

the *Cistudo*, the process of respiration is no doubt performed entirely by the lungs. This remarkable difference is not only owing to the greater or less thickness of the epidermis, but particularly to this circumstance, that air does not penetrate a horny epidermis so easily as water. Thus, aquatic animals probably absorb the water through the whole surface of their body, and that water, being impregnated with oxygen, is made subservient to respiration; while, on the contrary, animals living on land are much less capable of breathing through their skin, the air penetrating the epidermis with greater difficulty. This seems to be rendered evident by our table, if we compare *Testudo* with *Trionyx*. We suppose the same law may have its application in regard to the respiration of all animals; and that animals living in water generally require a much smaller development of the breathing organs proper than animals living in the atmospheric air.

TABLE,

SHOWING THE CAPACITY OF THE LUNGS COMPARED WITH THE WEIGHT OF THE BODY.

Species.	Mode of Life.	Weight of the Body.	Capacity of the Lungs.	Length of the Carapace.
<i>Testudo polyphemus</i> . (Gopher.) Female.	On dry ground and in sand-holes.	95 Ounces.	35 Cubic In.	10½ Inches.
<i>Cistudo triunguis</i> . (Three Toed Box-Turtle.) Female.	In dry woods, under leaves, etc.	19 "	17½ "	6½ "
<i>Ptychemys rugosa</i> . (<i>Emys rubriventris</i> .) (Red Terrapin.) Female.	In water and on land.	62 "	22½ "	11 "
<i>Cinosternon pennsylvanicum</i> . (Mud-Turtle.) Female.	In water and mud.	8 "	½ "	4½ "
<i>Chelydra serpentina</i> . (Snapping-Turtle.) Male.	In water and mud.	65 "	7 "	10 "
<i>Trionyx ferox</i> . (Soft-shelled Turtle.) Female.	In water and mud.	76 "	4½ "	13 "

But there is another interesting circumstance, to which I would allude in this connection. Dr. A. Sager says, that, "arranged along the surface of the tongue of *Trionyx* and somewhat in rows, as well as on the fauces and about the rima