

A NEW MEDUSOID (?) FROM THE SILURIAN OF ENGLAND

by ISLES STRACHAN

ABSTRACT. *Duodecimedusina palmeri* sp. nov. is described from the Upper Llandovery of the Malverns and West Midlands. This extends the stratigraphic range of the genus previously described from the Carboniferous and Lower Devonian. It is also the first record from Europe.

ONE of the specimens described here was picked up some years ago on a student field excursion to the Lickey Hills, just south of Birmingham. Like so many interesting specimens it was a loose block so that there is no direct evidence of which way up the specimen was, or more important, from which geological horizon it came, both Cambrian and Lower Silurian being exposed in the quarry. In June 1967, a similar specimen (for which the stratigraphic horizon is more precise) was collected by Mr. K. F. Palmer on a student trip to the Malverns. The confirmation of geological age and morphological features make recording of the specimens more important since the range of the genus is considerably extended in time and space.

Genus DUODECIMEDUSINA King

This genus was proposed by King (1955) for three species, *D. typica*, *D. wycherleyi*, and *D. ulrichi*. The first two of these, known from a single specimen each, come from Upper Carboniferous of Kansas, and the third species, also from a single specimen, is from the Lower Devonian of Bolivia. Avnimelech (1966) has recently described a fourth species, *D. aegyptica* from the Lower Carboniferous of Egypt, again from a single specimen. The present specimens therefore extend the range of the genus down to the Lower Silurian as well as being the first record from Europe.

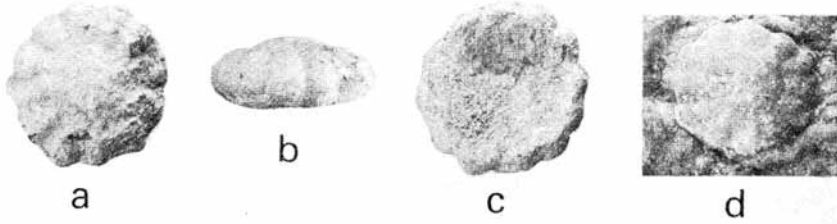
Harrington and Moore (1956) classified *Duodecimedusina* amongst the 'Medusae Incertae Sedis' but Avnimelech has proposed transferring the genus to the Protomedusae on the grounds of similarity to *Brooksella* which forms the whole class. The latter genus, however, frequently shows supplementary lobes on the sub-umbrellar surface which are not found in the Egyptian and British specimens. The American specimens are all attached to a 'pedestal' so that the sub-umbrellar surface cannot be seen. The general category of 'Medusae Incertae Sedis' therefore seems to me to be a better resting place for *Duodecimedusina* for the present.

Duodecimedusina palmeri sp. nov.

Material. Holotype, BU 302, from base of Upper Llandovery, Gullet Quarry, Malverns, in a slightly micaceous siltstone, way-up not known. Paratype, BU 303, probably from Rubery Sandstone (Upper Llandovery), Rubery Quarry, Leach Green Lane, Birmingham, in a medium to coarse sandstone.

Description. Body roughly circular, 16–19 mm. in diameter. There is a central raised
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area, rather poorly defined, occupying about half of the diameter, surrounded by twelve lobes. The lobes are distinct at the periphery, measuring about 3 mm. across, but merge centrally into the more raised area. The undersurface is poorly preserved in the holotype and not seen on the paratype.



TEXT-FIG. 1. *a, b, c.* Holotype, BU 302, exumbrellar, side, and subumbrellar views. *d.* Paratype, BU 303, exumbrellar view. All $\times 1\frac{1}{2}$.

Discussion. *D. palmeri* is similar to *D. typica* King in the poorly delimited area of the exumbrellar surface but is little more than half its size. *D. wycherleyi* King is even smaller (10–11 mm. in diameter) but has a central depression, which is also found in the Lower Devonian, *D. ulrichi* King. *D. aegyptica* Avnimelech is similar in size to *D. palmeri* but is much more convex in lateral view and has more clearly marked off lobes.

Since the above was written, Dr. Goldring has sent me another specimen from the Gullet Quarry. This specimen (Reading Univ. Geol. Dept. no. 14601) was collected as a loose specimen by Mr. D. C. Smith while mapping the area. It is somewhat larger (about 28 mm. in diameter) and the lobes show weak, but fairly constant, concentric bands, a feature not reported on any other of the species.

REFERENCES

- AVNIMELECH, M. A. 1966. A new medusoid fossil from the Lower Carboniferous of Egypt. *J. Paleont.* **40**, 742–5.
 HARRINGTON, H. J. and MOORE, R. C. 1956. Protomedusae, etc. In MOORE, R. C. *Treatise on invertebrate Paleontology, Part F, Coelenterata*. Kansas.
 KING, R. H. 1955. In HARRINGTON, H. J. and MOORE, R. C. Fossil jellyfishes from Kansan Pennsylvanian rocks and elsewhere. *Bull. geol. Surv. Kansas*. **114**, 153–64, pl. 1, 2.

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