NOTES

*Elevation of the bottom of the Olean Conglomerate above tide level, in feet.*

| | | | | | |
|---|---|---|---|---|---|
| At | De Golier | 2145 | Marshburg | 1975 | Davis Lot 1945 |
| " | Custer City | 2140 | Bullock Farm | 1970 | Mathews Farm 1914 |
| " | Whitman opening | 1364 | Camp Lot | 1980 | Buttsville 1924 |
| | Seven Foot Knoll | 1940 | | | |

*The contour Curves mark successive altitudes of 100 Feet above Mean Atlantic Ocean level. The Horizontal distances were obtained by Stadia measurement and the Levels by vertical angle measurement.*

Scale 3200 ft. to 1 Inch.

0 800 1600 2400 3200 6400 9600 12800 Feet.

1 Mile 2 Miles

$\frac{1}{38,400}$ of Nature

| | | |
|---|---|---|
| 1 | LOWER COAL MEASURES 140' Davis Lot | POTTSVILLE Nº XII. |
| 2 | KINZUA CREEK S.S. 50' OLEAN CONGLOMERATE 50' Interval. 40' Sub Olean Conglomerate —Interval. GROUP A. 250' at Bradford and Big Shanty 350' on Kinzua Creek | POCONO Nº X. |
| 3 | | |
| 4 | GROUP B, S.S. and SHALE 250' at Bradford and Kinzua Creek | CATSKILL Nº IX. |
| 5 | GROUP C. SHALES and SANDSTONES 1252' at Bradford. | CHEMUNG Nº VIII. |
| | BRADFORD OIL SAND 54' Dennis well. | |

*Note. The names of the geological epochs have been adopted provisionally.*

CORYDON TWP.

HAMILTON TOWNSHIP

BRADFORD TOWNSHIP

LAFAYETTE TOWNSHIP

HAMLIN TOWNSHIP

KEATING TOWNSHIP

DE GOLIER

CUSTER CITY

MARSHBURG

LEWIS RUN

BIG SHANTY

LAFAYETTE

ALTON

BUTTSVILLE

HOWARD HILL

KINZUA CREEK OIL DISTRICT

Sugar Run

Kinzua Creek S.S.

Olean Conglomerate

Shepherd Run

Bradford, Braden N.Y. L.E. and W. Railway

Fluctuating water

Creek

West Branch Red Fox Run

Pocono S.S. No. I. 250'

Olean Conglomerate

Beecher Isl. Summit

Two Mile Run

Lewis Run

Emery & Co Lewis Run well No. 2

Emery & Co Lewis Run well No. 1

Prentice Lewis Run well Moody tract

Miers Hollow

Lewis Run

Bear Run

Big Level Run

Turner Farm drill hole

Kinzua Creek S.S. Coal at bottom Kinzua and Olean rocks

Olean Conglomerate

Newcomb Farm

Coal at bottom Olean Conglomerate

J.E. Butts Jr. Test pit

Chapel Fork

Kinzua Creek

Distance from Marshburg Rd. to Lafayette Rd. 2.450 follow. rated S 56° 45' E.

Hudson Farm

Whitman Farm

Tuscarora road

Root Farm Drill N°1.

Newell Farm Drill N°3.

Bullock Farm Drill N°5

Drill N°2

NOTE On account of the Sporadic character of the Coal beds in Lafayette Township, the area of the Lower Coal Measures does not necessarily represent the area of workable commercial coal beds.

Owen Croen

Lincoln Ld Drill hole

Thette place Farm

Mead Lot

Camp Lot

Davis Mine

Davis Lot

Drill hole N° 1.

Drill hole N° 2.

DAVIS MINE TRAMWAY

Coal

Three Mile Run

BOND VEIN Coal

Mathews Farm Drill hole

Wintergreen Run

Kinzua Creek S.S. Olean Conglomerate 100'

Group A 350'

Group B.

Pocono Above

Kinzua Creek

Huling's oil well N°1.

Woodrat Run

Kinzua Creek

Putnam Drill hole

Seven Foot Knoll Coal

PROPOSED LINE

N.Y. PA. AND ERIE RAILWAY

To Wilcox

SECOND GEOLOGICAL SURVEY OF PENNSYLVANIA
REPORT OF PROGRESS R. 1878.

# TOPOGRAPHICAL MAP
OF THE
# ALTON COAL BASIN
IN
## LAFAYETTE, BRADFORD AND HAMLIN TOWNSHIPS
## Mc KEAN COUNTY.

DRAWN IN 100' CONTOUR CURVES AND GEOLOGICALLY COLORED
To exhibit the general dip of the Coal Measures towards the Southwest, and the thickening of the Sub-Conglomerate Rocks, towards the South.

J.P. LESLEY, STATE GEOLOGIST.
Chas. A. Ashburner Ass't Geologist.

NOTE

*The data from which the accompanying Map is constructed, are:*
*1. Line run by Chas. A. Ashburner 1877 from Buttsville to Bond Vein, to Alton, to Lafayette, to Marshburg, to De Golier to Lewis Run, to Big Shanty, to Lafayette*
*2. Bradford Branch N.Y. L.E. & W. (N.Y. & Erie) Roy. from De Golier to Buttsville*
*3. Proposed Line Pa. and Erie Roy. Buttsville to Howard Hill*
*4 Private Estate Maps* / *5 County Maps* — *The location of Streams taken from these Maps, I consider inaccurate C.A.A.*
*The contours are hypothetical except where crossed by lines 1.2.3.*

JULIUS BIEN PHOTOLITH. NEW YORK.
LANE S. HART, STATE PRINTER