

MONOGRAPH OF THE BRITISH LOWER  
TERTIARY UNIONIDAE  
CORRECTIONS AND ADDITIONS

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(Read before the Society, 19 March 1966)

Since the publication of my monograph of the British Lower Tertiary Unionidae a further new species has come to light, which is described herein. In addition, a number of corrections to my original paper (WOODWARD, 1965) are listed below.

**Corrections**

- p. 316, line 32: for 'Teritary' read 'Tertiary'.
  - p. 323, line 18: for 'Bembridge Limestone' read 'Upper Headon Beds'.
  - p. 323, line 29: for 'SM C.29450' read 'SM C.29540'.
  - p. 327, line 22: for 'SM C.28489' read 'SM C.29489'.
  - p. 327, line 34: for 'SM C.28489' read 'SM C.29489'.
  - p. 327, Table 3: insert 'SM C.29532' and 'SM C.29533'; these specimens were included in *Unio subparallela* Wood on p. 328.
  - p. 328: material included under *Unio subparallela* Wood, from the Sedgwick Museum, Cambridge [registration numbers SM C.29532 and SM C.29533] is in reality *Unio solandri* J. de C. Sowerby. Therefore delete fifth line under 'Material examined' and the last two lines of dimensions and include these under *Unio solandri* on p. 327.
  - pl. 22: insert '1. *Unio edwardsii* Wood'.
  - pl. 23: insert '5. *Unio austeni* Morris'.
- All the material listed as in 'FRW Coll.' has since been transferred to the geological collections of the Hunterian Museum, The University, Glasgow.

**Additional species*****Unio castelli* n.sp.**

(Plate 9)

*Unio gibbsii* auctt. non *U. gibbsii* Morris.

**Description.** Shell equivalve, inequilateral, inflated, elongate oval in outline; umbones slightly elevated, situated approximately one-fourth of the way along the length of the shell. Gonial ridge weakly developed, running diagonally from the umbones to the postero-ventral junction, forming a weak shoulder with a definite post-gonial region. In some individuals the gonial shoulder is transversed by a series of oblique corrugations as in *Unio cumberlandi* Woodward. Growth lines well-marked, regular, slightly raised. Anterior margin rounded; ventral margin straight, or weakly curved in old individuals; posterior margin obliquely truncate; dorsal margin slightly convex, tending to be parallel to the ventral margin. Umbonal rugae in the form of well-defined **W**-shaped rugae in which the two points of the inverted **V**'s are more pronounced, resulting in the development of a pair of divergent rugal nodules similar to those present in the Recent *Anodonta complanata* Rossmässler = *A. minima* auctt. No trace of the ligament is present in the material examined.

The internal features which follow are based on specimens in the Sedgwick Museum, Cambridge, nos. SM C.22054 and SM C.22055. Left valve hinge plate having a single, low, lamelliform pseudocardinal and two well-developed lateral lamellae; umbonal cavities shallow, with the dorso-umbonal muscle scars impressed on to the hinge plate, these being four in number. Anterior adductor muscle scar impressed, reniform in outline, fused dorsally with the anterior retractor-pedis muscle scar which is also impressed. Anterior protractor-pedis muscle scar distinct, impressed, cubic in outline. Pallial scars fused, impressed, forming a distinct pallial line from the base of the anterior adductor muscle scar to the posterior adductor muscle scar which is spade-shaped in outline.

**Geological horizon.** Oligocene: Hamstead Beds.

**Material examined**

Holotype: BM LL 18132. Specimen from the F. E. EDWARDS collection, purchased 1872-73. Type-locality: Hempstead [i.e. Hamstead], Isle of Wight (on the authority of EDWARDS).

Six paratypes: BM LL 18133, from the F. E. EDWARDS collection, purchased 1872-73; SM C.22053—SM C.22057, Lower Hempstead Beds, Hamstead, Isle of Wight.

The dimensions of these specimens are as follows:

SPECIMEN		L.	B.	H.
		(mm)	(mm)	(mm)
Holotype	BM LL 18132	28.0	4.0*	15.5
Paratype	SM C.22053	33.0	5.0*	20.0
Paratype	SM C.22054	38.0	3.5*	16.5
Paratype	SM C.22055	21.0+	4.5*	20.0
Paratype	SM C.22056	32.0	4.0*	15.0
Paratype	SM C.22057	27.0+	4.0*	16.0

\* = one valve.

This species is named after Mr C. P. CASTELL in appreciation of his considerable help to me in the past and for placing the material at my disposal.

ACKNOWLEDGMENTS

I should like to express my sincere thanks to the British Museum (Natural History); The Sedgwick Museum, Cambridge; Paisley Museum and Art Gallery; and to Mr C. P. CASTELL, Mr T. PAIN and my wife for helpful criticism and assistance during my investigations.

REFERENCES

WOODWARD, F. R., 1965. Monograph of the British Lower Tertiary Unionidae, with descriptions of three new species. *J. Conch.* 25: 316-330, pls. 22-27.

SPECIMEN	L. (mm)	B. (mm)	H. (mm)
Holotype BM LL 18132	28.0	4.0*	15.5
Paratype BM LL 18133	38.0	5.0*	20.0
Paratype SM C.22053	33.0	5.0*	16.5
Paratype SM C.22054	38.0	3.5*	20.0
Paratype SM C.22055	21.0+	4.5*	15.0
Paratype SM C.22056	32.0	4.0*	16.0
Paratype SM C.22057	27.0+	4.0*	16.0

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#### ACKNOWLEDGMENTS

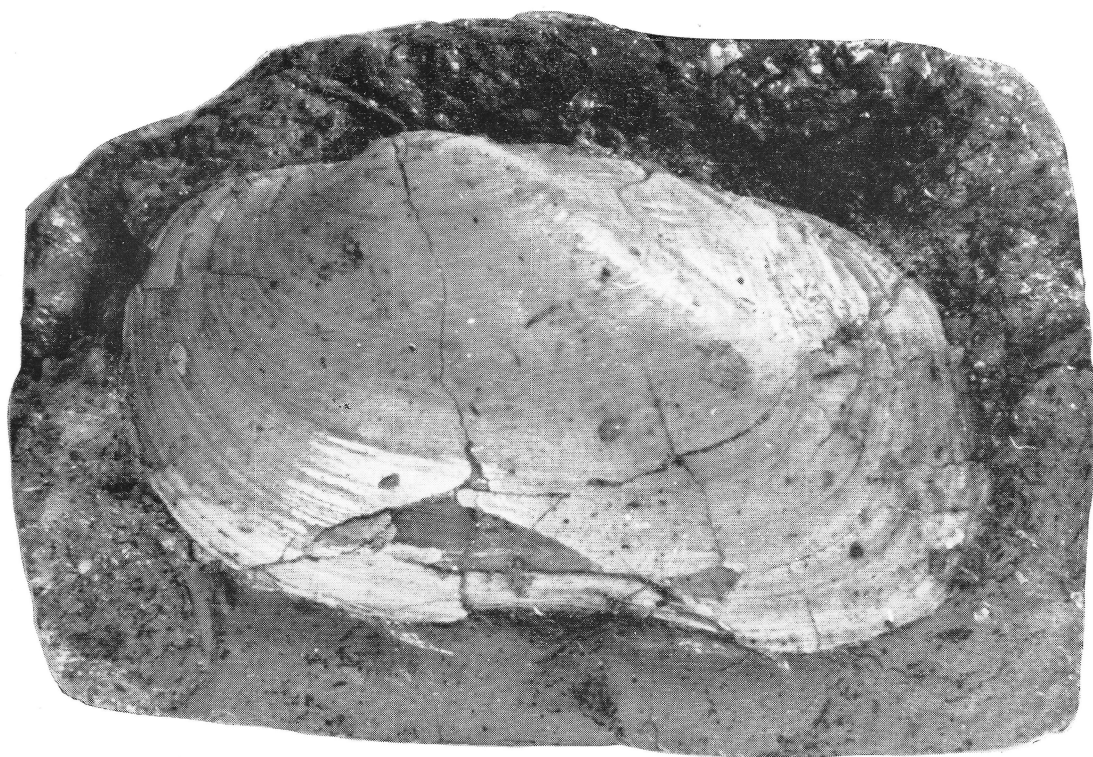
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EXPLANATION OF PLATE 9

Figure 1. *Unio castelli* Woodward: holotype, left valve. Lower (?) Hamstead Beds. BM LL 18132.  
Figure 2. *Unio castelli* Woodward: paratype, dorsal aspect of both valves. Lower (?) Hamstead Beds.  
BM LL 18133.  
Photos.: R. F. CUMBERLAND.



1



2

*Unio castelli* Woodward

Fig. 1.  
d Beds.