

225 miles in its longest diameter, while its maximum breadth is about one hundred miles, its superficial extent being about fourteen thousand square miles.\*

In the accompanying map (Pl. II.), the reader will see a sketch of the outline of what has been called the Appalachian coal-field, the vast area of which was before alluded to at p. 88, Vol. I., as extending for a distance of 720 miles from N. E. to S. W., its greatest width being about 180 miles. This outline must be regarded as giving a mere approximation to its true limits, but when the State Surveys of Pennsylvania and Virginia are published, the extent of this great coal-field will be most accurately delineated. While alluding to the vast area of these carboniferous formations in the United States, so rich in productive coal, I may call attention to the Illinois coal-field, the area of which has been also laid down on the map (Pl. II.), reduced from a large map of the Western States executed by Mr. Dale Owen of Indiana, and of which he has liberally given me the free use for the present publication. That coal field, comprehending parts of Illinois, Indiana, and Kentucky, is not much inferior in dimensions to the whole of England, and consists of horizontal strata, with numerous rich seams of bituminous coal. Its position relatively to the Appalachian coal-field may be seen in the western part of the section at page 92, Vol. I.†

At the edge of the left bank of the Monongahela, we collected shells of many species of freshwater

\* Trans of Amer. Geol. 1840, p. 446.

† See also Description of Maps.