terminal bones (Pl. 21, fig. 21) of the feet have not yet assumed the cartilaginous state, but are composed of sharply polygonal cells (fig. 21a) in contact with each other. Each cell contains a large mesoblast occupying half its diameter, and numerous entoblasts. Just before hatching, the centre of the bones of the limbs contains pure cartilage cells (Pl. 22, fig. 5, 6, 6a, 6b). The intercellular substance, or blastema, (*a*,) so called, occupies a large amount of space, when contrasted with the size of the cells (*b*). These cells are very irregular in shape, varying from spherical, semiglobular, trianguloid to elongate-oval, and each one contains a large, faint mesoblast. The principal point of interest is the granular basis for lime deposits in the form of a central heap, with branches stretching out in various directions. Some of the cells (fig. 6) also contain faint granules throughout their whole length and breadth. The application of alcohol brings out more clearly the faint granules, (fig. 6a,) and also those arranged in a branching manner. In some instances, the cells thus treated shrank away from the surface of the cavity of the blastema (fig. 6a, *c*, 6b).

The Skin. At the time the branchial fissures begin to form, and the eye to develop, (Pl. 12, fig. 5, 8, 9, 9a, 11,) the surface of the tail consists of hyaline, oval cells, (Pl. 19, fig. 2,) each one of which contains a small, sharply defined, single mesoblast. A little later, the cells on the head, near the eye, are large, cylindrical, thin walled, and hyaline, and appear to have no contents whatever that may be seen, not even a mesoblast. They form but a single stratum, and have scattered between them minute hyaline granules. Considerably later than this, (Pl. 14, fig. 2, 2a,) the cells of the dermal layer (Pl. 19, fig. 4, *f*) are globular, hyaline, and contain each a single, dark mesoblast (see fig. 7, *b*).[1] When water is applied to these cells, the mesoblast becomes resolved into two bodies,—one very transparent, and the other dark and granular (fig. 4, *a*). When the toes begin to develop, (Pl. 25, fig. 11,) the cells of the surface of the feet are globular, faintly granulated, and contain a large, single, clear mesoblast, and a single entoblast (Pl. 21, fig. 23). The internal tissue of the feet is composed of cells similar to those of the shield (fig. 26). At this time, the cells of the skin of the carapace are elongated, irregular, finely granulated, and each contains a large mesoblast and a central, single entoblast (Pl. 21, fig. 26). That portion of the skin which is metamorphosed into claws (Pl. 21, fig. 20, *a*) is composed of very large, transparent, irregularly polygonal cells, each one of which contains a minute, irregular mesoblast, situated at its surface, and a dot-like entoblast (fig. 20a, 20b, 20c). The cells (fig. 20, *b*) beneath this horny sheath and at the base of the toe (*b'*) are large, (fig. 20d,) but yet much smaller than those of

[1] Although this is a blood corpuscle, it is apparently identical with the cells of the dermal layer.