probably due in great part to the contracted condition of the colony, caused by preservation in alcohol. The Ascidiozooids are very much shorter antero-posteriorly in Sarcobotrylloides wyvillii than in Sarcobotrylloides superbum, and are less regularly arranged in systems (compare Pl. IV. fig. 12 with von Drasche's figure). There are only eight tentacles in Sarcobotrylloides superbum, while Sarcobotrylloides wyvillii has sixteen. This list of the more notable differences—there are others of less importance shows clearly that these forms constitute two well-marked species.

I have named the new species Sarcobotrylloides wyvillii in honour of Sir Wyville Thomson, who dredged it in the "cold area" of the Færöe Channel¹ close to the famous "Wyville Thomson" ridge. This region has since been investigated by Mr. Murray and Captain Tizard in the "Knight Errant" (1880)² and the "Triton" (1882), but no Compound Ascidians were obtained during these expeditions.

Sarcobotrylloides wyvillii, n. sp. (Pl. IV. figs. 12-18).

The Colony is of an irregular elongated form and of considerable thickness. The surface is somewhat uneven, but smooth. The colour varies from pale pink to light purple. The anterior ends of the Ascidiozooids form lighter areas, and the basal part of the colony is light grey and semi-transparent. The common cloacal apertures are inconspicuous.

The length of the colony is 4.3 cm., the breadth is 1.6 cm., and the thickness is 1.3 cm.

The Ascidiozooids are elongated antero-posteriorly, being about 1.5 mm. in length, and rather less than 1 mm. in greatest breadth. The light area formed on the surface of the colony by the anterior end of the Ascidiozooid is about 0.5 mm. in diameter.

The Test is soft but moderately firm. It is very thick all over the colony. At the narrow base it is light coloured and semi-transparent, elsewhere, as seen from the surface, it is opaque and of a pale bluish-pink or very light purple colour. No terminal knobs of vessels are visible. The test is formed of a homogeneous transparent matrix, in which numerous rounded fusiform and stellate cells are imbedded. The vessels are fairly abundant, but rather narrow, and they do not branch much. The terminal knobs are not very abundant, except just under the surface.

The Mantle is thin but fairly muscular. The muscle bands are mostly transverse in direction, and are very delicate.

The Branchial Sac is of moderate size. There are three internal longitudinal bars on each side. The transverse vessels are moderately wide, and are all of the same size. stigmata are regular, and are usually about four in a mesh.

The Dorsal Lamina is a plain membrane.

¹ See Depths of the Sea, Third Cruise of the "Porcupine" in 1869, p. 104. London, 1873.

² See Proc. Roy. Soc. Edin., vol. xi. p. 638, 1882.