

inflammable materials; that the superincumbent basalt or wacke is melted by this heat, and flows into these hollows; and that water rushes in on the surface of this melted mass, and occasions its explosion.

Hence the conditions for the existence of a volcano appear to be the following: 1. A substance capable of combustion; and this we may fairly infer to be coal: 2. Actual combustion, which may be caused by the spontaneous inflammation of the coal, or its being kindled by lightning: 3. The melting of the stony beds that rest on the coal: 4. The rushing in of water from the sea, or from the surface of the land during wet seasons, or by the flowing in of small rivers or lakes: 5. The presence of a power capable of forcing the melted matter from its repository; and this we may conclude to be aqueous vapour.

Petricher Mineral Repository.

Bogundere Lagerstätte.—Werner.

CHAP. XI.

MINERAL REPOSITORIES.

Lagerstätte.—Werner.

1. By mineral repositories, we understand those spaces that contain the various mineral substances of which