

there is a whole hill composed of this species of ironstone, which has been worked for several hundred years. It is there accompanied with red ironstone, which renders the smelting very advantageous.

*Asia.*—In the mines of Catharinenburg.

*America.*—West Greenland ; and Mexico.

#### *Uses.*

It affords an iron which is excellently suited for steel making. The black variety is said to afford the best kind of iron.

#### *Observations.*

1. It is nearly allied to brown ironstone, and brown-spar, and there is a transition from calcareous-spar through brown-spar, sparry ironstone to brown ironstone.

2. Cast-iron obtained from this species, or from brown ironstone, presents a whitish colour and radiated fracture ; whereas that obtained from red ironstone, and several other ores of iron, has a dark grey colour, and a granular fracture. Further, the cast-iron obtained from this species can be converted into steel ; but a great portion of that obtained from red ironstone, &c. passes to the state of malleable iron, long before the mass in the furnace has become steel. The steel obtained from this ore is said to contain a small portion of manganese, which is supposed to be the cause of its durability in the fire, and what renders it less liable to become soft and irony.

3. It generally occurs more or less weathered. By exposure to the air, it experiences a gradual decomposition, which has a great effect on its external aspect. This decomposition at first affects only the external colour, external