

The following is a proportional representative table of the amount of each element contained in coal :

Name of Element.	NAME OF COAL.				
	Welsh.	Lancashire.	Newcastle	Scotch.	The Mean.
Carbon	85	80	81	78	81
Hydrogen	5	5	5½	5½	5½
Nitrogen	1	1	1½	1½	1
Sulphur	1	2	2	1	1½
Oxygen	3	7	6	9½	6½
Ash	5	5	4	4½	4½
	100	100	100	100	100

The air (which is composed of oxygen and nitrogen mixed in the proportion of four measures of N. to one of O.) must be mixed with coal before it will burn, that is, the oxygen of the air mixes with the carbon, etc., of the coal, also in the proportion of one hundred and fifty cubic feet of air for every pound of coal, but in practice it is usually found that twice this is required, or say one pound of coal for eighteen pounds of air.

The hydrogen gives out part for part of heat, but as there is so much more carbon than hydrogen in coal we get the greater amount of heat from that carbon, but not proportionally. The coal fields of the United States are the largest known, embracing an area more than double that of Great Britain. These immense deposits lie chiefly within the western slopes of the Alleghany region, West Pennsylvania, Ohio, Virginia, and in the peninsular tract of country between the great lake basins of Michigan, Huron and Erie, and in the region extending across the Missouri and Arkansas Rivers, etc.

These vast stores of coal are but little worked, however, and the produce of the United States is nothing like that of Great Britain. In Canada the laurentian and silurian deposits forming the chief part of the river valley of the St. Lawrence, show the appearance of coal, but New Brunswick and Nova Scotia, both now included in Canada, have worked mines, and on the other side coal of an excellent quality is procured in the Island of Vancouver, of the Province British Columbia; coal has also been found in the Northwest Territory of Canada, along the