The following section of Carboniferous rocks, in Ohio, will illustrate the alternations of coal, shale, etc.

1. Sandstone,		•	•	•	•	•	.•		•
2. COAL								•	6 feet.
3. Fine-graine	d slaty	sands	stone,	•			•		50 fect.
4. Silicious iro	n ore,	•	•	•	•	•		i i	1.5 feet.
5. Argillaceou	s sand	stone,.		•	•	•	•	•	75 teet.
6. COAL.		•		•		•	•		3 feet.
7. Shale, conta	aining '	vegeta	ble i	mpre	ssions	8,	•	•	4 feet.
8. Sandstone.		۰.				•			80 feet.
9. Iron ore,			c 3			•	•	•	1 foot.
10. Argillaceous	sandst	one,	٠	••		•	•		80 feet.

These rocks abound in faults produced by igneous agency; whereby the continuity of the beds of coal is interrupted, and the difficulty of exploring for coal increased in some respects; but in other respects facilitated; so that upon the whole, these faults are decidedly beneficial.

The thickness of the coal formation in Pennsylvania is about 7,000 feet; in Nova Scotia, 13,000 feet, in which there are 76 beds and seams of coal; in Great Britain 12,000 feet.

Coal has been found in nearly all parts of the world. Great Britain has 12,000 square miles of coal-fields, the continent of Europe about 10,000 square miles; the area of coal-fields in Nova Scotia and New Brunswick is 7,000 square miles, and in the United States there are more than 200,000 square miles underlaid by beds of coal.

Of particular coal fields in the United States the largest is the Appalachian, extending from Ohio and Northern Pennsylvania to Alabama, embracing 80,000 square miles. Others are the Indiana, Illinois, and Kentucky coal-field, covering an area of 50,000 square miles; the Iowa and Missouri coal-field, 60,000 square miles; the Michigan coal-field, 15,000 square miles, and the New England coal-field, 600 square miles. Still further west and south, the carboniferous rocks with coal are found, as in the southwest part of Nebraska, the east part of Kansas, and the north part of Texas. Still further west, along the eastern base of the Rocky Mountains, and extending north into the British possessions, are extensive deposits of lignite, either of Cretaceous or Tertiary age. They furnish a coal of much value, but not as good as that which is older. Those deposits have not yet been traced out; but will undoubtedly be found of great extent. See H. Engleman's Report to Captain Simpson, appended to the latter's Report on Wagon Routes, etc., in Utah Territory, page 49, 1858.

In McClintock's late Narrative in search of the remains of Sir John Franklin, (1860), is a Geological Map, which represents carboniferous sandstones with beds of coal extending from Lat. 72 to 77°, and Long. 92 to 125°. This is represented on the small Geological Map of North America, attached to Part V. of this work. Truly we do not yet know, by a great deal, the extent of the coal fields of this country.