The teeth are in sockets placed obliquely, with conical crowns compressed to sharp lateral margins, and curved inward. The proportions of the vertebral column are those of *Echidna*, though the transverse processes are longer, as in *Pareiasaurus*. The ribs are like those of a Monotreme, though the sacral ribs are longer. The shoulder-girdle resembles that of *Procolophon*, and differs from typical Anomodonts in the constituent bones being unanchylosed, and in the precoracoid having a large anterior extension in advance of the scapula. The sternum appears to have been unossified, as in Crocodilia. The humerus is widely expanded at both extremities and twisted, but does not show the peculiar lateral curvature seen in Monotremes. The ulna gives no evidence of an olecranon-process; it is larger than the radius, and appears to articulate with the humerus. The pelvic bones are without acetabular or obturator-perforations, are not anchylosed together, and the ilium is not expanded transversely. The hind-limb is no larger than the fore-limb. The femur is more slender than the similar bone in *Echidna*. The fibula is prolonged proximally beyond the stout tibia, round which it may rotate. The proximal row of the tarsus is one large bone, formed of the blended astragalus and os calcis.

In conclusion, the Author argues that the points of structure are so few in which Monotreme mammals make a closer approximation to the higher mammals than is seen in this fossil and other Anomodontia, that the Monotreme resemblances to fossil reptiles become increased in importance. He believes that a group Theropsida might be made to include Monotremata and Anomodontia, the principal differences (other than those of the skull) being that Monotremes preserve the marsupial bones and the atlas vertebra. *Ornithorhynchus* shows pre-frontal and post-frontal bones, and has the malar arch formed as in Anomodonts and some other reptiles.

MISCELLANEOUS.

The Dates of Esper's 'Schmetterlinge.' By C. DAVIES SHERBORN, F.Z.S. &c., and B. B. WOODWARD, F.L.S. &c.

THE following incomplete notes (pp. 138-140) on the dates of E. J. C. Esper's 'Die europäischen Schmetterlinge in Abbildungen' &c., collected over several years, may be useful to students until further information be forthcoming. We have to thank Mr. L. B. Prout for some valuable memoranda, the references "A. V." (= Allgemeines Verzeichniss derer Bucher, &c.: Leipzig, Weidmann) coming from his manuscripts. "G. A." signifies "Göttingische gelehrte Anzeigen." The dates in square brackets are doubtful and are those used by Mr. Sherborn in his 'Index Animalium.'

The dates of Esper's 'Die ausländischen (aussereurop.) Schmetterlinge' have been published by Prof. Aurivillius in K. Vet.-Ak. Handl. xix. (5) 1882, p. 182. We think the date of the last three parts (14-16, pp. 205-254) will be found to be 1798. The 1801 titlepage belongs to the so-called second edition.

Ann. & Mag. N. Hist. Ser. 7. Vol. vii. 10

Th. I.	Heft 1	pp. 1-28-40	pls. 1-6	1777	Announced A. V., Michaelmesse, 1776, p. 159.
	2	41-72	7-12	"	
	3	73-104	13-18	"	
	4	105-116*	19-24	"	
	5	117-144	25-30	"	G. A. 1777, pp. 618-622.
	6	145-168	31-36	"	
	7	169[-192]	37-42	"	
		Sheet Bb=pp. 193-200 with Heft 28.		1788	
	8	201-216	43-48	1777	
	9	207-388	49-50	1779	
Th. II.	Heft 10	1-	1-6	1778	G. A. 1779, pp. 1256-8.
	11	-	7-12	1779	
	12	- 80	13-18	"	
	13	81-104	19-24	1780	G. A. 1781, p. 24.
	14	105-196		1781	G. A. 1784, p. 823; A. V., Oster. 1781, p. 89.
Th. III.	Heft 15	1-32	1-6	1782	G. A. 1783, pp. 551-2.
	16	33-56	7-12	"	
	17	57-88	13-17	1783	G. A. 1784, p. 784.
	18	89-104	18-23	"	
	19	105-136	24-31	1784	
	20	137-184	32-37	1785	
	21	185-208	38-43	"	
	22	209-240	44-49	"	G. A. 1786, pp. 925-7.
	23	241-272	50-55	"	
	24	273-288	56-61	1786	
	25	289-312	62-67	"	
	26	313-328	68-73	"	
	27	329-344	74-79	"	
	28	345-396 (with pl. 113 and Sheet Bb of Th. i., and pl. 36, sheet Gg of Th. ii.).		"	
Th. IV. Bd. 1, Heft 29		1-16	80-85	"	G. A. 1788, pp. 324-6.
30		17-32	86-91	"	
31		33-48	92-97	1787	A. V., Oster. 1787, p. 603.
32		49-64	98-103	"	
33		65-72		"	
34		73-96	104-121	"	
35		97-112		"	
36+		113-128		"	
37+		129-144	122-133	1788	G. A. 1792, pp. 652-3.
38+		145-160	134-139	"	

39†	161-176	140-145	1789	G. A. 1792, pp. 660-1.
40	177-192	146-151	1790	
41	193-208	152-155 & 99 B & 105 B	"	
42 }				
43 }				
44 }	209-320	156-167 & 117 A	1791	
45 }				
46 }	321-352	168-177 & 125 B & C	"	
47	353-372	178-183	1793†	G. A. 1798, p. 653.
Th. IV. Bd. 2, Heft 48	373-420	184-186	1796	
Abschn. 1.			1798	
49 }			1798	
50 }			1799	
51			1804	A. V., Oster. 1798, p. 150.
52			1804	A. V., Mich. 1799, p. 348.
53			1804	A. V., Oster. 1804, p. 164.
54			1805	A. V., Mich. 1804, p. 432.
				A. V., Oster. 1805, p. 191.
Th. IV. Bd. 2, Abschn. 2.	1-16			P. 6 out before p. 590 of Th. iv. Bd. 2, Abschn. 1.
	17-36		[1796]	P. 20 "In dem abgewichenen 1794ten Jahre," and p. 29; and see p. 35. Probably written 1795 and published 1796. E marks end of a part.
				H marks end of a part.
	37-54		1794	P. 36 "dieses 1794sten Jahres."
	55-86	1-4	1795	
	1-40	5-10	1795	
	41-64	11-16	[1795]	
	65-88	17-20		
	89-104			G. A. 1798, p. 653; A. V., Oster. 1795, p. 120; Mich. 1795, p. 282.
	105-128			
	129-172?		1799	Pp. 129-148 are omitted, but the signatures are correct; A. V., Oster. 1799, p. 136; Allg. lit. Zeit. 1804, iii. p. 412.
	-196			On p. 170 Esper refers to 1795; A. V., Oster. 1800, p. 151; Oster. 1802, p. 187.
	197-220	36-40	1800 §	See Brit. Mus. 461. g. 8. with original wrapper.
				A. V., Oster. 1806, p. 159.
	221-224	41-46	1803	
	225-276		1806	

* ? 112 or 126.

† Fibig and Nau, Bibl. gesamt. Nat. 1789-91, agree with these dates and supply numbers of plates.

‡ Michaelmas 1793, Meyer, Zool. Annalen, p. 50; A. V., Mich. 1793, p. 266.

§ "Bechstein and Scharfenberg (Naturg. schäd. Forstinsect. i. p. 26) give the dates of the work as 1777-1800, and indicate pl. 40 of the 'Spannerphal.' as the last out. They also state at that date [1800] 112 (out of 123) Tagschmett. plates had appeared, 46 (out of 47) Schwärmer., 205 (out of 219) Spinner and Eulen." —L. B. PROUT *in litt.*

Fortsetzung der Tagschmetterlingen :

1	1- 68	
2	pp.	
3	69-100	pls. 63- 68
4	101-124	69- 74
5	125-140	75- 80
7 (pars)	141-156	81- 82
	157-184	
	185-190	

Fortsetzung der Abendschmetterlingen :

6	197-212	26- 31
7 (pars)	213-228	32- 35
	229-234	36

Supplement Band. 1 Abschn. Tagschmett. :

Heft 1	1- 8	94
3	9- 60	95-101
5	[no text]	102-106
	61- 88	
	89-104	

Suppl. Band. 2 Abschn. Abendschmett. :

Heft 2	1- 4	37
4	5- 16	38-40
	17- 40	41
	41- 52	

Suppl. Band. 3 Abschn. Nachtschmett. :

Heft 1	1- 36	86-90
	[no text]	
	37- 64	
	65- 94	
	95-104	

Suppl. Band. 2 Theil. Fortsetzung 1, 2, 3, 4 Theile :

	1- 8	
	9-16	
	17-24	
	25-48	

[1780] 1780 quoted on p. 9; A. V., Oster. 1781, p. 89.
 [1780] 1780 quoted on p. 45; A. V., Mich. 1781, p. 206.

1781 } G. A. 1782, p. 1237, and 1783, p. 592.
 1782 }
 1783 }

G. A. 1784, p. 823.

G. A. 1788, p. 324.

1786 } (With text to Heft 14 of main work.)

1782 } G. A. 1784, p. 823.
 1783 }
 1786 }

G. A. 1788, p. 324.

1789 G. A. 1792, p. 653.

1793 } G. A. 1798, p. 654.
 1793 }

[1797] On O_s we read "in dem abgewichenen" sommer's
 [1799] dieses 1799sten Jahres."

Completed 1805, Engelmann; Hagen.

[1805] G. A. 1792, p. 653.

1789 G. A. 1798, p. 654.

1793 On p. 32 "in abgewichenen 1797 Jahre."

[1797] Completed 1806, Engelmann; Hagen.

[1806] G. A. 1792, p. 653.

1789 G. A. 1798, p. 654.

1793 P. 91 quotes 1798.

[1797] Completed 1807, Engelmann; Hagen.

[1799]

[1807]

[1805]

1830

By T. v. Charpentier.

Sherborn, Charles Davies and Woodward, Bernard Barham. 1901. "The dates of Esper's 'Schmetterlinge'." *The Annals and magazine of natural history; zoology, botany, and geology* 7, 137–140.

<https://doi.org/10.1080/00222930108678449>.

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