

this present paper will treat of that region only ; the limbs, limb girdles, and spine will take up less space : these will be worked out for me by young fellow-labourers.¹

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First Stage. Embryo, 3½ lines long.—The body is composed of about twenty-seven somatomes, and the ventral surface of the body from the pericardium to the commencement of the caudal region (composed of four or five somatomes) is wide open.

There are evident thickenings where the limbs will be formed. The ventricle (Pl. I. fig. 1, *h*) is at present a large looped vessel, the auricles being rudimentary.

The mesocephalic flexure is perfect, and the hind-brain (C 3) is very long, showing ten or twelve thickenings on each side below, from which the nerves are arising. The mid-brain (C 2) is large, and completely bent upon itself, and the fore-brain (C 1), which is inferior in position, is separated from the mid-brain by a considerable pineal enlargement. The pituitary body has not begun to be formed.

The nasal folds (*ol.*) are already formed, and the eyeball is seen as an imperfect ring enclosing the large lens ; each of the auditory sacs (*au.*) is a short-necked lagena with an oval mouth, and having a very definite rim.

Four clefts (*cl.* 1-4) are apparent, lessening in size from before backwards, the opening of the last not being clear ; they are surrounded by a clear line of cells, possibly derived from the hypoblast which lines the slits.

¹ The sections of the head were all prepared for me by my son, Mr W. N. Parker.