Lamarck[1] in 1815 formed the genus *Polycyclus* for a Botrylloid species producing a thick fleshy colony. This genus was not recognised by Savigny, who in 1816[2] divided the single genus *Botryllus* into two sections :—(1) "Botrylli stellati" having the Ascidiozooids of each system placed in one row, and (2) "Botrylli conglomerati," where the Ascidiozooids form several rows. The latter included only one species, *Botryllus conglomeratus*, Gaertner, said to be found on the English coast. There is considerable doubt as to this species. Possibly it does not belong to the Botryllidæ.[3] Savigny further divided the Botrylli stellati into—(1) those where the Ascidiozooids are cylindrical and have the branchial and atrial apertures close together, and where the margin of the common cloaca is not distinct; and (2) those where the Ascidiozooids are ovoid and have the apertures distant, and where the margin of the common cloaca is always visible. This was a very natural classification, and it has been upheld by almost every writer on the Botryllidæ

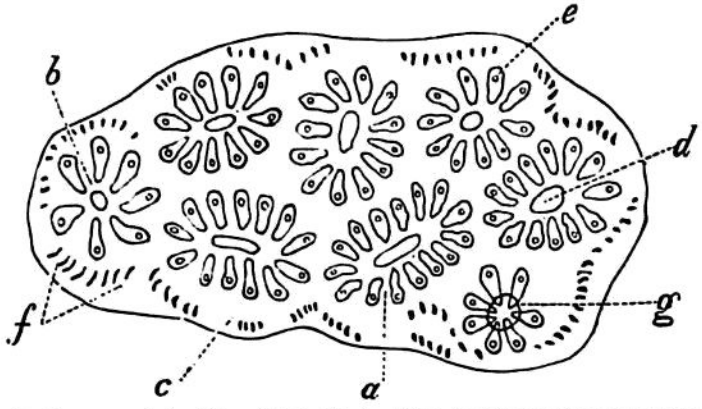

FIG. 7.—A Colony of a Compound Ascidian (*Botryllus*). The Ascidiozooids are arranged in eight systems.

a, a large system formed of fifteen Ascidiozooids; *b*, a small system formed of seven Ascidiozooids; *c*, the test or investing mass; *d*, a common cloacal aperture; *e*, an Ascidiozooid; *f*, the terminal knobs of the vessels; *g*, a system where the common cloacal aperture is fully expanded.

since. Milne-Edwards recognised the value of the distinction, and in 1841[4] raised the two groups to generic rank by founding the new genus *Botrylloides* for Savigny's first tribe of species; *Botryllus* being restricted to the second series of forms. As Giard and others have pointed out, these two genera differ not only in the shape of the Ascidiozooids and in the common cloacal aperture, but also in the shape of the systems composing the colony (compare Fig. 7 with Fig. 8, D and E, p. 39).

Della Valle[5] showed in 1877 that Lamarck's old genus *Polycyclus*, which, although it had been employed by some authors (*e.g.*, Risso,[6] Delle Chiaje,[7] and Grube[8]), was by no

[1] *Mem. Mus. Hist. Nat. Paris*, t. i. p. 340.

[2] Mémoires sur les Anim. sans Vert.

[3] From the description and figure given by Pallas (Spicilegia Zool., fasc. 10, Berolini, 1774, p. 39, Tab. iv. fig. 6) it is evident that the animal in question is a Compound Ascidian; it is, however, impossible to say with any certainty even the family to which it belongs. The figure seems to me much more like one of the Polyclinidæ than one of the Botryllidæ. It is not unlike a small colony of *Amaroucium proliferum*. Consequently, I think Savigny's second section may be regarded as having been probably founded upon a mistaken identification, and may now be suppressed.

[4] Observations sur les Asc. Comp., &c.

[5] Contrib. alla Storia Nat. d. Asc. Comp., &c., p. 22.

[6] *Mém. Mus. Hist. Nat. Paris*, 1826, t. iv. p. 280.

[7] Descriz., &c., vol. iii. p. 19.

[8] Die Insel Lussin, &c., p. 64, Breslau, 1864.