1883


Describes the Friedensville zinc deposits—history of operations, geology, origin by thermal (magmatic) waters, and reasons for closing mines.


Describes the deposits near Old Zionsville.


Gives short descriptions of the then current operations.


Contains much information on Lehigh County including the following: eight analyses of iron ores (pp. XII-XIV), geographical description (pp. 7-12), streams in Lehigh County (pp. 18-22), slate region (pp. 31-35, 83-86), drift deposits (pp. 37-54), geological structures of the limestones (pp. 54-58), slate quarries (pp. 113-123), geological structures of slate region (pp. 124-133), slate cleavage, quarrying, statistics (pp. 139-148), slate belt along Lehigh River in 1875 (pp. 151-160), occasional references to Lehigh County localities in discussion of age, various members, character and analyses of limestones (pp. 161-190), Potsdam (Hardyston) sandstone (pp. 205-214), South Mountain gneiss and associated rocks and mines (pp. 215-241, 254-256).

Atlas contains a colored geological map (scale: 2 miles to 1 inch) of Lehigh and Northampton counties and part of Berks County, a topographical map of the Durham and Reading Hills (scale: 1600 feet to 1 inch) between Delaware and Schuylkill rivers in 18 sheets, a colored geological index map (scale: 2 miles to 1 inch), a colored geological and topographic map of southern Northampton County with part of Lehigh County (scale: 1600 feet to 1 inch) in 6 sheets showing location of iron mines.


Describes the following minerals from Lehigh County with analyses of all except zircon: allophane, chloropal, corundum, fluorite, garnet, pyrolusite, stibnite, tourmaline, wavellite, zircon.

1884


A brief discussion of the geological formations mainly taken from the reports of the Second Geological Survey of Pennsylvania. Includes analyses of limestones and iron ores. The structure is described as follows: "The thickness of the limestone formation in Lehigh County is uncertain, for the apparently regular surface of the valley conceals a very troubled and irregular floor, from three to seven miles wide, so complicated and contorted as to defy accurate measurement or interpretation of dips. "Its general structure is a series of tightly compressed rolls and basins, some regular, some overturned, twisted, and even snapped." (p. 116.)


Mentions a specimen of concretionary quartz containing blende, pyrite and greenockite from the Saucon Valley.


Discusses formation of Bake Oven Knob, but advances no final explanation (pp. XII-XLIV).