

II. LIME.

The next substance I have mentioned as being of like importance with coal, is LIME. Besides many lesser utilities, it is of high importance for the improvement of land, and may be pronounced indispensable to the beauty and stability of our houses. Though found in mountain masses it has been ascertained to result principally, if not exclusively, from comminuted shells and other parts of animal structure. The shellfish is empowered by its constitution to secrete calcareous matter from the waters, lacustrine or marine, in which it lives, and therewith to fashion for itself its protecting envelope. After serving its purposes to its aquatic occupant, this covering might have returned to its for-

at present. On the contrary, besides the many difficulties attending the supposition, Liebig has shown that it is unnecessary, inasmuch as there is at present more carbon in our atmosphere, in combination with oxygen, than exists in all the coal-fields of the world. We thus see that our fuel once existed in a gaseous state, and that it had its origin in the atmosphere, whence it was separated by the influence of vegetation, and ultimately submerged and preserved under depositions of stratified matter. **S.**