

verse section these last (fig. 9) appeared as yellowish-white longitudinally striated lamellæ, which at either end unite into a common muscular mass; between these lie greyish-white perpendicularly striated lamellæ, the same which in longitudinal section are tendinous-glittering white. The white hue of these lamellæ is the optical expression of sections which follow the direction of the lamellæ. The wall of the stomach consists in this way of layers of muscular fibres, which are made up of thin strands lying in close proximity; the layers alternate in direction, and are, therefore, quite different in longitudinal and transverse section. In the periphery of the organ the layers unite into a very thick, tight covering, which contains abundant blood-vessels (fig. 8). To the right hand and above in the first stomach (which may be regarded as an antechamber to the masticatory stomach) is the wide obliquely-oval orifice of the third stomach, the lamellæ of which are very conspicuous in the depth of the orifice; the hinder margin of the opening is more conspicuous, and projects in the form of a fold with transverse furrows. The *third*, the lamellated stomach (fig. 6, *h*) is united by a short neck with the first stomach; it is of a rounded angular contour, somewhat flattened, of about 11 mm. diameter by about 6 mm. in height; it is radially striped with a blackish colour, the folds of the inside are visible from the outside, especially at the margins. Besides the above-mentioned ligaments between this and the second stomach, there are also two strong bands on the upper surface, the exact relations of which could not be made out. The walls of the third stomach are not thick; the inside has numerous yellowish-white variously-sized folds passing from above downwards, which at the lower end reach a height of quite 3 mm. Generally a high fold alternates with several quite low ones; the largest folds are provided at the sides with smaller longitudinal folds directed upwards (Pl. V. figs. 21, 22). All the folds converge after the middle point of the stomach, and leave a fine central space. Below the folds are much lower in the opening of the stomach; above they gradually decrease in size as far as the intestine, where they end rather abruptly. The *intestine* (Pl. VI. fig. 6, *ik*) takes its rise at the upper end of the third stomach, and runs forwards for a short space (12 mm.), and then bends to the right, and ascending along the right side of the body, traverses a more or less superficial furrow upon the liver (Pl. V. fig. 27, *ee*), winding forwards and backwards; in the region of the middle of the pericardium it descends, bending backwards, and runs beneath the pericardium along the under side of the mucous gland, and approaching the middle of the body it takes its course between the foot and the lung-sac to the anal papilla (Pl. V. fig. 2). The length of the whole intestine is 14 cm. with an average breadth of 1.5–2.5 mm.; only the first extent of 6 mm. was somewhat broader, about 3.5 mm. in diameter, *widened into an ampulla*¹ (Pl. VI. fig. 6, *i*), showing on its outside a number of black pigmented lines. The inside of the intestine is yellowish-white in colour, and furnished throughout its entire length with fine longitudinal folds, which are a trifle higher in the ampulla, and

¹ This ampulla is regarded by Cuvier as a special stomach (Mém. sur l'Onchidie, p. 8, pl. figs. 5y, 7y).