The diagrams are cross-sections which extend from the northern border of the Danville field to the southern edge of the county. The vertical scale is exaggerated several times, in order to show the details of deposition and compression of the vegetable matter.

A shows a basin in which the vegetable matter of coal No. 6 accumulated. Conditions for growth were more favorable at the south than at the edge of the swamps toward the north. In B the region subsided below the level of the sea and muds were deposited on the carbonaceous material and subjected it to pressure. At the south the greater thickness of highly compressible peat permitted greater subsidence and a larger accumulation of muds than at the north where the floor of the sea was soon built up to form land surface and vegetable growth for coal No. 7 began, as shown in C. As the sea became shallow because of deposition, vegetation encroached southward (D) but the final result was a decreasing amount of coal-forming material toward the south. The sea again invaded the region (E), put an end to vegetable growth, and permitted an accumulation of muds. This sequence of events resulted in the formation of two coal beds, the thicker portion of one coinciding in position with the thinner portion of the other.

Later (F), the region rose above the level of the sea and was subjected to erosion. Some of the streams cut their valleys down through the coals. Subsequently, the glacial drift (G) tended to fill up the irregularities in the old surface, but the present topography (H) is the result of erosion since glacial times. Some of the streams have again cut their valleys down through the coals.