

GENERAL DISTRIBUTION OF THE ROCKS OF THE ERA.

The geological map on page 412, though small, is sufficiently detailed to give a general idea of the distribution of the Carboniferous and Subcarboniferous areas of the eastern part of the continent. The former are distinguished by doubly cross-barred marking; the latter, which border these, by singly cross-barred, with a cross in the small squares. The several areas of the two combined formations are as follows:—

I. The Acadian: covering part of western Newfoundland, of Nova Scotia, and of New Brunswick.

II. The Rhode Island: covering part of Rhode Island, and extending northward and eastward into Massachusetts.

III. The Worcester area: about Worcester, Massachusetts.

IV. The Michigan area: occupying the larger part of Michigan between the southern half of Lake Huron and Lake Michigan, having the coal-measures over its central portion.

V. The Pennsylvania-Arkansas area: stretching in a zigzag way over 25 degrees of longitude and 12 of latitude; first, from the southern border of western New York, and a line just south of Lake Erie, to Alabama and Mississippi; then, northward and westward to Illinois and Iowa; thence southward and westward again to Arkansas and Texas. At the western limit commences the "Western Interior Sea," where the Carboniferous strata pass out of sight beneath those of the Cretaceous. The coal-measures of this area are mostly in three parts, underlaid and connected by the Subcarboniferous. These parts are thus separate, either because never united, or more probably because of the removal of the coal-measures that once covered the intermediate Subcarboniferous beds.

VI. Over the Western Interior and along the summit region of the Rocky Mountains, but without coal, and mostly as a limestone wherever there are outcrops.

VII. Along parts of the Great Basin, being a constituent of many of the mountain ridges; also in the Sierra Nevada, and in other portions of the Western border region.

VIII. In the Arctic regions, along a wide belt between the parallels of 72° and $82\frac{1}{2}^{\circ}$, northeast in course, from Banks Land on the west to Grinnell Land on the east, and reaching beyond the latter to 83° , nearly the most northern point of Arctic exploration. Also on Spitzbergen and Bear Island.

The Coal-measures, or the areas of the Carboniferous period, have a smaller range, and the productive Coal-measures, a still smaller. Of the above eight regions, only numbers I., II., IV., and V., to the east of the meridian of 100° W., are coal-producing; but the Arctic beds of Grinnell Land afford coal, which may be available whenever the seas shall become navigable.

The term *Permo-Carboniferous* is sometimes used for the beds of the Carboniferous and Permian periods of central and eastern North America, because they make an essentially undivided series.