Germans, which probably belong in part to the Miocene, and in part to

the Upper Eccene, epoch.

This Brown-Coal is seen on both sides of the Rhine, in the neighborhood of Bonn, resting unconformably on highly inclined and vertical strata of Silurian and Devonian rocks. Its geographical position, and the space occupied by the volcanic rocks, both of the Westerwald and Eifel, will be seen by referring to the map (fig. 672), for which I am indebted to Mr. Horner, whose residence for some years in the country enabled him to verify the maps of MM. Noeggerath and Von Oeynhausen, from which that now given has been principally compiled.*

The Brown-coal formation of that region consists of beds of loose sand, sandstone, and conglomerate, clay with nodules of clay-ironstone, and occasionally silex. Layers of light brown, and sometimes black lignite, are interstratified with the clays and sands, and often irregularly diffused

Fig. 672. Sicqburgo ·Siege! 0 Siebengebirge *Westerwald* · Unkel Œ Altenahro Nemvied Montanbar Adenuu 0 Maye Brum Bingen Berneastel Map of the volcanic region of the Upper and Lower Eifel.

W. B. The country in that part of the map which is left blank is composed of inclined Silurian and Devenian rocks.

A. of the Upper Elfel. B. of the Lower Elfel.

Volcanio

Trachyto.

5 English miles.

Basalt.

Points of cruption, with craters and

[·] Horner, Trans. of Geol. Soc. 2d ser. vcl. v.