

soda, which would remain in solution in the sea. But the carbonic acid of the atmosphere, having a more powerful affinity for these alkalies than the silica, would wrest them from combination with the silica, as already stated, and would form carbonates of potash ( $\text{CO}^2\text{KO}$ ) and soda ( $\text{CO}^2\text{NaO}$ ), while the silica would be added to the quartzose rocks of the globe. These carbonates, whether formed in the ocean or on the hill-sides, would, when transported to the ocean, find themselves confronted with chlorid of calcium ( $\text{ClCa}$ ), and probably other chlorids. Chlorid of calcium, carbonate of potash ( $\text{CO}^2\text{KO}$ ), and carbonate of soda ( $\text{CO}^2\text{NaO}$ ), brought face to face, would immediately enter into arrangements for an exchange of partners. Carbonic acid ( $\text{CO}^2$ ) would incontinently abandon potash ( $\text{KO}$ ) and soda ( $\text{NaO}$ ), and betake itself to calcium ( $\text{Ca}$ ), changing its name, by the aid of a little oxygen, to "lime" ( $\text{CaO}$ ), and forming a union known as carbonate of lime ( $\text{CO}^2\text{CaO}$ ). With equal celerity, chlorine ( $\text{Cl}$ ), dispossessed of its calcium ( $\text{Ca}$ ), would compensate itself by seizing upon potash ( $\text{KO}$ ) and soda ( $\text{NaO}$ ), and, after eliminating the oxygen ( $\text{O}$ ) in their constitution, would unite with potassium and sodium, forming chlorid of potassium ( $\text{ClK}$ ) and chlorid of sodium ( $\text{ClNa}$ ). Thus all parties would be better satisfied, and each would abide in its appropriate place. Carbonate of lime ( $\text{CO}^2\text{CaO}$ ) refusing, for the greater part, to be dissolved in sea-water, would settle to the bottom and become limestone; while chlorid of sodium ( $\text{ClNa}$ )—which is only the chemist's name for "common salt"—remained in solution, and thus gave its characteristic salinity to the sea. Chlorid of potassium ( $\text{ClK}$ ) also continues to exist in sea-water in smaller quantity.

The diagram on the following page is intended to represent to the eye the chemical reactions above described. The symbols are familiar to the chemical reader; but they