FIG.

77. A polyp, (Tubularia indivisa;) m, mouth; o, ovaries; p. while 78. Blood disks in man, magnified. 79. " " in birds, " " 80. in reptiles, " 81. " . .. 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's b. 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 cgg; 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. Separation of the cell-layer into three layers; s, serous 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. Young 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, allantois; y, yolk.
- 126. The same more fully developed. The allantois (a) is further de-

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