

**SECOND GEOLOGICAL SURVEY  
OF PENNSYLVANIA: REPORT OF  
PROGRESS IN 1879. VV. THE  
GEOLOGY OF CLARION  
COUNTY**

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**H. MARTYN CHANCE**

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REPORT OF PROGRESS IN 1879.

VV.

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THE GEOLOGY OF  
  
CLARION COUNTY.

BY

JJ. MARTYN CHANCE.

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WITH

A COLORED GEOLOGICAL MAP OF CLARION COUNTY,  
A MAP OF THE ANTICLINALS, AND OIL-BELT,  
A CONTOURED MAP OF THE OLD RIVER CHANNEL AT PARKER,  
FOUR PAGE PLATES,  
AND 83 LOCAL SECTIONS FIGURED IN THE TEXT.

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1880.

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PHILADELPHIA, *March 30, 1880.*

*To his Excellency Governor HENRY M. HOYT, Chairman  
of the Board of Commissioners of the Second Geological  
Survey of Pennsylvania:*

SIR: I have great pleasure in transmitting the excellent report of Mr. H. Martyn Chance, on the geology of Clarion county.

This is virtually a continuation towards the east of his survey of Northern Butler recently published by the Board; as that was a continuation northeastward of his previous surveys along the Beaver river and Slippery Rock creek.

It is well to state, that the continuous surveys of Prof. White in Greene\*, Washington\*, Allegheny, Beaver, Southern Butler, Lawrence, Mercer, Crawford and Erie,—of Mr. Chance in Beaver, Lawrence, Northern Butler, Venango†, Clarion and Forest‡;—of Mr. Carl in Mercer, Crawford, Warren, Venango, McKean, Clarion, Forest, Armstrong and Butler, along the oil belts, and across the line into New York;—of Mr. W. G. Platt in Armstrong, Southern Jefferson, Indiana, Cambria‡ and Somerset‡;—of Mr. Franklin Platt in Jefferson and Clearfield;—and of Mr. Ashburner in Forest, Elk, Cameron and McKean—overlapping each other, as these surveys have done, and executed, as they have been, by these geologists, concurrently in complete harmony of sentiment, and in familiar intercourse with one another, they establish on the soundest basis the whole geology of western Pennsylvania.

Disciplined by five years of uninterrupted field and office-work, in surveying the Coal measures and underlying for-

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\* While assisting Prof. Stevenson.

† While assisting Mr. Carl.

‡ While assisting Mr. Franklin Platt.

mations, over an immense area, with a zeal which never flagged, and on methods approved by varied experience, slowly and carefully applied, and richly illustrated by maps and measured sections, aided by thousands of deep borings—these gentlemen have deserved well of the Commonwealth, and the fruits of their arduous labors (more arduous than can ever be appreciated) will remain as a legacy from the Legislature to successive generations of the citizens of Pennsylvania.

Reports of all of the above named surveys have now been published except those of Armstrong; Erie and Crawford; Warren and Venango; Forest, Elk and Cameron; and McKean; and the manuscripts of these reports are nearly ready for the press.

As the reports of Tioga and Bradford have been published, and those of Potter, Lycoming and Sullivan are printed and ready for binding; as Mr. Chance's report on Clinton will be ready to go to press in May; and as most of Centre and all of Blair\* has been surveyed,—there only remains a close revision for a second report of the geology of Jefferson and Clearfield counties† to complete *the strictly geological description of the Bituminous coal fields of Pennsylvania*; that is, of all Western Pennsylvania, and of Northern Pennsylvania as far east as the North Branch of the Susquehanna.

Meantime the final report of Mr. Carll on the geology of the Oil region is going through the press, and an additional volume of oil-well records is preparing.

As a large part of the force of the survey must be applied this year to the second survey of the Anthracite region, and as the mapping of the South Mountains north of Gettysburg, and east of Reading must be carried forward, as well as the survey of Chester and Berks counties, it may become necessary to postpone to 1881 the surveys of Fulton, Bedford, the Franklin county valley, the Broad top and other

\*The report of this county is nearly ready for the press; its coal was reported with Cambria county.

†This will be in the coming season of 1880 by Mr. W. G. Platt, who has already revised Southern Jefferson.

portions of Huntingdon, Union and Snyder, Northumberland, Montour, Susquehanna, Wayne and Pike, and such portions of Luzerne, Lackawanna, Monroe, and other counties as lie outside the Anthracite coal fields—subject to the decision of the Board.

I remain, sir,

With great respect,

Your obedient servant,

J. P. LESLEY.