

the lungs too far behind the centre of gravity, to permit the head to be buoyant; therefore, the large cavities about the head, (twelve feet long, and four feet deep) are filled with a material lighter than the water, and thus the equilibrium is maintained.

Although the changes in the shape of the skulls of animals are principally forwards, yet the slighter deviations in the back part may indicate much, if minutely scanned. For example, a portion of a skull was found, among other interesting specimens of fossil bones, in the caves of the limestone rocks, near Plymouth. It consisted merely of the condyles or articulating processes of the skull which join it to the vertebræ of the neck, and a portion of the occipital and temporal bones. Yet from these it could be ascertained that the fragment belonged to an hyæna: although its proportions were double those of the corresponding parts of the largest of the recent species. First, the high spine showed the strength of the neck; secondly, the depth and extent of the fossa or hollow for the lodgement of the temporal muscle proved that there was a remarkable mass, and consequent strength of muscle for closing the jaws; thirdly, it belonged neither to the bear nor to the tiger, which was shown by the extraordinary thickness and density of the whole bone. In this last respect, the portion of bone corresponded with