Milne-Edwards classified the genera of the Compound Ascidians in three "tribes," the "Polycliniens," the "Didemniens," and the "Botrylliens," an arrangement which with our present knowledge of the group still seems fairly natural in some respects. These three divisions are distinguished by such anatomical characters as the relations of the other viscera to the branchial sac. In the "Polycliniens" the body has three regions—the "thorax," containing mainly the branchial sac; the "abdomen," formed chiefly of the stomach and the greater part of the intestine; and the "post-abdomen," having the reproductive organs and the heart. In the "Didemniens" there are only two regions—thorax and abdomen—the reproductive organs and heart being placed on the intestine. In the third group, the "Botrylliens," the viscera form a single mass in which the alimentary canal lies alongside the branchial sac. The first and last tribes are natural groups, and correspond respectively to the modern families Polyclinidæ and Botryllidæ, but the second tribe, the Didemniens, is rather too wide in its range, and includes forms which are not closely related. Milne-Edwards, however, subdivides it into two groups, the "unistellés" and the "bistellés," of which the former is a very natural group, the modern family Didemnidæ.

This arrangement of the Ascidiæ Compositæ was generally accepted until 1872, when Giard published an important memoir,[1] in which he gave a classification based mainly upon the method of gemmation. He divided the Synascidiæ (in which he included the Social Ascidians of Milne-Edwards) into three great groups—(1) the Catenatæ, in which the buds are formed at the base or posterior end of the body; (2) the Glomeratæ, in which the buds are developed from the region of the reproductive organs of the parent; and (3) the Reticulatæ, in which the buds are formed as outgrowths from the part of the body where the thorax and abdomen join.

The group Catenatæ includes three families, the Clavelinidæ, the Perophoridæ, and the Botryllidæ, but M. Giard gives no sufficient reasons for placing the first two families in the Compound Ascidians, and as von Drasche has since pointed out, the third one does not really exhibit the essential character of the Catenatæ. The second group, the Glomeratæ, corresponds to Milne-Edwards' "Polycliniens," in addition to his "Didemniens bistellés," and is divided into two families, the Polyclinidæ and the Distomidæ, both of which are still retained, but have undergone some changes in constitution. The "Didemniens unistellés" correspond to Giard's third group, the Reticulatæ, and are characterised by gemmation taking place from the region at the posterior end of the branchial sac and by exhibiting the phenomenon of embryonic blastogenesis. This is a natural enough section, which includes two distinct families, the Didemnidæ and the Diplosomidæ, which Milne-Edwards to a certain extent confused with one another. The Glomeratæ cannot stand without several changes which have since been made by von Drasche, and which really reduce it merely to Milne-

[1] Recherches sur les Ascidies Composées ou Synascidies.