

# CONTENTS.

## EMBRYOLOGY.

<i>The Animal Cell.</i>		<i>The Primitive Segments</i> . . .	52
Cytoplasm . . . . .	35	<i>Separation of the Embryo</i> . . .	53
Nucleus . . . . .	36	<i>The Yolk-sac</i> . . . . .	54
Reproduction of Cells . . . . .	36	<i>Development of the Fetal Membranes and Placenta.</i>	
Prophase . . . . .	36	The Allantois . . . . .	54
Metaphase . . . . .	36	The Amnion . . . . .	56
Anaphase . . . . .	36	The Umbilical Cord and Body-stalk . . . . .	57
Telophase . . . . .	38	Implantation or Imbedding of the Ovum . . . . .	58
<i>The Ovum.</i>		The Decidua . . . . .	59
Yolk . . . . .	39	The Chorion . . . . .	60
Germinal Vesicle . . . . .	40	The Placenta . . . . .	62
Coverings of the Ovum . . . . .	40	Fetal Portion . . . . .	62
Maturation of the Ovum . . . . .	40	Maternal Portion . . . . .	63
<i>The Spermatozoön</i> . . . . .	42	Separation of the Placenta . . . . .	64
<i>Fertilization of the Ovum</i> . . . . .	44	<i>The Branchial Region.</i>	
<i>Segmentation of the Fertilized Ovum.</i>		The Branchial or Visceral Arches and Pharyngeal Pouches . . . . .	65
The Primitive Streak; Formation of the Mesoderm . . . . .	47	The Nose and Face . . . . .	67
Ectoderm . . . . .	47	The Limbs . . . . .	71
Entoderm . . . . .	49	<i>Development of the Body Cavities</i> . . . . .	72
Mesoderm . . . . .	49	<i>The Form of the Embryo at Different Stages of its Growth</i> . . . . .	74
<i>The Neural Groove and Tube</i> . . . . .	50		
<i>The Notochord</i> . . . . .	52		

## OSTEOLOGY.

Long Bones . . . . .	79	The Thoracic Vertebra . . . . .	102
Short Bones . . . . .	79	The First Thoracic Vertebra . . . . .	104
Flat Bones . . . . .	79	The Ninth Thoracic Vertebra . . . . .	104
Irregular Bones . . . . .	80	The Tenth Thoracic Vertebra . . . . .	104
Surfaces of Bones . . . . .	80	The Eleventh Thoracic Vertebra . . . . .	104
<i>DEVELOPMENT OF THE SKELETON.</i>		The Twelfth Thoracic Vertebra . . . . .	104
The Skeleton . . . . .	80	The Lumbar Vertebrae . . . . .	104
The Vertebral Column . . . . .	80	The Fifth Lumbar Vertebra . . . . .	106
The Ribs . . . . .	82	The Sacral and Coccygeal Vertebrae . . . . .	106
The Sternum . . . . .	83	The Sacrum . . . . .	106
The Skull . . . . .	83	The Coccyx . . . . .	111
<i>BONE.</i>		Ossification of the Vertebral Column . . . . .	111
Structure and Physical Properties . . . . .	86	<i>The Vertebral Column as a Whole.</i>	
Periosteum . . . . .	87	Curves . . . . .	114
Marrow . . . . .	87	Surfaces . . . . .	114
Vessels and Nerves of Bone . . . . .	88	Vertebral Canal . . . . .	116
Minute Anatomy . . . . .	89	<i>THE THORAX.</i>	
Chemical Composition . . . . .	91	Boundaries . . . . .	117
Ossification . . . . .	91	The Sternum . . . . .	119
Intramembranous Ossification . . . . .	91	Manubrium . . . . .	120
Intercartilaginous Ossification . . . . .	93	Body . . . . .	120
<i>THE VERTEBRAL COLUMN.</i>		Xiphoid Process . . . . .	121
<i>General Characteristics of a Vertebra.</i>		The Ribs . . . . .	123
The Cervical Vertebrae . . . . .	97	Common Characteristics of the Ribs . . . . .	123
The First Cervical Vertebra . . . . .	99	Peculiar Ribs . . . . .	125
The Second Cervical Vertebra . . . . .	100	First Rib . . . . .	125
The Seventh Cervical Vertebra . . . . .	101	Second Rib . . . . .	125
		Tenth Rib . . . . .	126
		Eleventh and Twelfth Ribs . . . . .	126
		The Costal Cartilages . . . . .	127