

little tubes," and embraced genera as diverse as *Amphistegina*, *Heterostegina*, *Orbiculina*, *Alveolina*, and *Fabularia*. Our knowledge of the true structure and affinities of the type is mainly due to the researches of Williamson, Parker and Jones, and Carpenter.

Normally the test has the form of a lenticular disk, more convex on one side than the other, and consists of an inequilateral turbinoid spire, of which each convolution completely or almost completely encloses its predecessor. The chambers are equitant; the alar prolongations on the superior side are simple, and do not differ very materially from those of a Nummulite; but on the inferior side they are each divided into two portions by a deep constriction, and the secondary lobes thus formed are directed backward and radially, and are so intercalated as to give the appearance externally of an independent whorl of chambers. The aperture is on the inferior side of the final chamber, and resembles that of *Rotalia* in form and position. The surface of the test in the neighbourhood of the aperture is generally rough or granulose. Occasionally the septal lines are beaded or otherwise limbate, and less frequently the surface of the chambers has also a granular exogenous ornament; but as a rule the shell is smooth, except near the orifice on the inferior side. The walls are thick and laminated, and traversed transversely by closely-set tubuli; but the septa are single and there is no canal system.

In the living condition *Amphistegina* is essentially a tropical genus, notwithstanding the fact that it is occasionally met with as far north as Bermuda and the Canary Islands, the former of which is considerably outside the tropical line. Its home is amongst the shallow-water sands of warm seas, and under favourable local conditions it sometimes exists in extraordinary profusion. Occasionally, however, it extends into much deeper areas. With the exception of a minute and somewhat obscure variety, which has been found in the Carboniferous rocks of the west of England, the geological range of the genus is not known to reach beyond the Tertiary epoch; but it has been recognised in strata of almost every period from the Nummulitic formations to the present time.

Amphistegina lessonii, d'Orbigny (Pl. CXI. figs. 1-7).

Compressed lenticular form, figs. 1-4.

- Amphistegina lessonii* (pars), d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 304, No. 3, pl. xvii. figs. 1-4.
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| „ | <i>vulgaris</i> , | Id. | Ibid. | p. 305, No. 8;—Modèle, No. 40. |
| „ | <i>gibbosa</i> , | Id. | 1839, Foram. Cuba, p. 120, pl. viii. figs. 1-3. | |
| „ | <i>hauerina</i> , | Id. | 1846, For. Foss. Vien., p. 207, pl. xii. figs. 3-5. | |
| „ | <i>vulgaris</i> , | Parker, Jones, and Brady, | 1865, Ann. and Mag. Nat. Hist., ser. 3, vol. xvi. p. 25, pl. iii. fig. 91. | |
| „ | <i>nucleata</i> , | Terquem, | 1882, Mém. Soc. géol. France, sér. 3, vol. ii. Mém. III. p. 123, pl. xiii. fig. 1, a. b. | |

Thicker variety, often more inequilateral, figs. 5, 6.

- Amphistegina lessonii* (pars), d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 304, No. 3;—Modèle, No. 98.