

according to their specific weight : skeletons of men, anchors and shot and cannon, and last of all the broad gold pieces wrecked in the loss of many a galleon on the Spanish Main ; the whole forming a kind of ' false bottom ' to the ocean, beneath which there lay all the depth of clear still water, which was heavier than molten gold.

The conditions of pressure are certainly very extraordinary. At 2,000 fathoms a man would bear upon his body a weight equal to twenty locomotive engines, each with a long goods train loaded with pig iron. We are apt to forget, however, that water is almost incompressible, and that therefore the density of sea-water at a depth of 2,000 fathoms is scarcely appreciably increased. At the depth of a mile, under a pressure of about 159 atmospheres, sea-water, according to the formula given by Jamin, is compressed by the  $\frac{1}{144}$  of its volume ; and at twenty miles, supposing the law of the compressibility to continue the same, by only  $\frac{1}{7}$  of its volume—that is to say, the volume at that depth would be  $\frac{6}{7}$  of the volume of the same weight of water at the surface. Any free air suspended in the water, or contained in any compressible tissue of an animal at 2,000 fathoms, would be reduced to a mere fraction of its bulk, but an organism supported through all its tissues on all sides, within and without, by incompressible fluids at the same pressure, would not necessarily be incommoded by it. We sometimes find when we get up in the morning, by a rise of an inch in the barometer, that nearly half a ton has been quietly piled upon us during the night, but we experience no inconvenience, rather a feeling of exhilaration and buoyancy, since it requires a little less exer-