REPORT

ON THE

SCIENTIFIC RESULTS

OF THE

VOYAGE OF H.M.S. CHALLENGER

DURING THE YEARS 1873-76

UNDER THE COMMAND OF CAPTAIN GEORGE S. NARES, R.N., F.R.S.

AND THE LATE

CAPTAIN FRANK TOURLE THOMSON, R.N.

PREPARED UNDER THE SUPERINTENDENCE OF THE LATE

Sir C. WYVILLE THOMSON, Knt., F.R.S., &c.

REGIUS PROFESSOR OF NATURAL HISTORY IN THE UNIVERSITY OF EDINBURGH DIRECTOR OF THE CIVILIAN SCIENTIFIC STAFF ON BOARD

AND NOW OF

JOHN MURRAY

ONE OF THE NATURALISTS OF THE EXPEDITION

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1887

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PLATE 51.

Legion NASSELLARIA. Order CYRTOIDEA.

Families TRIPOCALPIDA, PHENOCALPIDA et CYRTOCALPIDA.

(ZOOL. CHALL. EXP.-PART XL.-1886.)-Rr.

PLATE 51.

TRIPOCALPIDA, PHÆNOCALPIDA et CYRTOCALPIDA.

								Diam.	Page
Fig.	1.	Tripterocalpis phylloptera, n. sp.,				•	×	400	1138
Fig.	2.	Tripterocalpis conoptera, n. sp.,		•		:	×	300	1138
Fig.	3.	Tripterocalpis ogmoptera, n. sp.,	•				×	300	1138
Fig.	4.	Tripterocalpis ogmoptera, n. sp., A group of confluent pores, more enlarged	d.	·	•		×	500	1138
Fig.	5.	Tripterocalpis ogmoptera, n. sp., Central capsule. In the centre the stri globules, to the right the nucleus.	iate pod	loconus,	above it f	our oil-	×	300	1138
Fig.	6.	Tripocalpis triserrata, n. sp.,	: A.)	a .ndi	· ·		×	600	1136
Fig.	7.	Tridictyopus conicus, n. sp.,	.0	0.00		•	×	300	1145
Fig.	8.	Tridictyopus vatillum, n. sp.,	i der	4.20	19.267	1919	×	400	1145
Fig.	9.	Cyrtophormis spiralis, n. sp.,					×	400	1166
Fig.	10.	Archicorys ovata, n. sp.,					×	300	1185
Fig.	11.	Cyrtocalpis gromia, n. sp., .	•				×	400	1188
Fig.	12.	Archicorys microstoma, n. sp.,					×	400	1185
Fig.	13.	Cyrtocalpis urceolus, n. sp.,	•			•	×	500	1186
		The ovate central capsule exhibits in the	lower h	alf the po	odoconus, i	n the			

The ovate central capsule exhibits in the lower half the podoconus, in the upper half the spherical nucleus and three oil-globules. Between the capsule and the shell numerous xanthellæ, partly protruded through the shell-mouth along the radiating pseudopodia.



1-6. TRIPTEROCALPIS, 7.8. TRIDICTYOPUS, 9.-13. CYRTOCALPIS.

R.Biltoch, Jena, Lithogr

PLATE 52.

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Legion NASSELLARIA.

Order CYRTOIDEA.

Families TRIPOCALPIDA, PHÆNOCALPIDA, CYRTOCALPIDA et Anthocyrtida.

PLATE 52.

TRIPOCALPIDA, PHÆNOCALPIDA, CYRTOCALPIDA et ANTHOCYRTIDA.

						1.			Diam.	Page
Fig.	1.	Cyrtophormis pila, n. sp., .			•	• •		. >	× 300	1165
Fig.	2.	Cyrtophormis ærostatica, n. sp.,						. >	× 300	1166
 Fig.	3.	Cyrtophormis ærostatica, n. sp., Longitudinal section.	•		•	•	•	. >	< 300	116 6
Fig.	4.	Cyrtocalpis sethopora, n. sp.,						. >	600	1187
Fig.	5.	Cyrtocalpis lithomitra, n. sp.,						. >	400	1187
Fig.	6.	Cyrtocalpis lithomitra, n. sp., Longitudinal section.	•		· · · ·	•	·	. >	400	1187
Fig.	7.	Cyrtocalpis compacta, n. sp.,						. ,	< 400	1187
Fig.	8.	Cyrtocalpis compacta, n. sp., Longitudinal section.	.20	MA	19:		•	• • •	400	1187
Fig.	9.	Carpocanistrum flosculum, n. sp.,						. >	400	1171
Fig.	10.	Carpocanistrum cephalum, n. sp.,			10.00	1.2-1	1.	. >	< 300	1171
Fig.	11.	Carpocanistrum evacuatum, n. sp.,	i dan	ayo)	10.00			. >	< 400	1172
Fig.	12.	Carpocanium verecundum, n. sp.,	inte			1.1	6114	. ,	< 400	1284
		Vertical section through the top of the s	shell.							
Fig.	13.	Carpocanium verecundum, n. sp.,		•		• •	•	. >	< 400	1284
Fig.	14.	Carpocanium irregulare, n. sp.,						. >	400	1284
Fig.	15.	Carpocanium hexagonale, n. sp.,						. >	< 400	1282
Fig.	16.	Carpocanium peristomium, n. sp.,		:				. >	< 500	1283
Fig.	17.	Carpocanium peristomium, n. sp., Vertical section.	•		•	•	•	. >	< 500	1283
Fig.	18.	Carpocanium trepanium, n. sp., Peristome.	• 7	•		•	•	. >	< 600	1282
Fig.	19.	Carpocanium petalospyris, n. sp.,	1.00					. ,	< 300	1283
Fig.	20.	Carpocanium virgineum, n. sp.,						. >	< 600	1285
Fig.	21.	Tripodiscium sphærocephalum, n. s	sp.,					. >	400	1144
Fig.	22.	Tripodiscium tristylospyris, n. sp.	(vel T	ristylos	pyris trij	podisciu	m),	. ,	< 600	1143
Fig.	23.	Tripodiscium ramosum, n. sp. (vel	Trist	ylospyr	ris ramoso	ı), .		. ,	< 600	1144

The Wyage of H.M.S. Challenger!



1-8. CYRTOCALPIS, 9-20. CARPOCANIUM, 21-23. TRIPODISCIUM

PLATE 53.

Legion NASSELLARIA.

Orders SPYROIDEA ET CYRTOIDEA.

Families ZYGOSPYRIDA, TRIPOCALPIDA, PHENOCALPIDA et CYRTOCALPIDA.

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(ZOOL. CHALL. EXP.-PART XL.-1886.)-Rr.

PLATE 53.

Diam. Page Fig. 1. Archicapsa triforis, n. sp., . × 300 1191 Lateral view. Fig. 2. Archicapsa triforis, n. sp., . × 300 1191 Basal view. Fig. 3 Halicapsa triglochin, n. sp., 200 1190 × Lateral view. Fig. 4. Halicapsa triglochin, n. sp., × 200 1191 Basal view. Fig. 5. Halicapsa hystrix, n. sp., × 200 1191 Lateral view. Fig. 6. Halicapsa hystrix, n. sp., × 200 1191 Basal view. Fig. 7. Cantharospyris platybursa, n. sp. (vel Platybursa compressa), × 400 1051 Fig. 8 Tessarospyris clathrobursa, n. sp. (vel Clathrobursa dictyopus), × 400 1045 Fig 9. Peridium spinipes, n. sp., . × 500 1154 . Fig. 10. Peridium palmipes, n. sp., . × 500 1154 Fig. 11. Archiscenium quadrispinum, n. sp., . × 500 1150 In the spherical central capsule the dark nucleus is visible. Fig. 12. Euscenium eucolpium, n. sp.; × 500 1147 Fig. 13. Cladoscenium ancoratum, n. sp., × 400 1149 Fig. 14. Pteroscenium pinnatum, n. sp., × 400 1152 Lateral view. Fig. 15. Pteroscenium pinnatum, n. sp., × 400 1152 Vertical section. Fig. 16. Pteroscenium pinnatum, n. sp., × 400 1152 Basal view. Fig. 17. Calpophæna hexarrhabda, n. sp., × 400 1176 Fig. 18. Calpophæna hexarrhabda, n. sp., × 400 1176 Basal plate. Fig. 19. Tetraspyris tetracorethra, n. sp., × 400 1044 . . . With the four-lobed central capsule, in each lobe an oil-globule. Fig. 20. Tetraspyris tetracorethra, n. sp., × 800 1044 Shell more enlarged.

ZYGOSPYRIDA, TRIPOCALPIDA, PHÆNOCALPIDA et CYRTOCALPIDA.

The Wage of H. M.S. Challenger

Radiolaria Pl. 53.



 2. ARCHICAPSA, 3-6. HALICAPSA, 7. PLATYBURSA,
8. CLATHROBURSA, 9.10. ARCHIPERA, 11.12. ARCHISCENIUM, 13. CLADOSCENIUM, 14-16. PTEROSCENIUM, 17.18. ACROCORONA, 19:20. TETRACORETHRA.

PLATE 54.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families PHÆNOCALPIDA, CYRTOCALPIDA, ANTHOCYRTIDA et Sethocyrtida.

PLATE 54.

PHENOCALPIDA, CYRTOCALPIDA, ANTHOCYRTIDA et SETHOCYRTIDA.

			1.				Diam.	Page
Fig.	1.	Bathropyramis quadrata, n. sp.,	•			×	300	1159
Fig.	2.	Sethopyramis quadrata, n. sp.,	•	•		×	300	1254
Fig.	3.	Bathropyramis trapezoides, n. sp., .				×	300	1160
Fig.	4.	Bathropyramis ramosa, n. sp.,		•		×	300	1161
Fig.	5.	Peripyramis circumtexta, n. sp.,	Guong	•		×	300	1162
Fig.	6.	Plectopyramis dodecomma, n. sp.,	•••			×	400	1258
Fig.	7.	Cinclopyramis infundibulum, n. sp.,	energia. A sola		•	×	300	1161
Fig.	8.	Plectopyramis trapezomma, n. sp., .				×	400	1258
Fig.	9.	Cornutella hexagona, n. sp.,			•	×	400	1180
Fig.	10.	Cornutella sethoconus, n. sp.,				×	400	1180
Fig.	11.	Sethoconus orthoceras, n. sp., .				×	400	1294
Fig.	12.	Sethoconus bimarginatus, n. sp.,		. /		×	400	1295





E.Haedal and A.Gütach Del

R.Giltsch Jona Lithogr.

PLATE 55.

Legion NASSELLARIA. Order CYRTOIDEA.

Families PHENOCALPIDA, ANTHOCYRTIDA et SETHOCYRTIDA.

(ZOOL. CHALL EXP.-PART XL-1886.)-Rr.

PLATE 55.

PHÆNOCALPIDA, ANTHOCYRTIDA et SETHOCYRTIDA.

D:

					Diam.	rage
Fig.	1.	Sethoconus facetus, n. sp. (vel Phlebarachnium facetum), Upper part of the shell.	•	×	300	1296
Fig.	2.	Sethoconus venosus, n. sp. (vel Phlebarachnium venosum), Shell including the four-lobed central capsule.	•	×	250	1297
Fig.	3.	Sethophormis aurelia, n. sp. (vel Leptarachnium aurelia), Shell seen from above.	•	×	100	1248
Fig.	4.	Sethophormis aurelia, n. sp.,	•	×	400	1248
Fig.	5.	Cladarachnium ramosum, n. sp.,		×	300	1165
Fig.	6.	Cladarachnium ramosum, n. sp.,	•	×	70	1165
Fig.	7.	Bathropyramis interrupta, n. sp.,	•	×	300	1160
Fig.	8.	Litharachnium araneosum, n. sp.,	•	×	300	1163
Fig.	9.	Litharachnium epeira, n. sp.,	·	×	500	1164
Fig.	10.	Litharachnium araneosum, n. sp.,	•	×	50	1163
Fig.	11.	Periarachnium periplectum, n. sp.,	•	×	500	1297



Radiolaria Pl 55.



1 2 PHLEBARACHNIUM, 3 4 LEPTARACHNIUM, 5 10 LITHARACHNIUM, 11 PERIARACHNIUM,

PLATE 56.

VLATE 66. 1

Legion NASSELLARIA. Order CYRTOIDEA.

Families TRIPOCYRTIDA, ANTHOCYRTIDA et SETHOCYRTIDA.

PLATE 56.

TRIPOCYRTIDA, ANTHOCYRTIDA et SETHOCYRTIDA.

				Diam.	Page
Fig.	1.	Lithomelissa bütschlii, n. sp. (vel Sethomelissa bütschlii),	×	400	1207
Fig.	2.	Lithomelissa decacantha, n. sp. (vel Sethomelissa decacantha),	×	400	1208
Fig.	3.	Psilomelissa calvata, n. sp.,	×	400	1209
Fig.	4.	Lychnodictyum scaphopodium, n. sp.,	×	400	1231
Fig.	5.	Sethophormis pentalactis, n. sp. (vel Pentaphormis pentalactis), Oblique view of the shell, from below.	×	400	1244
Fig.	6.	Sethophormis hexalactis, n. sp. (vel Hexaphormis hexalactis), Central part of the shell, with the cortinar septum.	×	400	1245
Fig.	7.	Sethopyramis enneactis, n. sp. (vel Cephalopyramis enneactis),	×	400	1254
Fig.	. 8.	Plectopyramis polypleura, n. sp. (vel Sethopyramis polypleura),	×	200	1260
Fig.	9.	Sethophormis eupilium, n. sp. (vel Craspedilium eupilium),	×	400	1247
Fig.	10.	Plectopyramis spongiosa, n. sp. (vel Spongopyramis spongiosa),	×	400	1261
Fig	. 11.	Arachnocorys araneosa, n. sp.,	×	500	1266
Fig.	12.	Sethophormis dodecaster, n. sp. (vel Astrophormis dodecaster),	×	200	1248
Fig.	13.	Sethocephalus eucecryphalus, n. sp.,	×	400	1298



Radiolaria Pl 56.

Källtsch, Jena, Lefhogr.



Effacted and AGitzch,Del

1.2. SETHOMELISSA, 3.4. PSILOMELISSA, 5. PENTAPHORMIS, 6. HEXAPHORMIS, 7. CEPHALOPYRAMIS, 8.9. SETHOPYRAMIS, 10. PLECTOPYRAMIS, 11.12. ARACHNOCORYS, 13. SETHOCEPHALUS.

PLATE 57.

Legion NASSELLARIA. Order CYRTOIDEA.

Families TRIPOCYRTIDA, ANTHOCYRTIDA et SETHOCYRTIDA.

(ZOOL CHALL EXP.-PART XL-1886.)-Rr.

PLATE 57.

TRIPOCYRTIDA, ANTHOCYRTIDA ET SETHOCYRTIDA.

				1	Diam.	Page
 Fig.	1.	Dicolocapsa microcephala, n. sp.,	3	×	400	1312
 Fig.	2.	Sethocapsa pyriformis, n. sp.,	;	×	300	1310
Fig.	3.	Lithopera ananassa, n. sp.,	;	×	500	1234
 Fig.	4.	Sethamphora favosa, n. sp. (vel Cryptoprora favosa), .	:	×	400	1252
 Fig.	5.	Sethamphora microstoma, n. sp. (vel Cryptoprora microstoma	e), :	×	300	1252
 Fig.	6.	Clistophæna hexolena, n. sp.,	:	×	30,0	1287
 Fig.	7.	Clistophæna armata, n. sp.,	•	×	300	1288
Fig.	8.	Clathromitra pterophormis, n. sp.,	:	×	400	1219
 Fig.	9.	Sethophormis rotula, n. sp. (vel Enneaphormis rotula), .		×	400	1246
Fig.	10.	Dictyophimus sphærocephalus, n. sp.,		×	400	1195
Fig.	11.	Peromelissa phalacra, n. sp.,	:	×	400	1236
Fig.	12.	Peromelissa calva, n. sp.,		×	300	1237
Fig.	13.	Sethochytris triconiscus, n. sp.,		×	300	1239
Fig.	14.	Micromelissa bombus, n. sp.,		×	300	1235



B Harckel and AGitada Del

1 SETHOCAPSA, 2.3 LITHOPERA, 4.5 CRYPTOPRORA, 6.7 SETHOPHATNA, 8. PTEROPHORMIS, 9. ENNEAPHORMIS, 10. DICTYOPHIMUS, 11.12 PEROMELISSA, 13 SETHOCHYTRIS, 14 SETHOPERA.

PLATE 58.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families TRIPOCYRTIDA, SETHOCYRTIDA, PHORMOCYRTIDA et THEOCYRTIDA.

PLATE 58.

TRIPOCYRTIDA, SETHOCYRTIDA, PHORMOCYRTIDA et THEOCYRTIDA.

								Diam.	Page
Fig.	1.	Cecryphalium sestrodiscus, n. sp., Apical view.	•	•	·	•	×	400	1399
Fig.	2.	Cecryphalium lamprodiscus, n. sp., Apical view.	•	•			×	400	1398
Fig.	3.	Clathrocyclas coscinodiscus, n. sp., Apical view.	in a		·		×	400	1389
Fig.	4.	Clathrocyclas coscinodiscus, n. sp., The cephalis alone, with the two horns.	e.k.vi	•10108	·k	•	×	700	1389
Fig.	5.	Clathrocyclas semeles, n. sp., . Lateral view.	in carda		7009	in	×	400	1388
Fig.	6.	Sethoconus capreolus, n. sp., . Lateral view.	•	•		•	×	400	1291
Fig.	7.	Lampromitra quadricuspis, n. sp., Apical view.	•		•	•	×	400	1214
Fig.	8.	Lampromitra furcata, n. sp., The collar septum after removal of the ce	phalis.		•	•	×	400	1215
Fig.	9.	Lampromitra dendrocorona, n. sp., Apical view.	•	•	•	•	×	400	1216



Radiolaria PL 58.



1 2 CECRYPHALIUM. 3-6 EUCECRYPHALUS, 7-9 LAMPROMITRA

PLATE 59.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families TRIPOCYRTIDA, PODOCYRTIDA et PHORMOCYRTIDA.

(ZOOL. CHALL. EXP.-PART XL.-1886.)-Rr.

PLATE 59.

TRIPOCYRTIDA, PODOCYRTIDA et PHORMOCYRTIDA.

				Diam.	Page
Fig.	1.	Lampromitra huxleyi, n. sp.,	×	400	1215
Fig.	2.	Amphiplecta callistoma, n. sp.,	×	400	1224
Fig.	3.	Corocalyptra agnesæ, n. sp,	×	400	1323
Fig.	4.	Corocalyptra emmæ, n. sp.,	×	400	1323
Fig.	5.	Clathrocyclas cassiopejæ, n. sp.,	×	400	1390
Fig.	6.	Clathrocyclas alcmenæ, n. sp.,	×	400	1388
Fig.	7.	Clathrocyclas latonæ, n. sp., 23 27419	×	400	1389
Fig.	8.	Diplocyclas bicorona, n. sp.,	×	400	1392
Fig.	9.	Clathrocyclas ionis, n. sp.,	×	400	1389
Fig.	10.	Corocalyptra elisabethæ, n. sp.,	×	400	1323
		Oblique apical view of the shell, with the quadrilobate central capsule enclosed.			
Fig.	11.	Clathrocyclas europæ, n. sp.,	×	400	1388
	•	Apical view of the shell, after removal of the cephalis.			
Fig.	12.	Clathrocyclas europæ, n. sp.,	×	400	1388
		Central capsule, seen from above, with the quadrilobate nucleus.			
Fig.	13.	Clathrocyclas danaës, n. sp.,	×	300	1388
		Vertical section through the cephalis and the quadrilobate central capsule, with the quadrilobate nucleus.			
Fig.	14.	Clathrocyclas danaës, n. sp.,	×	300	1388
		Apical view of the shell.			



1-10 EUCECRYPHALUS, 11-14 CECRYPHALIUM.

PLATE 60.

Legion NASSELLARIA. Order CYRTOIDEA. Family TRIPOCYRTIDA.

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PLATE 60.

TRIPOCYRTIDA.

Fig.	1	Dictuonhimus cienkoustii n sn (vel Lammatinnus souge		Diam.	Page
8.		rosus),	×	300	1200
		Sheh seen from the side.			
Fig.	2.	Dictyophimus bütschlii, n. sp. (vel Lamprotripus horridus),	×	300	1201
Fig.	3.	Dictyophimus hertwigii, n. sp. (vel Lamprotripus spinosus),	×	400	1201
		The cephalis of the shell includes the central capsule, with three lobes depending in the pyramidal thorax.			
Fig	1	Distrionhimare platerenhaling		100	
rig.	ч.	Decegophimus plaigeephalus, II. sp.,	×	400	1198
		Central capsule with four thoracic lobes, each of which contains an oil-globule; kidney-shaped nucleus in the cephalic lobe.			
Fig.	5.	Dictyophimus platycephalus, n. sp.,	×	400	1198
		Shell seen from the side.			
Fig.	6.	Dictyophimus brandtii, n. sp.,	×	300	1198
		Shell seen from the base, with the four large pores of the collar septum, two minor jugular and two major cardinal pores.			
Fig.	7.	Lampromitra coronata n sp	~	100	1014
0		Shell seen from helow with the quadrilebate control course	^	400	1214
		Fig. 7a. A portion of the shell-margin,	~	800	1914
			^	000	1214
Fig.	8.	Lampromitra arborescens, n. sp.,	×	400	1216
		Shell from above.			
		Fig. 8a. The collar septum with the four crossed rods of the cortina,	×	400	1216
Fig.	9.	Tripocyrtis plectaniscus, n. sp.,	×	400	1202
Fig.	10.	Tripocyrtis plagoniscus, n. sp.,	×	400	1201



1-6. LAMPROTRIPUS, 7-10. LAMPROMITRA ...

R.Biltzch, Jens, Lithogr

PLATE 61.

Legion NASSELLARIA. Order CYRTOIDEA. Family TRIPOCYRTIDA.

(ZOOL. CHALL. EXP. - PART. XL.-1886.)-Rr.

PLATE 61.

TRIPOCYRTIDA

								Diam.	Page
Fig.	1.	Dictyophimus cortina, n. sp., .	•	•		•	×	400	1197
Fig.	2.	Lychnocanium pudicum, n. sp.,	•			• •	×	200	1230
Fig.	3.	Dictyophimus longipes, n. sp.,	•		•	•	×	400	1197
Fig.	4.	Lychnocanium clavigerum, n. sp.,			•	••	×	300	1230
Fig.	5.	Dictyophimus lasanum, n. sp.,			•		×	300	1197
Fig.	6.	Lychnocanium favosum, n. sp.,		•	•	•	×	300	1225
Fig.	7.	Lychnocanium lanterna, n. sp.,			•	•	×	300	1224
Fig.	8.	Dictyophimus plectaniscus, n. sp., Apical view.	in an	Na sete		•	×	300	1196
Fig.	9.	Dictyophimus plectaniscus, n. sp., Lateral view.	leite a Lint	6.0 Januali	•		×	300	1196
Fig.	10.	Lychnocanium fenestratum, n. sp.,		•		•	×	400	1228
Fig.	11.	Lychnocanium pyriforme, n. sp.,					×	300	1225
Fig.	12.	Lychnocanium fortipes, n. sp.,			•		×	300	1227
Fig.	13.	Lychnocanium tuberosum, n. sp.,	• •				×	300	1227
Fig.	14.	Lychnocanium nodosum, n. sp.,		• •			×	300	1225
Fig.	15.	Lychnocanium sigmopodium, n. sp	.,	•	÷	•	×	400	1228
Fig.	16.	Dictyophimus pyramis, n. sp.,				•	×	300	1196
Fig.	17.	Dictyophimus triserratus, n. sp.,					×	300	1200

The Voyage of H.M.S. Challenger'



I Haeckel and A.Giltoch Del

LYCHNOCANIUM

RAiltoch, Jens, Lithogr.

PLATE 62.

Legion NASSELLARIA. Order CYRTOIDEA.

Families ANTHOCYRTIDA, SETHOCYRTIDA et PHORMOCYRTIDA.

PLATE 62.

ANTHOCYRTIDA, SETHOCYRTIDA et PHORMOCYRTIDA.

										Diam.	Page
Fig.	1.	Dictyocephalus australis, n. sp.,							×	300	1306
Fig.	2.	Dictyocephalus mediterraneus, n. s	p.,						×	300	1307
Fig.	3.	Sethamphora costata, n. sp. (vel D	ictyoceph	alus cos	tatus),				×	300	1251
Fig.	4.	Dictyocephalus amphora, n. sp.,							×	400	1305
Fig.	5.	Cycladophora (?) favosa, n. sp. (an	Dictyoce	phalus ?	?),	:			×	400	1380
Fig.	6.	Cycladophora (?) favosa, n. sp. (an A variety with obliterated ribs (?).	Dictyoce	phalus ?	'),	•		•	×	400	1380
Fig.	7.	Dictyocephalus globiceps, n. sp.,		MIL	4	. 6			×	400	1308
Fig.	8.	Sethocorys achillis, n. sp.,							×	400	1301
Fig.	9.	Sethocyrtis oxycephalis, n. sp., .	1.13	88A	1 40	1.084			×	400	1299
Fig.	10.	Sethocorys odysseus, n. sp., .	amor	TYO	Unie				×	400	1302
Fig.	11.	Sethocyrtis agamemnonis, n. sp., Seen from above (apical view).		0.11.2	i), 4.6	iens		; ;;)	×	300	1300
Fig.	11a	. Sethocyrtis agamemnonis, n. sp., Seen from above, after removal of the	cephalis.	•	•		·	•	×	300	1300
Fig.	12.	Anthocyrtium pyrum, n. sp.,							×	400	1276
Fig.	13.	Anthocyrtis ovata, n. sp., .							×	300	1272
Fig.	14.	Anthocyrtium chrysanthemum, n. s	p.						×	400	1272
Fig.	15.	Anthocyrtidium ligularia, n. sp.,							×	400	1278
Fig.	16.	Anthocyrtidium cineraria, n. sp.,		1.10					×	400	1278
Fig.	17.	Anthocyrtium campanula, n, sp.,							×	400	1274
Fig.	18.	Anthocyrtium doronicum, n, sp.,							×	300	1276
Fig.	19.	Anthocyrtium flosculus, n. sp.,				•			×	300	1277
Fig.	20.	Anthocyrtium adonis, n. sp.,							×	300	1273
Fig.	21.	Sethoconus anthocyrtis, n. sp. (vel .	Anthocyn	rtium se	thoconiu	um),			×	300	1296


1-7. DICTYOCEPHALUS, 8-11. LOPHOPHAENA, 12-21. ANTHOCYRTIS.

PLATE 63.

.

Legion NASSELLARIA. Order CYRTOIDEA. Family TRIPOCYRTIDA.

(ZOOL. CHALL. EXP.-PART XL.-1886.)-Rr.

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PLATE 63.

TRIPOCYRTIDA.

					Diam.	Page
Fig.	1.	Callimitra carolota, n. sp.,		×	400	1217
		Lateral view.				
Fig.	2.	Callimitra annæ, n. sp.,		×	400	1217
		Dorsal view.				
Fig.	3.	Callimitra emma, n. sp.,		×	300	1218
		Lateral view.				
Fig.	4.	Callimitra emma, n. sp.,		×	400	1218
Ŭ		Cephalis alone, with the enclosed four-lobed central capsule, and the inte	ər-			
		nal four divergent beams; surrounded by some scattered xanthell	æ.			
Fig.	5.	Callimitra agnesæ, n. sp.,		×	400	1217
0.		Dorsal view.				
Fig	6	Callimitra elisabetha, n. sp.		×	400	1218
rig.	0.	Lateral view.			100	
Fig.	7.	Callimitra carolotæ, n. sp.,	•	×	200	1217
		Seen from above (from the apical pole).				
Fig	8.	Callimitra carolotæ, n. sp.,		×	200	1217
1.32		Seen from below (from the basal pole).				



CALLIMITRA.

PLATE 64.

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Legion NASSELLARIA.

Order CYRTOIDEA.

Families TRIPOCYRTIDA et PODOCYRTIDA.

PLATE 64.

TRIPOCYRTIDA et PODOCYRTIDA.

								Diam.	Page
Fig.	1.	Clathrocanium sphærocephalum, n.	sp.,		•		×	600	1211
Fig.	2.	Clathrocanium diadema, n. sp.,	<u>iby 181</u>	•		•	×	600	1212
Fig.	3.	Clathrocanium triomma, n. sp.,	e a n	aoine	i t	•	×	600	1211
Fig.	4.	Clathrocanium reginæ, n. sp.,	10	.0.	•	•	×	600	1212
Fig.	5.	Clathrolychnus araneosus, n. sp.,	imano	una (readim		×	600	1240
Fig.	6.	Clathrolychnus periplectus, n. sp.,		•	•	•	×	600	1241
Fig.	7.	Pteropilium clathrocanium, n. sp.,	÷		•	•	×	400	1327
Fig.	8.	Clathrocorys murrayi, n. sp.,			•	•	×	600	1219
Fig.	9.	Clathrocorys giltschii, n. sp.,			•		×	600	1220
Fig.	10.	Clathrocorys teuscheri, n. sp.,		•	•	•	×	600	1220

The Voyage of H.M.S. Challenger



1-4. CLATHROCANIUM, 5-7. CLATHROLYCHNUS, 8-10. CLATHROCORYS.

Miltoch Jena Lithogr .

PLATE 65.

Legion NASSELLARIA. Order CYRTOIDEA. Family PHORMOCYRTIDA.

(ZOOL CHALL EXP.-PART XL-1886.)-Rr.

PLATE 65.

PHORMOCYRTIDA.

		Diam.	rage
Fig. 1. Alacorys friderici, n. sp. (vel Hexalacorys friderici),	×	400	1372
The central capsule, enclosed in the fenestrated shell, exhibits in its lower half four large club-shaped lobes, each of which includes in its upper part a large oil-globule. The uppermost, undivided part of the capsule includes the nucleus, which protrudes four small nuclear lobes through the four holes of the cortinar septum into the thorax. Numerous long pseudopodia arise from the granular sarcomatrix, which the capsule surrounds, and pass through the pores of the siliceous shell.			
Fig. 2. Alacorys guilelmi, n. sp. (vel Hexalacorys guilelmi),	×	300	1372
Fig. 3. Alacorys bismarckii, n. sp. (vel Pentalacorys bismarckii),	×	200	1372
Fig. 4. Alacorys lutheri, n. sp. (vel Tetralacorys lutheri),	×	400	1370
Fig. 5. Cucladophora goetheana, n. sp. (vel Lampterium goetheanum).	×	300	1376



K Harchel and A.Giltsch,Del

Effituch, Jens, Lithogr.

PLATE 66.

Legion NASSELLARIA. Order CYRTOIDEA. Family THEOCYRTIDA.

PLATE 66.

THEOCYRTIDA.

										Diam.	Page
Fig.	1.	Tricolocapsa theophrasti, n. sp.,	•	•	•	•	•	•	×	400	1432
Fig.	2.	Tricolocapsa schleidenii, n. sp.,	•				•		×	300	1433
Fig.	3.	Tricolocapsa discoridis, n. sp.,		•		•			×	300	1432
Fig.	4.	Tricolocapsa decandollei, n. sp.,							×	300	1433
Fig.	5.	Tricolocapsa linnæi, n. sp., .							×	400	1432
Fig.	6.	Theocapsa aristotelis, n. sp.,							×	300	1427
Fig.	7.	Theocapsa mülleri, n. sp.,							×	400	1431
Fig.	8.	Theocapsa democriti, n. sp.,							×	400	1427
Fig.	9.	Theocapsa forskalii, n. sp.,	20-3	$T_{\rm eff}$					×	400	1429
Fig.	10.	Theocapsa cuvieri, n. sp.,							×	400	1430
Fig.	11.	Theocapsa wottonis, n. sp.,	138	2.4.8	.noi		~.		×	400	1428
Fig.	12.	Theocapsa darwinii, n. sp., .	11.00	170 -	6.0				×	300	1431
Fig.	13.	Theocapsa linnæi, n. sp.,	:	·	·			•	×	400	1429
Fig.	14.	Theocapsa wolffii, n. sp.,				•			×	400	1429
Fig.	15.	Theocapsa malpighii, n. sp.,			• .			•	×	400	1428
Fig.	16.	Theocapsa lamarckii, n. sp.,.							×	400	1430
Fig.	17.	Tricolocampe amphizona, n. sp.,							×	400	1413
Fig.	18.	Theocampe collaris, n. sp.,							×	300	1425
Fig.	19.	Tricolocampe polyzona, n. sp.,	.1	. '					×	400	1412
Fig.	20.	Tricolocampe stenozona, n. sp.,	••						×	400	1413
Fig.	21.	Tricolocampe cylindrica, n. sp.,					• .		×	300	1412
Fig.	22.	Tricolocampe urnula, n. sp.,							×	400	1422
Fig.	23.	Theocampe stenostoma, n. sp.,							×	300	1423
Fig.	24.	Theocampe costata, n. sp., .							×	300	1424
Fig.	25.	Theocampe sphærothorax, n. sp.,	•						×	300	1424

The Wage of H.M.S. Challenger'

Radiolaria Pl 66



1- 5 TRICOLOCAPSA, 6-16 TRICOLOPERA, 17-25 TRICOLOCAMPE.

PLATE 67.

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Legion NASSELLARIA. Order CYRTOIDEA. Family PODOCYRTIDA.

(ZOOL CHALL EXP. -PART XL -1886.)-Rr.

PLATE 67.

PODOCYRTIDA.

								Diam.	Page
Fig.	1.	Lithornithium falco, n. sp., .				•	×	400	1355
Fig.	2.	Lithornithium fringilla, n. sp.,				-	×	400	1355
Fig.	3.	Lithornithium ciconia, n. sp.,					×	400	1354
Fig.	4.	Lithornithium trochilus, n. sp.,					×	400	1355
Fig.	5.	Theopera fusiformis, n. sp.,					×	400	1357
Fig.	6.	Theopera chytropus, n. sp., .	11.19				×	400	1358
Fig.	7.	Theopera prismatica, n. sp.,	•		· 4.		×	300	1357
Fig.	8.	Theopera cortina, n. sp., .	in a star	1999. 1			×	400	1358
Fig.	9.	Rhopalocanium delphicum, n. sp.,	1.4 () 7 m				×	400	1360
Fig.	10.	Rhopalocanium lasanum, n. sp.,	•				×	300	1359
Fig.	11.	Lithochytris lanterna, n. sp.,					×	300	1364
Fig.	12.	Lithochytris cortina, n. sp., .		. \			×	300	1362
Fig.	13.	Lithochytris pyriformis, n. sp.,					×	400	1362
Fig.	14.	Lithochytris lucerna, n. sp.,					×	300	1364
Fig.	15.	Lithochytris pteropus, n. sp.,					×	300	1364
Fig.	16.	Lithochytris galeata, n. sp.,					×	400	1363



1-5. LITHORNITHIUM, 6-10. RHOPALOCANIUM, 11-16. LITHOCHYTRIS.

Railtsch, Jena, Lithogr .

PLATE 68.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families PODOCYRTIDA, PHORMOCYRTIDA et THEOCYRTIDA.

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PLATE 68.

PODOCYRTIDA, PHORMOCYRTIDA et THEOCYRTIDA.

				Diam.	Page
Fig.	1.	Axocorys macroceros, n. sp.,	×	300	1420
		Fig. 1a. The internal axial rod of the shell, which bears on its basal part			
		three verticils of three diverging forked spines,	×	300	
Fig.	2.	Cycladophora fenestrata, n. sp.,	×	300	1380
Fig.	3.	Cycladophora pantheon, n. sp.,	×	400	1379
Fig.	4.	Theosyringium tibia, n. sp.,	×	300	1409
Fig.	5.	Theosyringium pipetta, n. sp.,	×	200	1409
Fig.	6.	Pterocorys tubulosa, n. sp.,	×	400	1319
Fig.	7.	Pterocanium pyramis, n. sp.,	×	400	1330
Fig.	8.	Thyrsocyrtis rhizopodium, n. sp.,	×	300	1351
Fig.	9.	Thyrsocyrtis arborescens, n. sp.,	×	400	1350
Fig.	10.	Rhopalatractus foveolatus, n. sp.,	×	400	1361
Fig.	11.	Rhopalatractus pentacanthus, n. sp.,	×	300	1361
Fig.	12.	Rhopalatractus fenestratus, n. sp. (vel Dictyatractus fene-			
		$stratus), \ldots \ldots \ldots \ldots \ldots$	×	300	1361
Fig.	13.	Hexalatractus fusiformis, n. sp.,	×	300	1394
Fig.	14.	Sethornithium dictyopterum, n. sp.,	×	300	1356
		The trilobate central capsule, which contains in its uppermost part the trilobate nucleus, and in the basal part of each lobe an oil-globule.	1		
Fig.	15.	Lophocyrtis synapta, n. sp.,	×	300	1411
0		The quadrilobate central capsule, which contains in its uppermost part the quadrilobate nucleus, and in the basal part of each lobe an oil- globule.	;		



1. AXOCORYS, 2.3. CYCLADOPHORA, 4.5. THEOSYRINGIUM, 6. PTEROSYRINGIUM, 7. PTEROCANIUM, 8.9. THYRSOCYRTIS, 10.11 RHOPALATRACTUS, 12. DICTYATRACTUS, 13. HEXALATRACTUS.

PLATE 69.

Legion NASSELLARIA. Order CYRTOIDEA.

Families PHORMOCYRTIDA et THEOCYRTIDA.

(ZOOL. CHALL EXP. - PART XL. -1886.) - Rr.

PLATE 69.

PHORMOCYRTIDA et THEOCYRTIDA.

								Diam.	Page
Fig.	1.	Theocorys plutonis, n. sp., .	•	•			×	400	1416
Fig.	2.	Lophoconus rhinoceros, n. sp.,					×	400	1405
Fig.	3.	Theocorys apollinis, n. sp., .			•	•	×	300	1418
Fig.	4.	Theoconus jovis, n. sp.,		N 199		•	×	400	1401
Fig.	5.	Theocorys veneris, n. sp., .	110.00	•			×	300	1415
Fig.	6.	Phormocyrtis costata, n. sp.,					×	300	1369
Fig.	7.	Theoconus junonis, n. sp., .	2.0 4.10	.ucm	· 1. * `		×	300	1401
Fig.	8.	Theocyrtis ptychodes, n. sp.,	120.0	(11)			×	400	1408
Fig.	9.	Lophocorys astrocephala, n. sp.,	ara'a s	o gara s	ang ind		×	300	1421
Fig.	10.	Theocorys obliqua, n. sp.,					×	400	1417
Fig. 1	11.	Theocorys diana, n. sp., .					×	400	1416
Fig. 1	12.	Lophocorys bovicornis, n. sp.,					×	300	1422
Fig.	13.	Theocyrtis macroceros, n. sp.,					×	400	1407
Fig. 1	14.	Theocorys minervæ, n. sp., .					×	300	1419
Fig. 1	15.	Phormocyrtis longicornis, n. sp.,		•			×	400	1370
Fig. 1	16.	Theocorys ovata, n. sp., .					×	300	1416



Radiolaria Pl. 69.



Illeeckel and AGiltsch,Del

Kültsch, Jena, Lithogr.

PLATE 70.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families ANTHOCYRTIDA, PODOCYRTIDA, PHORMOCYRTIDA et THEOCYRTIDA.

PLATE 70.

ANTHOCYRTIDA, PODOCYRTIDA, PHORMOCYRTIDA et THEOCYRTIDA.

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				Diam.	Page
Fig.	1.	Theophormis callipilium, n. sp.,	×	300	1367
Fig.	2.	Theophormis callipilium, n. sp.,	×	300	1367
		The four cruciate rods of the cortinar septum and the vertical columella in its centre.			
Fig.	3.	Theophormis callipilium, n. sp.,	×	400	1367
		The cephalis alone with the enclosed quadrilobate central capsule, which is surrounded by numerous xanthellæ.			*
Fig.	4.	Sethophormis umbrella, n. sp.,	×	150	1248
Fig.	5.	Sethophormis umbrella, n. sp.,	×	400	1248
		Cephalis with the cruciform cortinar septum.			
Fig.	. 6.	Theopilium tricostatum, n. sp.,	×	400	1322
		Seen from above.			
Fig.	7.	Phrenocodon clathrostomium, n. sp.,	×	250	1434
		Vertical section through the shell.			1
Fig.	8.	Phrenocodon clathrostomium, n. sp.,	×	500	1434
		Shell seen half from below, and exhibiting the fenestrated septum between thorax and abdomen.			
Fig.	9.	Pteropilium stratiotes, n. sp.,	×	400	1326
Fig.	10.	Pteropilium stratiotes, n. sp.,	×	400	1326
		The three rods of the cortinar septum and the three arches connecting them with the central axial columella.			
Fig.	11.	Pterocodon ornatus, n. sp.,	×	300	1333
Fig.	12.	Theophæna corona, n. sp.,	×	300	1394





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1-5. THEOPHORMIS, 6. THEOPILIUM, 7.8. CLATHROSTOMIUM, 9.10. PTEROPILIUM, 11. PTEROCODON, 12. THEOPHATNA. RAiltech, Jona, Lithogr.

PLATE 71.

Legion NASSELLARIA. Order CYRTOIDEA. Family PODOCYRTIDA.

(ZOOL CHALL EXP.-PART XL-1886.)-Rr.

PLATE 71.

PODOCYRTIDA.

								Diam.	Page
Fig	g. 1.	Pterocorys rhinoceros, n. sp.,		1. ·			×	400	1320
Fig	g. 2.	Pterocorys columba, n. sp., .					×	400	1317
Fig	ç. 3.	Pterocorys campanula, n. sp.,			1. / · · ·		×	400	1316
Fig	ş. 4.	Pterocorys hirundo, n. sp., .					×	300	1318
Fig	ç. 5.	Pterocorys aquila, n. sp.,					×	300	1317
Fig	;. 6.	Dictyoceras insectum, n. sp.,	STA19				×	400	1324
Fig	;. 7.	Dictyoceras insectum, n. sp., Seen from the apex.	азай	inolo		•	×	400	1324
Fig	. 8.	Dictyoceras formica, n. sp.,	67 CTR	(m()			×	400	1325
Fig	. 9.	Dictyoceras melitta, n. sp., . Seen from the apex.	a a o 👘 : ;	eji na di	·		×	400	1325
Fig	. 10.	Dictyoceras bombus, n. sp., .					×	400	1325
Fig	. 11.	Dictyocodon annasethe, n. sp.,					×	400	1334
Fig	. 12.	Dictyocodon palladius, n. sp.,	1.1.1				×	300	1335
Fig	. 13.	Dictyocodon palladius, n. sp., Apical part of the shell alone.	·	•	•		×	600	1335
Fig	. 14.	Dictyocodon carolotæ, n. sp.,					×	300	1335

The Voyage of H.M.S. Challenger.



1-5. PTEROCORYS, 6.-10. DICTYOCERAS, 11.-14. DICTYOCODON.

R.Biltsch, Jena Lifhogr.

PLATE 72.

Legion NASSELLARIA. Order CYRTOIDEA. Family PODOCYRTIDA.

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PLATE 72.

PODOCYRTIDA.

				Diam.	Page
Fig.	1. Podocyrtis prismatica, n. sp.,	• .	•	× 300	1340
Fig.	2. Podocyrtis corythæola, n. sp ,			× 300	1339
Fig.	3. Podocyrtis lithoconus, n. sp.,			× 300	1348
Fig.	4. Podocyrtis tripodiscus, n. sp ,	· · · · · · · ·		× 300	1338
Fig.	5. Podocyrtis magnifica, n. sp.,			× 500	1341
Fig.	6. Podocyrtis divergens, n. sp.,		••	× 400	1340
Fig.	7. Podocyrtis cristata, n. sp.,			× 400	1342
Fig.	8. Podocyrtis pedicellaria, n. sp.,		•	× 300	1347
Fig.	9. Podocyrtis flosculata, n. sp.,			× 500	1341
Fig.	10. Podocyrtis surena, n. sp.,			× 400	1339



PODOCYRTIS.

Rültsch, Jena, Lithogr.

PLATE 73

Legion NASSELLARIA.

Order CYRTOIDEA.

Families PODOCYRTIDA et PHORMOCYRTIDA.

(ZOOL CHALL EXP.-PART XL.-1886.)-Rr.

PLATE 73.

PODOCYRTIDA et PHORMOCYRTIDA.

						Diam.	Page
Fig.	1.	Pterocanium tricolpum, n. sp., .	•	•	×	400	1331
Fig.	2.	Pterocanium orcinum, n. sp., .			×	400	1329
Fig.	3.	Pterocanium gravidum, n. sp.,			×	400	1329
Fig.	4.	Pterocanium eucolpum, n. sp.,	- 1. ie		×	400	1332
Fig.	5.	Pterocanium bicorne, n. sp.,		•	×	400	1332
Fig.	6.	Pterocanium virgineum, n. sp.,	hes T a	inin'	×	400	1330
Fig.	7.	Dictyopodium thyrsolophus, n. sp., .	•		×	300	1354
Fig.	8.	Dictyopodium scaphopodium, n. sp.,		•	×	300	1353
Fig.	9.	Calocyclas monumentum, n. sp.,		•	×	400	1385
Fig.	10.	Calocyclas casta, n. sp.,			×	400	1384



1-8. DICTYOPODIUM, 9.10. LAMPROCYCLAS.

Railtech, Jena, Lifhogr.

PLATE 74.

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Legion NASSELLARIA. Order CYRTOIDEA.

Family PHORMOCYRTIDA.

. PLATE 74.

PHORMOCYRTIDA.

								Diam.	Page
Fig	1.	Calocyclas parthenia, n. sp.,					×	400	1385
Fig.	2.	Calocyclas amica, n. sp., .			•		×	400	1382
Fig.	3.	Calocyclas vestalis, n. sp., .					×	400	1382
Fig.	4.	Calocyclas virginis, n. sp., .					×	300	1381
Fig.	5.	Calocyclas veneris, n. sp.,				•	×	300	1381
Fig.	6.	Clathrocyclas basilea, n. sp. (vel	Calocycl	as basi	ilea),		×	400	1386
Fig.	7.	Clathrocyclas principessa, n. sp. (1	vel Caloc	yclas p	principe.	ssa),	×	400	1386
Fig.	8.	Clathrocyclas collaris, n. sp. (vel	Calocyc	las col	laris),		×	400	1387
Fig.	9.	Alacorys carcinus, n. sp. (vel Ca	locyclas	carcin	us),		×	300	1375
Fig.	10.	Lamprocyclas deflorata, n. sp.,	- 10 M		•		×	200	1391
Fig.	11.	Lamprocyclas reginæ, n. sp.,				•	×	400	1391
Fig.	12.	Lamprocyclas regina, n. sp.,	• •		. •		×	800	1391
		Two meshes of the network.							
Fig.	13.	Lamprocyclas maritalis, n. sp.,					×	400	1390
Fig.	14.	Lamprocyclas maritalis, n. sp.,					×	400	1390
		Vertical section.							
Fig.	15.	Lamprocyclas nuptialis, n. sp.,			1.		×	400	1390
Fig.	16.	Lamprocyclas saltatricis, n. sp.,					×	400	1391


I Baeckel and A Giltsch Del.

Rültsch, Jena, Lifhogr.

1-9. CALOCYCLAS , 10-16. LAMPROCYCLAS .

PLATE 75.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families PODOCAMPIDA et PHORMOCAMPIDA.

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(ZOOL. CHALL. EXP.-PART XL.-1886.)-Rr.

PLATE 75.

PODOCAMPIDA et PHORMOCAMPIDA.

					Diam.	Page
Fig.	1.	Artopilium elegans, n. sp. (vel Trictenartus elegans),		×	200	1440
Fig.	2.	Artophormis horrida, n. sp.,		×	300	1458
Fig.	3.	Cyrtopera thoracoptera, n. sp. (vel Artopera thoracoptera)),	×	300	1450
Fig.	4.	Stichophæna ærostatica, n. sp. (vel Artophæna ærostatica),		×	400	1463
Fig.	5.	Cyrtophormis turricula, n. sp.,		×	300	1463
Fig.	6.	Stichopodium dictyopodium, n. sp., .		×	400	1447
Fig.	7.	Artopilium trifenestra, n. sp. (vel Clathropyrgus trifenestra),	×	500	1441
Fig.	8.	Artopilium stichopterygium, n. sp., .		×	400	1442
Fig.	9.	Stichophormis cornutella, n. sp.,		×	400	1455
Fig.	10.	Cyrtopera laguncula, n. sp. (vel Cyrtolagena laguncula),		×	400	1451
Fig.	11.	Stichopera pectinata, n. sp.,		×	500	1449
Fig.	12.	Stichophæna ritteriana, n. sp.,		×	400	1465



Radiolaria Pl. 75.



R Harderl and Lüftuch.Del

1 ARTOPILIUM, 2 ARTOPHORMIS, 3 ARTOPERA, 4 ARTOPHATNA, 5 STICHOCORYS. 6. STICHOPODIUM, 7. CLATHROPYRGUS, 8. STICHOPTERYGIUM, 9. STICHOPHORMIS, 10 CYRTOLAGENA, 11 STICHOPERA, 12 STICHOPHATNA.

PLATE 76.

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Legion NASSELLARIA. Order CYRTOIDEA.

Families PHORMOCAMPIDA et LITHOCAMPIDA.

PLATE 76.

PHORMOCAMPIDA et LITHOCAMPIDA.

								Diam.	Page
Fig.	1.	Stichocapsa pentacola, n. sp.,				•	×	400	1517
Fig.	2.	Stichocapsa hexacola, n. sp.,					×	400	1517
Fig.	3.	Stichocapsa compacta, n. sp.,			• •	• .	×	400	1517
Fig.	4.	Stichocapsa paniscus, n. sp.,					×	400	1518
Fig.	5.	Artocapsa fusiformis, n. sp.,					×	400	1519
Fig.	6.	Stichophæna nonaria, n. sp.,	11.61			•	×	200	1466
Fig.	7.	Stichophæna novena, n. sp.,	in the second				×	400	1466
Fig.	8.	Artocapsa elegans, n. sp., .		•			×	400	1520
Fig.	9.	Cyrtocapsa chrysalidium, n. sp.,					×	400	1515
Fig.	10.	Artocapsa spinosa, n. sp., .		•			×	400	1519
Fig.	11.	Spirocampe callispira, n. sp.,					×	300	1511
Fig.	12.	Spirocampe allospira, n. sp.,					×	400	1511
Fig.	13.	Spirocyrtis cornutella, n. sp.,					×	400	1509
Fig.	14.	Spirocyrtis scalaris, n. sp., .	:				×	400	1509
Fig.	15.	Spirocyrtis merospira, n. sp.,	• • •				×	500	1510
Fig.	16.	Spirocyrtis holospira, n. sp.,					×	400	1509
Fig.	17.	Spirocyrtis diplospira, n. sp.,					×	400	1510

The Wyage of H.M.S. Challenger'

Radiolaria Pl 76



1 - 4. STICHOCAPSA . 5.-10. STICHOPERA , 11.12. SPIROCAMPE , 13.-17. SPIROCYRTIS .

PLATE 77.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families PODOCAMPIDA, PHORMOCAMPIDA et LITHOCAMPIDA.

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(ZOOL CHALL EXP. - PART XL -1886.)-Rr.

PLATE 77.

Родосамріда, Рногмосамріда еt Lithocampida.

								Diam.	Page
Fig.	1.	Lithocampe ovata, n. sp., .	•			•	×	500	1504
Fig.	2.	Lithocampe urceolata, n. sp.,	•			•	×	400	1507
Fig.	3.	Lithocampe diploconus, n. sp.,					×	400	1505
Fig.	4.	Dictyomitra eurythorax, n. sp.,				• •	×	300	1477
Fig.	5.	Eucyrtidium teuscheri, n. sp.,			•		×	400	1491
Fig.	6.	Lithostrobus cornutus, n. sp.,	· · · · · ·				×	400	1474
Fig.	7.	Eucyrtidium bütschlii, n. sp.,	•				×	400	1492
Fig.	8.	Cyrtocapsa compacta, n. sp.,	DAM	ridine	.3		×	300	1512
Fig.	9.	Stichopilium bicorne, n. sp.,	120 10	-0			×	600	1437
Fig.	10.	Artopilium longicorne, n. sp.,	n a com	1. 1. 9.7	191.50	9.0	×	500	1440
Fig.	11.	Stichopilium campanulatum, n. sp.	,				×	400	1438
Fig.	12.	Artopilium cyrtopterum, n. sp.,					×	400	1440
Fig.	13.	Phormocampe campanula, n. sp.,					×	400	1456
Fig.	14.	Phormocampe eucalyptra, n. sp.,					×	300	1457
Fig.	15.	Cyrtophormis corona, n. sp.,					×	300	1462
Fig.	16.	Phormocampe lamprocyclas, n. sp.,					×	300	1457
Fig.	17.	Cyrtophormis cylindrica, n. sp.,		Na			×	300	1461
Fig.	18.	Cyrtophormis cornuta, n. sp.,					×	500	1462



1-4. LITHOCAMPIUM , 5-8. EUCYRTIDIUM , 9-12. PTEROCORYTHIUM , 13.-18. ANTHOCORYS.

Effitsch Jena Lithogr.

PLATE 78.

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Legion NASSELLARIA.

Order CYRTOIDEA.

Families PHORMOCAMPIDA et LITHOCAMPIDA.

PLAT	TE '	78,
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PHORMOCAMPIDA et LITHOCAMPIDA.

								Diam.	Page
Fig.	1.	Stichocapsa tetracola, n. sp.,			•	•	×	600	1515
Fig.	2.	Stichocapsa tricincta, n. sp.,		•	•	•	×	400	1516
Fig.	3.	Stichocapsa quadrigata, n. sp.,		•	•	•	×	400	1515
Fig.	4.	Stichocapsa monstrosa, n. sp.,		•	•	•	×	400	1517
Fig.	5.	Cyrtocapsa tetrapera, n. sp.,	•	•	•		×	300	1512
Fig.	6.	Cyrtocapsa diploconus, n. sp.,			•	•	×	300	1513
Fig.	7.	Cyrtocapsa fusulus, n. sp., .	Right.				×	400	1514
Fig.	8.	Cyrtocapsa pyrum, n. sp., .	10.10	· doln			×	400	1513
Fig.	9.	Cyrtocapsa cornuta, n. sp., .	191	Nak			×	400	1513
Fig.	10.	Eusyringium conosiphon, n. sp.,			: 4-10		×	400	1496
Fig.	11.	Eusyringium pachysiphon, n. sp.,			•		×	400	1496
Fig.	12.	Eusyringium macrosiphon, n. sp.,					×	400	1497
Fig.	13.	Eucyrtidium tricinctum, n. sp.,					×	400	1494
Fig.	14.	Eucyrtidium armatum, n. sp.,				•	×	400	1495
Fig.	15.	Eucyrtidium ehrenbergii, n. sp.,			•		×	300	1495
Fig.	16.	Eucyrtidium conostoma, n. sp.,					×	400	1495
Fig.	17.	Cyrtophormis armata, n. sp.,					×	400	1460
Fig.	18.	Cyrtophormis cingulata, n. sp.,			•		×	400	1460

The Voyage of H.M.S. Challenger'

Radiolaria. Pl. 78.



E Eneckal and A.Gützch, Dol.

1 - 4. TETRACAPSA, 5.- 9. TETRAPERA, 10-12. EUSYRINGIUM. 13.- 18. ACANTHOCYRTE. R.Giltech, Jena, Lithogr.

PLATE 79.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families PHORMOCAMPIDA et LITHOCAMPIDA.

(ZOOL CHALL EXP.-PART XL-1886.)--Rr.

PLATE 79.

PHORMOCAMPIDA et LITHOCAMPIDA.

							Diam	Page
Fig.	1. Lithomitra nodosaria, n. sp.,					×	600	1484
Fig.	2. Cyrtophormis tabulata, n. sp.,				•	×	400	1166
Fig.	3. Lithomitra eruca, n. sp.,			•	•	×	500	1485
Fig.	4. Lithomitra chrysalis, n. sp.,					×	300	1485
Fig.	5. Lithomitra infundibulum, n. sp.,					×	500	1487
Fig.	6. Lithocampe octocola, n. sp., .		•			×	400	1508
Fig.	7. Lithocampe hexacola, n. sp.,			•		×	400	1507
Fig.	8. Lithocampe heptacola, n. sp.,					×	400	1508
Fig.	9. Stichophormis novena, n. sp.,			12		×	400	1455
Fig.	10. Siphocampe annulosa, n. sp.,					×	300	1500
Fig.	11. Siphocampe erucosa, n. sp.,	•				×	300	1500
Fig.	12. Siphocampe caminosa, n. sp.,			•		×	400	1500
Fig.	13. Siphocampe tubulosa, n. sp.,				•	×	400	1500
Fig.	14. Siphocampe spiralis, n. sp.,			•	•	×	500	1501
Fig.	15. Lithostrobus seriatus, n. sp.,			• •		×	400	1474
Fig.	16. Artostrobus articulatus, n. sp.,	•	• •	1.	•	×	400	1483
Fig.	17. Lithostrobus lithobotrys, n. sp.,		•		•	×	400	1475
Fig.	18. Lithostrobus botryocyrtis, n. sp.,		. 17			×	400	1475
Fig.	19. Lithostrobus botryocyrtis, n. sp.,			•	•	×	400	1475
	Vertical section through the cephalis.							
Fig.	20. Lithostrobus hexagonalis, n. sp.,	• -	•	•	•	×	400	1475





1 14 LITHOCAMPE, 15. 20 EUCYRTIS.

Editoch Jena Lutiegr

PLATE 80.

Legion NASSELLARIA. Order CYRTOIDEA. Family LITHOCAMPIDA.

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PLATE 80.

LITHOCAMPIDA.

						Diam.	Page
Fig.	1.	Lithostrobus conulus, n. sp. (vel Cyrte	ostrobus con	nulus),	. x	400	1472
Fig.	2.	Lithostrobus cyrtoceras, n. sp. (vel Co	ornustrobus	cyrtoceras	s), ×	400	1470
Fig.	3.	Stichocorys huschkei, n. sp.,	•		. ×	400	1480
Fig.	4.	Lithostrobus caloceras, n. sp. (vel Con	rnustrobus	caloceras),	,. ×	400	1471
Fig.	5.	Stichocorys okenii, n. sp., .			. ×	300	1480
Fig.	6.	Lithostrobus tetrastichus, n. sp. (vel Co	onostrobus t	tetrastichus	s), ×	500	1470
Fig.	7.	Stichocorys panderi, n. sp.,	I which	·	. ×	400	1479
Fig.	8.	Stichocorys baerii, n. sp., .	Sal Ales	1. 5	. ×	400	1479
Fig.	9.	Eucyrtidium cienkowskii, n. sp.,	•		. ×	400	1493
Fig.	10.	Stichocorys wolffii, n. sp., .			. ×	400	1479
Fig.	11.	Eucyrtidium hexagonatum, n. sp.,	2	•	. ×	600	1489
Fig.	12.	Eucyrtidium hertwigii, n. sp.,			. ×	400	1491
Fig.	13.	Eusyringium cannostoma, n. sp., .	• .		. ×	600	1499
Fig.	14.	Eusyringium siphonostoma, n. sp., .			. >	\$ 500	1499
Fig.	15.	Lithostrobus hexastichus, n. sp. (vel A	Irtostrobus	hexastichu	s), >	< 500	1470



EUCYRTIS.

PLATE 81.

Legion NASSELLARIA. Order STEPHOIDEA. Family STEPHANIDA.

(ZOOL CHALL EXP.-PART XL-1886.)-Rr.

PLATE 81.

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STEPHANIDA.

								Diam.	Page
Fig.	1.	Archicircus primordialis, n. sp.,	•	•	•		×	200	942
Fig.	2.	Zygocircus polygonus, n. sp.,		•			×	200	947
Fig.	3.	Zygocircus triquetrus, n. sp.,				•	×	300	947
Fig.	4.	Archicircus hexacanthus, n. sp.,			•		×	300	942
Fig.	5.	Zygocircus acacia, n. sp.,					×	300	947
Fig.	6.	Lithocircus crambessa, n. sp.,				•	×	400	944
Fig.	7.	Archicircus rhombus, n. sp.,		•			×	300	942
Fig.	8.	Zygocircus pentagonus, n. sp.,					×	300	946
Fig.	9.	Lithocircus quadricornis, n. sp.,		· · · · · · · · ·	. *.		×	300	944
Fig.	10.	Dendrocircus arborescens, n. sp.,					×	300	949
Fig.	11.	Dendrocircus dodecancistra, n. sp.	,.				×	300	949
Fig.	12.	Archicircus sexangularis, n. sp.,					×	300	943
Fig.	13.	Dendrocircus elegans, n. sp.,				•	×	400	949
Fig.	14.	Dendrocircus stalactites, n. sp.,					×	400	950
Fig.	15.	Lithocircus decimalis, n. sp.,			•		×	300	944
Fig.	16.	Lithocircus magnificus, n. sp.,			•	•	×	400	945
		The ovate, red-coloured central capsule striate podoconus, in the upper half the kidney-shaped nucleus. Numer are scattered in the calymma, which the porochora. Numerous pseudop spines of the sagittal ring.	exhibits four oil-ş rous "ye contains odia radi	in the lov globules, ar llow cells " brown pig ate from th	wer half t nd at the h or xanthel gment arou ne supporti	he eft læ nd ng			

Fig. 17.	Lithocircus	hexablastus,	n.	sp.,						×	400	944
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1-8 LITHOCIRCUS, 9-17 DENDROCIRCUS.

RGiltsch, Jena, Lithogr.

PLATE 82.

Legion NASSELLARIA. Order STEPHOIDEA.

Families CORONIDA et TYMPANIDA.

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Arrender areas

PLATE 82.

CORONIDA et TYMPANIDA.

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Fig.	1.	Coronidium cervicorne, n. sp.,					×	400	974
0		Seen from the apical pole.							
Fig.	2.	Coronidium acacia, n. sp., .			•		×	300	975
Fig.	3.	Eucoronis angulata, n. sp.,.					×	400	978
	Ĺ	Half from the apical, half from the dors	al side.						
Fig.	4.	Eucoronis challengeri, n. sp.,		•	•		×	400	978
		The red central capsule encloses a large by numerous xanthellæ.	ovate nucl	leus and	is surrour	nded			
Fig.	5.	Eucoronis nephrospyris, n. sp.,	•				×	300	977
Fig.	6.	Eucoronis perspicillum, n. sp.,				•	×	300	977
Fig.	7.	Coronidium dyostephanus, n. sp.,	•				×	400	974
		Seen from the apical pole.							
Fig.	8.	Coronidium diadema, n. sp.,			•		×	300	974
Fig.	9.	Acrocubus octopylus, n. sp.,					×	300	993
Fig.	10.	Parastephanus asymmetricus, n. s	p.,				×	400	1008
Fig.	11.	Eutympanium militare, n. sp.,					×	400	1014
		Oblique view.							
Fig.	12.	Lithocubus astragalus, n. sp.,			•		×	400	1012
Fig.	13.	Trissocircus globus, n. sp., .		•	A		×	400	986



Radiolaria. Pl. 82.



^{1 2.} EUCORONIS, 3. - 8. LITHOCORONIS, 9. - 12. TYMPANIUM, 13. TRISSOCIRCUS.

PLATE 83.

Legion NASSELLARIA.

Orders STEPHOIDEA ET SPYROIDEA.

Families STEPHANIDA, SEMANTIDA, CORONIDA, TYMPANIDA, ZYGOSPYRIDA, PHORMOSPYRIDA et ANDROSPYRIDA.

(ZOOL CHALL EXP.-PART XL-1886.)-Rr.

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PLATE 83.

Stephanida, Semantida, Coronida, Tympanida, Zygospyrida, Phormospyrida et Androspyrida.

							1	Diam.	Page
Fig.	1.	Lithotympanum tuberosum, n. sp., .		•	•	•	×	400	1006
Fig.	2.	Eutympanium musicantum, n. sp., .			•	•	×	300	1013
Fig.	3.	Semantis distephanus, n. sp.,		•	•		×	300	957
Fig.	4.	Sphærospyris globosa, n. sp.,					×	300	1100
Fig.	5.	Trissocyclus stauroporus, n. sp., .					×	200	987
Fig.	6.	Trissocircus binellipsis, n. sp.,					×	300	985
Fig.	7.	Podocoronis toxarium, n. sp.,					×	200	980
Fig.	8.	Androspyris anthropiscus, n. sp., .					×	400	"1093
Fig.	9.	Cortina tripus, n. sp.,					×	200	950
Fig.	10.	Cephalospyris cancellata, n. sp.,		196			×	400	1035
Fig.	11.	Tripospyris furcata, n. sp., .	12/201	122.1			×	400	1029
Fig.	12.	Petalospyris novena, n. sp.,					×	400	1062
		Basal view of the shell, with the cortinar	septum.						
Fig.	13.	Rhodospyris tricornis, n. sp.,	•				×	400	1089
Fig.	14.	Desmospyris mammillata, n. sp.,			•	•	×	400	1089
Fig.	15.	Phormospyris tricostata, n. sp.,					×	400	1087
Fig.	16.	Zygospyris equus, n. sp., .					×	300	1056
Fig.	17	Archicircus monostephus, n. sp.,		. 4		•	×	300	941
Fig.	18.	Dipospyris cubus, n. sp., .	•			•.	×	400	1036
		Basal view of the shell, with the cortinar	septum.						
Fig	. 19	. Gamospyris circulus, n. sp.,	•		•		×	200	1042
Fig	. 20	. Stephanospyris excellens, n. sp.,					×	300	1043



PLATE 84.

Legion NASSELLARIA. Order SPYROIDEA. Family ZYGOSPYRIDA.

PLATE 84.

ZYGOSPYRIDA.

								Diam.	Page
Fig.	1.	Tripospyris capitata, n. sp., Seen from the dorsal side.		•		•	×	400	1028
Fig.	2.	Tripospyris semantis, n. sp., Seen from the ventral side.			•	•	×	300	1026
Fig.	3.	Tripospyris semantis, n. sp., Seen from the lateral side.		•	•		×	300	1026
Fig.	4.	Tripospyris eucolpos, n. sp., Seen from the dorsal side.	•		•	•••	×	300	1029
Fig.	5.	Tripospyris diomma, n. sp., Half from the right side, half from the ba	asal side.		•	•	×	400	1026
Fig.	6.	Tripospyris cortiniscus, n. sp., Half from the dorsal, half from the right	side.		•	•	×	500	1026
		Fig. 6a. Frontal section through the ring,	,				×	500	
Fig.	7.	Tripospyris conifera, n. sp., Seen from the dorsal side.	in an	i.		•	×	400	1027
		Fig. 7a. From the basal side, .					×	200	
Fig.	8.	Tripospyris euscenium, n. sp. (vel I Seen from the frontal or ventral side.	Euscenii	um tripo	ospyris),		×	400	1147
Fig.	9.	Triceraspyris gazella, n. sp., Seen from the ventral side.		•		•	×	500	1031
Fig.	10.	Triceraspyris damacornis, n. sp. (vel Ela	phospur	is dama	9-			
0		cornis?); compare p. 1032, Seen from the apical (or basal?) side.	•		•	•	×	400	1057
Fig.	11.	Triceraspyris giraffa, n. sp., Seen from the frontal side.		•	•	• .	×	400	1031
Fig.	12.	Triceraspyris corallorrhiza, n. sp., Seen from the frontal side.		•	•	•	×	400	1031
Fig.	13.	Tristylospyris scaphipes, n. sp., Seen from the dorsal side.	•				×	400	1033
Fig.	14.	Tristylospyris palmipes, n. sp., Seen from the dorsal side.		•	•	•	×	400	1033
Fig.	15.	Tristylospyris clavipes, n. sp.,			•	•	×	400	1033

The Voyage of H.M.S. Challenger



1-8. TRIPODOSPYRIS, 9-12. TRICERASPYRIS, 13-15. TRISTYLOSPYRIS

Kailtsch, Jens Lithogr.

PLATE 85.

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Legion NASSELLARIA.

Order SPYROIDEA.

Family ZYGOSPYRIDA.

(ZOOL CHALL. EXP. -PART XL.-1886.)-Rr.

PLATE 85.

ZYGOSPYRIDA.

								Diam.	Page
Fig.	1.	Dipospyris forcipata, n. sp.,	•				×	300	1037
Fig.	2.	Dipospyris irregularis, n. sp.,	•				×	200	1037
Fig.	3.	Dipospyris chelifer, n. sp., .	114	1.	·	•	×	300	1037
Fig.	4.	Dorcadospyris dinoceras, n. sp.,	· At	a mai	f		×	400	1041
Fig.	5.	Dorcadospyris antilope, n. sp.,			•		×	200	1041
Fig.	6.	Dorcadospyris dentata, n. sp.,	int	in a			×	200	1040
Fig.	7.	Dorcadospyris decussata, n. sp.,	•				×	200	1041
Fig.	8.	Dendrospyris polyrrhiza, n. sp.,					×	200	1039
Fig.	9.	Dendrospyris arborescens, n. sp.,	•				×	400	1040
Fig.	10.	Stephanospyris cordata, n. sp.,		•			×	200	1042
Fig.	11.	Stephanospyris verticillata, n. sp.,					×	300	1043



1-3. DIPODOSPYRIS, 4-11. DORCADOSPYRIS.

Effiltech, Jena, Lithogr.

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PLATE 86.

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Legion NASSELLARIA. Order SPYROIDEA. Family ZYGOSPYRIDA.

THE TO DISPUSICION OF

PLATE 86.

ZYGOSPYRIDA.

								Diam.	Page
Fig.	1.	Ceratospyris polygona, n. sp.,					×	400	1066
Fig.	2.	Ceratospyris strasburgeri, n. sp.,	•				×	400	1067
Fig.	3.	Ceratospyris allmersii, n. sp.,				•	×	400	1067
Fig.	4.	Ceratospyris mulderi, n. sp.,	••••	· · ·			×	400	1067
Fig.	5.	Anthospyris aculeata, n. sp.,	÷.				×	400	1065
Fig.	6.	Petalospyris dictyocubus, n. sp.,					×	400	1063
Fig.	7.	Liriospyris hexapoda, n. sp.,		and the second	• •	•	×	400	1049
Fig.	8.	Aegospyris caprina, n. sp., .	·	•	•		×	400	1054
Fig.	9.	Ceratospyris preyeri, n. sp.,					×	400	1068
Fig.	10.	Ceratospyris krausei, n. sp.,	:		•,		×	400	1068
Fig.	11.	Ceratospyris carnerii, n. sp.,	•				×	400	1069
Fig.	12.	Elaphospyris alcicornis, n. sp.,	. 1				×	400	1057
Fig.	13.	Elaphospyris cervicornis, n. sp.,					×	400	1057


R Barchel and LG (Inch. Dol.

1-7. CERATOSPYRIS, 8-13. ELAPHOSPYRIS.

Railtoch, Jena, Lifhogr

PLATE 87.

Legion NASSELLARIA.

Order SPYROIDEA.

Families ZYGOSPYRIDA et THOLOSPYRIDA.

(ZOOL CHALL EXP.-PART XL.-1886.)--Rr.

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PLATE 87.

ZYGOSPYRIDA et THOLOSPYRIDA.

								Diam.	Page
Fig.	1.	Gorgospyris medusa, n. sp.,	•	•		•	×	300	1070
Fig.	2.	Gorgospyris medusetta, n. sp., From the basal side, with the nine cortin	nar pores.	•	•	•	×	300	1070
Fig.	3.	Gorgospyris polypus, n. sp.,				•	×	300	1070
Fig.	4.	Gorgospyris schizopodia, n. sp.,	•		:	•	×	400	1071
Fig.	5.	Gorgospyris eurycolpos, n. sp.,		•	• 、		×	300	1071
Fig.	6.	Gorgospyris liriope, n. sp., .				•	×	300	1071
Fig.	7.	Tiarospyris pervia, n. sp., .	PLAT			•	×	400	1082
Fig.	8.	Tiarospyris amphora, n. sp.,					×	400	1083
Fig.	9.	Tiarospyris mitra, n. sp., . From the ventral side.	19 A M (18 m)	10195 10		•	×	400	1082
Fig.	10.	Tiarospyris mitra, n. sp., . From the dorsal side.	GLS T	(100×	C exila	.1	×	400	1082
Fig.	11.	Petalospyris octopus, n. sp.,					×	400	1061
Fig.	12.	Petalospyris dinoceras, n. sp.,					×	400	1063
Fig.	13.	Petalospyris lobata, n. sp., .				•	×	300	1064
Fig.	14.	Petalospyris triomma, n. sp., From the basal side, with the six cortina	ar pores.	·	•		×	200	1060
Fig.	15.	Anthospyris spathulata, n. sp.,				•	×	400	1065
Fig.	16.	Anthospyris mammillata, n. sp.,	•	•	•	•	×	400	1064
Fig.	17.	Anthospyris tragopogon, n. sp.,	•	1			×	300	1066
Fig.	18.	Anthospyris doronicum, n. sp.,					×	300	1065
Fig.	19.	Ceratospyris calorrhiza, n. sp.,					×	400	1069

The Voyage of H.M.S. Challenger



B Fanckel and A.Giltech Del

1-6. GORGOSPYRIS, 7-10. TIAROSPYRIS, 11-14. PETALOSPYRIS, 15.-19. ANTHOSPYRIS.

K.Siltoch, Jena Lithogr

PLATE 88.

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Legion NASSELLARIA. Orders STEPHOIDEA ET SPYROIDEA. Families TYMPANIDA et ANDROSPYRIDA.

PLATE 88.

TYMPANIDA et ANDROSPYRIDA.

								Diam.	Page
Fig.	1.	Toxarium circospyris, n. sp.,		•			×	400	995
Fig.	2.	Amphispyris sternalis, n. sp.,	•				×	300	1096
Fig.	3.	Amphispyris costata, n. sp.,			•	·	×	300	1097
Fig.	4.	Amphispyris thorax, n. sp.,	That.	:	•	•	×	300	1096
Fig.	5.	Amphispyris subquadrata, n. sp.,	•	•	•		×	300	1097
Fig.	6.	Amphispyris quadrigemina, n. sp.,		uoine	÷	•	×	300	1096
Fig.	7.	Amphispyris toxarium, n. sp.,	aton	tirlis a	abaQ	•	×	300	1097
Fig.	8.	Tricolospyris baconiana, n. sp.,	. a type	TRET	anifam	•	×	400	1098
Fig.	9.	Tricolospyris leibnitziana, n. sp.,		•	•	•	×	600	1098
Fig.	10.	Tricolospyris kantiana, n. sp.,		•	• .	•	×	600	1098
Fig.	11.	Tricolospyris newtoniana, n. sp.,	•	•	•	•	×	400	1098
Fig.	12.	Perispyris lentellipsis, n. sp.,	•	•	•	•	×	400	1099
Fig.	13.	Perispyris bicincta, n. sp., .		•	•		×	400	1099

The Voyage of H.M.S. Challenger

Radiolaria. Pl. 88.



I Eneckel and I.Giltach, Del

K.Giltech, Jens, Lithogr.

1. CIRCOSPYRIS, 2-7. AMPHISPYRIS, 8.- 11. TRICOLOSPYRIS, 12.13. PERISPYRIS

PLATE 89.

Legion NASSELLARIA. Order SPYROIDEA.

Distances in the

Families ZYGOSPYRIDA, THOLOSPYRIDA et ANDROSPYRIDA.

(ZOOL CHALL EXP.-PART XL-1886.)-Rr

PLATE 89.

Zygospyrida, Tholospyrida et Androspyrida.

								Diam.	Page
Fig.	1.	Tholospyris tripodiscus, n. sp., Ventral side.	·	:	•	•	×	400	1079
Fig.	2.	Tholospyris fenestrata, n. sp., Dorsal side.	•	•	•	•	×	400	1079
Fig.	3.	Tholospyris ramosa, n. sp., . Dorsal side.	•	•	•	·	×	400	1079
Fig.	4.	Tholospyris cupola, n. sp., . Ventral side.	:	·	•	•	×	400	1080
Fig.	5.	Therospyris leo, n. sp., . Ventral side.			•-	•	×	400	1059
Fig.	6.	Therospyris felis, n. sp., . Dorsal side.	· .	•	· · · · ·	·	×	400	1059
Fig.	7.	Dictyospyris stalactites, n. sp., Ventral side.	ine a	i de	·	•	×	400	1073
Fig.	8.	Dictyospyris anthophora, n. sp., Ventral side.	1.000	7	1. 184	.,	×	400	1076
Fig.	9.	Dictyospyris mammillaris, n. sp., Ventral side.	·	•	·	•	×	400	1076
Fig.	10.	Dictyospyris mammillaris, n. sp., Frontal section.	•	•	·	•	×	400	1076
Fig	11.	Dictyospyris distoma, n. sp., Ventral side.	·		·	·	×	300	1073
Fig	. 12.	Dictyospyris distoma, n. sp., Frontal section.	· ·	•	•••	•	×	300	1073
Fig	. 13.	. <i>Lamprospyris darwinii</i> , n. sp., Ventral side.	•	•	•		×	300	1094
Fig	. 14.	Lamprospyris huxleyi, n. sp., Ventral side.	•	·	•		×	300	1094



Radiolaria Pl. 89.



1-4. THOLOSPYRIS, 5.6. TESSARASPYRIS, 7-12. DICTYOSPYRIS 13.14. LAMPROSPYRIS. E.Biltoch, Jens, Lithogr

PLATE 90.

Sin'

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to be in the series of

Legion NASSELLARIA. Order SPYROIDEA.

Family ANDROSPYRIDA.

PLATE 90.

ANDROSPYRIDA.

1.	Nephrospyris paradictyum, n. sp. (vel Paradictyum para-			
	<i>aosam)</i> ,	×	250	1102
	The complete shell, seen from the frontal side.			
2.	Nephrospyris paradictyum, n. sp.,	×	250	1102
3.	Nephrospyris paradictyum, n. sp.,	×	500	1102
4.	Nephrospyris paradictyum, n. sp.,	×	120	1102
5.	Nephrospyris paradictyum, n. sp.,	×	200	1102
6.	Nephrospyris paradictyum, n. sp.,	×	250	1102
	Marginal view of a young specimen, with open fissure between the two parallel net-plates.			
7.	Nephrospyris paradictyum, n. sp.,	×	250	1102
8.	Nephrospyris paradictyum, n. sp.,	×	500	1102
9.	Nephrospyris renilla, n. sp. (vel Nephrodictyum renilla), . The bilobed central capsule is enclosed by the discoidal shell and in the middle constricted by the sagittal ring; it contains a transverse nucleus. The kidney-shaped calymma contains in the peripheral part numerous symbiontes (Xanthellæ or Vorticellinæ? Compare page 1101).	×	250	1101
10.	Nephrospyris renilla, n. sp., A singular abnormality (occurring not rarely), in which the reduced skeleton has nearly disappeared and the sagittal ring alone remained. The kidney-shaped calymma, however, which encloses numerous symbiontes, has preserved the form of the skeleton. The bilobed central capsule is similar to that in figs. 7 and 9, and is encircled	×	250	1101
	 2. 3. 4. 5. 6. 7. 8. 9. 10. 	 Nephrospyris paradictyum, n. sp., The incomplete shell, seen from the dorsal side. Nephrospyris paradictyum, n. sp.,	 Nephrospyris paradictyum, n. sp.,	 Nephrospyris paradictyum, n. sp.,



Radiolaria Pl. 90.



I Second and A.D.2mda.Del

PARADICTYUM.

Loinsch, Jena, Lithogr

PLATE 91.

Legion NASSELLARIA. Orders NASSOIDEA ET PLECTOIDEA.

Families NASSELLIDA, PLAGONIDA et PLECTANIDA.

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(ZOOL. CHALL EXP.-PART XL.-1886.)-Rr.

PLATE 91.

NASSELLIDA, PLAGONIDA et PLECTANIDA.

Fig.	1.	Cystidium princeps, n. sp., .	•			×	Diam. 400	Page 897
Fig.	2.	Triplagia primordialis, n. sp.,			•	×	100	909
Fig.	3.	Tetraplagia phænaxonia, n. sp.,				×	200	911
Fig.	4.	Plagoniscus tripodiscus, n. sp.,	a tag			×	200	912
Fig.	5.	Plagiocarpa procortina, n. sp.,	12/16			×	300	914
Fig.	6.	Plagonium sphærozoum, n. sp.,	A1948	1.475	(dista)	×	300	916
Fig	7.	Triplecta triactis, n. sp., .	(.174)	1.44		 ×	300	922
Fig.	8.	Tetraplecta pinigera, n. sp.,				×	300	924
Fig.	9.	Plectaniscus cortiniscus, n. sp.,				×	300	925
Fig.	10.	Periplecta cortina, n. sp., .				×	400	926
Fig.	11.	Plectanium trigeminum, n. sp.,				×	400	928
Fig.	12.	Polyplecta heptacantha, n. sp.,				×	300	929

The Voyage of H.M.S. "Challenger."



B Haeckel and A Giboch Del.

A, Giltsch. Jena , Lithogr.

^{1.} CYSTIDIUM , 2-6. PLAGONIDA , 7-12. PLECTANIDA.

PLATE 92.

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Legion NASSELLARIA. Order STEPHOIDEA.

Families STEPHANIDA et SEMANTIDA.

PLATE 92.

STEPHANIDA et SEMANTIDA.

								Diam.	Page
Fig.	1.	Semantis sigillum, n. sp.,				•	×	400	957
Fig.	2.	Semantis biforis, n. sp.,	•	•		•	×	300	956
Fig.	3.	Semantrum tetrastoma, n. sp.,			•		×	300	959
Fig.	4.	Semantrum signarium, n. sp.,		•	•	•	×	400	960
Fig.	5.	Semantrum quadrifore, n. sp.,	•		•		×	400	958
Fig.	6.	Semantidium hexastoma, n. sp.,					×	400	960
Fig.	7.	Semantidium signatorium, n. sp.,					×	400	961
Fig.	8.	Clathrocircus stapedius, n. sp.,	1.1.1. M				×	400	962
Fig.	9.	Clathrocircus dictyospyris, n. sp.,			. 2		×	300	963
Fig.	10.	Clathrocircus multiforis, n. sp.,	•	•			×	300	963
Fig.	11.	Cortiniscus tripodiscus, n. sp.,		•	•		×	400	963
Fig.	12.	Cortiniscus typicus, n. sp., .		•	•		×	300	964
Fig.	13.	Cortiniscus dipylaris, n. sp.,					×	400	964
Fig.	14.	Stephaniscus quadrifurcus, n. sp.,		•			×	300	965
Fig.	15.	Stephaniscus quadrigatus, n. sp.,					×	400	965
Fig.	16.	Semantiscus hexapodius, n. sp.,					×	400	966
Fig.	17.	Semantiscus hexapylus, n. sp.,					×	400	967
Fig.	18.	Semantiscus hexaspyris, n. sp.,		•			×	400	966
Fig.	19.	Lithocircus tarandus, n. sp.,					×	400	944
Fig.	20.	Stephanium quadrupes, n. sp.,					×	200	952
Fig.	21.	Cortina cervina, n. sp.,					×	300	952

The Voyage of H.M.S. Challenger



E Raechel and Alliberth, Del

Köchsen Jena Liber.

1-7. SEMANTIS, 8-10. CLATHROCIRCUS, 11-13. CORTINISCUS, 14-15. STEPHANISCUS, 16-19, SEMANTISCUS, 20-21. STEPHANIUM.

PLATE 93.

Legion NASSELLARIA. Order STEPHOIDEA.

Families CORONIDA et TYMPANIDA.

(ZOOL CHALL EXP.-PART XL.-1886.)-Rr.

PLATE 93.

CORONIDA et TYMPANIDA.

						I	Diam.	Page
Fig.	1.	Zygostephanus dissocircus, n. sp.,	•	• 40	·•	×	300	971
Fig.	2.	Zygostephanus bicornis, n. sp.,	•	•		×	300	972
Fig.	3.	Zygostephanium dizonium, n. sp.,	•	•	•	×	300	973
Fig.	4.	Zygostephanium paradictyum, n. sp.,	•			×	300	973
Fig.	5.	Acanthodesmia corona, n. sp.,				×	400	976
Fig.	6.	Plectocoronis pentacantha, n. sp., .	•			×	300	979
Fig.	7.	Tristephanium quadricorne, n. sp., .	•			×	300	984
Fig.	8.	Tristephanium octopyle, n. sp.,	•		•••	×	300	983
Fig.	9.	Tristephanium dimensivum, n. sp., .		•	•••	×	400	983
Fig.	10.	Trissocircus lentellipsis, n. sp.,		. h	•	×	300	985
Fig.	11.	Trissocircus octostoma, n. sp.,	ford \$		•	×	300	986
Fig.	12.	Trissocyclus sphæridium, n. sp.,		Paul		×	300	987
Fig.	13.	Tricyclidium dictyospyris, n. sp.,				×	300	984
Fig.	14.	Protympanium amphipodium, n. sp.,	•			×	300	992
Fig.	15.	Acrocubus arcuatus, n. sp., .				×	300	993
Fig.	16.	Acrocubus cortina, n. sp., .		•		×	300	994
Fig.	17.	Acrocubus amphithectus, n. sp.,		•	4	×	300	995
Fig.	18.	Toxarium thorax, n. sp.,	•		•	×	300	996
Fig.	19.	Toxarium cordatum, n. sp.,				×	300	996
Fig.	20.	Toxarium bifurcum, n. sp., .			•	×	300	997
Fig.	21.	Parastephanus quadrispinus, n. sp.,			•	×	300	1008
Fig.	22.	Prismatium tripodium, n. sp.,			•	×	300	1009

The Voyage of H.M.S."Challenger."

Radiolaria Pl.93.

A.Mitoch, Jena, Lithogr.



E.Haeckel and A.Gilmoh, Del.

^{1-4.} ZYGOSTEPHANUS, 5-6. ACANTHODESMIA, 7-13. TRISTEPHANIUM, 14-17. ACROCUBUS, 18-20. TOXARIUM, 21.22. PRISMATIUM.

PLATE 94.

Legion NASSELLARIA. Order STEPHOIDEA.

Family TYMPANIDA.

PLATE 94.

TYMPANIDA.

							1.2.	Diam.	Page
Fig.	1.	Tympanidium foliosum, n. sp.,			•	•	×	400	1003
Fig.	2.	Octotympanum cervicorne, n. sp.,	• •		•	:	×	400	1000
Fig.	3.	Octotympanum octonarium, n. sp.,		•		•	×	400	1000
Fig.	4.	Tympaniscus quadrupes, n. sp.,			•	•	×	400	1002
Fig.	5.	Tympaniscus dipodiscus, n. sp., Frontal view.	·	·	•	•	×	400	1001
Fig.	6.	Tympaniscus dipodiscus, n. sp.,			• • • •	•	×	400	1001
		Lateral view.	PETT						
Fig.	7.	Tympaniscus tripodiscus, n. sp.,					×	400	1002
		Frontal view.			IL				
Fig.	8.	Microcubus zonarius, n. sp.,	TR of	ia			×	300	998
Fig.	9.	Microcubus dodecastoma, n. sp.,	i T alu	din .		•	×	300	998
Fig.	10.	Microcubus amphispyris, n. sp.,		•	•	•	×	400	999
Fig.	11.	Pseudocubus obeliscus, n. sp.,					×	400	1010
Fig.	12.	Pseudocubus hexapylus, n. sp.,		•			×	300	1011
Fig.	13.	Lithocubus geometricus, n. sp.,					×	200	1011
Fig.	14.	Paratympanum octostylum, n. sp.,			•		×	400	1005
Fig.	15.	Dystympanium dictyocha, n. sp.,					×	400	1007
		Lateral view.							
Fig.	16.	Dystympanium dictyocha, n. sp., Apical view.	•	·	•	•	×	400	1007
Fig.	17.	Circotympanum octogonium, n. sp.	, ·		•	•	×	500	1013
Fig.	18.	Tympanidium binoctonum, n. sp.,					×	400	1004

The Voyage of H.M.S. Challenger"



E Ranckel and A Giltach, Del

à Gibach Jena Lathogr.

1-3,18. TYM PANIDIUM, 4-7. TYM PANISCUS, 8-10. MICROCUBUS. 11-13. LITHOCUBUS, 14. PARATYM PANIUM, 15-17. DYSTYM PANIUM.

PLATE 95.

Legion NASSELLARIA.

Order SPYROIDEA.

Families ZYGOSPYRIDA, THOLOSPYRIDA, PHORMOSPYRIDA et Androspyrida.

(ZOOL CHALL EXP.-PART XL-1886.)-Rr.

PLATE 95.

ZYGOSPYRIDA, THOLOSPYRIDA, PHORMOSPYRIDA et ANDROSPYRIDA.

							Diar	n. Page
Fig.	1.	Tripospyris cortina, n. sp., . Basal view.	•	•	•	·	× 30	0 1025
Fig.	2.	Tripospyris triplecta, n. sp., Basal view.	•	·	••	•	× 30	0 1027
Fig.	3.	Tripospyris semantrum, n. sp., Basal view.	•	•	·	•	× 40	0 1027
Fig.	4.	Tripospyris hexomma, n. sp., Basal view.	•	•	•	•	× 30	0 1028
Fig.	5.	Brachiospyris diacantha, n. sp Basal view.		•	·	•	× 40	0 1038
Fig.	6.	Tetraspyris stephanium, n. sp., Basal view.	•	·	•	•	× 30	0 1044
Fig.	7.	Liriospyris amphithecta, n. sp., Basal view.		•	·	•	× 30	00 1050
Fig.	8.	Hexaspyris hexacorethra, n. sp., Frontal view.		main	poi	ż	× 30	0 1048
Fig.	9.	Clathrospyris pyramidalis, n. sp., Frontal view.	173 m	10	•	•	× 50	00 1052
Fig.	10.	Aegospyris aegoceras, n. sp., Frontal view.	io T	in.	irisa	ir.	× 40	00 1054
Fig.	11.	Pentaspyris pentacantha, n. sp., Dorsal view.		h	·	•	× 40	00 1054
Fig.	12.	Taurospyris cervina, n. sp., Frontal view.	·	·	·	•	× 40	00 1058
Fig.	13.	Circospyris nucula, n. sp., . Dorsal view.	·	·	·	•	× 30	00 1072
Fig.	14.	Lophospyris dipodiscus, n. sp., Frontal view.	•	·		·	× 40	00 1080
Fig.	15.	Sepalospyris platyphylla, n. sp., Dorsal view.	·	·		·	× 40	00 1081
Fig.	16.	Pylospyris canariensis, n. sp., Frontal view.	•	·	·	•	× 40	00 1084
Fig.	17.	Acrospyris clathrocanium, n. sp., Dorsal view.	·	•	·	·	× 30	00 1085
Fig.	18.	Phormospyris tridentata, n. sp., Frontal view.	·	•	·	·	× 40	00 1087
Fig.	19.	Patagospyris anthocyrtis, n. sp., Dorsal view.	•	÷	•	•	× 50	00 1088
Fig.	20.	Androspyris pithecus, n. sp., Lateral view.	•	•	•	•	× 4	00 1093



E Eseckei and A Giltreh Del.

A. Shusch, Jana; Lubogr

^{1-13.} ZYGOSPYRIS, 14-16. THOLOSPYRIS, 17-19. PHORMOSPYRIS, 20. ANDROSPYRIS.

PLATE 96.

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408 x .

all is .

Legion NASSELLARIA.

Order BOTRYODEA.

Families CANNOBOTRYIDA, LIHTOBOTRYIDA et PYLOBOTRYIDA.

the submation of the submation of the sub-

PLATE 96.

CANNOBOTRYIDA, LITHOBOTRYIDA et PYLOBOTRYIDA.

											I)iam.	Page
	Fig.	1.	Botryopera cyrtoloba, n. sp.,	•	• . •	•	• • •	•		. >	< .	500	1108
	Fig.	2.	Botryopera quinqueloba, n. sp., Half lateral, half frontal view.	•	•	•	•			. ×	< .	500	1109
	Fig.	.3.	Cannobotrys tricanna, n. sp., View half from the frontal, half from	m the left	t side.	•	•	• •		• •	×	400	1110
	Fig.	4.	Cannobotrys cortina, n. sp., Basal view.	•	•	•	•		•	. >	×	400	1110
-	Fig.	5.	Botryopyle inclusa, n. sp., Frontal view.	•	•	•	•	•	•	• • •	×	500	1113
	Fig.	6.	Botryopyle dictyocephalus, n. sp., Lateral view (right side).	•	•	•	•		•	• >	×	500	1113
	Fig.	7.	Botryopyle sethocorys, n. sp., Frontal view.	•	•	•				• >	×	400	1112
1	Fig.	8.	Acrobotrys trisolenia, n. sp., Lateral view (right side).	•	•	•	• • • • *	•	•	. >	×	400	1115
	Fig.	9.	Acrobotrys acuminata, n. sp., Lateral view (right side).	•		•	•		•	. ,	×	400	1115
	Fig.	10.	Acrobotrys disolenia, n. sp., Lateral view (left side).	• •			•		•	. ;	×	400	1114
	Fig.	11.	Acrobotrys auriculata, n. sp., Lateral view (right side).		• 1.4.4		•		•	. ;	×	500	1115
	Fig.	12.	Botryocella multicellaris, n. sp., Lateral view (left side).	•	•	•		•	•	. ;	×	500	1117
	Fig.	13.	Botryocella quadricellaris, n. sp.,			•			•	. :	×	400	1117
	Fig.	14.	Botryocella quadrigemina, n. sp.,	d thorax.		•	•	•		. :	×	400	1117
	Fig.	15,	Lithobotrys spherothorax, n. sp.,	•						•	×	500	1119
	Fig.	16.	Lithobotrys mascula, n. sp.,	•	•			•	•	•	×	500	1119
	Fig.	17.	Lithobotrys orchidea, n. sp.,			• ` .	•	•		• •	×	500	1119
	Fig.	18.	Botryocyrtis cerebellum, n. sp.,							•	×	400	1121
	Fig.	19.	Botryocyrtis theocampe, n. sp.,						•	•	×	500	1121
	Fig.	20.	Pylobotrys fontinalis, n. sp.,						•	•	×	400	1122
	Fig.	21.	Pylobotrys putealis, n. sp.,		•		•	•	•	•	×	500	1121
	Fig.	22.	Pylobotrys cerebralis, n. sp.,	•			•			•	×	500	1122
	Fig.	23.	Botryocampe rotalia, n. sp.,		•		•			•	×	400	1123
	Fig.	24.	Botryocampe camerata, n. sp.,	•						•	×	500	1124
	Fig.	25.	Phormobotrys cannothalamia, n.	sp.,	•			•		•	×	400	1125
	Fig.	26.	Phormobotrys trithalamia, n. sp., Erontal section The dereal wall i	s visible	in the co	nhalis the	cruciform	frontal	sentum		×	500	1124
	Fig.	27.	Phormobotrys pentathalamia, n. a	sp.,	•	·	·	·	·		×	400	1124
	Fig.	28.	Cephalospyris triangulata, n. sp., The central capsule encloses numer	ous spher	ical conc	rements	•			•	×	400	1035
			The contract of the contract without	1									



Radiolaria Pl 96.



E. Eneckel and A. Golmech, Del.

A Giltach, Jena, Lithogr.

1-4 BOTRYOPERA, 5-11. BOTRYOPYLE, 12-17. BOTRYOCELLA, 18-22. BOTRYOCYRTIS, 23-27. BOTRYOCAMPE, 28. CEPHALOSPYRIS,

PLATE 97.

Legion NASSELLARIA.

Orders STEPHOIDEA ET CYRTOIDEA.

Families STEPHANIDA, CORONIDA, TRIPOCALPIDA, PHÆNOCALPIDA, TRIPOCYRTIDA, PODOCYRTIDA et PODOCAMPIDA.

(ZOOL CHALL. EXP. -PART XL -1886.)-Rr.

PLATE 97.

STEPHANIDA, CORONIDA, TRIPOCALPIDA, PHÆNOCALPIDA, TRIPOCYRTIDA, PODOCYRTIDA et PODOCAMPIDA.

								Diam.	Page
Fig.	1.	Cortina typus, n. sp.,				۰.	×	300	951
, 0.		View from the right side. The uppe includes the nucleus, the lower some oil-globules. The two pectors	r part of part the l feet are	f the co e podoc partly l	entral ca conus, be proken of	psule esides f.			
Fig.	2.	Podocoronis cortiniscus, n. sp.,				• *	×	400	981
		View from the right anterior side.							
Fig.	3.	Tripocalpis cortinaris, n. sp.,		• •			×	400	1137
Fig.	4.	Phanocalpis petalospyris, n. sp.,					×	400	1173
		Lateral view (inverted).							
Fig.	5.	. Haliphormis lagena, n. sp.,				•	×	200	1167
Fig.	6.	. Halicapsa lithapium, n. sp,					×	300	1190
		Basal view.	1						
Fig.	7	. Peridium alatum, n. sp.,					×	300	1155
		Basal view.							
Fig.	8	. Sethopilium orthopus, n. sp.,		•		۰.	×	300	1202
		Basal view.							
Fig.	9	. Sethopilium macropus, n. sp.,			÷		×	400	1203
Fig	. 10). Amphiplecta acrostoma, n. sp.,					×	400	1223
Fig	. 11	1. Sethopera tricostata, n. sp.,				•	×	400	1232
Fig	. 12	2. Acanthocorys macroceras, n. sp.,					×	200	1264
Fig	. 1:	3. Sethophæna hexaptera, n. sp.,					×	400	1286
Fig	. 14	4. Theopodium tricostatum, n. sp.,					×	400	1328
Fig	. 1	5. Podocampe trictenota, n. sp.,					×	500	1446
-									



Radiolaria. Pl. 97.



B. Raeckel and A. Gilmach, Del.

1, 2. CORTINA, 3-7. MONOCYRTIDA, 8-13. DICYRTIDA. 14. THEOPODIUM. 15. PODOCAMPE. A.Gebach, Jena Lithofr.

PLATE 98.

Legion NASSELLARIA.

Order CYRTOIDEA.

Families TRIPOCALPIDA et PHENOCALPIDA.

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PLATE 98.

TRIPOCALPIDA et PHÆNOCALPIDA.

							Diam.	Page
Fig.	. 1.	Euscenium plectaniscus, n. sp.,	•			×	300	1146
		Half frontal, half basal view.						
Fig.	2.	Cladoscenium pectinatum, n. sp.,				×	400	1150
		Shell opened by a vertical section.						
Fig.	3.	Archiscenium cyclopterum, n. sp., .				×	400	1151
		View from the dorsal side.						1101
Fig.	4.	Pteroscenium arcuatum, n. sp.,				×	400	1159
		The central capsule contains a large spherical	nucleus with	i a nucle	olus.	^	100	1154
Fig.	5.	Archipera cortiniscus, n. sp.					100	
17.		1 · · · · · · · · ·		•	•	×	400	1155
Fig.	6.	Archibursa tripodiscus, n. sp.,	100.000	· · .	:	×	400	1157
	r	Basal view.						
Fig.	7.	Archipilium orthopterum, n. sp., .				×	400	1139
Fig.	8.	Tripilidium costatum, n. sp.,		1	inter i	×	300	1141
		Fig. 8a. Central capsule in the upper part of	the shell,			×		1111
		Fig. 8b. Cortinar septum, .				×		
Fig.	9.	Phanoscenium hexapodium, n. sp., .	1			~	200	1100
Fig	10	Archinhana anaonuis				^	300	1175
1.8.	10.	Fig 10g Continue and the state		•	•	×	300	1178
		Fig. 10a. Cortinar septum with four collar po	res, .	•	•	×	300	
Fig.	11.	Archiphormis urceolata, n. sp.,				×	300	1168
Fig.	12.	Halicalyptra petalospyris, n. sp.					100	
Fig	19	Angeleneer II' 'I			•	×	400	1169
rig.	10.	The central concella is fill a set.	•	•		×	300	1172
		upper half the ellipsoidal nucleus and lower half the slender striated podoconus	uoles and ex four oil-glo	chibits in bules, in	n the n the			
		Fig. 13a. A piece of the network, more enlarge	ged,			×	900	


1-4. EUSCENIUM, 5. 6. ARCHIPERA, 7. 8. TRIPILIDIUM, 9. 10. ARCHIPHAENA, 11. 12. ARCHIPHORMIS, 13 ARACHNOCALPIS.