

# CONTENTS.

	PAGE
<b>GENERAL CONSIDERATIONS . . . . .</b>	<b>I</b>
<b>CONSIDERATION OF FOSSILS . . . . .</b>	<b>4</b>
<b>CHEMICAL AND NEBULAR HYPOTHESES OF THE GLOBE . . . . .</b>	<b>15</b>
<b>MODIFICATIONS OF THE EARTH'S SURFACE . . . . .</b>	<b>26</b>
<b>ERUPTIVE ROCKS . . . . .</b>	<b>30</b>
<b>PLUTONIC ERUPTIONS . . . . .</b>	<b>31</b>
Granite . . . . .	31
Syenite . . . . .	34
Protogine . . . . .	35
Porphyry . . . . .	37
Serpentine . . . . .	38
<b>VOLCANIC ROCKS . . . . .</b>	<b>39</b>
Trachytic Formations . . . . .	39
Basaltic Formations . . . . .	44
Volcanic or Lava Formations . . . . .	51
<b>METAMORPHIC ROCKS . . . . .</b>	<b>71</b>
General Metamorphism . . . . .	74
<b>THE BEGINNING . . . . .</b>	<b>80</b>
<b>PRIMARY EPOCH . . . . .</b>	<b>99</b>
<b>CAMBRIAN PERIOD . . . . .</b>	<b>101</b>
<b>SILURIAN PERIOD . . . . .</b>	<b>102</b>
Lower Silurian Period . . . . .	104
Upper Silurian Period . . . . .	110
<b>OLD RED SANDSTONE AND DEVONIAN PERIOD . . . . .</b>	<b>119</b>
<b>CARBONIFEROUS PERIOD . . . . .</b>	<b>130</b>
Carboniferous Limestone . . . . .	140
Coal Measures . . . . .	150
Formation of Coal . . . . .	159
<b>PERMIAN PERIOD . . . . .</b>	<b>170</b>
Permian Rocks . . . . .	177
<b>SECONDARY EPOCH . . . . .</b>	<b>185</b>
<b>TRIASSIC, OR NEW RED PERIOD . . . . .</b>	<b>185</b>
New Red Sandstone . . . . .	187
Muschelkalk . . . . .	188
Keuper Period . . . . .	199
<b>RHÆTIC (PENARTH) PERIOD . . . . .</b>	<b>207</b>
<b>JURASSIC PERIOD . . . . .</b>	<b>211</b>
Liassic Period . . . . .	211
Oolitic Sub-Period . . . . .	243
Lower Oolite Fauna . . . . .	244
————— Rocks . . . . .	249
Middle Oolite . . . . .	255
Upper Oolite . . . . .	265
<b>CRETACEOUS PERIOD . . . . .</b>	<b>275</b>
Lower Cretaceous Period . . . . .	286
Upper Cretaceous Period . . . . .	300
<b>TERTIARY EPOCH . . . . .</b>	<b>312</b>
Eocene Period . . . . .	315
Miocene Period . . . . .	336
Pliocene Period . . . . .	357