

agree that they existed at great depths, "dans les grandes profondeurs des mers."*

Here again we find the inventions of art anticipated in the works of nature, and the same principle applied to resist the inward pressure of the sea upon the shells of Ammonites, that an engineer makes use of in fixing transverse stays beneath the planks of the wooden centre on which he builds his arch of stone.

The disposition of these supports assumes throughout the family of Ammonites a different arrangement from the more simple curvature of the edges of the transverse plates within the shells of Nautili; and we find a probable cause for this variation, in the comparative thinness of the outer shells of many Ammonites; since this external weakness creates a need of more internal support under the pressure of deep water, than was requisite in the stronger and thicker shells of Nautili.

This support is effected by causing the edges of the transverse plates to deviate from a simple

some of them empty, and others containing a fluid. The empty bottles were sometimes crushed, at other times, the cork was forced in, and the bottle returned full of sea water. The cork of the bottles containing a fluid was uniformly forced in, and the fluid exchanged for sea water; the cork was always returned to the neck of the bottle, sometimes, but not always, in an inverted position.

* See Lamarck, who cites Bruguières with approbation on this point.—Animaux sans : Vert : vol. vii. p. 635.