Fig.
77. A polyp, (Tubularia indivisa; $m$, mouth; $o$, ovarits; $p$, un! icles 78. Blood disks in man, magnified.

| 79. ". | in birds, |  |
| :--- | :--- | :--- | :--- |
| 80. " |  |  |
| 81. " | " | in reptiles, " |
| in fishes, " |  |  |

82. Portion of a vein opened, to show the valves.
83. Network of capillary vessels.
84. Dorsal vessel of an insect, with its valves.
85. Cavities of the heart of mammals and birds.
86. " " " of a reptile.
87. " " " of a fish.
88. Heart and bloodvessels of a gasteropod mollusk, (Natica.)
89. Tracheæ, or air tubes of an insect; $s$, stigmata; $t$, trachea.
90. Relative position of the heart and lungs in man.
91. Respiratory organs of a naked mollusk, (Polycera illuminata.)
92. Respiratory organs (gills) of a fish.
93. Vesicles and canals of the salivary glands.
94. Section of the skin, magnified, to show the sweat glands; $a$, the cut': $h$. blood-layer ; $c$, epidermis; $g$, gland imbedded in the fat-layer, $(f$.
95. Egg of a skate-fish, (Myliobatis.)
96. Egg of hydra.
97. Egg of snow-flea, (Podurella.)
98. Section of an ovarian egg; $d$, germinative dot; $g$, germinative vesi cle; $s$, shell membrane; $v$, vitelline membrane.
99. Egg cases of Pyrula.
100. Monoculus bearing its eggs, $a$ a.
101. Section of a bird's egg ; $a$, albumen ; $c$, chalaza; $e$, embryo; $s$, shell $y$, yolk.
102. Cell-layer of the germ.
103. Scparation of the cell-layer into three layers; $s$, seroxs or nervous layer; $m$, mucous or vegetative layer; $v$, vascular or blood layer.
104. Embryo of a crab, showing its incipient rings.
105. Embryo of a vertebrate, showing the dorsal furrow.

106-8. Sections of the embryo, showing the formation of the dorsal canal.
109. Section, showing the position of the embryo of a vertebrate, in relation to the yolk.
110. Section, showing the same in an articulate, (Podurella.)

111-22. Sections, showing the successive stages of development of the embryo of the white-fish, magnified.
123. Ycung white-fish just escaped from the egg, with the yolk not yet fully taken in.
124, 125. Sections of the embryo of a bird, showing the formation of the allantois; $e$, embryo; $x x$, membrane rising to form the amnios; $a$, allintois; $y$, yolk.
126. The same more fully developed. The allantois ( $a$ ) is further des:

