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Lower and Middle Jurassic Gastropods from the Bakony Mountains (Hungary)
Part V. Supplement to Archaeogastropoda; Caenogastropoda

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Abstract — Eight Bajocian species of the here described 21 Liassic and Middle Jurassic gastropod species are new to science, one of these belongs to the here designated new genus *Maturifusus* as type species: *M. densicostatus* gen. et sp. n. Other new species are: *Ventricaria? vesicula* sp. n., *Anoptychia hastata* sp. n., *Cerithinella rigauxoides* sp. n., *Procerithium (Cosmocerithium)? angulocostatum* sp. n., *Pietteia trispinigera* sp. n., *Eucycloidea galaczi* sp. n. and *Ochetochilus piceus* sp. n. With 2 figures and 3 photoplates.

Supplement to Order Archaeogastropoda

After the publication of the first parts of the series on the Jurassic gastropod faunas of the Bakony Mts., new collections and preparation works resulted in specimens which belong to new, or previously fragmentarily known, unidentifiable species. Here follow the supplementary descriptions of the newly recognized species.

Suborder ?MACLURITINA COX et KNIGHT, 1960
Superfamily ?*Euomphalacea* DE KONINCK, 1881
Family ?**Helicotomidae** WENZ, 1938

Genus ?*PARAVIVIANA* KUTASSY, 1940

Paraviviana? sp.
(Plate I: figs. 1–3)

Material — Fragment of a single specimen.

Shape — The partially preserved three whorls show the conical shell with nearly gradate outline. Below the suture runs a narrow, somewhat concave ramp, with a break in the whorl-surface on the abaxial margin. This angulation is accentuated by the uppermost and strongest of the three carinae on the narrow peripheral zone. The suture of the earlier whorls runs on the middle carina. The lower carina is visible only on the last whorl, accentuating the angular periphery, too. The convex base encircles a very wide umbilicus, which is bordered also by a carinated angulation.

Ornament — Beyond the mentioned carinae, the whole shell is covered by dense, uniform, spiral striation, forming the spiral ornament. The transverse ornamentation is formed by tiny rugae, which may appear as rib-like elements. They run parallel to the growth lines, which are generally prosocline, but occasionally somewhat opisthocyrt on the ramp and on the base. The intersections of the carinae and the transverse rugae bear tubercles.

Distribution — Bakonybél, Somhegy: condensed Subfurcatum–Garantiana Zones.

Remarks — The described fragment matches the description of *Paraviviana*, but incompletely, because of the missing juvenile shell. If the juvenile shell was conical too, this would refer the specimen into *Nododelphinulidae* COX, 1960. Among the widely umbilicated *Nododelphinula* species there are some which are similar but those have bicarinate instead of tricarinate periphery, thus rangeing this specimen into genus *Paraviviana* seems more probable.

Suborder TROCHINA COX et KNIGHT, 1960
Superfamily *Trochacea* RAFINESUQE, 1815
Family **Trochidae** RAFINESQUE, 1815
Subfamily Proconulinae COX, 1960

Genus *PROCONULUS* COSSMANN, 1918

Proconulus ibbetsoni (MORRIS et LYCETT, 1851)
(Plate I: figs 11–12)

1851: *Trochus Ibbetsoni* MORRIS and LYCETT, p. 61, pl. 10, figs 4,4a.
1868: *Trochus Ibbetsoni* MORR. et LYC. — LAUBE, p. 12, pl. 3, fig. 1.
1950: *Proconulus ibbetsoni* (MORR. et LYC.) — COX and ARKELL, p. 58.

Measurements:	H	HL	HA	D	W	A
Plate I: figs. 11–12.	—	7	4.2	8	4.5	40–45°

Material — Three fragmentary specimens.
Shape — The shell is dextral, high, slightly cyrtoconoid in outline and thick-walled. The whorl-surface is smooth, with the suture in a narrow groove. The periphery is rounded-angular, the surface of the base is hardly convex, without umbilicus. The aperture is circular, with prosocline peristome. The basal lip is widened, with a shallow depression just below the columella, which is bordered on the basal side by a "C"-shaped angulation.
Ornament — Beyond the prosocline growth lines, spiral ornamental elements appear only on the last whorl; these are faded grooves visible only with magnifier.
Distribution — England: Great Oolite; Poland (Balin): Upper Bathonian — Lower Callovian; Bakony, Somhegy: Humphriesianum to Parkinsoni Zones.

Remarks — The shape and the construction of the aperture are strikingly similar to those of the genus *Endianaulax* (Ataphridae). Only the faded ornament suggests *Proconulus*.

Proconulus? cf. **galatensis** (GEMMELLARO, M., 1911)
(Plate I: fig. 6)

cf. 1911: *Chemnitzia galatensis* GEMMELLARO, M., p. 236, pl. 9, figs 17–18.

Measurements:	H	HL	HA	D	W	A
Plate I: fig. 6.	—	5	3.5	5	—	50–35°

Material — Two fragmentary (juvenile?) specimens.
Shape — Dextral, cyrtoconoid form, with apparently pointed apex and thick shell. The number of whorls of somewhat convex or flat surface is relatively high, the suture between them appears as a narrow groove. The last whorl is higher than the previous ones, the periphery is rounded, the base is convex, without umbilicus. The peristome is slightly prosocline, rounded quadrate in outline, the outer lip becomes outwardly thin and the columellar lip bears a small callus.
Ornament — Beyond the slightly prosocline growth lines transverse elements are visible only on the juvenile shell: these are tiny ribs between the sutures. Spiral sculpture is shown only on the base: spiral lines, which are stronger along the inner lip, fade out, then disappear at the periphery.
Distribution — Bakony Mts., Sümeg: ?Upper Sinemurian.

Remarks — The morphology of the shell suggests the genus Proconulus, except the last whorl, coiling of which differs significantly from that of the pervious ones. This feature, with associated similar shape, appears in the genus *Ventricaria* KOKEN, 1896 of uncertain systematical position. However, the here described forms lack the slightly tapering peristome, visible in the mentioned genus. This lack can be due to the juvenile state of the specimens — this is why the taxonomic arrangement is uncertain.

The shape is near to that of the species *Chemnitzia galatensis* GEMM., M., but this form is described as a smooth species. Taking into consideration the weak ornament of the Sümeg specimens, it is possible that the lack of ornamentation is due to preservational causes.

Family **Ataphridae** COSSMANN, 1918

Genus *LEWISIELLA* STOLICZKA, 1868

Lewisiella acicula (HÖRNES, 1853)
(Plate I: figs. 4–5)

1853: *Trochus aciculus* HÖRNES, p. 759.
1861: *Trochus aciculus* HÖRN. — STOLICZKA, p. 173, pl. 2, fig. 8.
1876: *Turbo aciculus* STOL. — TATE, p. 344, pl. 9, fig. 22.

Measurements:	H	HL	HA	D	W	A
Plate I: figs 4–5.	—	10	4.5	10.5	5	46°

Material — A single specimen with damaged apex and peristome.

Shape — The shell is dextral, conical. The whorls are somewhat convex, their inner space is nearly circular in cross section. The periphery is rounded, the base is convex, with a large depression in the middle. The entirely preserved part of the peristome is the strongly thickened inner lip, to which a lunuliform callus is connected between the parietal part and the foot of columella. This callus fills mostly the basal depression.

Ornament — The surface of the whorls and the base is covered by prosocline and orthocline, fine growth lines, respectively. These are intersected by faded spiral grooves. The latter ones are missing from the base.

Distribution — Northern Alps: Hierlatz limestone; England, Yorkshire: Pliensbachian; Bakony Mts., Kericser: beds with mixed Obtusum to Ibex Zone faunas.

Remarks — This form can be easily identified with help of the cited descriptions and figures.

Suborder uncertain
Superfamily *Craspedostomatacea* WENZ, 1938
Family **Codonocheilidae** S. A. MILLER, 1889

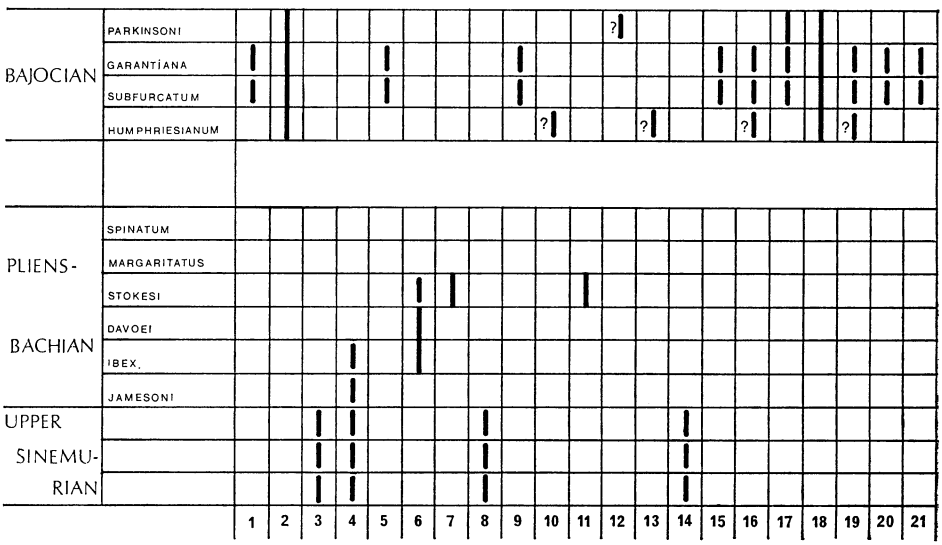

Fig. 1. Stratigraphic distribution of the species in the Bakony Mountains. 1 = *Paraviviana*? sp., 2 = *Proconulus ibbetsoni*, 3 = *Proconulus*? cf. *galatensis*, 4 = *Lewisiella acicula*, 5 = *Ventricaria*? *vesicula*, 6 = *Katosira undulata*, 7 = *Katosira periniana*, 8 = *Anoptychia turgida*, 9 = *Anoptychia hastata*, 10 = *Pseudomelania*? sp., 11 = *Oonia pennina*, 12 = *Lamelliphorus rhombifer*, 13 = *Lamellephorus suessi*, 14 = *Lamelliphorus*? sp. 15 = *Cerithinella rigauxoides*, 16 = *Procerithium (Cosmocerithium)*? *angulocostatum*, 17 = *Pietteia trispinigera*, 18 = *Eucycloidea galaczi*, 19 =*Ochetochilus piceus*, 20 = *Maturifusus densicostatus*, 21 = *Mathilda (Tricarilda?)* sp.

Genus ?*VENTRICARIA* KOKEN, 1896

Ventricaria? vesicula sp. n.
(Plate I: figs. 7–10)

Holotypus: Plate I: fig. 7. — Lycus typicus: Bakonybél, Somhegy. — Stratum typicum: limestone infilling horizontal fissure. — Derivatio nominis: *vesicula* (Lat.) = small bubble (referring to the extremely thin shell and to the globular form).

Diagnosis: extremely thin shell; ovate outline; convex whorls with angulation up to the penultimate whorl, which are just covered by the suture; cancellate ornament consisting of dense threads.

Measurements:	H	HL	HA	D	W	A
Plate I: fig. 7.	—	24	15	—	12	—

Material — Five fragmentary specimens.

Shape — The shell is dextral, thin-walled, oval in outline. The whorls are convex, the suture runs in a shallow groove. The periphery is angular in the juvenile specimens, with the suture running on this very angulation. This angulation disappears on the penultimate whorl, and the last whorl is slightly inflected. The somewhat thickened outer lip of the last peristome is trumpet-like except its basal part, what is projected slightly, thus the columellar lip bends forward, too. On the relatively wide anterior surface of this latter peristomal part an axially elongated depression is visible. The duplication of the shell shows that this surface is actually a callus, which probably closes also a previously open umbilicus. The margin of the callus coincides with an angulation of the convex base bordering the presumed umbilicus. The adapical end of the columellar lip and the parietal lip cannot be freed out on the single specimen with preserved peristome. The embryonal shell is similarly unknown.

Ornament — The ornament is fine, net-like, with spiral threads thinner and denser than the intersecting ones. These latters are prosocline to the angulation or to the corresponding level on the last whorl, then are slightly opisthocyrt with maintained prosocline tendency.

Distribution — Bakonybél, Somhegy: condensed Subfurcatum and Garantiana Zones.

Remarks — Similar shape is common in the terrestrial gastropods, but no diagnostic traces of land in the Middle Jurassic of the Bakony Mts. are known. Similarly-shaped genera of uncertain systematic position are united in Codonocheilidae, and species of the genus *Ventricaria* seem as most closely allied forms. Some visible differences: *V.? vesicula* sp. n. has lower spire than other species of the genus; the transvese ornament is stronger than the spiral one; the presevred youngest whorls do not suggest an apex sharpening so much as in the *Ventricaria* species; so, until clarification of this last morphological character, the generic arrangement remains uncertain. From the two rather similar Mesozoic genera of the family, *Bathyclides* STRAND, 1928 has a phaneromphalous shell, and *Pirper* DE GREGORIO, 1886 shows smooth shell. Both genera have whorl surface without angulations which are

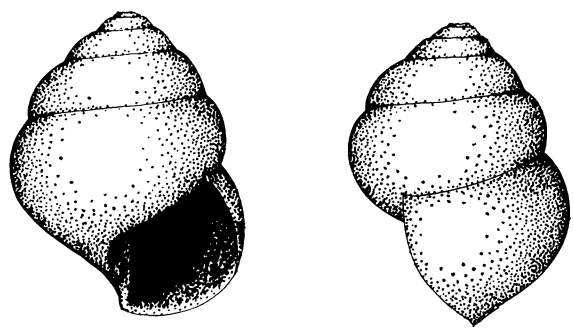

Fig. 2. Shape of *Ventricaria*? *vesicula* sp. n., reconstructed after the specimens figured on Plate I: figs. 7–9, ×1.1

present in *Ventricaria*. Probably congeneric with the here described *V.? vesicula* sp. n. is the similarly-shaped and also thin-shelled *Onkospira pupaeformis* VACEK, 1886, which, in turn, is clearly distinguished by its higher spire and more numerous whorls.

Order CAENOGASTROPODA COX, 1959
Superfamily *Loxonematacea* KOKEN, 1889
Family **Zygopleuridae** WENZ, 1938

Genus *KATOSIRA* KOKEN, 1892

Katosira undulata (BENZ, 1832)
(Plate II: figs 1–2)

1832: *Turritella undulata* BENZ — in: ZIETEN, p. 43, pl. 32, fig. 2.
1852: *Chemnitzia undulata* D'ORBIGNY, p. 35, pl. 237, fig. 16.
1858: *Turritella undulata* ZIET. — QUENSTEDT, p. 153, pl. 19, fig. 13.
1861: *Chemnitzia undulata* BENZ. — STOLICZKA, p. 163, pl. 1, fig. 1.
?1869: *Chemnitzia undulata* (ZIETEN) — DUMORTIER, p. 101, pl. 18, fig. 8.
1884: *Turritella undulata* ZIET. — QUENSTEDT, p. 305, pl. 196, figs. 45–51.
1909: *Katosira undulata* BENZ — BRÖSAMLEN, p. 286, pl. 21, fig. 28.

Measurements:	H	HL	HA	D	W	A
Plate II: figs. 1–2.	—	35	22.5	—	—	17.5°

Material — 9 + ?2 fragmentary specimens with preserved shell or as internal moulds.

Shape — The shell is dextral with high spire and convex whorl surfaces. Angulation is hardly visible in the periphery, it is accentuated rather by the carina. The parietal and columellar lips are covered by a thin callus.

Ornament — The whorl surfaces and the base is divided by deep spiral grooves. These are intersected by opisthocyrt growth lines and strong, paralell folds on the whorls. The number of folds increases on the successive whorls during the growth, and run suture to suture or to the carina bordering the base on the last whorl. The growth lines are orthocline on the base.

Distribution — South Germany: Pliensbachian; France, Normandy: Middle Liassic; Northern Calcareous Alps: Hierlatz limestone; Bakony, Kericser Ibex, ?Davoei and Stokesi Zones, Hamuháza: Davoei Zone, Lókút: ?Davoei Zone.

Remarks — This form is easily distinguished by its convex whorl surface and greater spiral angle from *Katosira periniana* (D'ORBIGNY, 1853), a species with almost totally flat whorls except the convexly-whorled juvenile shell. In this latter species it is not the folds that emerge from the conical surface formed by the sutures, but actually the furrows between them are depressed. On the basis of the these differences, the uniting of the two forms (STOLICZKA, 1861) seems unjustified.

The fragment determined by Dumortier (1869) as *Chemnitzia undulata* (ZIETEN) seems different, even generically, on the basis of its substantially different proportions and the almost total lack of transverse folds.

Katosira periniana (D'ORBIGNY, 1853)
(Plate II: fig. 3)

1853: *Chemnitzia periniana* D'ORBIGNY p. 36, pl. 243, figs 1–2.
?1861: *Chemnitzia undulata* BENZ — STOLICZKA, p. 163, pl. 1, fig. 1.

Measurements:	H	HL	HA	D	W	A
Plate II: fig. 3.	—	17.5	—	11	—	12.5°

Material — Two fragmentary specimens with preserved shell.

Shape — The shell is dextral with turriculate spire. The surface in the juvenile whorls strongly, in the later whorls slightly convex. A pronounced keel runs on the basal margin, while the base is conical with a somewhat concave outline on the part inclining to the columella.

Ornament — The whorl-surface and the base are divided into bands by spiral grooves. Their number hardly increases with growth, rather their width grows. The angulation of the basal margin is accentuated by a carina. The run of the growth lines is somewhat opisthocyrt on the whorls and orthocline on the base. Only the whorls are ornamented with transverse folds, which are more regular and nearly rib-like on the juvenile whorls. The folds become flattened during growth, with increase in number per whorls. The internal moulds show traces of these latter elements only.

Distribution — France, Normandy: Middle Liassic; ?Alps: Hierlatz limestone; Bakony, Kericser: Stokesi Zone.

Remarks — For distincion of this form from *K. undulata* (BENZ) which also occurs in the Bakony Mts., see above. The similarly small spire-angled *K. carusensis* (D'ORB.) has more convex whorl-surface, but this is hardly a basis for distinguishing in the juvenile state, when the less-curved ribs of *K. periniana* are denser.

Genus *ANOPTYCHIA* KOKEN, 1892

Anoptychia turgida (STOLICZKA, 1861)
(Plate II: fig. 4)

1861: *Chemnitzia turgida* STOLICZKA, p. 165, pl. 1, fig. 5.

Measurements:	H	HL	HA	D	W	A
Plate II: fig. 4.	—	10.4	6.5	7	—	15°

Material — Two fragmentary, one three-whorled and one four-whorled specimens.

Shape — Dextral, high-spired, many-whorled shell. The whorls are convex, the last one goes without angulation into the similarly convex, anomphalous base. The suture is situated deeply within a groove. The aperture is circular, with fragmentary peristome in the available specimens.

Ornament — The abapical side of the whorls and the whole base is sculptured by spiral lines. The transverse ornament consists of fine, slightly opisthocyrt growth lines and tiny folds on the juvenile whorls, parallel to the latter ones. The interspaces are more regular on the earlier shell-parts, where the cords are more distinct, riblet-like, and bear tiny tubercles on the intersections with the spiral lines.

Distribution — Northern Calcareous Alps: Hierlatz limestone; Bakony, Sümeg: ?Upper Sinemurian.

Remarks — The two Bakony specimens are just distinguished from the description and figure of STOLICZKA by their measurements, but the ornament shows some differences, i. e. juvenile riblets are present in the former ones. However, the similarities in the proportions are so close, that one can attribute the lack of sculptural elements in the Hierlatz specimens to preservational causes. Similar to the Bakony specimens by ornament is the species *Anoptychia crenata* (STOLICZKA, 1861), but its spiral angle is greater by about 10 degrees, so its

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Plate I.

Figs 1–3. *Paraviviana*? sp., Somhegy, ×2.5.

Figs 4–5. *Lewisiella acicula* (STOLICZKA), Kericser, ×1.8.

Fig. 6. *Proconulus*? cf. *galatensis* (GEMMELLARO, M.), Sümeg, ×3.5.

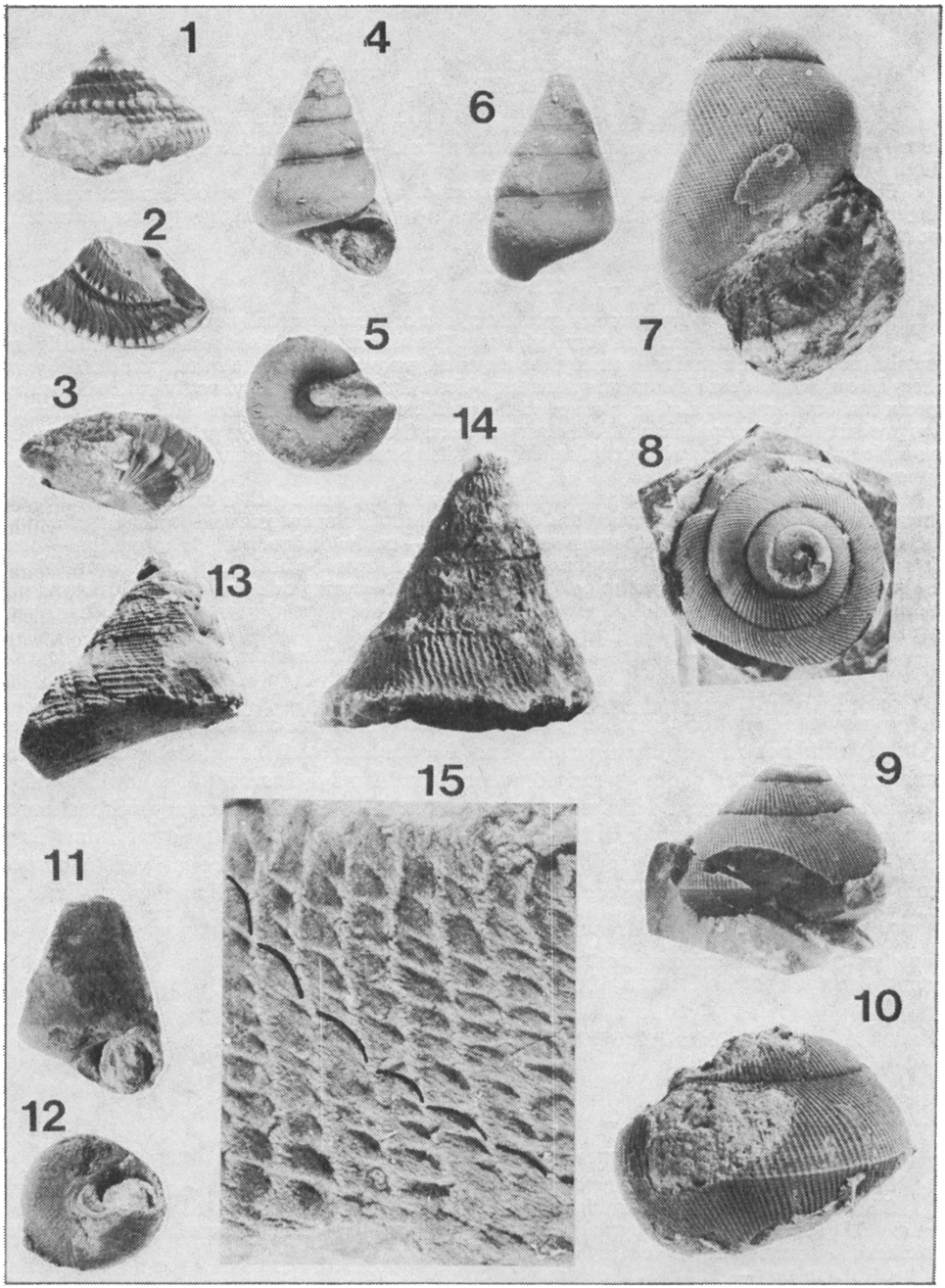
Figs. 7–10. *Ventricaria*? *vesicula* sp. n., Somhegy. 7 = holotype, J 10134. ×1.8, 8–9 = a juvenile specimen, ×1.9, 10 = another juvenile specimen showing disappearence of angulation, ×2.2.

Figs 11–12. *Proconulus ibbetsoni* (MORRIS & LYCETT), Somhegy, ×2.4.

Fig. 13. *Lamelliphorus*? sp., Sümeg, ×1.5.

Figs 14–15. *Lamelliphorus rhombifer* (Uhlig), Somhegy, 14 = ×2.4, 15 = ornament of another specimen, ×13.5

Plate I.



proportions are also markedly different. However, it should be mentioned that both species belong to the rare forms in tha Alps as well as in the Bakony Mts., so they are imperfectly known.

Anoptychia hastata sp. n.
(Plate II: figs 5–6)

Holotypus : Plate II: figs 5–6. — Locus typicus : Bakonybél, Somhegy. — Stratum typicum : limestone infilling horizontal fissure. — Derivation nominis : hasta (Lat.) = spear.

Diagnosis : very high spire, great number of whorls, flattened whorl-surface; riblets on the juvenile whorls near the apex; spiral threads on the whole shell, with slightly weaker intersecting growth lines on the whorls.

Measurements:	H	HL	HA	D	W	A
Plate II: figs 5–6.	—	15.5	10	10.5	5	9°

Material — Two fragmentary specimens, one of these is partially an impression.

Shape — Dextral shell with very high spire. The surface of the whorls is flat, with hardly impressed suture, which is similar in strength to the small grooves between the spiral threads. The periphery is rounded, the base is convex, without umbilicus. Entire peristome cannot be studied on either specimens, but it may be similar in shape to the parallelogram-formed whorl-section. The outer lip was probably slightly opisthicyrt like the growth lines. Only the columellar portion of the inner lip is visible, which is straight without thickening, and its abaxial end curves into the basal lip without siphonal canal or its rudiment.

Ornament — Except the subsutural narrow zone, the whole shell is ornamented with spiral threads, which widen on the last whorl and on the base, and the narrow grooves between them become rather characteristic. The juvenile transverse sculpture — on the basis of a single impression — consists of small opisthocline ribs. These fade out later, first on the mid-whorls, then on below and above the suture. The growth lines are also opisthocline initially, becoming opisthocyrt later. Among them, especially on the younger whorls, there are almost periodically repeating growth lines of nearly as strong as threads.

Distribution — Bakonybél, Somhegy: condensed Subfurcatum and Garantiana Zones.

Remarks — The contemporary families are comprised of several known or imperfectly known high-spired genera, e. g. *Rhabdochonca* (Pseudomelaniidae), *Climacina* (Spirostylidae) with non-ribbed juvenile shell, and *Laevibaculis* with additional lack of spiral ornament. This latter genus is ranged among that family (Procerithiidae), which hosts *Cosmocerithium*, that may have similar ornament but this shows rudimentary siphonal canal on the peristome. The here described from — judging from irs preserved peristome fragment — does not show even a trace of this element. *A. hastata* sp. n. can be easily distinguished from the similarly-built *Nerineacea* genera by the smooth internal wall and columellar surfaces. Species of *Anoptychia* with similarly high spire cannot be found in the literature.

Superfamily *Pseudomelaniacea* FISCHER, 1885
Family **Pseudomelaniidae** FISCHER, 1885

Genus *PSEUDOMELANIA* PICTET et CAMPICHE, 1862

Pseudomelania? sp.
(Plate III: fig. 10)

Measurements:	H	HL	HA	D	W	A
Plate III: fig. 10.	—	11	6	6.5	3	13°

Material — A single fragmentary specimen with shell.

Shape — Dextral shell with high spire, hardly convex whorl-surfaces and suture as a narrow groove. The aperture is elongated axially, sharpening at the suture, and the columellar lip is somewhat thickened. Anomphalous, the outline of the base is slightly concave.

Ornament — The shell is ornamented only with prosocline and slightly opisthocyrt growth lines.

Distribution — Bakonybél, Somhegy: ?Bajocian (?Humphriesianum Zone).

Remarks — This form is distinguished from *Anoptychia hastata* sp. n., the other high-spired species in the fauna by its greater spiral angle, different proportions and lack of ornament. The badly preserved specimen which had two serious damages in its life, can be hardly determined specifically, and the generic arrangement is somewhat uncertain, because of the lack of the juvenile part of the shell.

Genus *OONIA* GEMMELLARO, 1878

Oonia pennina (PARONA, 1892)
(Plate III. fig. 9)

1880: *Chemnitzia* sp. — PARONA, p 210, pl. 3, fig. 10.
1892: *Pseudomelania pennina* n. sp. — PARONA, p. 12, pl. 1, fig. 1–2.
1967: *Anoptychia dubia* (Terquem) — SACCHI-VIALLI and CANTALUPPI, p. 119, pl. 18, figs 3a–b.

Measurements:	H	HL	HA	D	W	A
Plate III: fig. 9.	—	28	19	22	—	45–35°

Material — A single specimen with shell of many damages.

Shape — Dextral form with moderately high spire, slightly convex outline, similarly slightly convex whorls. Below the suture runs a thick spiral fold, separated from other parts of the whorl-surface by a shallow concave zone. The base is convex, without umbilicus.

Ornament — The whorls are ornamented spirally with fine striation visible only by magnification. The shell becomes gradually smooth from the suture toward the periphery, then the striation reappears along the inner lip. The fine growth lines are slightly opisthocyrt.

Distribution — Southern Alps, Gozzano: Middle Liassic; Bakony, Kericser: Stokesi Zone.

Remarks — There are no marked differences between the Bakony specimens and that figured by PARONA, and the somewhat smaller spiral angle on the specimen of SACCHI-VIALLI and CANTALUPPI cannot be regarded as significant difference. These latter authors revised the descriptions of PARONA, and wrongly identified *O. pennina* as the species „*Anoptychia*" *dubia* (TERQUEM, 1865). Apart from the markedly different proportions, the species of TERQUEM lacks the spiral fold below the suture, its whorls are more convex, the suture is deeper, and the peristome shows a significant siphonal extension, which is missing completely in *O. pennina*. Moreover, in spite of the lack of the juvenile shell, which is ribbed in *Anoptychia*, certainly the species cannot be ranged into genus *Anoptychia*. The height of the last whorl exceeds well half of the probable total heigh, which is an *Oonia* character, but, in turn, in *Anoptychia* it rarely exceeds slightly a quarter. This very proportional feature served as a basis for ranging this species here into the genus *Oonia*, instead of *Pseudomelania*. The above-discussed value is about 1/3 in this latter genus.

The most similar form is *Oonia dresnayi* BOURROUILH, 1966, but its spiral angle is greater by ca. 10°, and its subsutural fold is markedly weaker.

Superfamily *Xenophoracea* DESHAYES, 1864
Family **Lamelliphoridae** KOROBKOV, 1955

Genus *LAMELLIPHORUS* COSSMANN, 1915

Lamelliphorus rhombifer (UHLIG, 1881)
(Plate I: figs 14–15)

1881: *Trochus (Carinidea) rhombifer* n. f. — UHLIG, p. 405, pl. 7, figs. 15–16.

Measurements:	H	HL	HA	D	W	A
Plate I: fig. 14.	—	9	6	15	—	45–54°

Material — Four fragmentary specimens with shell.

Shape — Dextral form with moderately high and coeloconoid spire. The whorl-surface is sigmoidal, with a carina running on the lower margin, and the periphery is carinated, too. The base is concave in the peripherial zone, then, after a convexity, it rounds toward the columella. The peristome is strongly prosocline, roughly quadrangular, simple, with only a small, flat convexity at the columellar part.

Ornament — The whorls are covered with cancellate ornament, which appears at first glance as the result of a strongly and a less prosocline transverse rib type. However, even slight magnification shows, that the sculpture is formed by tiny, arched riblets, which are joined scale-like. The ribs, which are visible by unaided eye, are built up by properly curved parts of several arches of different age. The arches of the same growth stage are arranged parallel to the prosocline diagonals of the parallelograms of the apparent network, with concavities toward the opisthocline diagonals. Every convex sides of the small arches are connected to the lower end of the upper one and upper end of the other of the two neighbouring arches from the previous row, usually in tiny, spiniform protuberances (see Plate I: fig. 15.). The carinae running suprasuturally, and the periphery are ornamented with a line of small nodes fitting to the arch-rows. The base is ornamented only with opisthocyrt growth lines.

Distribution — Western Carpathians, Babierzowka: Upper Callovian; Bakony Mts, Somhegy: ?Parkinsoni Zone (all specimens from a fissure-filling limestone, which penetrates the well-dated sequence of Humphriesianum to Parkinsoni Zones).

Remarks — Despite the significant temporal difference, the Bakony specimens match well the description of UHLIG. *L. supraliasicus* (VACEK, 1886) is somewhat similar, but it has a broader base and the ornament differs markedly: the elements corresponding to the less-prosocline components of the network are stronger, while the other direction is hardly discernible. *L. papiraceus* (HÉBERT et DESLONGCHAMPS, 1860) has a more depressed shell and one component of the sculptural network is opisthocline.

Lamelliphorus suessi (UHLIG, 1878)
(Plate II: figs 10–11)

1878: *Onustus Suessi* n. f. — UHLIG, p. 650, pl. 16, figs 4–5.
1881: *Trochus (Carinidea) Suessi* UHLIG p. 404, pl. 7, figs 12–14.

Measurements:	H	HL	HA	D	W	A
Plate II: figs 10–11.	—	6.3	4.7	14	7.3	—

Material — Seven fragmentary internal moulds and shelled specimens.

Shape — The shell is dextral, moderately high, coeloconoid. The whorls are flat on the juvenile shell, with a convexity on their lower edge, the later whorls are concave, with a carina in the place of the previous convexity base is flat, with an excavation in the middle, anomphalous, but along the columellar lip runs a shallow furrow. The peristome is extremely prosocline, the basal lip is slightly reflected and thickened to form a callus. On the middle portion of the posterior margin of the callus a protruding recess is situated. The parietal lip is covered also by a marked callus.

Ornament — The whole spire is covered by spiral lines, of which 2 to 3 run near the periphery on the base, and an other in the middle of the base. This latter shows the trace of the recess on the callus. The growth lines are strongly prosocline on the whorls, opisthocyrt on the base and break along the single spiral line.

Distribution — Western Carpathian, Babierzowka: Upper Callovian; Bakony Mts.: ?Bajocian.

Plate II.

Figs 1–2. *Katosira undulata* (BENZ), Kericser, ×1.1.

Fig. 3. *Katosira periniana* (D'ORBIGNY), Kericser, ×1.6.

Fig. 4. *Anoptychia turgida* (STOLICZKA), Sümeg, ×2.2.

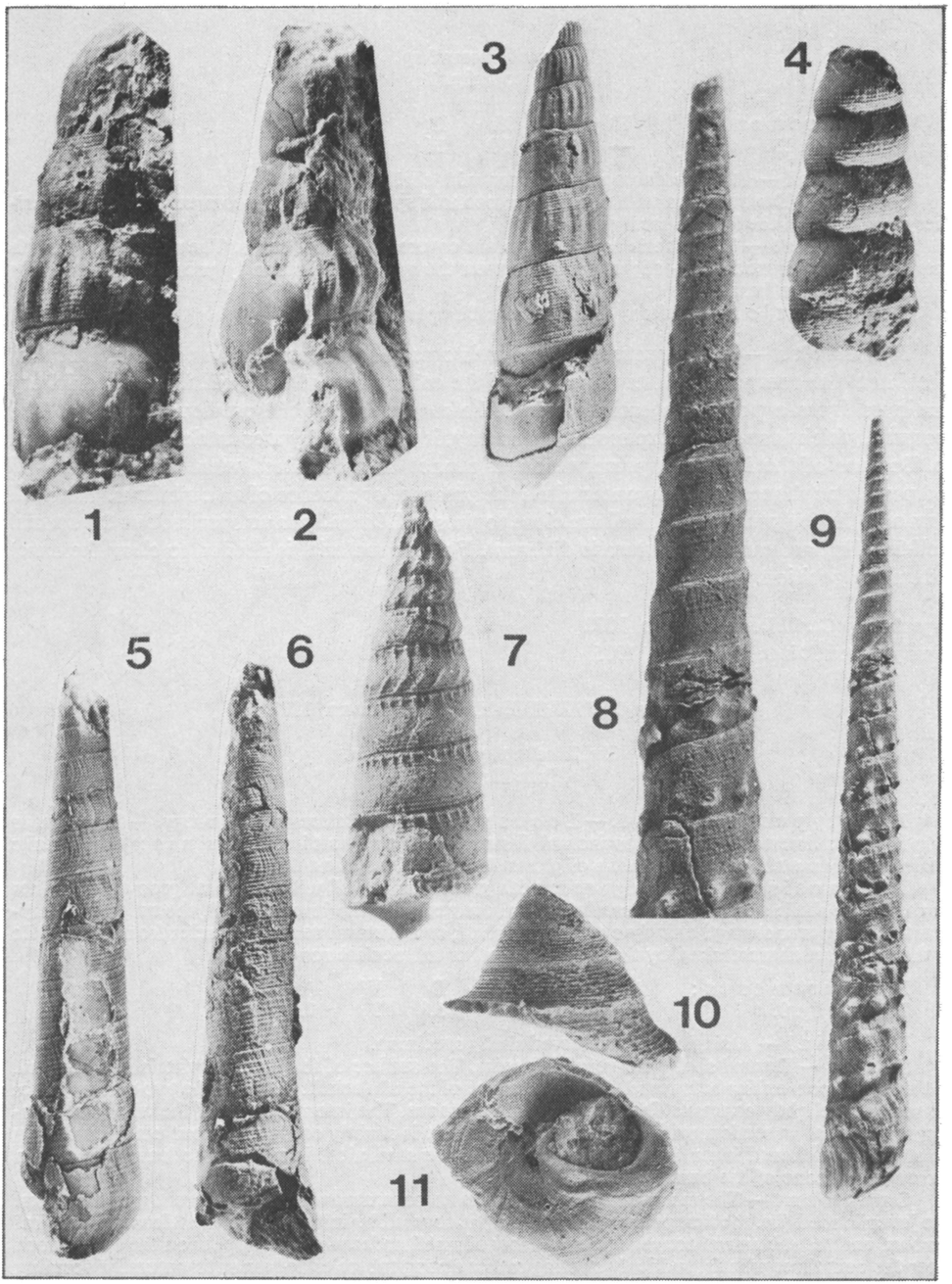
Figs 5–6. *Anoptychia hastata* sp. n., holotype J 10135, Somhegy, ×1.6.

Fig. 7. *Procerithium (Cosmocerithium)*? *angulocostata* sp. n., holotype J 10136, Somhegy, ×4.3.

Figs 8–9. *Cerithinella rigauxoides* sp. n., holotype J 10137, Somhegy, 8 = ×1.9, 9 = ×4.9.

Figs 10–11. *Lamelliphorus suessi* (UHLIG), Somhegy, ×2.4

Plate II.



Remarks — The spiral striation of the Bakony specimens are somewhat stronger and the number of the basal spiral lines is lower than on the figures of UHLIG.

Lamelliphorus? sp.
(Plate I: fig. 13)

Measurements:	H	HL	HA	D	W	A
Plate I: fig. 13.	—	14	10	16	11	—

Material — A single damaged specimen with shell.

Shape — Dextral form with slightly coeloconoid spire and slightly convex whorls; the periphery is sharp and the base is hardly convex.

Ornament — The whorls and the base are covered by spiral cords. The run of the growth lines is strongly prosocline — slightly prosocyrt on the whorls and strongly prosocline — slightly opisthocyrt on the base.

Distribution — Bakony Mts, Sümeg: ?Upper Sinemurian.

Remarks — The structure of the peristome seems special. The coiling of the last whorl neat the aperture deviates from that of the other parts of the shell, i. e. the periphery continues from a point tangentially, while the suture follows the previous direction. The aperture, which is suddenly expanded in this way, is restricted by a constriction on the basal lip. Because of the imperfect preservation, it cannot be ascertained what caused this shell and peristome shape. Similarly uncertain is the presence or absence of an umbilicus. The shell form and the sculpture of the shell are close to those of *Lamelliphorus* species, but the special shell-building around the aperture is different. Further material is needed to clear the exact systematic position.

Superfamily *Cerithiacea* FLEMING, 1822
Family **Procerithidae** COSSMANN, 1905

Genus *CERITHINELLA* GEMMELLARO, 1878

Cerithinella rigauxoides sp. n.
(Plate II: figs 8–9)

Holotypus: Plate II, fig. 9. — Locus typicus: Bakonybél, Somhegy. — Stratum typicum: limestone infilling horizontal fissure. — Derivatio nominis: the juvenile shell perfectly matches the description of genus *Rigauxia* COSSMANN, 1885.

Diagnosis: extremely high spire with great number of whorls: spiral grooves and lines on the whole shell; subsutural tuberculate spiral convexity on the juvenile shell, the tubercles disappear then reappear strengtheningly on the adult shell; suprasutural row of tubercles from the middle of the shell-part characterized by the lack of the other tuberculate row.

Measurements:	H	HL	HA	D	W	A
Plate II: fig. 9.	—	12.5	—	5.8	3	7.5°

Material — A single, well-preserved shelly specimen.

Shape — Dextral shell with very high spire. The surface of the juvenile whorls is sigmoidal, and there are convexities below and above the suture of the adult shell. Between the two convex zones the surface is slightly concave. The suture runs in a groove. The internal space of the whorls is paralelogram-shaped in section, with smooth walls. The base is slightly convex, without umbilicus. Only the strongly thickened inner lip of the peristome can be studied; it is reflected to leave free only a narrow outer zone of the base.

Ornament — The many-whorled shell bears an ornament varied by different growth stages. The juvenile shell (i.e. the first preserved 13 whorls) is covered by initially rare, then denser fine spiral furrows, and the subsutural convexity bears a row of small nodes which disappear on the 10th whorl. After the next three whorls, suddenly starting rather strong tubercles appear suprasuturally, forming a row with a weak connecting carina and this continues up to the aperture. With the appearance of the lower row of tubercles the width of the spiral furrows increase and fine spiral lines appear between them. In the place of the juvenile nodose row, 3 to 4 whorls after the appearance of the suprasutural

row, a weak carina, then, 1 to 2 whorls after, a similar tuberculate row of weaker elements are visible. This latter one continues also up to the aperture. Below the periphery (i.e. the lower tubercle row), on the base, runs a weak carina. The growth lines are opisthocyrt on the whorls and orthocline on the base.

Distribution — Bakony Mts., Somhegy: condensed Subfurcatum and Garantiana Zones.

Remarks — The last whorls are similar to those on the form described by HUDLESTON (1887—96) as *Chyptaulax* cf. *undulatum* QUENST., but this latter has lower whorls, and the corresponding elements of its lower and upper tubercle row are connected by transverse ribs, and its suture is deeper. „*Cerithium*" *undulatum* QUENSTEDT, 1858 itself is more similar to *Cerithinella rigauxoides* sp. n. in shape, but the sculpture is rather different: not only transverse ribs occur, but these are intersected by spiral cords, too. The closest form is *Cerithinella* cf. *italica* GEMMELLARO, 1878, which was figured by DUBAR (1948), especially that on pl. IV, fig. 12. On the other hand, its whorls are significantly lower and the ornament is more marked.

The juvenile shell in itself can be identified with the genus *Rigauxia* (Zygopleuridae). This phenomenon possibly suggest descendence relationship. This type of shell-built is most common within the Nerineacea superfamily, but the arrangement of the here described species into this group can be ruled out, because none of the whorl-sections of the specimen sticked together from several fragments did show any internal spiral folds.

Genus ?*PROCERITHIUM* COSSMANN, 1902
Subgenus ?*Cosmocerithium* COSSMANN, 1906

Procerithium (Cosmocerithium)? angulocostatum sp. n.
(Plate II: fig. 7)

Holotypus: Plate II: fig. 7. — Locus typicus: Bakonybél, Somhegy. — Stratum typicum: limestone infilling horizontal fissure. — Derivatio nominis: angulosus (Lat.) = angular; costatus (Lat.) = ribbed; referring to the characteristically ornamented whorls with broken ribs.

Diagnosis: high, slightly cyrtoconoid spire; juvenile shell with suture to suture ribs, which is followed by whorls bearing broken, then divided ribbing; short riblets subsuturally on the last whorls; fine spiral lines on every whorls.

Measurements:	H	HL	HA	D	W	A
Plate II: fig. 7.	—	—	—	4.5	—	25–13°

Material — Two fragmentary specimens.

Shape — Dextral form with high cyrtoconoid shell, the whorls are rather low, their surface is strongly, then less concave on the juvenile and adult shell, respectively. The top of the concavity is situated at the lower third initially, and at the mid-whorl in later growth stages. The suture runs in a narrow groove, the periphery is angular, and the anomphalous base is similar to a cone of concave sides.

Ornament — The surface of the whorls is covered by fine spiral lines, which are stronger on each sides of the suture than on the middle of the whorls. Immediately below the suture is situated the strongest one, from which rise the axial costellae. These run suture to suture and are straight on the juvenile whorls, later break at mid-whorl forming an adapical portion of slightly prosocline, and an other, of markedly opisthocline run. The two portions divide during growth, getting shorter, so that the lower ones become denser then about two whorls later fade out gradually. The upper ones are present within a narrow subsutural zone on the whole length of the available specimens. Because of the poor state of preservation, the sculpture of the base cannot be studied.

Distribution — Bakony, Somhegy: ?Humphriesianum and condensed Subfurcatum and Garantiana Zones.

Remarks — The uncertain generic arrangement can be assigned partly to the unknown peristome. The thick columella suggest the presence of a siphonal canal. If it will be proved, the question-mark shall be omitted, while in the case of its lack the possibility of zygopleurid relation should be considered. The uncertainty is increased by the fact that

ornamentation of this type is unknown in species of similar age; *Protorcula* KITTL 1894 has another, a suprasutural carina and no suture to suture riblets; *Diatrypesis* TOMLIN, 1929 bears no spiral ornament.

Superfamily *Strombacea* SWAINSON, 1840
Family **Aporrhaidae** ADAMS et ADAMS, 1858

Genus *PIETTEIA* COSSMANN, 1904

Pietteia trispinigera sp. n.
(Plate III: figs 12–13)

Holotypus: Plate III: fig. 12. — Locus typicus: Bakonybél, Somhegy. — Stratum typicum: limestone infilling horizontal fissure. — Derivatio nominis: tres (Lat.) = three; spine (Lat.) = thorn; gero (Lat.) = bears.

Diagnosis: large, bicarinate, dome-shaped embryonal shell; densely-ribbed juvenile whorls, followed by rare parabolic nodes on the angulation up to the penultimate whorl; three protrusion on the slightly expanded outer lip.

Measurements:	H	HL	HA	D	W	A
Plate III: fig. 12.	+30	+16.5	+14	18	—	17–12°

(+ = smaller than the real values owing to the damage of the specimen)

Material — Six, more or less damaged specimens with shell.

Shape — The shell is dextral with high spire of slightly cyrtoconoid outline. The whorls are slightly convex with carinate middle part, and are bordered by sutures in moderately deep grooves. On the last whorl, below the periphery (i.e. the carina of the whorls), an other weak break is visible, and both continues into a protruding spine on the peristome. The base is convex on the upper part, and concave near the siphonal canal, without umbilicus. The peristome is markedly expanded, its upper part reaches to the carina of the penultimate whorl. The end of the spine in the continuation of the carina is slightly curved adaperturally and adapically. The lower spine is situated as somewhat arched from the bisector of the angle between the upper spine and the siphonal canal, in the direction of the latter. One unpreparable specimen shows a spine on the carina, ca. 240° before the last peristome. The other shells show only the scar of this element.

Ornament — The whole teleoconch is ornamented by fine threads, which appear immediately after the end of the embryonal whorls. In the beginning these cover only the zone between the carina and the lower suture, but after about a half whorl cover the remaining part, too. These occur on the base also with the same density and strength as on the whorls. Some lines are continued upon the peristomal protrusions. The transverse ornament is formed by opisthocyrt growth lines and ribs restricted to the juvenile shell. These latter ones run suture to suture for a length of about one whorl after the end of the protoconch, and are pointed on the carina. They become shorter gradually on the next whorls, resulting in nodes on the carina, rarer than the ribs. Most nodes are parabolic, show-

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Plate III.

Figs 1–4. *Ochetochilis piceus* sp. n., Somhegy, 1–2 = a paratype, ×2.1, 3 = fragmentary protoconch of paratype, ×5.7, 4 = holotype J 10138, ×2,

Figs 5–8. *Eucycloidea galaczi* sp. n., Somhegy, 5–6 = holotype J 10139, ×1.9, 7 = embryonal-juvenile whorls of holotype, ×5.5, 8 = a juvenile specimen showing sculpture, ×2.8

Fig. 9. *Oonia pennina* (PARONA), Kericser, ×1.4

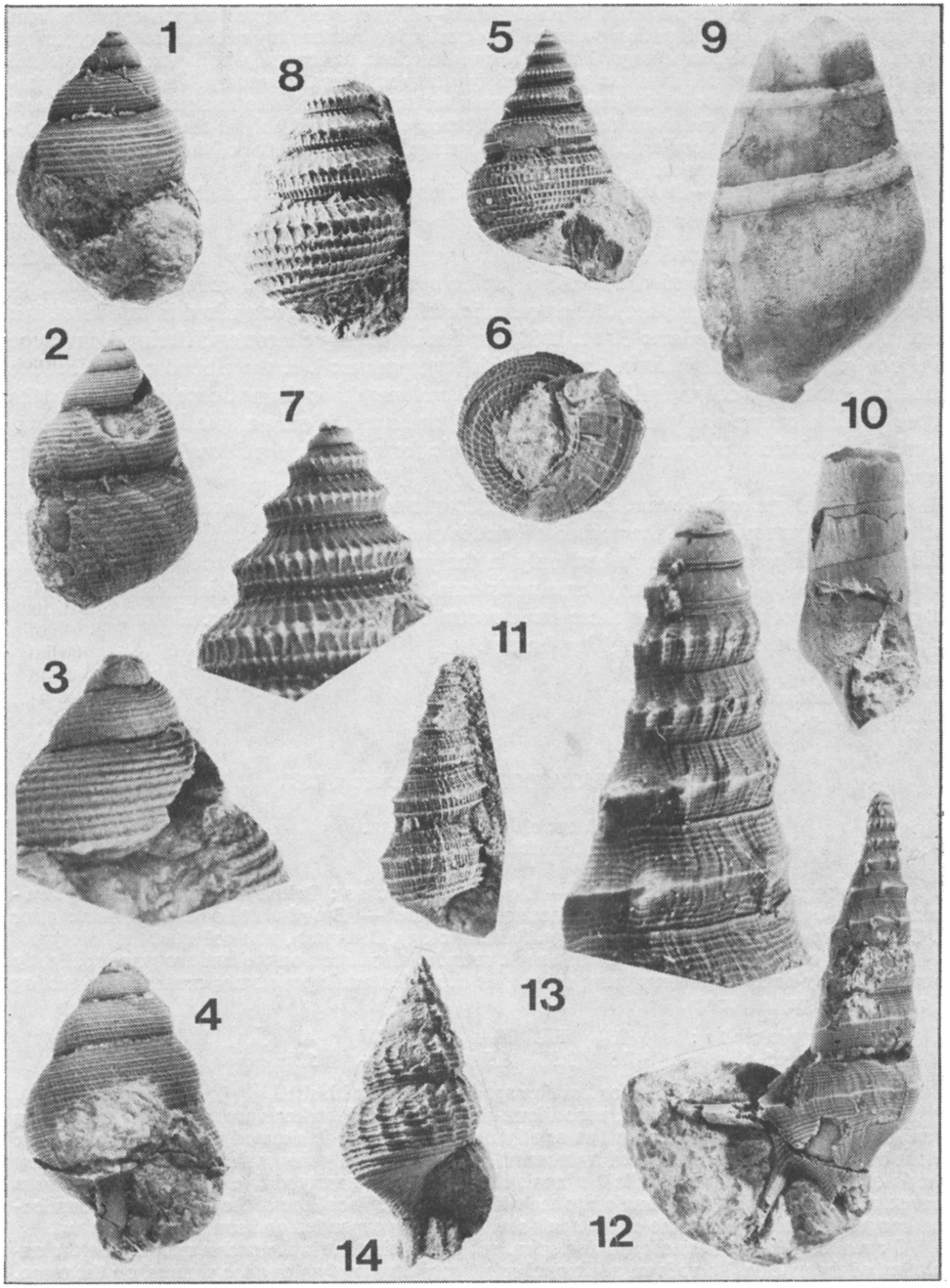
Fig. 10. *Pseudomelania*? sp., Somhegy, ×2.5

Fig. 11. *Mathilda (Tricarilda?)* sp., Somhegy, ×4.7

Figs 12–13. *Pietteia trispinigera* sp. n., holotype J 10140, 12 = ×1.9, 13 = embryonal-juvenile part of holotype, ×6

Fig. 14. *Maturifusus densicostatus* gen. et sp. n., holotype J 10141, ×1.9

Plate III.



ing by the growth lines clearly. The last ca. one and a half whorl lacks the nodes, but the strength and run of the carina remains uneven.

Embryonal shape and ornament — The axis of the protoconch coincides with that of the teleoconch, and is of dome-shape. Only trace of the nucleus is visible on the holotype: it is probably depressed and seems large. This is followed by three embryonal whorls visible by unaided eye, and these are separated from the teleoconch by sharp sculptural boundary. The somewhat convex whorls are smooth except the two tiny suprasutural carinae, only the last quarter-whorl bears gradually strengthening transverse threads. These become strong suddenly at the end of the protoconch, with simultaneous ending of the two tiny carinae, and appearance of the mid-whorl carina characteristic to the teleoconch.

Distribution — Bakony, Somhegy: condensed Subfurcatum and Garantiana, and Parkinsoni Zones.

Remarks — According to the original description, the build-up of the outer lip in the genus *Pietteia* is characterzied by a single spine beside the siphonal canal, in the place of the continuation of the periphery. The possession of two spines, recognized in this form, is a feature in the genus *Dicroloma* GABB, 1868, but this is the only character differing from those of *Pietteia*. All the other features suggest this latter genus: i. e. the ribbed or tuberculate whorls, contrary the only spirally ornamented *Dicroloma* shell; the presence of only one, the upper marked carina and the representation of the lower as only a spiral cord in the last whorl of *P. trispinigera* sp. n., as in the congeneric forms, while the *Dicroloma* is bicarinate here.

Of the contemporary forms, *P. hamus* (DESLONGCHAMPS, 1842) is the most similar, but this has only two protrusions on the peristome, and is evenly ribbed up to the penultimate whorl, while *P. trispinigera* sp. n. is ribbed only in the juvenile shell, then nodose. *P. tridactyla* (BUVIGNIER, 1843) bears similarly three peristomal protrusions, thus this is most similar in shape, in spite of the fact that these three rostra are markedly shorter. However, its r[illegible] equal ribbing is a clear distinguishing feature.

Superfamily *Littorinacea* GRAY, 1840
Family **Purpurinidae** ZITTEL, 1895

Genus *EUCYCLOIDEA* HUDLESTON, 1888

Eucycloidea galaczi sp. n.
(Plate III: figs 5–8)

Holotypus: Plate III: figs 5–6. — Locus typicus: Bakonybél, Somhegy. — Stratum typicum: limestone infilling horizontal fissure — Derivatio nominis: after A. Galácz (Eötvös Loránd University, Dept. Palaeontology, Budapest), who collected the holotype.

Diagnosis: pagodiform juvenile shell, rounded angulation on the last two whorls; slightly convex, widaely-hanerомphalous base; somewhat expanded adult peristome; ornament consisting of collabral nd pspiral cords.

Measurements:	H	HL	HA	D	W	A
Plate III: figs 5–6.	18	9.5	6.5	13	—	52°

Material — Eleven, more or less damaged specimens with shell.

Shape — The shell is dextral, pagodiform-littoriniform. The whorls are angular, the periphery is carinate. Above the angulation a flat or slightly convex ramp is situated, the surface is convex below. The angulation is accentuated by a carina, and actually only this carina is present on the last whorls of the adult specimens, while the break of the surface is hardly visible. The base is somewhat convex, and curves with a sharp angle into the wide umbilicus. The shape of the peristome is rounded-quadrangular, the last peristome of the adult shell is slightly expanded and somewhat thickened.

Ornament — The most striking spiral sculptural element is the carina running on the angulation of the whorls. There is an additional spiral cord constantly along the sutures, on the ramp. Some of the specimens show an occurrence of a supracarinal other cord in the whorls of the later growth stages. Between the angulation and the umbilical margin run 8 to 10 additional spiral cords, of these 0 to 3 are visible above the suture, depending on growth stages.

The axial ornament consists of weaker and denser cords as compared to those above, and the points of intersections commonly bear tiny tubercles. In some specimens, and on certain parts of the shell, the collabral cords break into tiny ribs, which end in the interspaces of the elements of the neighbouring costella-rows. Thus a characteristic sculpture is resulted on certain parts of the shell. The growth lines are hardly prosocline on the whorls and slightly opisthocyrt on the last whorl, including the base.

Embryonal shape and ornament — The apex is blunt, the initial chamber is embraced by the first (planispral) whorl, which is smooth in the beginning, and at its end bears appearing tiny transverse ribs along the upper suture, then, after about 1.5 whorls, the angulation develops in the middle of the whorl. The end of the protoconch can be recorded by this development.

Distribution — Bakony, Somhegy: Humphriesianum to Parkinsoni Zones.

Remarks — The most closely allied form of *E. galaczi* sp. n. is the species *Eucycloidea granulata* (HÉBERT et DESLONGCHAMPS, 1860), especially of those specimens which have only the subsutural spiral cord on the ramp. However, this new species shows lower whorls, smaller spiral angle, more flattened base and wider umbilicus. These features distinguish the two forms. In other *Eucycloidea* species the umbilicus is rather narrow, or missing.

Genus *OCHETOCHILUS* COSSMANN, 1899

Ochetochilus piceus sp. n.
(Plate III: figs 1–4)

Holotypus : Plate III: fig. 4. — Locus typicus : Bakonybél, Somhegy. — Stratum typicum : limestone infilling horizontal fissure. — Derivatio nominis : piceus (Lat.) = pitch-black; referring to that most specimens are coated with manganese film.

Diagnosis : oval shell-outline with narrow umbilicus; ornament consisting of dense spiral cords and transverse threads.

Measurements:	H	HL	HA	D	W	A
Plate III: fig. 4.	—	14	—	13	—	65–42°
Plate III: figs 1–3.	17.5	12	8	11.5	—	71–45°

Material — Six, more or less damaged specimens with shell.

Shape — Dextral shell with oval outline, convex whorls, of which last curves into the similarly convex base without break. The umbilicus is narrow, which is partially (or totally?) covered by the inner lip. The peristome is elongated axially, the outer lip is simple and arched, the inner lip forms a wide, "V"-shaped callus, of which axial wing is reflected and covers the umbilicus.

Ornament — The whole shell is covered with spiral cords, which are flattened, lace-like in the last whorl. Between them, random weaker threads also appear. The collabral ornament consists of growth lines, of whichs ome strengthen as the spiral threads, except on the last whorl. These threads, together with the spiral elements, result in cancellate pattern of more or less equal interspaces. The transverse sculptural elements are slightly opisthocyrt and stronger prosocline on the whorls, less on the base.

Emryonal shape and ornament — One specimens shows the preserved last whorl of the protoconch (Plate III: fig. 3), which is of convex surface and completely smooth. Its end is marked by sudden appearance of strong, rib-like, opisthocyrt growth lines and spiral lines covering the whorl.

Distribution — Bakony, Somhegy: ?Humphriesianum and condensed Subfurcatum and Garantiana Zones.

Remarks — The most similar form among the few known species of the genus is the type species, *O. subvaricosus* COSSMAN, 1899. However, this has anomphalous shell, non-ovate, but rather conical spire-outline with acute apex, and rarer and granulate spiral cords. Furthermore, the here described species lacks the rudimentary varices characterizing the type species.

Superfamily *Buccinacea* LATREILLE, 1825
Family **Buccinidae** LATREILLE, 1825

Genus *MATURIFUSUS* gen. n.

Type species : *Maturifusus densicostatus* sp. n. — Derivatio nominis : maturus (Lat.) = early (figuratively); fusus (Lat.) = spindle.

Diagnosis : fusiform shell with moderately high spire, convex whorls and deep suture. The periphery is rounded, the base is concave along the columella. The aperture is axially elongated, with a connected rather long siphonal canal. In the parietal and columellar region a thin callus, appearing in a narrow zone, may occur. The ornament consists of strong collabral ribs or folds, and spiral cords and threads. The intersections of the two differently directed ornamental elements may bear tiny tubercles. The shell-structure and the embryonal shell are unknown.

Distribution — France, Montreuil-Bellay; Bakony Mts.: Middle Jurassic.

Remarks — The majority of the similarly-shaped genera belongs into the family Buccinidae, of which most similar are forms in the Pleistocene to Recent *Plicifusus* and its subgenera. Naturally, the great temporal distance makes any closer relation unprobable, the similarity can be regarded rather as a subjective basis for the arrangement of Maturifusus. Further material and studies are needed to determine the exact systematic position and to understand the early evolution of the siphonostom caenogastropods (Neogastropoda).

Cymatiidae is an other family comprising similar genera, but most of these bear columellar teeth and folds, usually together with thick parietal and/or columellar callus. These features are missing in the here described new genus.

Apart from the type species, *Maturifusus piettei* (HÉBERT et DESLONGCHAMPS, 1860) certainly belongs into this genus. The generic arrangement of other fusiform species occurring more or less continuously from the Upper Triassic to the Middle Cretaceous needs further investigations.

Maturifusus densicostatus sp. n.
(Plate III: fig. 14)

Holotypus : Plate III: fig. 14. — Locus typicus : Bakonybél, Somhegy. — Stratum typicum : limestone infilling horizontal fissure. — Derivatio nominis : dense (Lat.) = close, dense; costa (Lat.) = rib.

Diagnosis : closely-situated sharp ribs suture to suture; spiral cords, between them spiral threads on the whorls and only spiral threads on the base; tiny tubercles on the intersecting points of the ribs and cords; thin, membranaceous parietal and columellar callus.

Measurements	H	HL	HA	D	W	A
Plate III: fig. 14.	—	—	—	11	5	57–37°

Material — Two damaged specimens with shell.

Shape — Dextral, high, fusiform shell with cyrtoconoid spire. The whorls are convex, the outline of the base is concave along the columella. The aperture is elongated, and, on the basis of one cross-section, the ca. one-third of its height is formed by the siphonal canal. Along the inner lip a thin lamella covers the previously-built shell-parts, and this lamella does not hide the unevennesses caused by the former ornament, either. Non-umbilicated.

Ornament — The whorls and the adapical margin of the base is covered by spiral cords with spiral threads running in between. Only these latters occur in the narrow subsutural zone, and on the lower part of the base. The transverse ornament is formed by strong ribs running parallel to the prosocyrt growth lines, which reach suture to suture and on the last whorl to the upper margin of the base. On the edges of the ribs, where the spiral cords are intersected, tiny tubercles can be seen.

Embryonal shape and ornament — The shape of the earliest whorl does not differ from that of the other ones, and the difference in the ornament appears only as the decreased number of the elements. This is the second whorl at most, in the case of same coiling on the embryonal shell and the teleoconch, thus could be a one-whorl different portion altogether. If the coiling was different from that of the preserved shell parts, greater differences could have been present.

Distribution — Bakony Mts., Somhegy: condensed Subfurcatum and Garantiana Zones. Subclass uncertain

Remarks — *Maturifusus piettei* (HÉBERT et DESLONGCHAMPS, 1860) is closely similar, but differs in having non-cyrtoconoid spire, lower whorls, smaller number of ribs per whorl, ribs, which are nearly straight and are rather undulatious, blunt, non-tuberculate, and equal spiral sculpture, while in *Maturifusus densicostatus* sp. n. cords and threads alternate.

Subclass uncertain
Superfamily uncertain
Family **Mathildidae** COSSMANN, 1912

Genus *MATHILDA* SEMPER
Subgenus ?*Tricarilda* GRÜNDEL, 1973

Mathilda (Tricarilda?) sp.
(Plate III: fig. 11)

Measurements:	H	HL	HA	D	W	A
Plate III: fig. 11.	—	—	—	3	—	36°

Material — One unpreparable and an other, relatively well-preserved specimen (this latter is the figured one).

Shape — Dextral, small shell with high spire. The whorls are convex, tricarinate initially and bicarinate later. The uppermost carina is represented on the last whorl as only a hardly visible line. The basis is convex, anomphalous. The embryonal shell and the peristome are unknown.

Ornament — Beyond the carinae, secondary spiral lines appear also during growth: one between the two lower carinae on the preserved sixth whorl, one in the narrow zone between the uppermost carina and the suture on the third whorl — this disappears on the penultimate whorl, three between the two uppermost carinae, one on the third whorl, and two on the fifth whorl. The base is covered with spiral threads of which some on the marginal part are similar to the carinae, in strength. The transverse ornament results from periodically repeated threads, which are parallel to the fine, slightly opisthocyrt growth lines. The threads are represented on the base, too, but here these are substantially weaker. The style of the sculpture is cancellate, and in the intersections tiny tubercles appear commonly.

Distribution — Bakony Mts., Somhegy: condensed Subfurcatum and Garantiana Zones.

Remarks — Suggesting the arrangement of Mathildidae into the superfamily Pyramidellacea (Subclassis Opisthobranchia) KNIGHT et al. (1960) made the higher systematic position of this family uncertain. Similarly uncertain is the subgeneric arrangement of this form based on the number of the spiral carinae (GRÜNDEL 1973): of the three initial carinae ("Primärspiralen") the uppermost one disappears almost completely till the last whorl.

Most similar of the published species is that described by WALTHER (1951) under the name *Promathilda euglypha* (Laube). However, the indentification of this bicarinate form seems wrong, because the species of LAUBE (1867) is pagodiform, i.e. unicarinate. The bad state of preservation of the available specimens makes the clearing up of the satisfactory indentification impossible.

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With this contribution, the systematic treatment of the faumans of the localities listed in Part I. of this series (v. 71., same journal) is nearing completion. The 85–90 percent of the species have already been treated, the remaining part represents such strongly fragmentary species which were not indentifiable but recognizable as independent units.

The writer hopes he can in the near future revisit the problems left open, by examining newly collected materialis and some museum collections.

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