Zoology Part XII: Report on the DEEP-SEA MEDUSÆ By Professor Ernst Haeckel. Bound in Volume 4,1882.

the preceding species. The unusual strength of this large proboscis indicates a predatory mode of life.

The central stomach appears capable of being completely shut off from the buccal stomach, as the palatine opening (*gp*) is narrowed by strongly-projecting palatine swellings, and both the four perradial palatine nodes (*gk*) and the contiguous lateral parts of the palatine grooves are also considerably thickened. On the other hand, the four obelisk plates of the central stomach are very delicate and thin walled (torn for the most part). The four perradial angles of the quadrate pyloric opening coincide with the four proximal ends of the four cleft-shaped gastral openings.

The basal stomach (*gb*) shows an essentially different formation from that of the preceding species. In the latter the four perradial peripheric niches surrounding its conical axial space are completely separate from each other, whilst the four interradial funnel cavities of the subumbrella run above as far as the point of the conical basal stomach and meet there in the centre of the umbrella cone. In *Periphema regina*, on the other hand, the interradial funnel cavities end 2 cm. below the basal centre point of the basal stomach. The latter consequently forms a quadratic undivided depression in the bottom of the flatter vaulting of the cone with the funnel cavities and their phacelli springing from its four angles. The distance of these four points (the lateral length of the quadrant) amounts to 4 cm. The shattered condition of the fragments before me, did not allow of the complete reconstruction of the basal stomach. The central part of the umbrella cone with its four funnel points was, however, preserved, and showed clearly that the four perradial niches of the basal stomach communicate freely. This peculiarity distinguishes *Periphema* generically from *Periphylla*.

The phacelli or longitudinal rows of gastral filaments in *Periphema regina* are extremely large and more strongly developed than in any other Medusa known to me. They consist of several thousand strong and very long filaments, placed in several rows along the gastral tæniola (not in a single row as in the preceding species). The filaments are longest in the middle of the phacelli, up to 80 mm. long and 1 mm. thick. They become shorter and thinner towards both ends, and are then mostly only 10–20 mm. long and hardly 0·5–0·2 mm. thick. Their special formation and distribution is the same as in the previous species. Two diverging phacelli run from the cone point of each of the four interradial funnels, extending on the lateral margins of the gastral openings as far as the pylorus, and ending 1 cm. above the palatine groove (fig. 1). The filaments are sometimes cylindrical, sometimes flattened like a ribbon, often thickened into knots and tongue-shaped at the end. The nature and disposition of these glands is the same as in the preceding species. The lumen both of the central and the basal stomach is occupied for the most part by this mass of filaments.

The peripheric coronal intestine in *Periphema regina* shows the same formation as that already described in detail in *Periphylla mirabilis* (p. 78). The colossal coronal

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