

trachodonts, of whose tuberculated skin impressions are commonly preserved, were entombed generally in water laid deposits and were probably rapidly covered after death before decomposition had gained much headway, whereas the bodies of the land dwelling carnivorous dinosaurs probably seldom found their way into river or lake. It is reasonable to assume that the carnivores, in common with the horned dinosaurs and armoured dinosaurs—being all land dwellers—were subjected to atmospheric conditions after death with the result that skin impressions would be less liable to occur.

It does not follow that because skin impressions of *Gorgosaurus* and other carnivorous dinosaurs have not yet been found that the skin was delicate and smooth; for of the many forms of horned dinosaurs known the skin impression of one only, viz., *Chasmosaurus belli*, Lambe, has been discovered revealing the presence of an outer layer of rather small polygonal plates¹ which imply a rough and by no means thin or delicate covering. The thick bony scutes of the armoured dinosaurs are usually well and abundantly preserved though not generally in place.

The four restoration drawings forming Figure 48 are based on the very complete type skeleton of *Gorgosaurus* and represent the creature standing, sitting, feeding, and lying stretched at full length. They are the work of Mr. Arthur Miles, prepared under the writer's direction.

The semi-erect position in standing or walking, given in Figure 48a, provides a perfect balance at the hip. Thus poised with the body and head stretched forward, the tail lightly touched the ground. The thighs, judging from the shape of the head of the femur and its position in the acetabulum, were inclined slightly outward. The feet were not far apart and made a double track when the animal walked. If a turn from a straight course were made it is probable that a balance was preserved by a swing of the tail. If this reptile were capable, under strong impulse, of making a rapid forward movement, the tail, functioning fully as a balance and assisting in regulating direction, would probably leave the ground. The perfect balance of the body would allow of a natural and easy movement of the head to the ground but it is not thought that a much more erect position than the one shown in Figure 48 was habitual or long sustained when standing or walking. It is believed that a reptile of the size of *Gorgosaurus* was not capable of jumping.

The size and shape of the pubic bones suggest the frequent assumption of a sitting or squatting position (Figure 48b). In this position

¹ On the fore limb of a carnivorous dinosaur from the Belly River formation of Alberta, and a new genus of ceratopsia from the same horizon, with remarks on the integument of some Cretaceous herbivorous dinosaurs, by Lawrence M. Lambe; *Ottawa Naturalist*, vol. XXVII, p. 131, p. XIV, 1914.