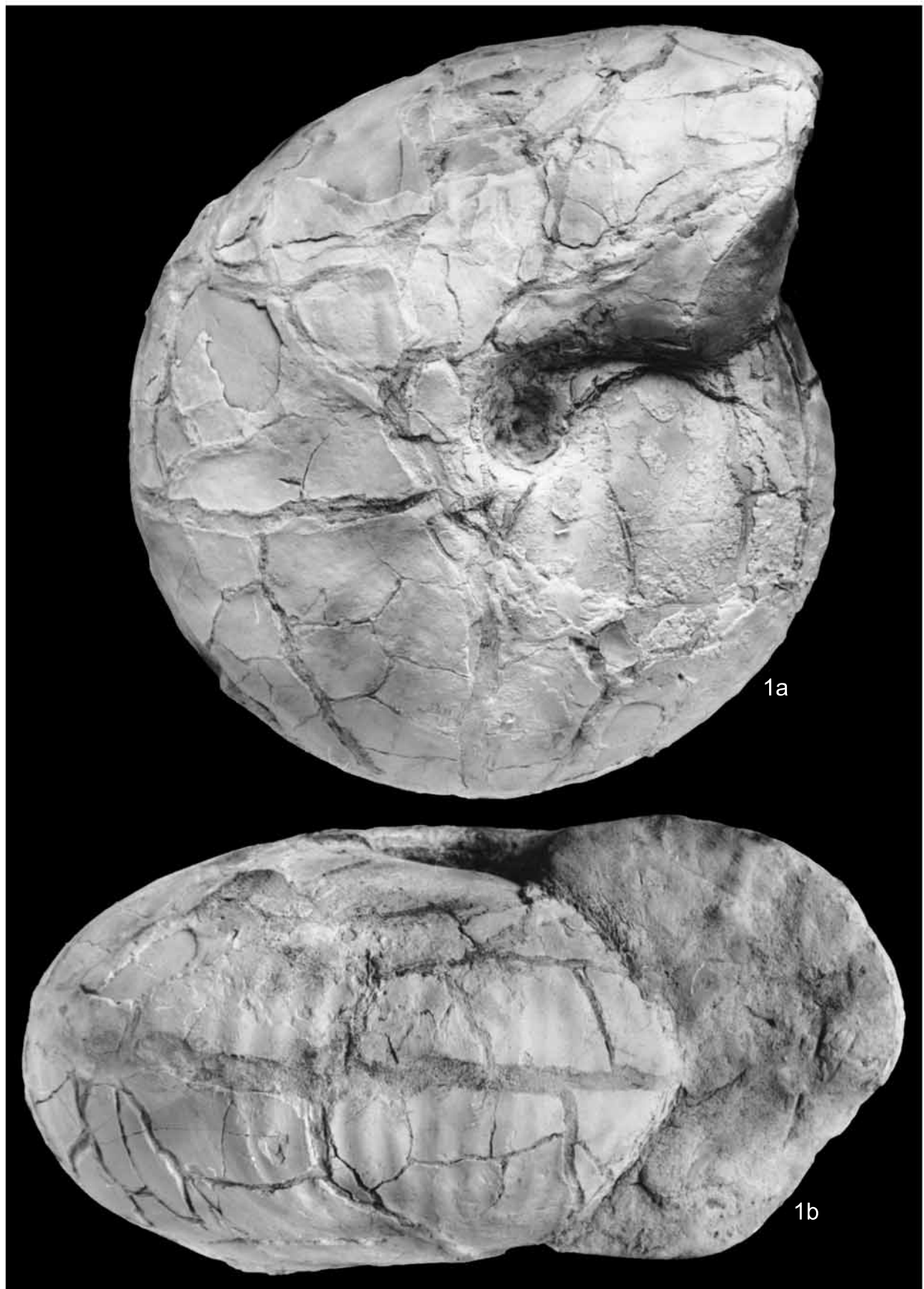
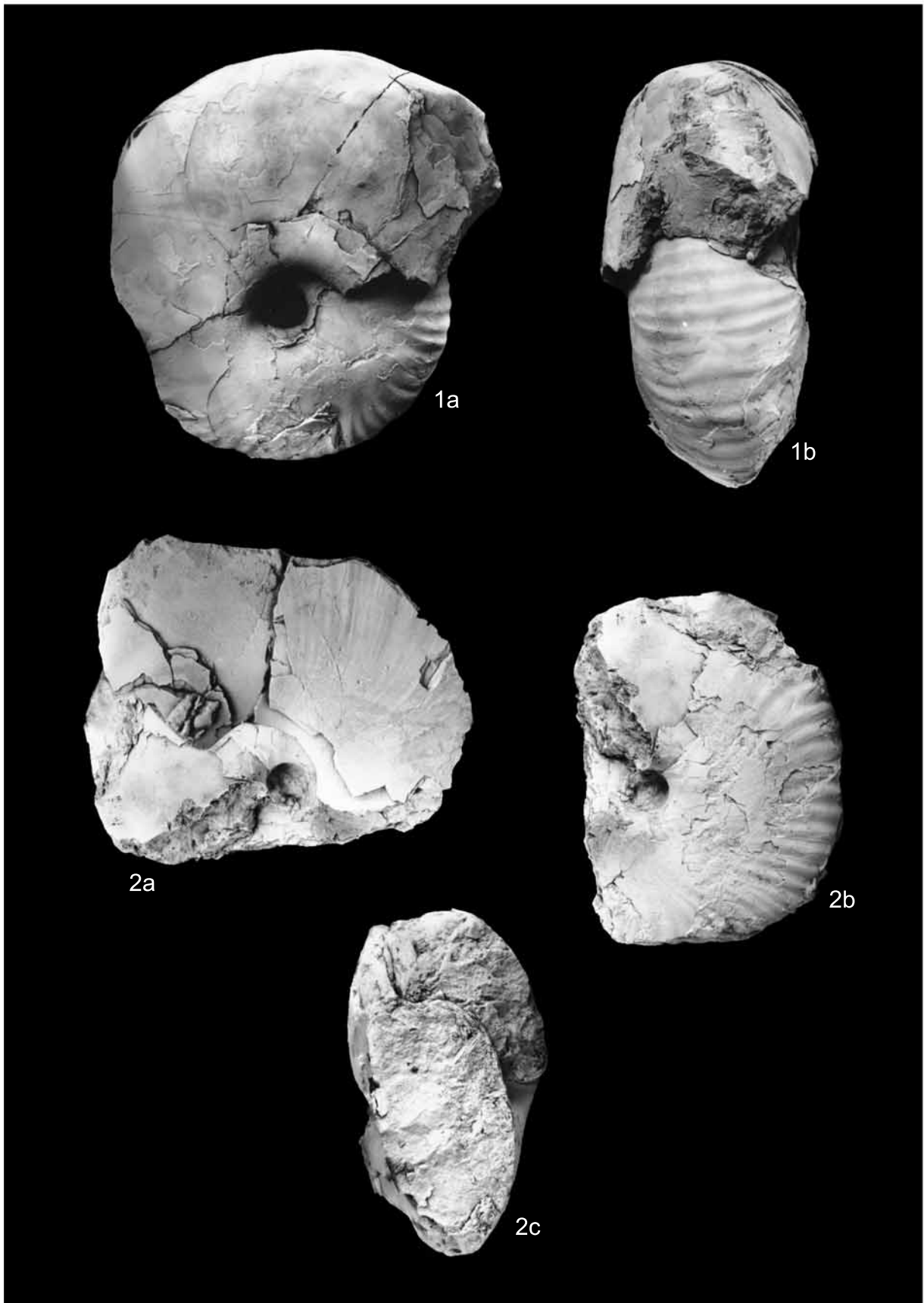


Fig. 1. *Morrisiceras sphaera* Buckman, a — side view, b — front view; private collection (coll. P. Nowacki) PN-82, Częstochowa-Kawodrza Dolna; Middle Bathonian, *Morrisiceras morrissi* Zone



*Morrisiceras comma comma* Buckman: Fig. 1 a — side view, b — front view, MUZ PIG 1630.II.7; Fig. 2 a — side view of complete specimen, b — internal whorls, side view, c — internal whorls, front view, MUZ PIG 1630.II.76. Figs. 1, 2 — Blanowice, Middle Bathonian, *Morrisiceras morrisi* Zone





Fig. 1. *Morrisiceras comma comma* Buckman, a — internal whorls, side view, b — internal whorls, front view, c — complete specimen, side view, d — complete specimen, front view; MUZ PIG 1630.II.58, Dąbrówka; Middle Bathonian, *Morrisiceras morrиси* Zone

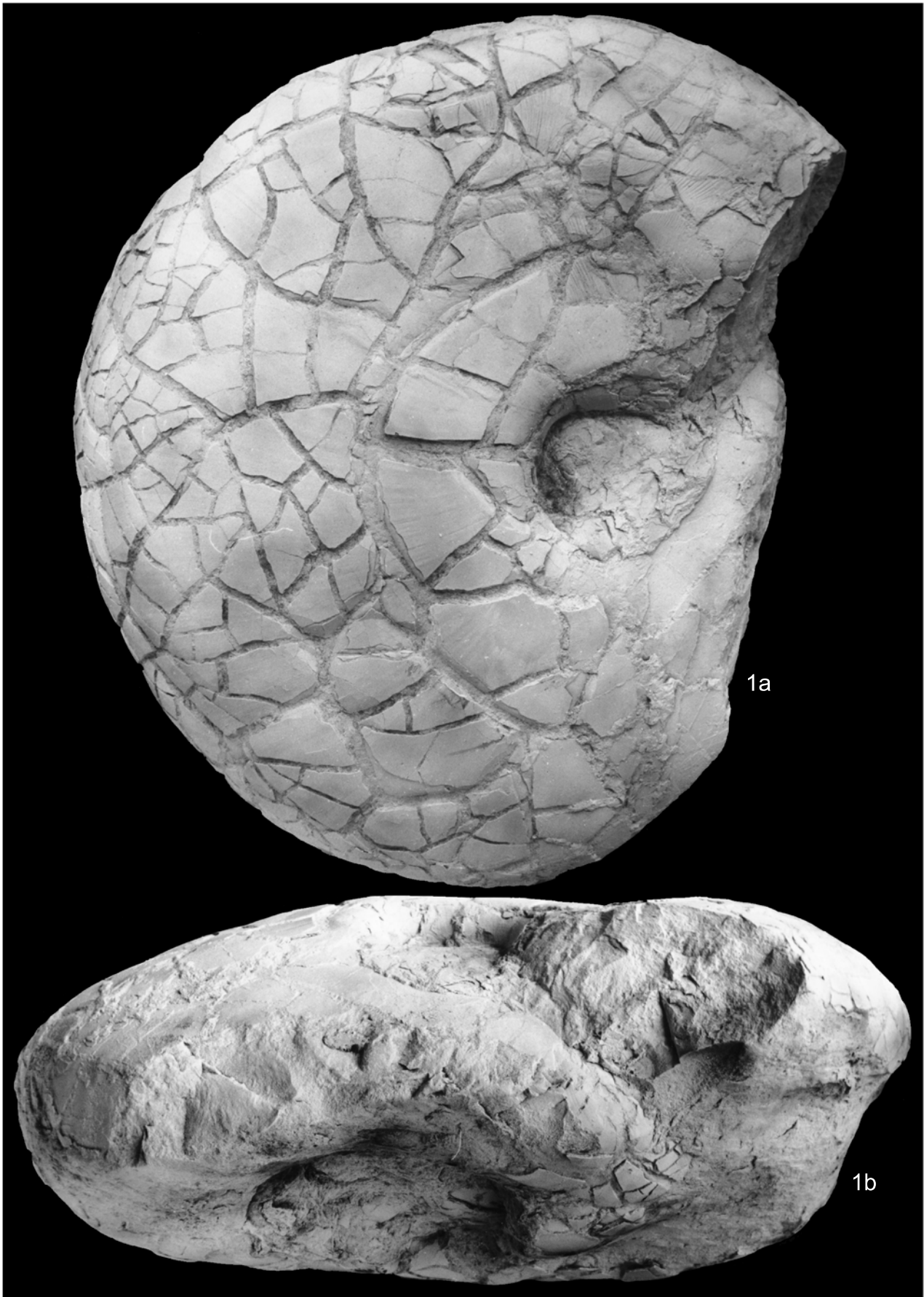


Fig. 1. *Morrisiceras comma schlippei* (Arkell), a — side view, b — front view, MUZ PIG 1630.II.73, Blanowice; Middle Bathonian, *Morrisiceras morrissi* Zone



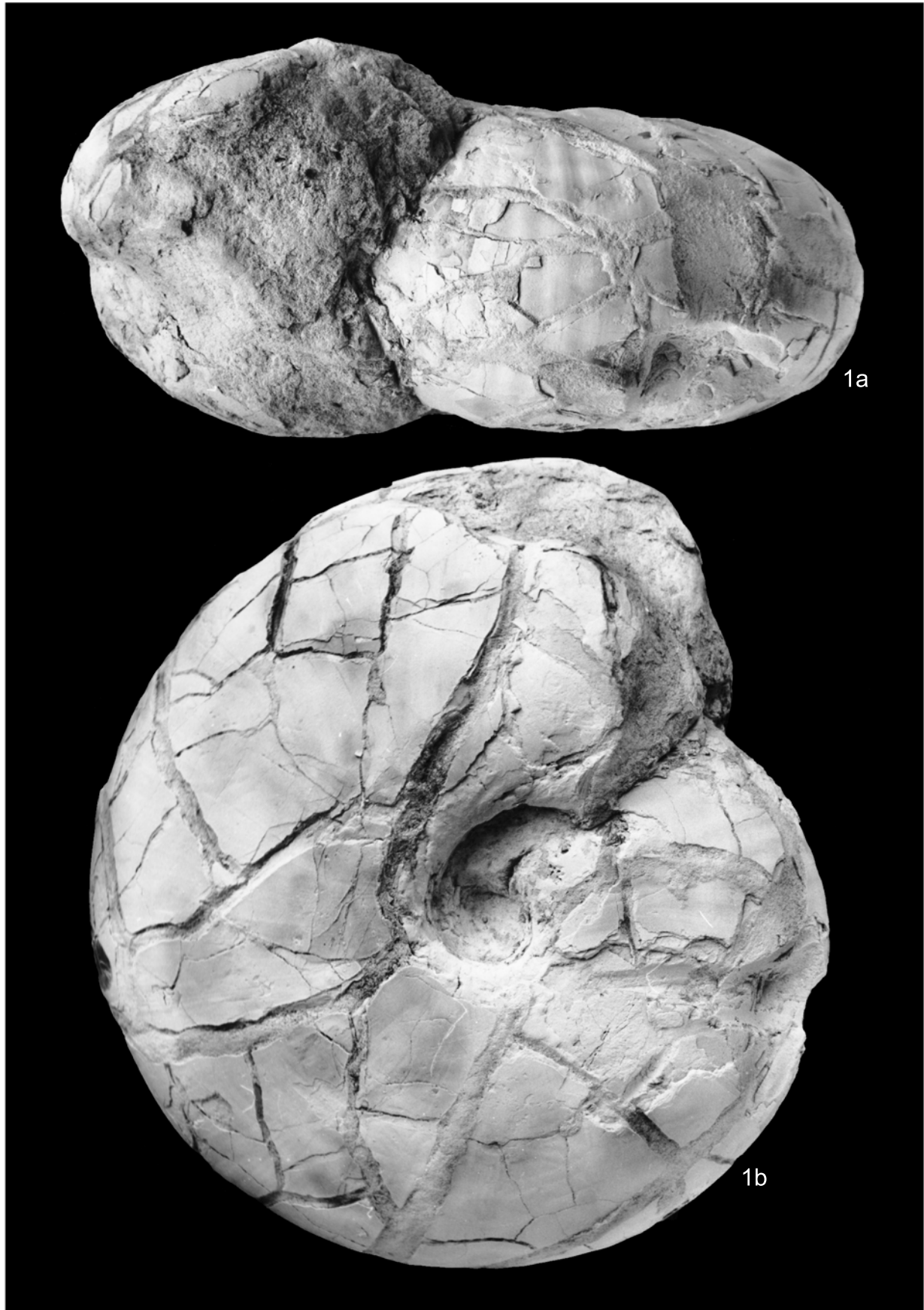


Fig. 1. *Morrisiceras comma schlippei* (Arkell), a — front view, b — side view; private collection (coll. P. Nowacki) PN-72, Częstochowa-Kawodrza Dolna; Middle Bathonian, *Morrisiceras morrisoni* Zone



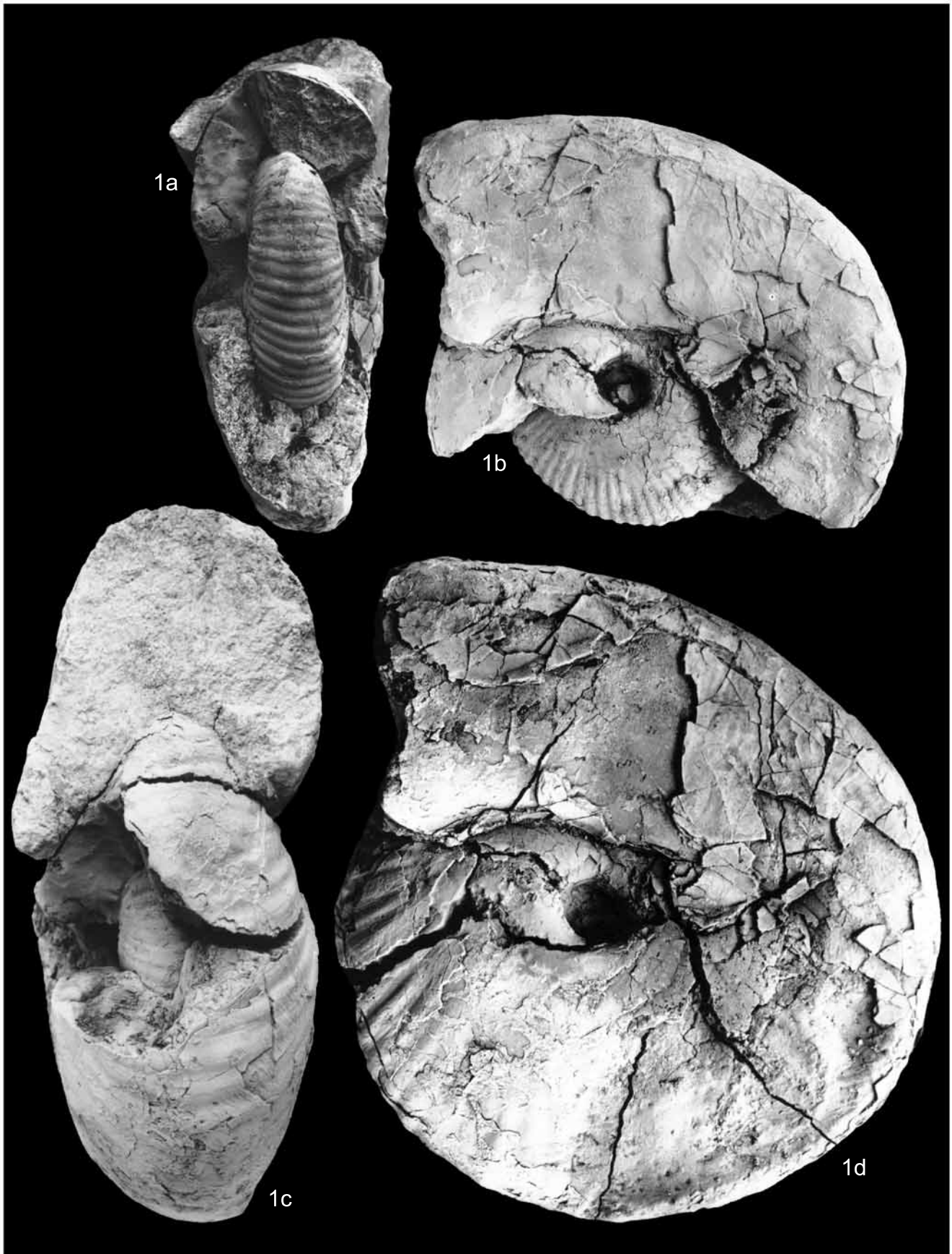


Fig. 1. *Morrisiceras lycetti* (Arkell), a — internal whorls, front view, b — internal whorls, side view, c — complete specimen, front view, d — complete specimen, side view; MUZ PIG 1630.II.69, exact locality unknown; Middle Bathonian, *Morrisiceras morrissi* Zone

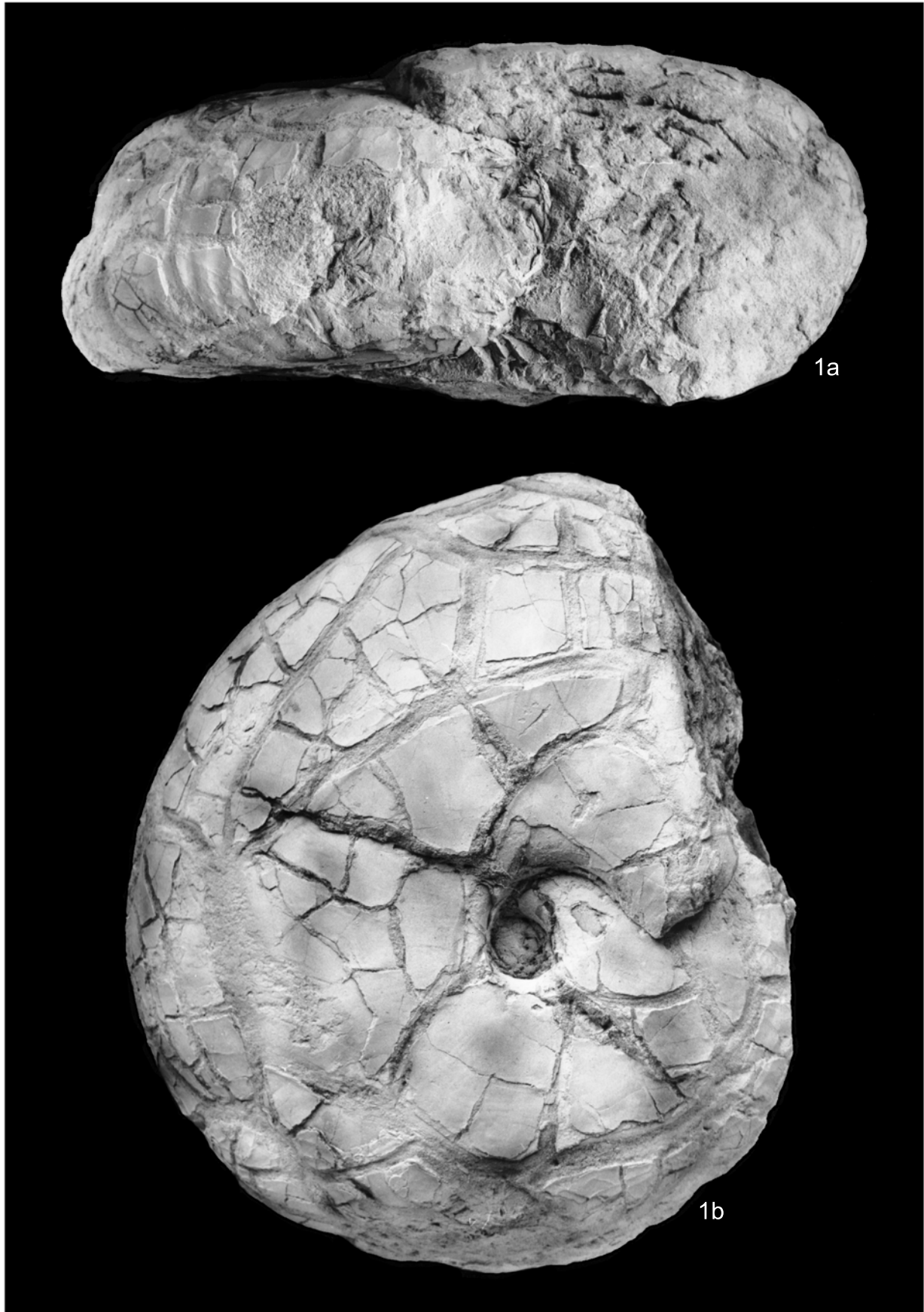


Fig. 1. *Morrisiceras lycetti* (Arkell), a — front view, b — side view; private collection (coll. P. Nowacki) PN-71, Częstochowa-Gnaszyn Dolny; Middle Bathonian, *Morrisiceras morrisoni* Zone





Fig. 1. *Morrisiceras cybeus* sp. nov., holotype, a — side view, b — front view, MUZ PIG 42.II.24, Częstochowa-Kawodrza Dolna, Middle Bathonian, *Morrisiceras morrissi* Zone





Fig. 1. *Morrisiceras cybeus* sp. nov., a — rear view, b — front view, c — side view; CZ. 168, Częstochowa-Kawodrza Dolna, Middle Bathonian, *Morrisiceras morrissi* Zone. Fig. 2. *Morrisiceras czestochowiense* sp. nov., holotype, internal whorls of specimen MUZ FIG 1630.II.77, (Pl. XXIV), Częstochowa-Zacisze, Middle Bathonian, *Morrisiceras morrissi* Zone

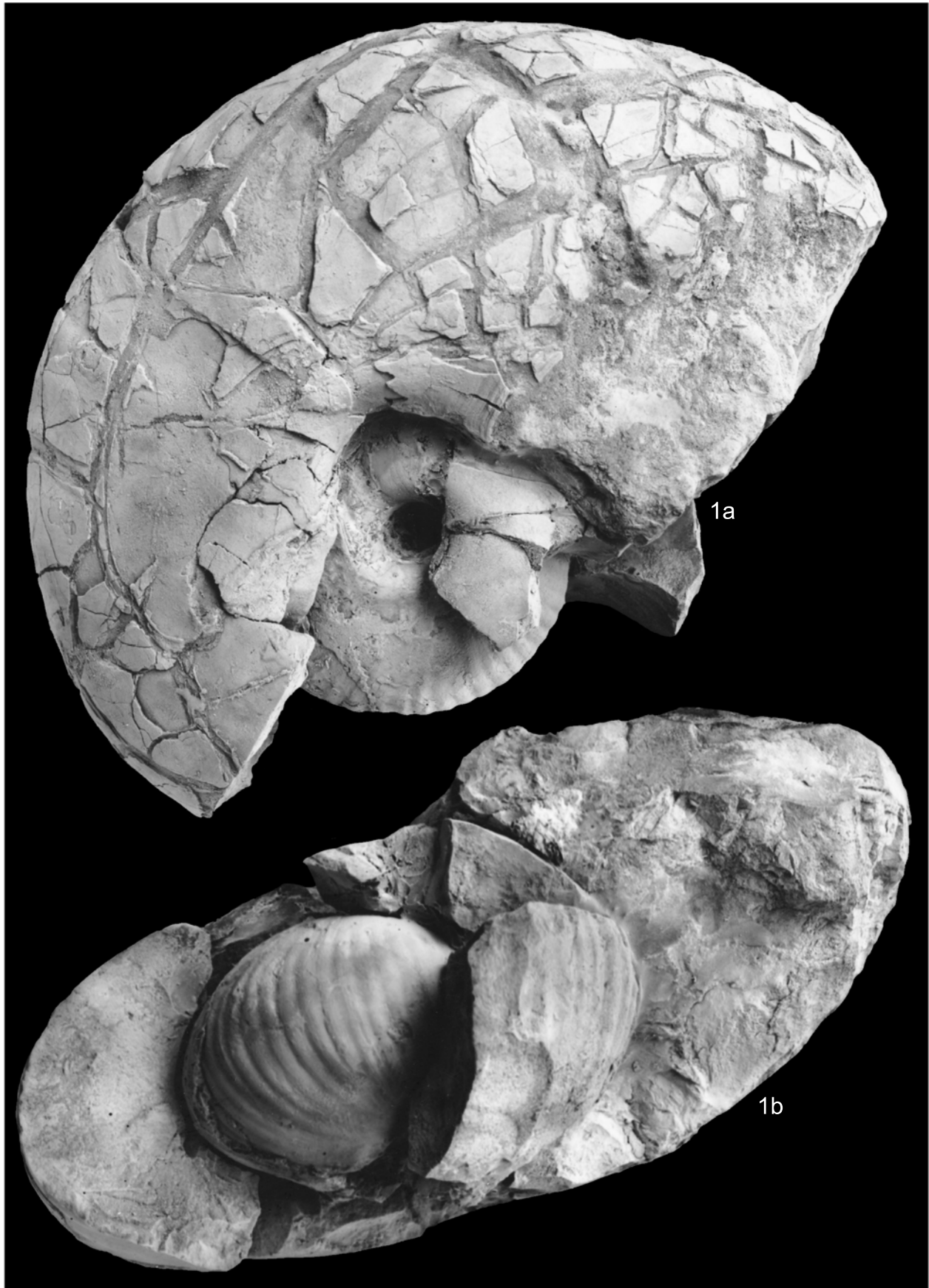


Fig. 1. *Morrisiceras czestochowiense* sp. nov., holotype, mature individual with internal whorls exposed, a — side view, b — front view, MUZ PIG 1630.II.77, Częstochowa-Zacisze, Middle Bathonian, *Morrisiceras morrisi* Zone



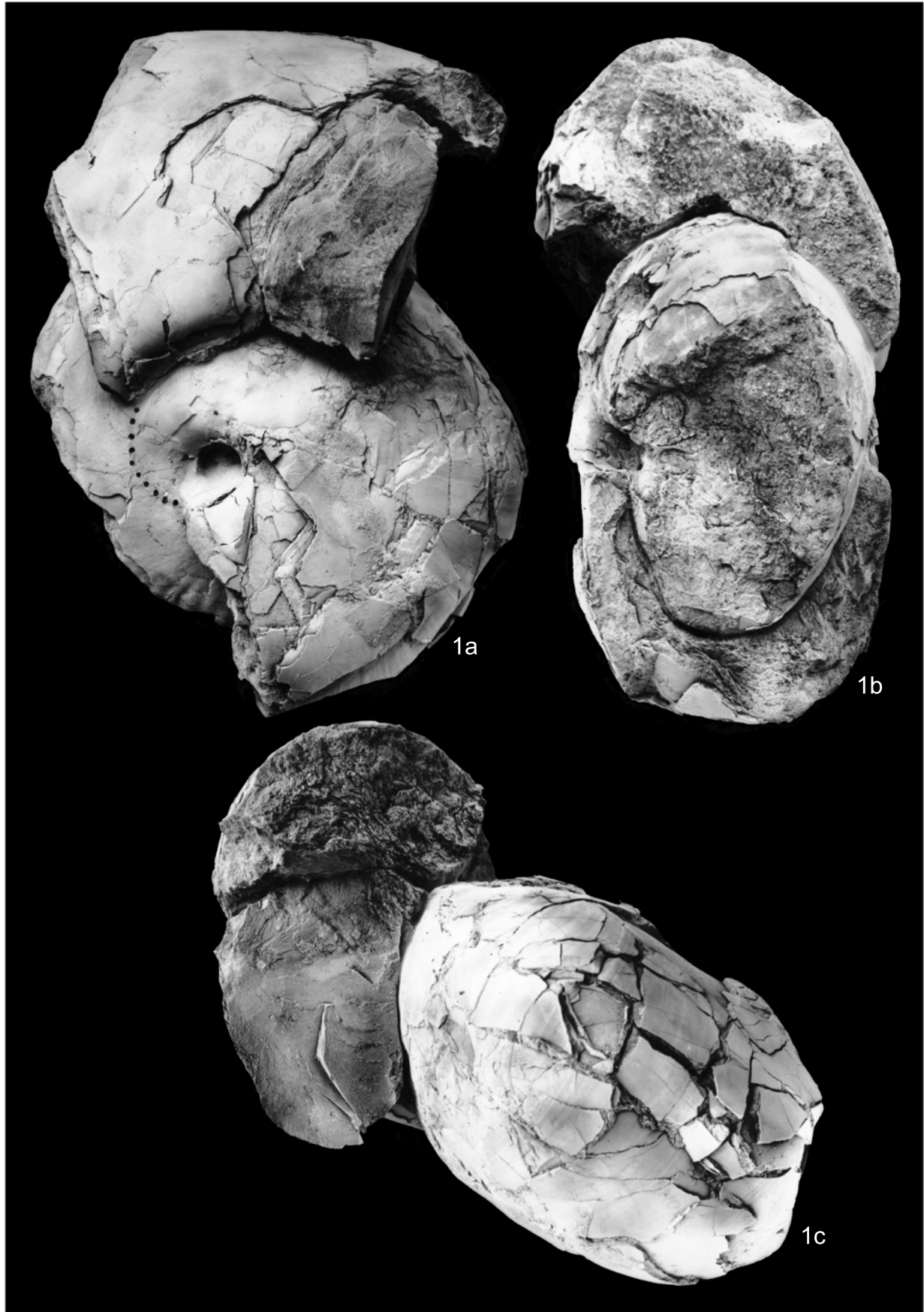


Fig. 1. *Morrisiceras makowskii* sp. nov., holotype, a — side view, b — rear view, c — front view, MUZ PIG 1630.II.60, Blanowice, Middle Bathonian, *Morrisiceras morrisi* Zone



Fig. 1. *Morrisceras cf. makowskii* sp. nov., a — rear view, b — front view, c — side view, MUZ PIG 1630.II.59, Blanowice, Middle Bathonian



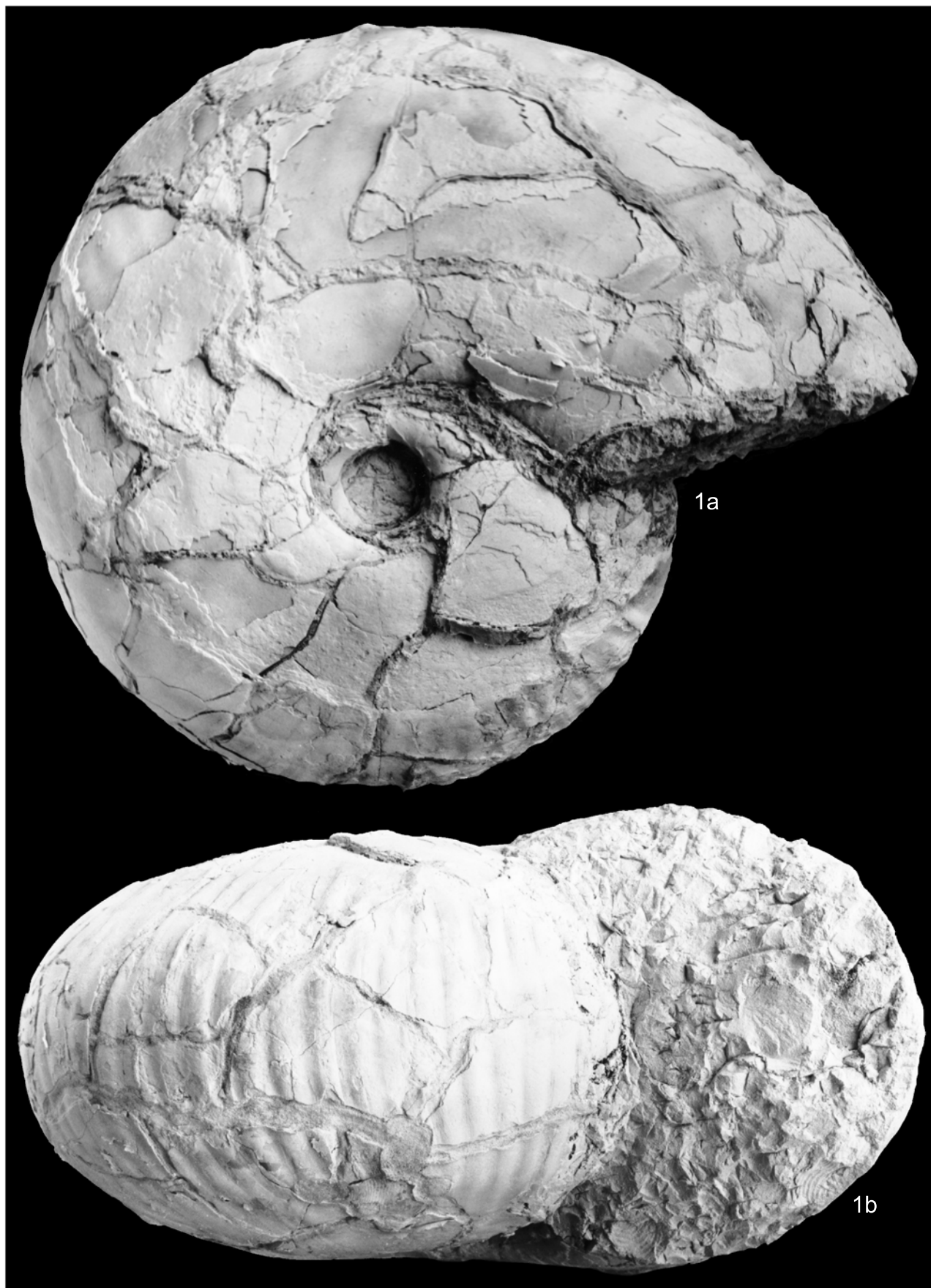


Fig. 1. *Morrisiceras bulbosum* (Arkell), a — side view, b — front view; private collection (coll. P. Nowacki) PN-80, Częstochowa-Kawodrza Dolna, Middle Bathonian, *Morrisiceras morrissi* Zone

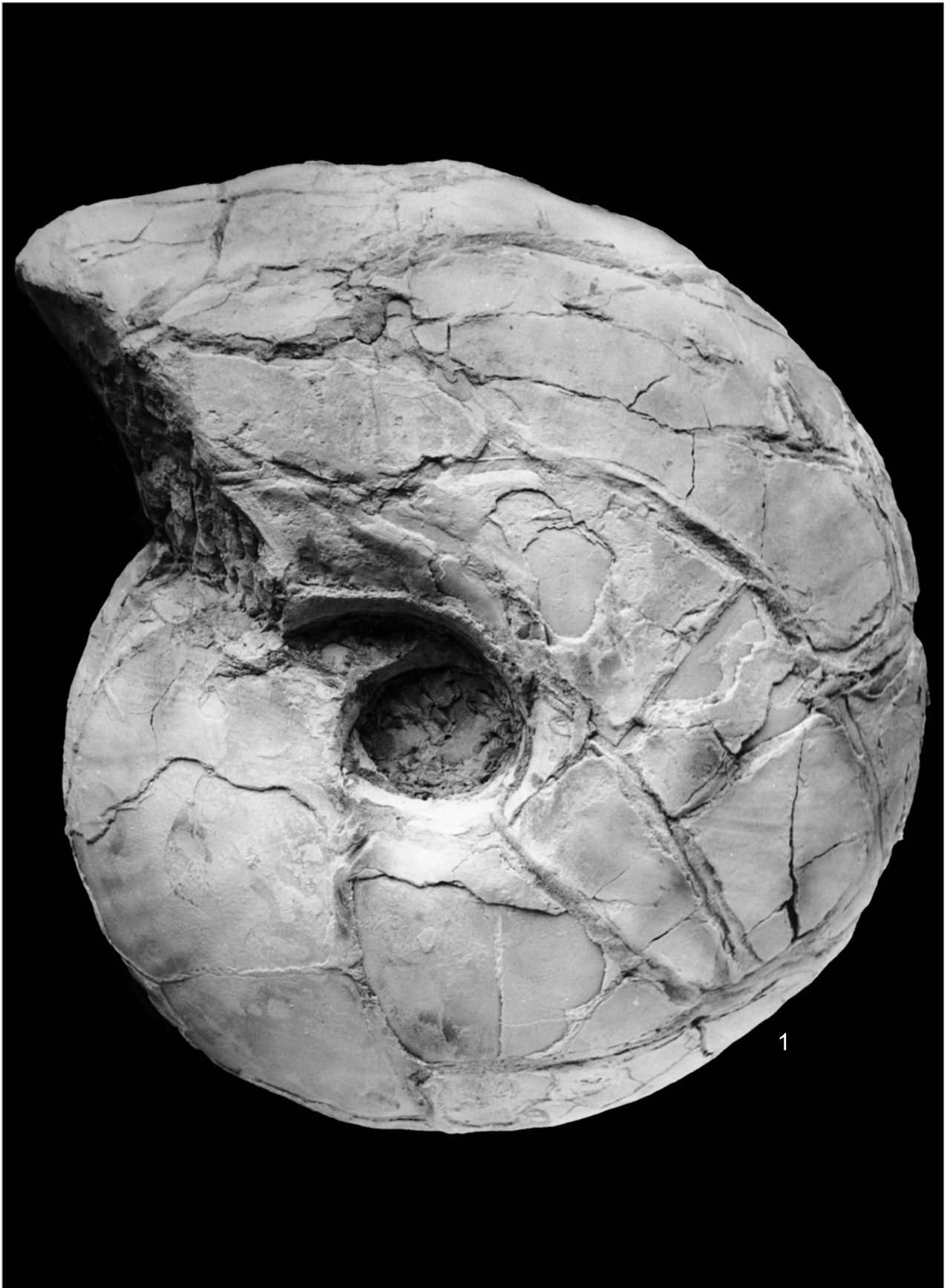


Fig. 1. *Morrisiceras bulbosum* (Arkell), side view, private collection (coll. P. Nowacki) PN-79, Częstochowa-Kawodrza Dolna, Middle Bathonian, *Morrisiceras morrissi* Zone





Fig. 1. *Morrisiceras bulbosum* (Arkell), front view, private collection (coll. P. Nowacki) PN-79, Częstochowa-Kawodrza Dolna, Middle Bathonian, *Morrisiceras morrissi* Zone

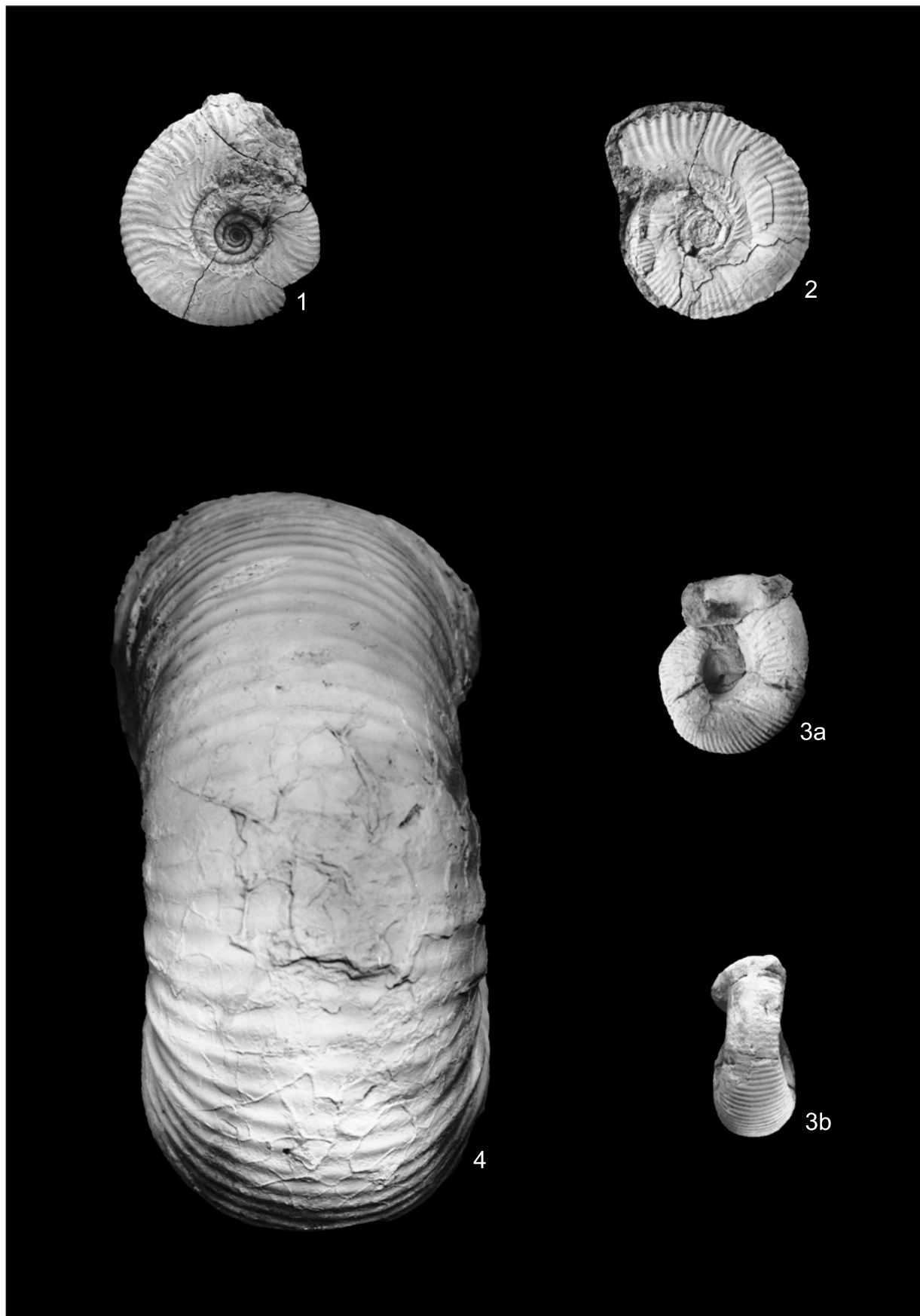


Fig. 1, 2. *Holzbergia schwandorfensis* (Arkell), side view, 1 — MUZ PIG 1630.II.25, exact locality unknown (Polish Jura Chain), 2 — MUZ PIG 1630.II.17, Częstochowa-Gnaszyn Dolny. Fig. 3. *Sphaeroptychius marginatus* (Arkell), a — side view, b — rear view, MUZ PIG 1630.II.24, Częstochowa-Lisieniec, clay-pit “Janina”. Fig. 4. *Bullatimorphites (Bullatimorphites) serpenticonus* Arkell, rear view. CZ. 106.42, exact locality unknown, ? *Cadomites bremeri* Zone. Figs. 1–4 — Middle Bathonian





Fig. 1. *Bullatimorphites (Bullatimorphites) serpenticonus* Arkell, a — side view, b — front view, CZ. 106.42, exact locality unknown (Polish Jura Chain); Middle Bathonian, ? *Cadomites bremeri* Zone

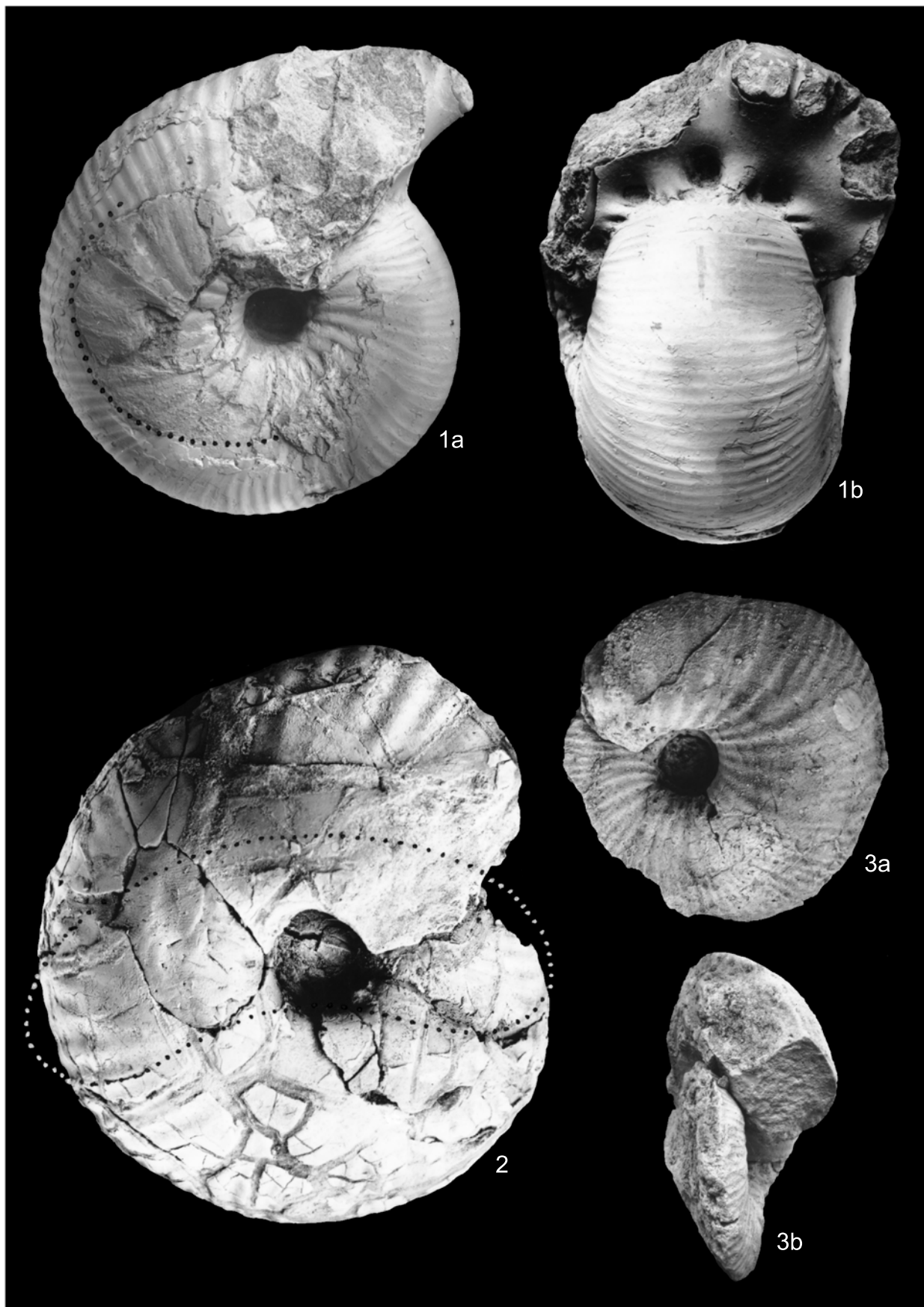


Fig. 1. *Bullatimorphites (Bullatimorphites) bullatimorphus* Buckman, phragmocone: a — side view, b — front view, MUZ PIG 1630.II.86, Częstochowa-Kawodrza Dolna; *Cadomites bremeri* Zone. Fig. 2. *Bullatimorphites (Bullatimorphites) supersphaera* (Stephanov), side view, MUZ PIG 1630.II.85, Częstochowa-Zacisze. Fig. 3. *Bullatimorphites (Bullatimorphites) costatus* Arkell, internal whorls, a — side view, b — front view, MUZ PIG 127.II.227, Bzów; *Cadomites bremeri* Zone. Figs. 1–3 — Middle Bathonian





Fig. 1. *Bullatimorphites (Bullatimorphites) costatus* Arkell, side view, MUZ PIG 1630.II.84, exact locality unknown (Polish Jura Chain); Middle Bathonian, *Cadomites bremeri* Zone



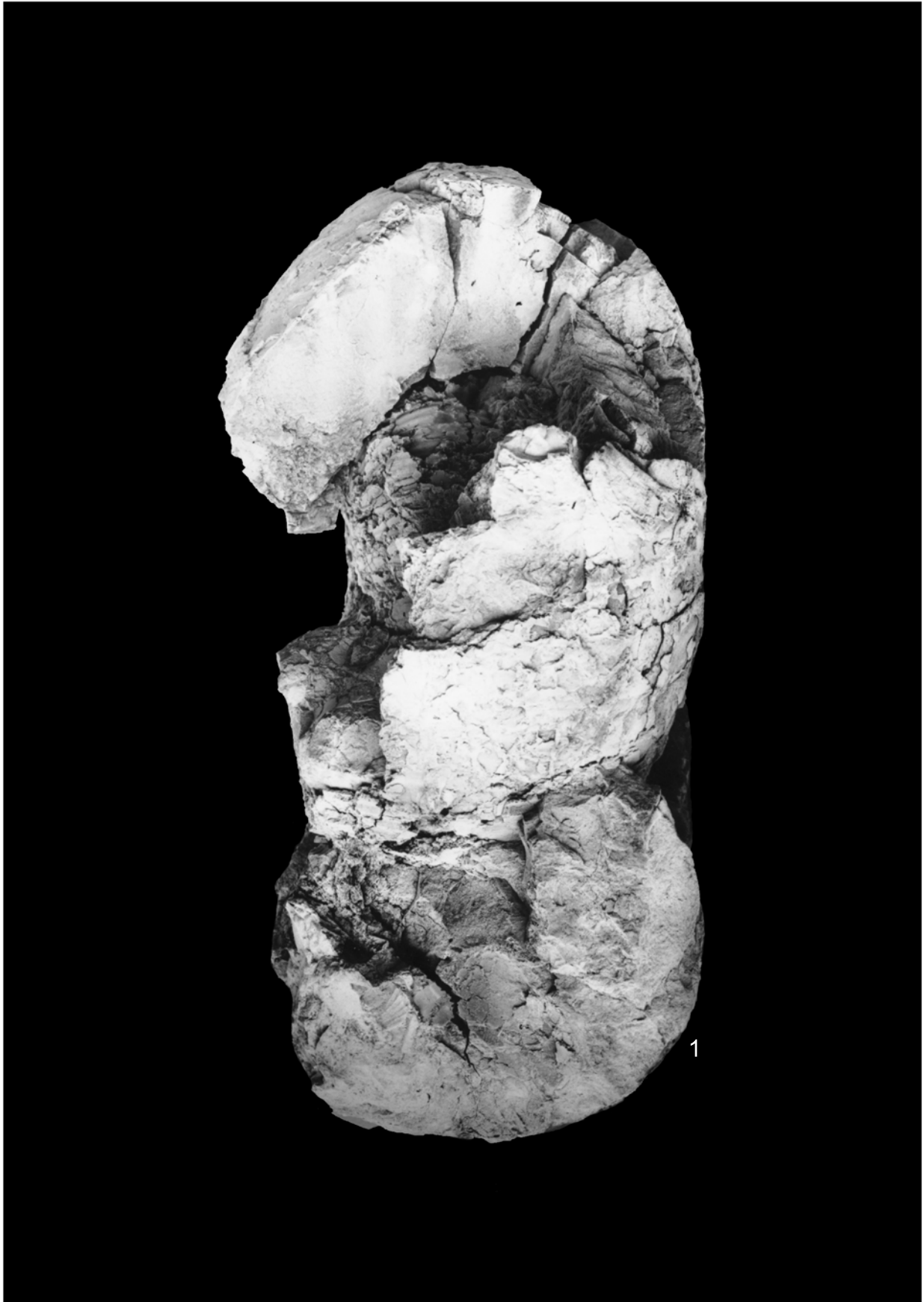


Fig. 1. *Bullatimorphites (Bullatimorphites) costatus* Arkell, front view, MUZ PIG 1630.II.84, exact locality unknown (Polish Jura Chain); Middle Bathonian, *Cadomites bremeri* Zone