

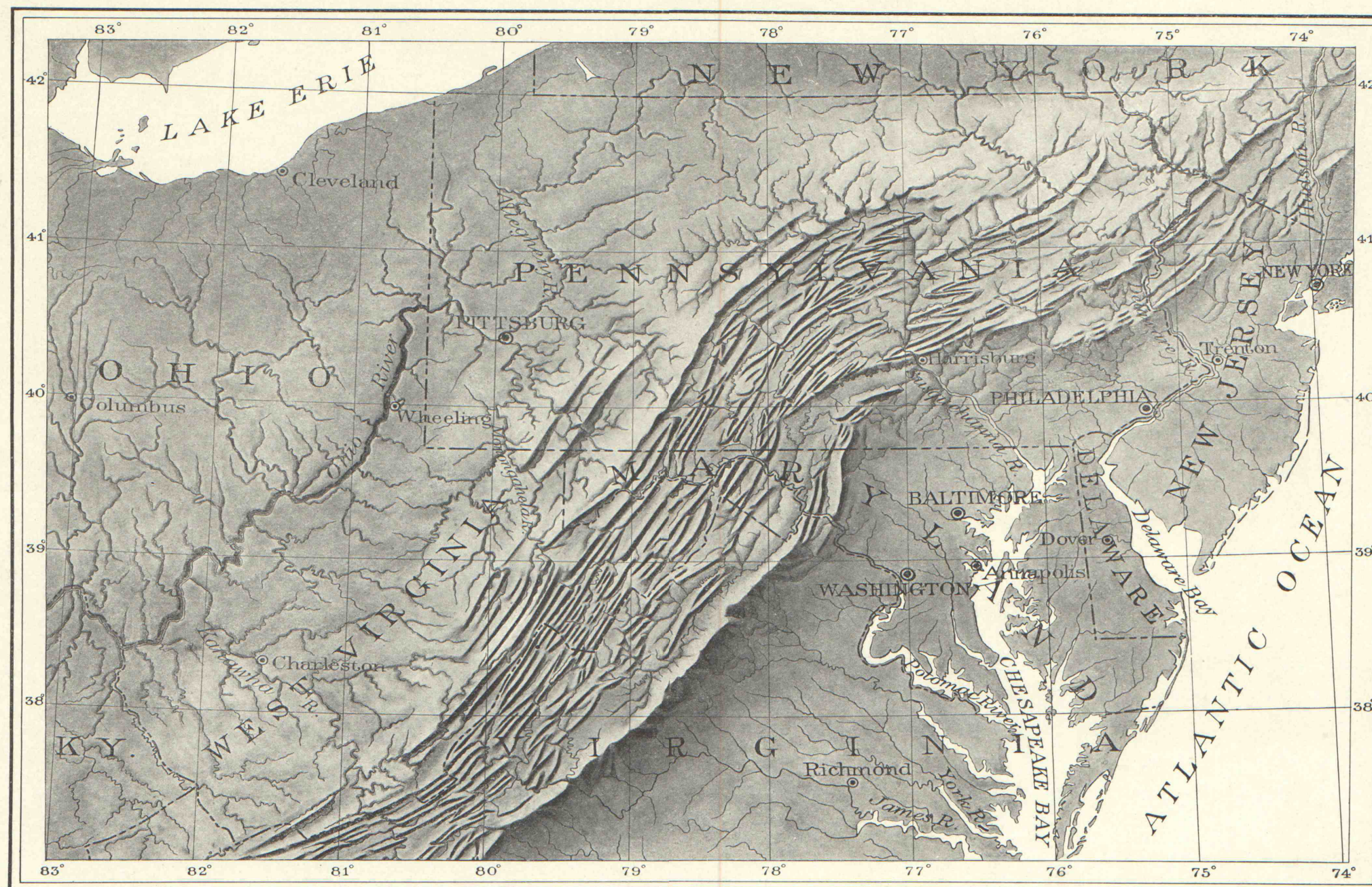


FIG. 10.—RELIEF MAP OF THE NORTHERN APPALACHIAN MOUNTAINS.
The Kittanning quadrangle is situated on the plateau lying west of the belt of valley ridges, in the west-central part of Pennsylvania.

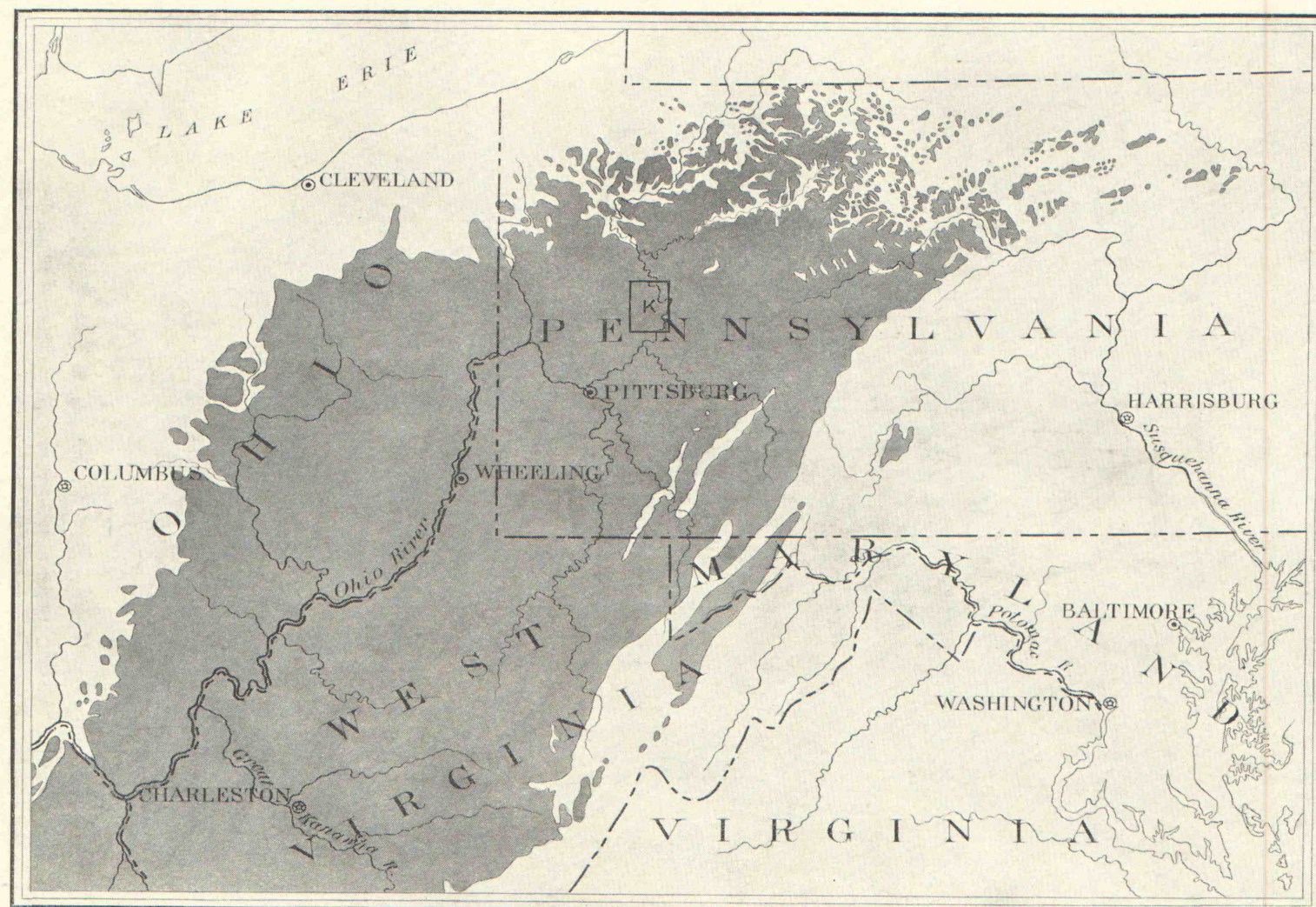


FIG. 11.—MAP SHOWING THE EXTENT OF THE NORTHERN PART OF THE APPALACHIAN COAL FIELD.
The position of the Kittanning quadrangle within the coal field is shown by the rectangle.

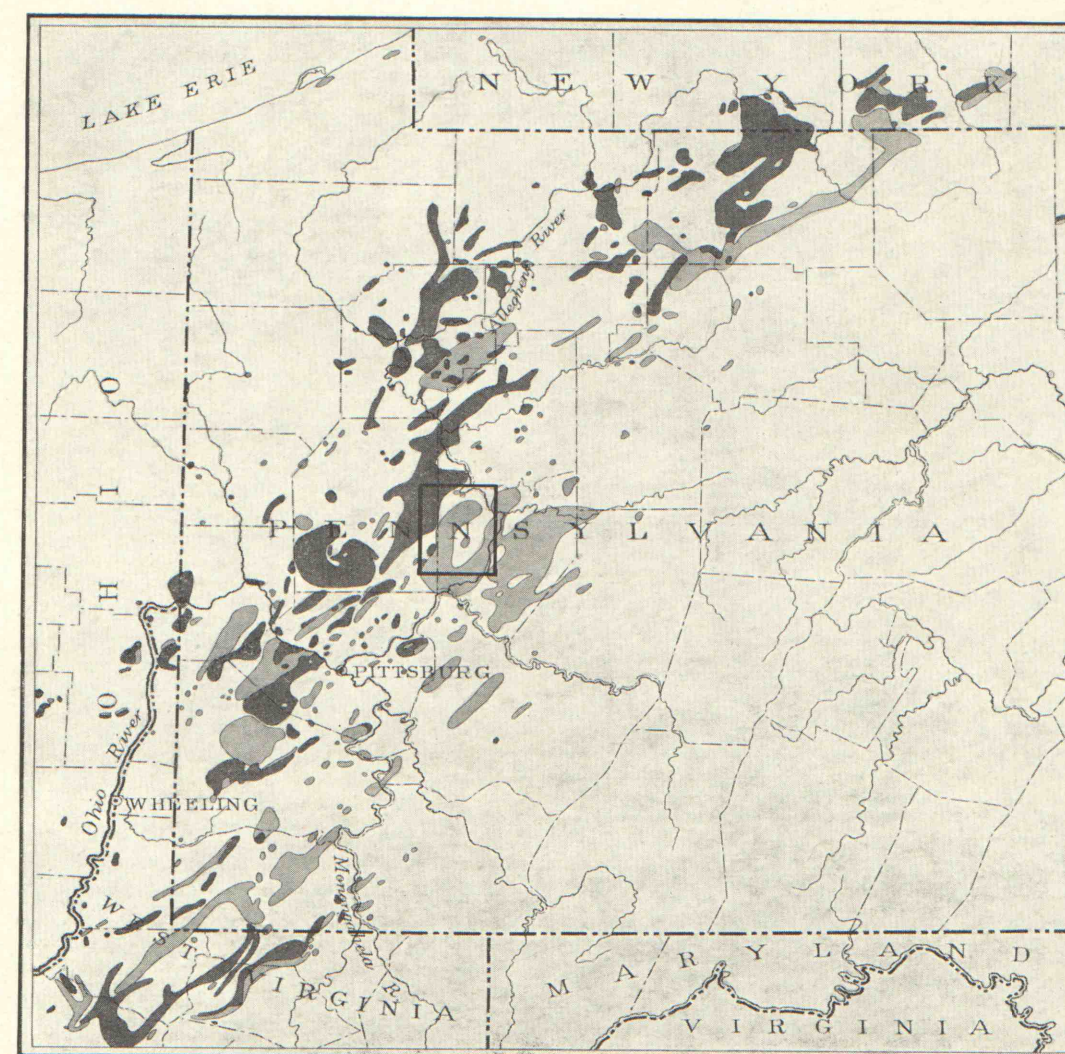


FIG. 12.—MAP OF THE OIL AND GAS PRODUCING AREAS OF THE NORTHERN APPALACHIANS.
Compiled from map by the Second Geological Survey of Pennsylvania, and from maps by the United States Geological Survey. Dark areas, oil; lighter areas, gas. The location of the Kittanning quadrangle is shown by the rectangle.