

fig. 2) of the kidneys are pretty far advanced. The bloodvessels (*b*) do not form a convoluted glomerulus in the end of the uriniferous tube, (*a, a', a''*), but in a swelling situated at a certain point in its track. The cells of the wall of the Malpighian body are short and broad, and form only a single layer (*a, a''*). The bloodvessels in the glomerulus are very closely crowded, and tortuous. Only a single vessel, whether artery or vein could not be determined, was seen in connection with the glomerulus.

The Wolffian Bodies. A short time before birth, the uriniferous tubes of the Wolffian bodies are composed of very large, irregularly polyhedral cells, arranged in one layer (Pl. 20, fig. 1, 1a, 1b) around a rather large, central channel (fig. 1, *a*). In a transverse section, these cells appear broadly wedge-shaped, with the narrower end next to the central channel (fig. 1, 1a). Where the tube bends upon itself, the cells all converge around one point, so that the inner ends of some may be seen in the centre, (fig. 1a,) and the channel in the distance. At this stage, the uriniferous tubes are very long and slender, and may be very easily traced from the central canal, or duct, (Pl. 25, fig. 5, *c*), to the point (*a*) where they bend upon themselves, at the parietes of the Wolffian body, and return to the channel whence they started. The uriniferous tubes (*b*) of the kidneys are very short and thick, and are much less numerous than those of the Wolffian bodies. They also run outward, and back toward the duct, (*c*), but we are not sure that they empty into it.

The Blood. About the time the heart begins to lose its tubular character, and the eyes and ears have become decidedly marked and conspicuous, (Pl. 12, fig. 6c, and p. 550,) the blood corpuscles are mere globular, minute, transparent cells (Pl. 19, fig. 6, 7, *a, b*).¹ This shape and size they retain for some time, at least until the allantois has nearly covered the embryo, (Pl. 14, fig. 2, 2a,) and the lungs (Pl. 24, fig. 2, 2a) have become separated from the intestine, and begun to assume a sac-like shape. In a natural state, these corpuscles (Pl. 19, fig. 7, *a, b*) are perfectly globular and transparent, and each contains a large, apparently granulated mesoblast attached to the wall (*a*). By the application of water, the mesoblast bursts, (*c, d, e, f, g, h, i, j*), and the whole granular contents come out, but still retain their globular state, and appear to have a membrane about them (*j*). From this it would seem that the apparently granular contents of the mesoblast constitute, in reality, an entoblast which fills the mesoblast. The blood corpuscles do not attain to the characteristic oval and flattened shape of the adult (fig. 8, *a* to *i*) until very late. At a certain stage, (see Pl. 15, fig. 1, 2, 3, and

¹ Fig. 7, *a, b* belong to a little later stage; but, as the blood corpuscles which they represent are iden-

tical with those of this stage, it would be superfluous to repeat the figures.