

## The Sea & Sea-Water.

1.

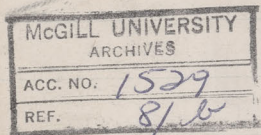
The second great ocean which envelopes our planet is that of the waters which covers about <sup>three-fourths</sup> ~~two-thirds~~ of its surface. In the sea we find the source of the moisture which we have followed in its course through the atmosphere, & which — after we have familiarized ourselves with the main features of the Earth's rocky Crust — we shall see in its return in streams & rivers to the sea again. It is the shore of the continents which have perished by decay in the long course of geological time & the waters of those which now are. Its waters are, further, a mighty reservoir of heat which they convey from the hotter to the colder parts of the Earth's surface modifying the climate of the adjacent land by warming or cooling the air which flows upon it. Even in the effect on human history, acting at one time as a barrier between diverse peoples, at another as a means of easy communication between them, the sea in all its features deserves our most careful attention.

Before, however, entering on the study of the sea as a whole it will be necessary to devote a few moments to the examination of the physical properties of water by reason of which it is qualified to perform its offices in nature.

Water is composed of 88 7/10 parts of oxygen gas united to 11 1/10 of hydrogen gas. It resembles air in being composed of two gaseous substances but differs completely from it in being a chemical compound of these two gases & not merely a mechanical mixture. The oxygen & hydrogen of water have a great affinity for each other & though it is possible to decompose water into its gases in several ways

Offices of the sea

Mark passages & to understand necessary.



Examine properties of water

Chem. Comp.

Mechan. Mixt.