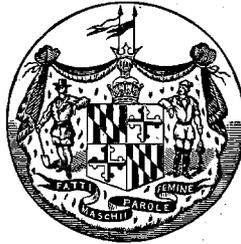


ANNUAL REPORT
OF THE
MINE INSPECTOR

for Allegany and Garrett
Counties, Maryland.



To His Excellency

Governor Phillips Lee Goldsborough

From May 1st, 1913 to May 1st, 1914

WILLIAM WALTERS, Inspector.

PRESS OF
THOMAS & EVANS PRINTING COMPANY
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BALTIMORE, MD.



LETTER OF TRANSMITTAL.

Midland, Md., May 1st, 1914.

To His Excellency, Phillips Lee Goldsborough,
Governor of Maryland,

Sir:—In compliance with the requirements of Chapter 124, of the Acts of the General Assembly of 1902, relating to Mines and Mining, I have the honor to submit herewith my second annual report.

WILLIAM WALTERS, Inspector.

INTRODUCTION.

To the Governor:

The report herewith submitted is for the year ending December 31, 1913. While showing no phenomenal or unprecented features, was on the whole a much more prosperous one than the one preceding it.

The total production of coal mined for the year was 4,239,643 gross tons, showing an increase of 153,826 tons over the year 1912.

During the year ending December 31, 1913, Allegany County employed 3,665 miners, 336 drivers, 436 inside laborers and 529 outside laborers, making a total of 4,860, and showing a decrease of 85 employes over the year 1912. The production of coal for Allegany County was 3,598,746 long tons. Of this amount 74,096 tons were mined by machines, showing a decrease of 36,292 tons; also showing a production of 762 tons of coal for each man employed in and outside of the mines in Allegany County and an increase of 67 tons for each employe.

During the year ending December 31, 1913, Garrett County employed 503 miners, 71 drivers, 35 inside laborers and 94 outside laborers, making a total of 699, a decrease of 57 over th year 1912.

The total production of coal was 640,897 tons, all mined by pick, and showing a decrease of 6,618 tons; also showing a production of 916 tons for each man employed, an increase of 60 tons for each person employed.

During the year there were employed in coal mining in the State, 5,559, a decrease of 144 over the year 1912. Counting the mining superintendents, mine foremen, engineering corps and office clerks, it would be safe to add 300 persons to the total above, making the total employes directly connected with the operation of the mines, 5,859.

ACCIDENTS AND INJURIES.

During the fiscal year, beginning May 1, 1913, and ending April 30, 1914, there were reported 163 accidents. Of this number 17 were fatal, showing an increase of two fatal and a decrease of 15 non-fatal accidents for the year. Of the 17 fatal accidents that occurred, 16 were in Allegany County and one in Garrett County. Of the total number of accidents 12 were caused by falls of top rock and coal, three by cars, one by dynamite and one by machinery. The reports of non-fatal accident claims to the miners and operators co-operative relief fund have been considerably reduced when compared to previous years. This is due to the fact that many of the operators and miners have been co-operating with the Inspector in striving to keep the mines in a more sanitary and safe condition. In looking over the accident reports it has been found that many of these accidents are due to carelessness of the injured, and strange as it may seem, the majority of those injured are old and experienced men. They seem to take greater risks, notwithstanding the object lessons that are given them when other men are injured or killed under similar conditions.

The mine law requires the mine foreman, overseer, roadman, driver, miner or any other person engaged in any employment whatever shall observe all practical care, caution and prudence in the work in which they may be engaged so that the lives, health and safety of themselves and co-laborers and to guard against all accidents from fall of roof, side or breast coal or slate. Accidents will not be reduced by posting a notice or marking a loose piece of roof. It should be timbered or taken down "At Once." The rule should be strictly enforced and the law obeyed. The prevention of mine accidents is not only a humane question, but it is a business proposition, every accident increasing the operating expenses and decreasing the earnings of the workman.

I sincerely hope that both employer and employe will lend their best efforts to bring about a reduction in the number of accidents.

LABOR CONDITIONS.

There were no serious labor troubles during the year 1913. There were three strikes throughout the State affecting three different mines, but was only local at each of the places. Two were to reinstate discharged drivers and one to place a check weighman at the weigh scales and only lasted a short time, as they were settled shortly after they occurred and with practically no financial loss to the men or the companies.

WEIGHTS AND WEIGHING.

The matter of weights and weighing has been given my most careful attention during the fiscal year from May 1, 1912, to April 30, 1913. The increasing demand for testing the scales requires a great deal of the Inspector's time, and while it is one of the most important branches in the coal mining industry, it is one of the hardest to settle. I have suggested that every coal company should be required to keep at their scales a couple of standard test weights. If there were a couple of test weights at each and every weigh scales the weighmaster could keep his scales more accurate and the miners could see the scales tested at any time, which is their right. At different tests I have made of various scales the majority have been found accurate.

VENTILATION.

The State mining law requires the Inspector to make such recommendations and suggestions as he may consider important as to legislation on the subject of mining. I find that every Inspector in each report has asked for some change in that part of the law relating to the use of oil for illuminating purposes in the mines. A great many miners try to purchase a good grade of oil and some pay the price, but it is inferior. One of the most persistent hindrances to good ventilation is the smoky oil lamp with inferior grade of oil, and the amount of explosives used in our mines it has become a menace to the lives and health of those working under ground. I cannot understand why those suggestions have been ignored, especially by miners, who will serve as members of the General Assembly. The Inspector is subjected to criticism and abuses he does not deserve. It is impossible to examine every miner's lamp and the law does not give him the right to go to the dealer and test the oil. I find the majority of superintendents and mine foremen are in favor of pure oil regulations. I would recommend a section similar to the West Virginia oil regulations for illuminating purposes be made part of the Maryland Mining Law. I want to impress upon the minds of the managers of the different mining companies in the State of Maryland, and I am speaking from a practical viewpoint, that they cannot reduce the cost of production of coal by any system they adopt more than they can by properly ventilating the mines in all its workings. To obtain the best results the interest of the employer and employe must be combined. If the employe in the mines sees that conditions are made as safe as possible for his health and safety, he naturally takes more interest in the work he is doing and will accomplish more and do his work better than if his working place was filled with "black damp" and smoke.

All of the operating companies have men employed whose duties are to see that enough pure and cool air circulates through all the working places. In various instances I have closed down places where men were working in less than the required amount of air, and instructions were given that the places should remain closed until the necessary amount should be provided.

Respectfully submitted,

WILLIAM WALTERS,
Mine Inspector.

VENTILATION, HAULAGE, IMPROVEMENTS, ETC., IN COAL AND FIRE-CLAY MINES IN ALLEGANY AND GARRETT COUNTIES.

Name of Company.	Name of Mine.	Character of Opening.	Mode of Ventilation.	Kind of Haulage.	No. and Kind Mining Machines.	Improvement during the year 1912.
Consolidation Coal Co.	Mine No. 1	Slope	Fan	Air motors, rope and horses	9 Punchers	New boiler and 3 stage air compressors
Consolidation Coal Co.	Mine No. 2	Drift	Fan	Mules	9 Punchers	New opening for mainway
Consolidation Coal Co.	Mine No. 3	Slope	Fan	Air motors, rope and horses		Slope arched with concrete
Consolidation Coal Co.	Mine No. 4	Slope	Fan	Electric motor, rope, horses		Two 20,000-gallon water tanks
Consolidation Coal Co.	Mine No. 5	Drift	Fan	Tramroad engine and mules		General improvements
Consolidation Coal Co.	Mine No. 6	Slope	Fan	Rope and mules		Concrete culvert under Wright's Run
Consolidation Coal Co.	Mine No. 7	Slope	Fan	Rope and mules	18 Punchers	General improvements
Consolidation Coal Co.	Mine No. 8	Drift	Fan	Stationary engine and horses		General improvements
Consolidation Coal Co.	Mine No. 9	Drift	Fan	Electric motor and mules	2 Con Cutters	General improvements
Consolidation Coal Co.	Mine No. 10	Drift	Fan	Electric motor and mules		General improvements
Consolidation Coal Co.	Mine No. 11	Shaft	Fan	Electric motor and mules	1 Con Cutter	Concrete overcasts
Consolidation Coal Co.	Mine No. 12	Shaft	Fan	Air motors and horses	5 Punchers	See Description of Mines
Consolidation Coal Co.	Mine No. 13	Drift	Fan	Horses and plane		See Description of Mines
Piedmont & George's Creek Coal Co.	Washington No. 1	Drift	Natural	Horses and plane		No improvements
Piedmont & George's Creek Coal Co.	Washington No. 2	Drift	Fan	Electric motor and mules		General improvements
Piedmont & George's Creek Coal Co.	Washington No. 3	Drift	Fan	Gasoline motor and mules		General improvements
Piedmont & George's Creek Coal Co.	Washington No. 4	Drift	Fan	Mules and plane		None
Piedmont & George's Creek Coal Co.	Washington No. 5	Drift	Fan	Electric motor and plane	5 Sull. L. Wall	See Description of Mines
New York Mining Co.	Union No. 1	Drift	Natural	Electric motor and horses	1 Sull. Chain	None
New York Mining Co.	Union No. 1, Tyson	Drift	Fan	Mules and plane		None
New York Mining Co.	Union No. 2	Drift	Fan	Electric motor and horses		General improvements
Union Mining Co.	Union Mine	Slope	Natural	Rope and horses		None
George's Creek Coal Co., Inc.	Mine No. 1	Drift	Fan	Horses		None
George's Creek Coal Co., Inc.	Mine No. 1 Tyson	Drift	Fan	Electric motor and mules		General improvements
George's Creek Coal Co., Inc.	Mine No. 2 Tyson	Drift	Fan	Mules		Installed gas fan
George's Creek Coal Co., Inc.	Mine No. 3 Tyson	Drift	Fan	Mules		General improvements
George's Creek Coal Co., Inc.	Mine No. 4 Tyson	Drift	Fan	Mules		Opened 1912
George's Creek Coal Co., Inc.	Mine No. 12	Drift	Natural	Horses		None
George's Creek Coal Co., Inc.	Mine No. 13	Drift	Natural	Horses		None
Maryland Coal Co.	Mines Nos. 9 and 12	Drifts	Natural	Horses and plane		None
Maryland Coal Co.	Mine No. 1 Tyson	Drift	Fan	Horses and plane		General improvements
Maryland Coal Co.	Mine No. 2 Tyson	Drift	Natural	Horses and plane		Opened 1912
Maryland Coal Co.	Waynesburg	Drift	Furnace	Horses and plane		Opened 1912
New Central Coal Co.	Koontz-Tyson	Drift	Fan	Rope, plane and mules		Installed new fan
New Central Coal Co.	Koontz-Big Vein	Drift	Natural	Horses		None
New Central Coal Co.	Koontz-Tyson	Drift	Fan	Horses and plane		Opened 1912
American Coal Co.	Caledonia	Drift	Natural	Horses and plane		None
American Coal Co.	Caledonia-Tyson	Drift	Natural	Locomotive, horses and plane		New opening
Cumberland Basin Coal Co.	Parker	Drift	Fan	Electric motor and mules	3 Con Cutters	Idle during 1912
Cumberland Basin Coal Co.	Bond	Slope	Fan	Mules		Idle during 1912
Midland Mining Co.	Enterprise	Slope	Fan	Rope and horses		None
Midland Mining Co.	Trimble	Drift	Natural	Mules		Abandoned during 1912
Midland Mining Co.	Nell Run	Drift	Natural	Horses and plane		Opened 1912
Barton & George's Creek Coal Co.	Carlos	Slope	Fan	Rope and horses		None
Moscow-George's Creek Mining Co.	Moscow No. 2	Drift	Natural	Horses and plane		New opening
Moscow-George's Creek Mining Co.	Moscow No. 3	Drift	Fan	Mules		General improvements
Maryland-George's Creek Coal Co.	Mertens	Drift	Fan	Gasoline motor, rope and mules		New opening and air shaft
Fitzpatrick Coal Co.	Pekin	Drift	Natural	Locomotive and horses and plane		New opening
Chapman Coal Co.	Swanton	Drift	Fan	Horses and plane		New opening
Phoenix Mining Co.	Elkhart	Drift	Furnace	Mules and plane		None
Davis Coal & Coke Co.	Buxton	Drift	Fan	Mules and plane		None
Cumberland & George's Creek Coal Co.	Penn	Drift	Fan	Mules and plane		None
Maryland Coal & Iron Co.	Frotter Run	Drift	Fan	Gas motor and mules		Installed boiler, sank air shaft 204 ft.
Franklin Coal Co.	Faheys	Drift	Fan	Mules		None
Sullivan Coal Co.	Sullivan	Drift	Fan	Mules and plane		Installed a new 10-ft. gas fan
Bowery Coal Co.	Big Vein	Drift	Natural	Horses		None
Bowery Coal Co.	Tyson	Drift	Furnace	Mules		Ten new cars
Allegany Coal Co.	Tacoma	Drift	Furnace	Mules		New opening
Masco Iron Co.	Masco	Drift	Fan	Mules		Blacksmith shop, fan and scale house

LOCAL MINES.

Frostburg Fuel Co.	Tyson No. 2	Drift	Natural	Mules		General improvements
Big Savage Fire Brick Co.	Davis 6-ft.	Drift	Natural	Mules		General improvements
Brallier Coal Co.	Brallier	Drift	Natural	Horses		General improvements
Samuel H. Smith.	Smith Mine	Drift	Natural	Horses		None
Solomon Brode	Brode Mine	Drift	Natural	Horses		None
William H. Barnes	Barnes Mine	Drift	Natural	Horses		General improvements
Jacob Miller	Miller Mines	Drift	Natural	Horses		New opening
William Anderson	Anderson Mine	Drift	Natural	Horses		Abandoned
Borden Fuel Mines	Borden Mines	Drift	Natural	Horses		Opened 1912
Harvey Mining Co.	Reynolds Mines	Drift	Natural	Mules		General improvements
Green Mining Co.	Green Mine	Drift	Natural	Mules		New opening

GARRETT COUNTY.

Blaine Mining Co.	Potomac Manor	Drift	Fan	Electric motor and mules		Built new store and office rooms
Garrett County Coal Mining Co.	Dodson No. 1 and 4	Drifts	Fans	Gasoline motors and mules		Installed gasoline motors
Potomac Valley Coal Co.	Peerless 1, 2 and 3	Drifts	Fans	Gasoline motors and mules		Installed gasoline motors
Patterson Coal Co.	Nos. 1 and 2	Drifts	Fan and natural	Mules		General improvements
Bloomington Coal Co.	Mine Nos. 1 and 2	Drifts	Fans	L'oules		General improvements
Hamill Coal & Coke Co.	Hamill 1 and 2	Drifts	Fans	Mules		General improvements
Monroe Coal Co.	Mine Nos. 1 and 3	Drifts	Fan	Gasoline motor		None
Chaffee Coal Co.	Chaffee	Drift	Fan	Gasoline motor		Standardized railroad and link belt picking table
Barnard Coal Co.	Stoyer No. 1	Drift	Fan	Mules		None
S. H. Jordan Coal Co.	Deal	Slope	Natural	Mules		Tipple repaired
Cutshall & Gates	Nethkin	Drift	Natural	Mules		None
Ajax Coal Co.	Inblard	Drift	Fan	Mules, locomotive and plane		Repaired tipple and plane

CLAY MINES.

Union Mining Co.	Nos. 5, 6, 7 and 8	Drifts	Natural and fan	Mules, locomotive and plane		General improvements
Savage Mountain Fire Brick Co.	Mine No. 5	Drift	Natural	Mules and tramroad		General improvements
Big Savage Fire Brick Co.	Mine Nos. 1 and 2	Drift	Natural	Mules and tramroad		General improvements
Andrew Ramsey Co.	Mine No. 1	Drift	Natural	Mules and tramroad		New opening

Maryland's Mine Inspectors.

NAME	TENURE OF OFFICE
PETER CAIN	From first Monday in May, 1874, to first Monday in May, 1876.
OWEN RIORDAN	First Monday in May, 1876, to first Monday in May, 1878.
OWEN RIORDAN	First Monday in May, 1878, to first Monday in May, 1880.
THOMAS BROWN	First Monday in May, 1880, to first Monday in May, 1882.
THOMAS BROWN	First Monday in May, 1882, to first Monday in May, 1884.
DENNIS SHERIDAN	First Monday in May, 1884, to first Monday in May, 1886.
DENNIS SHERIDAN	First Monday in May, 1886, to first Monday in May, 1888. Mr. Sheridan died during the early part of his term.
CHAS. H. HAMIL	Appointed September 9, 1886, began his duties September 16, 1886, and served the rest of Mr. Sheridan's term to May, 1888.
R. T. BROWNING	First Monday in May, 1888, to first Monday in May, 1890.
R. T. BROWNING	First Monday in May, 1890, to first Monday in May, 1892.
F. J. McMAHON	First Monday in May, 1892, to first Monday in May, 1894.
F. J. McMAHON	First Monday in May, 1894, to first Monday in May, 1896.
OTTO HOHING	First Monday in May, 1896, to first Monday in May, 1898.
ALEX. RANKIN	First Monday in May, 1898, to first Monday in May, 1900.
JAS. P. CARROLL	First Monday in May, 1900, to first Monday in May, 1902.
JAS. P. CARROLL	First Monday in May, 1902, to first Monday in May, 1904.
THOS. MURPHY	First Monday in May, 1904, to first Monday in May, 1906.
THOS. MURPHY	First Monday in May, 1906, to first Monday in May, 1908.
JOHN H. DONAHUE	First Monday in May, 1908, to first Monday in May, 1910.
JOHN H. DONAHUE	First Monday in May, 1910, to first Monday in May, 1912.
WILLIAM WALTERS	First Monday in May, 1912, to first Monday in May, 1914.
WILLIAM WALTERS	First Monday in May, 1914, to first Monday in May, 1916.

Table of Inspections.

ALLEGANY COUNTY.

Name of Company.	Name of Mine.	No. of Openings.	No. of Inspections.
Consolidation Coal Co.....	Mine No. 1.....	2	19
Consolidation Coal Co.....	Mine No. 2.....	2	5
Consolidation Coal Co.....	Mine No. 3.....	3	13
Consolidation Coal Co.....	Mine No. 4.....	1	4
Consolidation Coal Co.....	Mine No. 5.....	2	4
Consolidation Coal Co.....	Mine No. 6.....	2	4
Consolidation Coal Co.....	Mine No. 7.....	3	14
Consolidation Coal Co.....	Mine No. 8.....	1	5
Consolidation Coal Co.....	Mine No. 9.....	3	4
Consolidation Coal Co.....	Mine No. 10.....	1	4
Consolidation Coal Co.....	Mine No. 11.....	2	5
Consolidation Coal Co.....	Mine No. 12.....	2	10
Consolidation Coal Co.....	Mine No. 13.....	3	3
Piedmont & George's Creek Coal Co.	Washington No. 1.....	2	2
Piedmont & George's Creek Coal Co.	Washington No. 2.....	3	4
Piedmont & George's Creek Coal Co.	Washington No. 3.....	1	4
Piedmont & George's Creek Coal Co.	Washington No. 4.....	1	3
Piedmont & George's Creek Coal Co.	Washington No. 5.....	4	3
George's Creek Coal Co., Inc.....	Mine No. 1 Big Vein.....	2	3
George's Creek Coal Co., Inc.....	Mine No. 1 Tyson.....	2	4
George's Creek Coal Co., Inc.....	Mine No. 2 Tyson.....	1	2
George's Creek Coal Co., Inc.....	Mine No. 3 Tyson.....	1	2
George's Creek Coal Co., Inc.....	Mine No. 4 Tyson.....	1	2
George's Creek Coal Co., Inc.....	Mine No. 12 Big Vein.....	1	2
George's Creek Coal Co., Inc.....	Mine No. 13 Big Vein.....	1	..
New York Mining Co.....	Union No. 1.....	2	3
New Ycrk Mining Co.....	Union No. 2.....	2	4
New York Mining Co.....	Tyson No. 1.....	2	2
Union Mining Co.....	Union.....	2	3
Union Mining Co.....	Clifton No. 3.....	1	3
New Central Coal Co.....	Big Vein No. 1.....	1	2
New Central Coal Co.....	Koontz No. 1.....	2	5
New Central Coal Co.....	Koontz No. 2.....	2	2
Maryland Coal Co.....	Big Vein No. 9.....	1	1
Maryland Coal Co.....	Big Vein No. 12.....	2	6
Maryland Coal Co.....	Tyson No. 1.....	1	4
Maryland Coal Co.....	Tyson No. 2.....	1	1
Maryland Coal Co.....	Waynesburg.....	1	2
American Coal Company.....	Caledonia Tyson.....	4	3
American Coal Company.....	Caledonia Big Vein.....	1	3
Barton & G. C. Valley Coal Co.....	Carlos Big Vein.....	2	3
Maryland-George's Creek Coal Co...	Mertens.....	2	4

TABLE OF INSPECTIONS—Continued.

Name of Company.	Name of Mine.	No. of Openings.	No. of Inspections.
Bowery Coal Co.	Big Vein	1	4
Bowery Coal Co.	Tyson	1	6
Cumberland Basin Coal Co.	Parker	1	1
Cumberland Basin Coal Co.	Bond	1	1
Midland Mining Co.	Enterprise	1	4
Midland Mining Co.	Neff Run	2	5
Moscow-George's Creek Coal Co.	Big Vein No. 2	1	1
Moscow-George's Creek Coal Co.	Bakerstown	1	5
Fitzpatrick Coal Co.	Big Vein	1	1
Chapman Coal Co.	Swanton 4-ft.	2	3
Phoenix Coal & Mining Co.	Elkhart	2	3
Cumberland-George's Creek Coal Co.	Penn	4	1
Franklin Coal Co.	Faheys	1	3
Davis Coal & Coke Co.	Buxton	1	4
Sullivan Bros. Coal Co.	Sullivan	2	3
Barton Coal Mining Co.	Masco	2	3
Allegany Coal Co.	Tacoma	1	3
Stanton Coal Co.	Short Gap	1	3
Potomac Mining Co.	Potomac Mine	2	2

GARRETT COUNTY.

Blaine Mining Co.	Potomac Manor	1	3
Blaine Mining Co.	Potomac Manor No. 2	1	3
Garrett County Coal Mining Co.	Dodson No. 1	1	3
Garrett County Coal Mining Co.	Dodson No. 4	1	3
Potomac Valley Coal Co.	Peerless	3	4
Chaffee Coal Co.	Chaffee	2	3
Monroe Coal Co.	Elk Run No. 1	1	3
Monroe Coal Co.	Elk Run No. 3	1	3
Pattison Coal Co.	Pattison	1	3
Pattison Coal Co.	Pattison	1	3
Jordan Coal Co.	Deal	1	1
Frank Christopher	Stoyer	1	1
Hamill Coal Co.	Hamill	2	5
Bloomington Coal Co.	Bloomington	2	3
Ajax Coal Co.	Hubbard	2	2
	Total inspections for Garrett County		43

TABLE OF INSPECTIONS—Continued.

Name of Company	Name of Mine	No. of Openings	No. of Inspections
LOCAL MINES.			
Frostburg Fuel Co.....		1	1
Sol Brode Fuel Co.....		1	1
Barnard Fuel Co.....		1	1
Smith Fuel Co.....		1	1
Barnes & Son Fuel Co.....		1	1
Miller Fuel Co.....		1	1
Brailer Fuel Co.....		1	
Harvey Mining Co.....		1	1
Borden Fuel Mines.....		1	1
Green Fuel Co.....		1	1
Big Savage Fire Brick Co.....		1	3
Anderson Coal Co.....		1	
Union Mining Co.....		4	3
Savage Mountain Fire Brick Co.....		1	3
Big Savage Mountain Fire Brick Co.....		2	3
Andrew Ramsay Corporation.....		1	
	Total number of open-	—	
	ings	142	
	Total inspections dur-		—
	ing the year.....		296

NOTE.—The above table does not include the number of visits made to investigate fatal accidents with the coroner, and in addition to the number of visits and special investigations of serious accidents and examination of weigh scales and also for the purpose of consulting with mining officials in regard to improvements and safety in mining. Twelve days were spent waiting on the Grand Juries in Allegany and Garrett Counties.

Description of Fatal Accidents for Allegany and Garrett Counties for the Year Ending April 30, 1914.

No. 1, May 8, 1913.

James Henry Smith, miner, age 23, married, residing in Lonaconing, Md., was instantly killed by fall of top rock on May 8 in Koontz Mine at face of first left heading. He was in the act of mining a breast of coal when a very large piece of rock fell without any warning, pinning him to the pavement. The cause of the accident seemed to be unavoidable, as the place was properly timbered. He was employed by the New Central Coal Co.

No. 2, May 24, 1913.

Pietro Bonvicino, Italian, laborer, residing at Morantown, Md., was engaged in running a railroad car under the dump when in some manner he fell off the car and had his leg cut off, from which he died. The accident happened on May 22. He died May 24. He was employed by the New York Mining Co. at Union No. 1.

FATAL ACCIDENTS IN COAL MINES IN ALLEGANY AND GARRETT COUNTIES MAY 1, 1913, TO APRIL 30, 1914.

No.	Date.	Name.	Occupation.	Married or Single.	No. in Family.	Nationality.	Residence.	Age.	Cause of Accident.	Name of Mine.	Name of Company.	Extent of Injury.
1	1913.											
2	May 8.	J. Henry Smith.	Miner	Married	2	American.	Lonaconing, Md.	23	Fall of top rock.	Koontz No. 1.	New Central Coal Company.	Killed instantly.
3	May 24.	Pedro Bonvicino.	Laborer	Single		Italian	Morantown, Md.	17	Railroad cars.	Union No. 1.	New York Mining Company.	Died shortly after accident.
4	June 10.	John Darr, Jr.	Miner	Single	3	American.	Westport, Md.	34	Fall of top rock.	Washington No. 5.	Piedmont and George's Creek Coal Company.	Killed instantly.
5	June 12.	Wilbert Robertson.	Trip Rider	Married	5	American.	Lord, Md.	48	Hand pierced with steel.	Consolidation No. 7.	Consolidation Coal Company.	Died seven days later with tetanus.
6	June 21.	Thornton J. Crow.	Miner	Married	6	American.	Lonaconing, Md.	35	Fall of top coal.	Consolidation No. 7.	Consolidation Coal Company.	Died three days later.
7	August 7.	Hugh Dunn.	Miner	Married	4	American.	Ocean, Md.	54	Fall of top slate.	Consolidation No. 7.	Consolidation Coal Company.	Killed instantly.
8	September 30.	James Uphold.	Driver	Single		American.	Gilmore, Md.	20	Fall of roof coal.	Mine No. 16.	George's Creek Coal Company, Incorporated.	Died shortly after accident.
9	November 14.	Oscar Tipton.	Miner	Married		American.	Lonaconing, Md.		Squeezed between car and rib.	Koontz No. 1.	New Central Coal Company.	Died three hours later.
10	November 26.	Gibson L. Clark.	Miner	Married	11	American.	Lonaconing, Md.	56	Blown out shot of dynamite.	Mine No. 16.	George's Creek Coal Company, Incorporated.	Died three hours later.
11	1914.				4	American.	Lonaconing, Md.	48	By machinery.	Consolidation No. 1.	Consolidation Coal Company.	Died five hours later.
12	January 8.	Douglas Sumerville.	Foreman	Married		American.	Lonaconing, Md.	33	Fall of top coal.	Consolidation No. 7.	Consolidation Coal Company.	Died eight hours later.
13	January 31.	James Moses.	Miner	Married		American.	Frostburg, Md.	32	Struck by prop.	Sullivan	Sullivan Bros. Coal Company.	Killed instantly.
14	March 24.	John Nairn.	Miner	Single		Italian.	Eckhart, Md.	26	Fall of top rock.	Consolidation No. 1.	Consolidation Coal Company.	Killed instantly.
15	March 25.	Frank Mancuso.	Miner	Single	1	American.	Frostburg, Md.	21	Pillar fall.	Consolidation No. 1.	Consolidation Coal Company.	Killed instantly.
16	April 21.	John D. Scalley.	Miner	Married		American.	Ocean, Md.	20	Pillar fall.	Consolidation No. 1.	Consolidation Coal Company.	Killed instantly.
17	April 21.	Isaac Cavanaugh.	Miner	Single		American.	Ocean, Md.	51	Pillar fall.	Consolidation No. 1.	Consolidation Coal Company.	Killed instantly.
	April 21.	Joseph Bush.	Miner	Single		Irishman.	Ocean, Md.		Pillar fall.	Consolidation No. 1.	Consolidation Coal Company.	Killed instantly.
	April 21.	Thomas Bush.	Miner	Single		Irishman.	Ocean, Md.		Pillar fall.	Consolidation No. 1.	Consolidation Coal Company.	Killed instantly.

No. 3, June 10, 1913.

John Darr, Jr., American, age 17, miner, residing at Westernport, Md., was instantly killed by fall of bone coal and slate in room No. 2-F, opening 28, heading in Washington No. 5, operated by the Piedmont & George's Creek Coal Co. Mr. Darr and Mr. Ramond Wilson had started to load a car when a large piece of roof coal weighing about two tons gave away killing young Darr and pinning Mr. Wilson under it, breaking his back. It required the use of a machine jack to release them. The Inspector and Mine Foreman O'Rourke were passing the switch when the accident occurred and rendered all possible aid to the injured man and had him removed to the Keyser, W. Va., Hospital within two hours after the accident.

No. 4, June 12, 1913.

Wilbert Robertson, trip rider, age 34, married, wife and three children, residing at Lord, Md., employed by the Consolidation Coal Co. at Consol Mine No. 7. He had his hand pierced with a piece of steel he used on the signal wire. It dropped out of his belt and he was in the act of reaching to the ground for it when it pierced the middle of his hand. He died seven days later with tetanus.

No. 5, June 21, 1913.

Thornton J. Crow, miner, age 48, married, wife and five children, residing at Lonaconing, Md., was instantly killed by fall of top coal in Consol Mine No. 1, Consolidation Coal Co. The room was well timbered, but it seems there were some hidden slips that cut out at the face.

No. 6, August 7, 1913.

Arthur H. Dunn, miner, age 35, married, wife and six children, residing at Lord, Md., injured by fall of slate in fifth left heading, heavy grade slope, Consol Mine No. 7 of the Consolidation Coal Co. Mr. Dunn was engaged in setting a pillar coal when a piece of rock fell, striking his head, causing his death three days later.

No. 7, September 30, 1913.

Charles Uphold, miner, age 54, married, wife and seven children, residing at Gilmore, Md., killed by a fall of coal and rock in room No. 2, in dip heading, midway slope, Consol Mine No. 7, Consolidation Coal Co. From investigation it was found that the place was not properly timbered. There were plenty of unused props in the place. The Inspector found 35 props close at hand and it would require at least six or seven sets to make the place safe before the deceased started his shift. It was learned that he worked under this bad roof from September 22, P. M. until 3 o'clock A. M. when the roof gave way crushing him.

No. 8, October 14, 1913.

John Tipton, driver, age 20, single, residing at Gilmore, Md., was injured by being squeezed between car and rib on main heading in fourth left, Consol Mine No. 16, operated by the George's Creek Coal Co., Inc. He died shortly after the accident. A trip of loaded coal was run down a steep grade, and Mr. Tipton was standing at this point to put down the brakes when the first load left the track, pinning his body against the rib, crushing him through the body, injuring him internally, which resulted in his death a few hours later.

No. 9, November 26, 1913.

George L. Clark, miner, married, residing at Lonaconing, Md., employed by the New Tyson Mine, operated by the New Central Coal Co. Mr. Clark was under a charge of dynamite in a breast of coal with a short piece of

fuse. He thought it had time to go off, and went up to the working face to investigate when it went off, striking him in the right breast and tearing his body in such a manner that he died three hours later. He leaves a wife and several small children.

No. 10, January 8, 1913.

Douglas Sumerville, mine foreman, age 56, married, residing at Lonaconing, Md., employed at Mine No. 16, George's Creek Coal Co., Inc. Mr. Sumerville was examining the shaft on a steam fan while it was in motion. His clothing caught on a stud bolt, forcing his body down and whirling him around, striking his head against the frame of the engine and the foundation, crushing his brains out before the engineer could shut the steam off. He died a few hours later. He was a very proficient mine boss. He leaves a wife and 11 children.

No. 11, January 31, 1913.

James Moses, miner, married, age 48, residing at Lonaconing, Md., was injured by fall of top coal in No. 2 room, wet heading, in dip at Consol No. 1, operated by the Consolidation Coal Co. His working place was well timbered and the deceased was working at the face when he cut into a slip, the roof gave way, crushing him in such a manner that he died four hours later. He leaves a wife and four children.

No. 12, March 24, 1914.

John Nairn, miner, single, age 33, residing at Frostburg, Md., injured while at work in room 1 second left, midway slope, Consol No. 7, operated by the Consolidation Coal Co. Mr. Nairn was engaged in pillaring when a prop gave way, striking him on the head, crushing his skull, causing his death a few hours later.

No. 13, March 25, 1914.

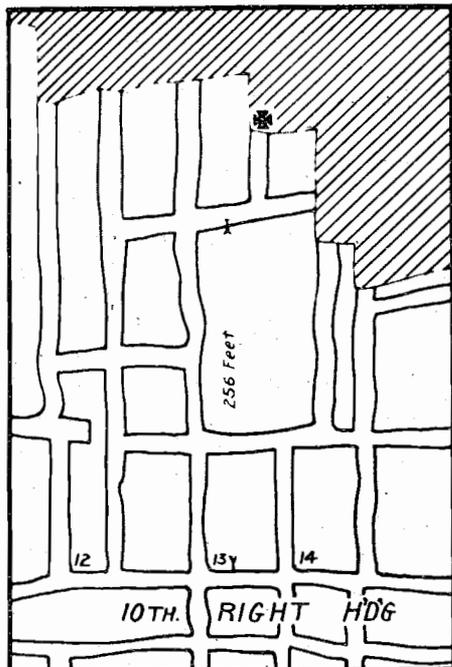
Frank Mancuso, miner, single, age 32, residing at Eckhart, Md., worked at the Sullivan Mine, operated by Sullivan Bros. Coal Co., was instantly killed by fall of top rock in No. 3 room in first left heading. He had just started to break off a cross-cut and was mining the breast when the roof gave away, killing him instantly. This accident could have been prevented if it was properly posted. There were plenty of unused props and caps in the room.

Nos. 14, 15, 16 and 17, April 21, 1914.

Isaac Cavanaugh, John D. Scalley, Joseph Busch and Thomas Busch. The most distressing inside mine accident of the year, or I may say, in the history of mining in the George's Creek Valley, occurred at Consol Mine No. 1, of the Consolidation Coal Co., located at Ocean, Md.

On Tuesday night, April 21, at 9.30 P. M., four men were instantly killed by a pillar fall of coal and rock. It required almost four days of incessant toil to recover the bodies from beneath the heavy mass of rock and slate. The four men were engaged in taking out pillar coal and were in the act of loading their last car when the roof fell without warning, crushing them to death. The work of rescue was immediately begun by competent and practical miners.

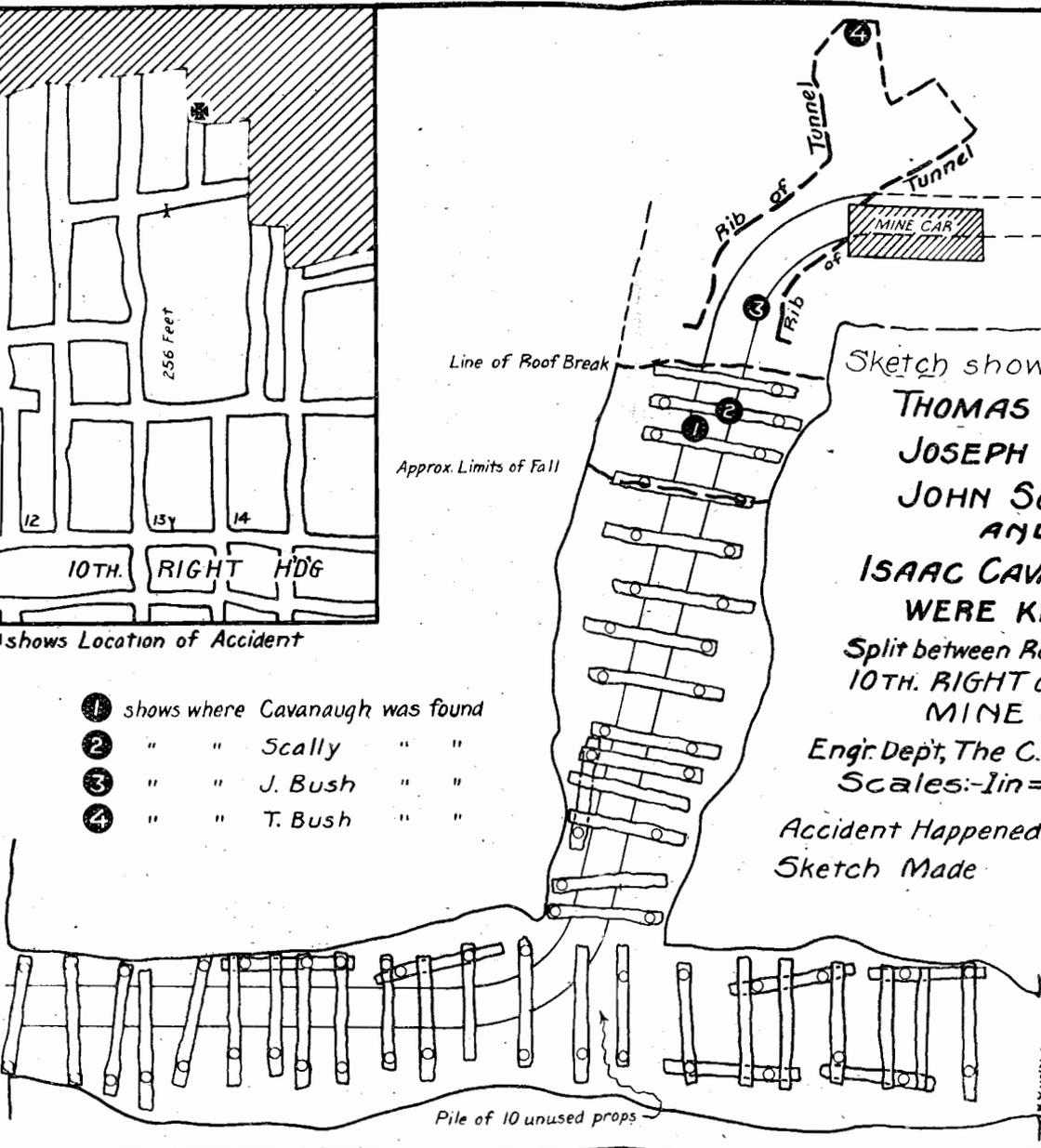
The body of Isaac Cavanaugh, miner, age 21, single, residing at Ocean, Md., was the first recovered at 11.30 P. M., two hours after the fall occurred. The body of John D. Scalley, miner, married, age 26, residing at Frostburg, was recovered at 1.30 A. M., four hours after the fall occurred. The body of Joseph Bush, miner, single, age 20, residing at Ocean, was located at 4.30 P. M. the following afternoon, and was recovered at 7.10, 22 hours after the accident. Slide after slide of rock occurred, interfering with the work



★ shows Location of Accident

- ① shows where Cavanaugh was found
- ② " " Scally " "
- ③ " " J. Bush " "
- ④ " " T. Bush " "

256 to 10th Rt. → Room No. 13.



Sketch showing where
THOMAS BUSH
JOSEPH BUSH
JOHN SCALLY
AND
ISAAC CAVANAUGH
WERE KILLED.

Split between Rooms 13 & 14
 10TH. RIGHT OFF SLOPE
 MINE NO. 1.

Engr. Dept, The C. C. Co, Md. Div.
 Scales: -1 in = 10 & 100 feet.

Accident Happened April 21st, 1914.
 Sketch Made April 25th, 1914

Room No. 14

of rescue. The body of Thomas Bush, miner, single, age 51, residing at Ocean, was located at 7.30 P. M. on April 23 and recovered at 3.10 A. M. on April 24 the last two bodies found were crushed in a fearful manner. So heavy was the fall that it was necessary to tunnel through the rock and debris over forty feet. The fall occurred so suddenly that the body of Thomas Bush was found in a standing position at the working breast. He apparently did not have time to move before the fall caught him. Mr. Bush was considered a good practical timberman, but the nature and condition of the roof and rock is very dangerous at this point where the accident occurred. Pillering coal in the Pittsburg or Big Vein is a very hazardous occupation and our most practical and expert miners are sometimes injured or killed.

I was immediately on the scene and rendered all possible aid in the rescue. Mr. H. V. Hesse, general manager of the Maryland Division, Consolidation Coal Co., deserves special commendation for the splendid service he rendered in comforting the bereaved families and remaining with the rescue parties day and night, looking after their comfort and safety. Mr. Thomas McFarlane, mine foreman, also rendered splendid service, remaining at the scene almost the entire time, three days and four nights.

Description of Mines in Allegany County.

CONSOLIDATION COAL COMPANY.

H. V. Hesse, Manager Maryland Division.

David J. Morgan, Mine Inspector. William Sleeman, Assistant Inspector.

The Consolidation Coal Company is the largest operation in the State in point of output and number of men employed. They operate thirteen mines and are working the Pittsburg or Big Vein and Tyson seams of coal. During the year ending December 31, 1913, they employed 2,772 persons and produced 2,126,931 tons of coal, showing a decrease of 36,065 tons under the year 1912.

CONSOLIDATION COAL COMPANY.

Thomas McFarland, Mine Foreman.

Peter Hoyer, Assistant Foreman.

Daniel Porter, Assistant Foreman.

Michael McGeedy, Assistant Foreman.

Consol Mine No. 1 is located at Ocean on the east side of the George's Creek and is a slope, working the Pittsburg or Big Vein seam of coal, and is one of the largest operations in the State.

During the year 1913 this mine employed 520 persons and worked 302 days, producing 421,518 tons of coal. The coal is mined by pick and gathered from the interior by horses and small compressed air motors to the main "lyes," then hauled by two large air motors to the bottom of the slope. From there it is hauled by a large stationary engine to the tippie and shipped over the Cumberland and Pennsylvania Railroad. Drainage is through the Hoffman water ditch which empties into the Braddock's Run at Clarysville. While this takes the main supply of water from this mine, it is still necessary to run several pumps as drainage here has always been

a serious one. There were nine brick dams erected to avoid danger of flooding should the waters of George's Creek break through. Ventilation is produced by a large 25-foot fan and by the overcast and regulator system, and is good considering the number of years this mine has been in operation. During the year they improved and retimbered the manway, making a good safe way to travel. The railroad sidings in lower end of yard were repaired and improved. This mine is capable of producing 16,000 tons daily.

CONSOLIDATION COAL COMPANY.

Douglas Shaw, Mine Foreman.

Consol No. 2 is located at Carlos Junction on the main line of the Cumberland and Pennsylvania Railroad and is a drift opening, working the Lower Sewickley or Tyson seam of coal. The thickness varying from twenty-six to thirty inches at this point. The irregularity of the coal seam and the great number of faults to contend with makes mining very difficult. Ventilation is produced by an electric fan and is generally good throughout the mine. During the year there were 28 persons employed and produced 13,819 tons of coal. The product is used to supply the locomotives on the Cumberland and Pennsylvania Railroad and also supplies fuel for Midland, Ocean and vicinity.

CONSOLIDATION COAL COMPANY.

Jenkins Daniels, Mine Foreman.

William Hendley, Assistant Foreman. Patrick Kenney, Assistant Foreman.

Consol No. 3 is located at Hoffman, one and one-half miles east of Frostburg, Md., on the Eckhart Branch of the Cumberland and Pennsylvania Railroad and is the second largest operation in the State, working the Pittsburg or Big Vein seam of coal. It is a slope one and one-quarter miles long and is opened on the double entry system. Ventilation is produced by two large fans, one at the main opening at Hoffman, and the other a 20-foot Lepley fan at the power station at pumping shaft. This mine covers a very large area and ventilation is generally good, except in some isolated sections. The manway has always been found in excellent condition. A motor pit was built at the bottom of the slope 63 feet long by 10 feet wide, connecting with a repair shop 38 feet long by nine feet wide, at a point readily accessible from the side tracks. These rooms are built of brick with arched ceiling and the doors are plate steel. A flueme 200 feet long was built to carry the waters of the Vale Run over some large surface cracks caused by pillaring underneath. The old light rails and frogs at lower end of railroad yard were torn out and replaced with heavy rails. During the year 1913 this mine employed 564 persons and worked 305 days, produced 441,256 tons by pick and 5,996 tons by machines, making a total production of 447,252 tons, showing an increase of 71,990 tons over the year 1912.

CONSOLIDATION COAL COMPANY.

James Weston, Mine Foreman.

John Sluss, Assistant Foreman.

Consol No. 4 is located at Eckhart and is a slope working the Pittsburg or Big Vein seam of coal. The mine is ventilated by a large steam-driven fan and ventilation is generally good considering the condition of this mine, as it is one of the oldest in the State. It is cut up in such a manner that it is impossible to maintain a good circulation of air at the working faces. Drainage is also a serious proposition here owing to the water ditch falling

in. There are several pumps in the mine, yet extreme difficulties are encountered. The coal is gathered in the interior by horses to the main "lyes" and hauled to the bottom of the slope by a large electric motor, then hoisted to the surface by a stationary engine and dumped into railroad cars and shipped over the Eckhart Branch of the Cumberland and Pennsylvania Railroad. During the year they employed 148 persons and worked 305 days and produced 95,192 tons of coal.

CONSOLIDATION COAL COMPANY.

Robert Edwards, Mine Foreman.

Consol No. 5 is located at Midland on the west side of the George's Creek and has two draft openings on the right side of "Squirrel Neck Run." They are working the Tyson or Upper Sewickley seam of coal. The seam here is in a much disturbed condition. At different parts rock faults are encountered and sometimes there is only two feet of coal and drainage has been a source of much trouble and expense. The company finally decided to abandon the two openings, the tracks were taken up and all buildings dismantled and the openings sealed up with brick. There were only 697 tons mined in 1913.

CONSOLIDATION COAL COMPANY.

Benjamin Bradley, Mine Foreman. Robert Edwards, Assistant Foreman.

Consol No. 6 is located at Lord, about two miles west of Carlos Junction, and is a slope opening working the Upper Sewickley or Tyson seam of coal. The mine is ventilated by a fan with the overcast system and ventilation is well distributed throughout the entire mine. The haulage is by endless rope system. Drainage is through drill holes to the Big Vein in Mine No. 7. During the year 1913 they employed 48 persons and worked 304 days, producing 31,036 tons of coal.

CONSOLIDATION COAL COMPANY.

Benjamin Bradley, Mine Foreman.
Charles Shields, Assistant Foreman. Robert Edwards, Assistant Foreman.

Consol Mine No. 7 is located at the town of Lord, one and one-half miles north of Midland. This is a double slope opening, working the Pittsburg or Big Vein seam of coal. The coal is mined by pick and is on the retreat. During the year 1913 there were 556 persons employed and worked 301 days, producing 544,368 tons of coal. This mine is composed of two slopes and the coal is shipped over the Carlos Branch of the Cumberland and Pennsylvania R. R. The mine is ventilated by a large 25-foot fan and by a separate split of air to each slope and ventilation has been found good during each inspection. Drainage is through Ocean No. 1 and Hoffman No. 3 water ditch and empties into Braddock's Run at Clarysville.

CONSOLIDATION COAL COMPANY.

Christopher Roberts, Mine Foreman. Daniel Williams, Assistant Foreman.

Consol Mine No. 8 is located at Midland on the west side of the George's Creek, on the main line of the Cumberland and Pennsylvania Railroad, and is working the Pittsburg or Big Vein seam of coal. During the year they employed 125 persons and worked 309 days, producing 91,612 tons of coal. Recently a new electric hoist made by the Vulcan Iron Works has been installed to hoist the coal out of the mines, increasing the tonnage to

500 tons. The hoist has a capacity of 1,000 tons, which can be utilized if required. The haulage system is a combined slope and tail rope, a tail rope pulling the empty cars into the mine as far as the top of an old heading known as "50 heading" which is utilized as a slope, twelve cars being hauled on a trip. When first installed some difficulty was encountered in landing the trips to the lower or "QX" lye due to the grade at the bottom of the slope being very slight, but this difficulty has been overcome by re-grading the tracks. The mine is ventilated by fan and in some parts is bad. They are recovering a very large percentage of supposedly lost coal and owing to the nature of this kind of work it is hard to keep the mines in a healthful condition. Drainage is through the old water ditch at Midland and in some parts is bad owing to the ditch being partly closed.

CONSOLIDATION COAL COMPANY.

John Casey, Mine Foreman.

Consol Mine No. 9 is situated at the end of the "Y" on the main line of the Cumberland and Pennsylvania Railroad, two miles east of Frostburg, Md. It is a drift with four openings designated as A, B, C and D, the latter opening serves as a travelway for the miner and is very convenient. They are working the Upper Sewickley or Tyson seam of coal and is among the best in the upper section of the region. This mine is up to date in every particular. It is equipped with electric haulage. A 100 K. W. 250-Volt D. C. Generator, belt connected to Russell engine and a 150 horse-power boiler, together with necessary buildings, connections, switchboards, etc., were installed during the year to provide additional power. C main heading was driven through a rock fault 210 feet long and graded to the mouth of the mine. The heading was widened, trolley wires hung, the track realigned and preparations made to use this as a haulway. New empty and loaded tracks were laid from C heading to the tippie. A slate trestle and dump 28 feet high and 48 feet long was built in front of the tippie to take care of the rock and dirt coming out of the mine. Ventilation is produced by a large 14-foot fan and the air is well distributed throughout the mine. During the year they employed 192 persons and worked 306 days, producing 96,342 tons of coal by pick and 14,106 by machine, making a total of 110,448 tons.

CONSOLIDATION COAL COMPANY.

Frank Myers, Mine Foreman.

Consol Mine No. 10, located at Eckhart, Md, about 500 feet west of Mine No. 4, is working in the Upper Sewickley or Tyson seam of coal. It is one of the first openings made in this seam by the Consolidation Coal Company and was closed down for several years. The mine was reopened in 1908 and has been steadily developing since that time. The coal is hauled from the rooms to inside "lyes" by mules, and from these "lyes" to a chute on the outside by electric motors. On the outside of the mines the coal is weighed and dumped through a chute into Big Vein Mine cars and conveyed to Mine No. 4 tippie by an endless rope. The coal is then dumped into the railroad-cars over a specific dump so that the coal will not be mixed with the Big Vein coal. The mine is ventilated by a large electric fan and is always found good and drainage is partly by pumps and bore holes drilled through the strata to the Big Vein working of Mine No. 4. During the year they employed 105 persons and worked 305 days and produced 71,407 tons of coal. The tonnage has been considerably increased by the development having been extended and a much larger increase can be expected in the future as the mine has a large territory which is being rapidly developed. The mine has been laid out and equipped for a much larger output than is now being mined. The product is shipped over the

Eckhart Branch of the Cumberland and Pennsylvania Railroad. A frame motor barn, 12 feet wide and 16 feet long, with corrugated iron roof and sides, and engine pit, was built for housing and repairing the haulage motor. On May 5, 1913, at 1.30 A. M., the powder magazine blew up by the explosion of contents composed of 1,700 pounds of 40 per cent. dynamite and 60 kegs of powder. Two miners who were stealing powder to carry out threats made against various persons, including the mine foreman, were killed by the explosion, their bodies being found 50 feet from the magazine. The force of the explosion caused considerable damage to the mine buildings and residences of Eckhart, all of which were repaired at the company's expense. The total damage was in the neighborhood of \$3,000.

CONSOLIDATION COAL COMPANY.

Alexander Neal, Mine Foreman.

George Tennant, Assistant Foreman.

Consol Mine No. 12 is located at Borden Shaft on the main line of the Cumberland and Pennsylvania Railroad. It is a shaft working the Pittsburg or Big Vein seam of coal. About three years ago the Consolidation Coal Company acquired this property by lease and immediately proceeded to drain the old workings through the Hoffman drainage tunnel which empties into Braddock's Run at Clarysville. Ventilation is produced by a large fan at the power station at pumping shaft and is generally good. During the year 1913 they employed 274 persons and worked 303 days, producing 240,349 tons of coal. During each inspection conditions were found satisfactory.

CONSOLIDATION COAL COMPANY.

Eugene Layman, Mine Foreman.

Consol Mine No. 11 is located at the pumping shaft, 100 feet above the Big Vein at Mine No. 3, and is working the Upper Sewickley or Tyson seam of coal. Ventilation is produced from a fan at pumping shaft and is generally good. The coal is gathered in the interior by electric motor and hauled to chute and dumped into Big Vein cars at bottom of Mine No. 3 and conveyed to tippie by stationary engine and dumped into railroad cars over a special dump so that the coal will not be mixed with the Big Vein coal. During the year 1913 they employed 82 persons and worked 305 days, producing 49,582 tons of coal.

CONSOLIDATION COAL COMPANY.

John Bahen, Mine Foreman.

Consol Mine No. 13. This mine opened in the latter part of 1913 for shipment and operation in the abandoned territory of old Ocean No. 2 Mine, working the Pittsburg or Big Vein seam of coal, and is located about one-half mile west of Frostburg. There are three main openings, one slope and two drifts. The southernmost opening is a slope on a 24 per cent. grade for 190 feet until it reaches the bottom of the seam, after which it follows the grade of the coal 11 per cent. Located 574 feet northwest of slope mouth is drift No. 1 at tippie height, and 510 feet northwest of opening No. 1 is drift No. 2, connected with the tracks at drift No. 1 by gravity plane. Paralleling drift No. 1 is an air course which furnishes ventilating current for both drifts. An old opening parallel to slope was converted into a manway. Power is supplied by a 100 horse-power boiler and coal is hoisted from slope by a hoisting engine and shipped over the Cumberland and Pennsylvania Railroad. The first shipment after reopening was made on October 27, 1913, and nearly 10,000 tons were shipped during the remainder

of the year, tracks having been relaid over the old grading from the main line at Wright's Crossing to the mine, a distance of 8,000 feet. At present the tonnage is small due to poor condition of the old workings which frequently have to be crossed. The old rooms are wide, the pillars small and very much cut up by cross-cuts. The roof conditions in the old place are poor due to the slight cover requiring much timber, making the removal of the remaining coal very difficult and dangerous.

GEORGE'S CREEK COAL COMPANY, INC.

William F. Coale, General Manager, Cumberland, Md.
John R. Hamilton, Superintendent, Lonaconing, Md.

The George's Creek Coal Co., Inc., are operating a series of openings on the east and west sides of the George's Creek and are working the Big Vein and Tyson seams of coal. During the year ending December 31, 1913, this company employed 372 persons and produced 280,125 tons of coal, showing an increase of 36,770 tons above the preceding year, 1912.

GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton, Superintendent. Nathaniel Somerville, Mine Foreman.

George's Creek Mine No. 1 is located on the west side of the George's Creek, near Lonaconing, and is a drift opening, working the Pittsburg or Big Vein seam of coal. The tipples are so arranged that they can dump Big Vein coal and Tyson separately, and can ship coal on the Cumberland and Pennsylvania or the Western Maryland Railroads. Ventilation is produced by a large steam-driven fan and is generally good. Drainage is by pumps. During the year this mine employed 53 persons and worked 280 days, producing 59,510 tons of coal.

GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton, Superintendent. David Dunn, Mine Foreman.

George's Creek Mine No. 2 is located on the east side of George's Creek, near Lonaconing, and is a drift opening, working the Pittsburg or Big Vein seam of coal. This is a small operation. It is ventilated by natural means, air holes being driven to the surface. During the year 1913 they employed eight persons and worked 202 days, producing 6,740 tons of coal.

GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton, Superintendent. William Abbott, Mine Foreman.

George's Creek Mine No. 12. This mine is located at Gilmore, near Midland, on the east side of the George's Creek. An incline plane is used to convey the cars from the mines to the dump. The product is shipped over the Western Maryland Railroad. The mine is ventilated by natural means, air holes being driven to the surface. During the year 1913 they employed 41 persons and produced 9,559 tons of coal.

GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton, Superintendent. David Dunn, Mine Foreman.

George's Creek Mine No. 2 is located on the east side of the George's Creek, one mile east of Lonaconing, and is a drift opening, working the

Upper Sewickley or Tyson seam of coal. An incline plane is used to convey the cars from the mine to the dump. They ship over the Western Maryland Railroad. Ventilation is produced by a gas fan and air conditions has always been found good. During the year they employed 31 persons and worked 202 days, producing 16,179 tons of coal.

GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton, Superintendent. Nathaniel Somerville, Mine Foreman.

George's Creek Mine No. 3 is located on the west side of the George's Creek, near Lonaconing, and is a drift opening, working the Upper Sewickley or Tyson seam of coal. The coal is gathered in the interior to the main headings by mules, then hauled to the dump by electric motor. The product is shipped over the Western Maryland Railroad. Ventilation is produced by a large electric fan and ventilation conditions have always been found satisfactory. During the year they employed 26 persons and worked 302 days, producing 16,962 tons of coal.

GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton, Superintendent. Nathaniel Somerville, Mine Foreman.

George's Creek Mine No. 4 is located on the west side of the George's Creek, near Lonaconing, and is a drift opening, working the Upper Sewickley or Tyson seam of coal. Ventilation is produced by a gas fan and conditions are generally good. During the year 1913 they employed 38 persons and worked 292 days, producing 30,772 tons of coal.

GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton, Superintendent. Douglas Somerville, Mine Foreman.

George's Creek Mine No. 16 is located on the west side of the George's Creek, near Lonaconing, and is a drift opening, working the Upper Sewickley or Tyson seam of coal. The mine is equipped with electric haulage and is one of the largest producers in the State, working the small seam and can increase their output at any time. The tipples are so arranged that they can ship over the Western Maryland or the Cumberland and Pennsylvania Railroads. The mine is ventilated by a large steam fan and conditions have always been found good. During the year they employed 175 persons and worked 276 days, producing 140,405 tons of coal.

PIEDMONT AND GEORGE'S CREEK COAL COMPANY.

John S. Brophy, President and General Manager, Frostburg, Md.

The Piedmont and George's Creek Coal Co. is working a series of openings in Allegany and Garrett Counties, working the Pittsburg or Big Vein, Tyson Vein, Davis six-foot and the Barton four-foot seams of coal. During the year ending December 31, 1913, they employed 434 persons and produced 281,122 tons, showing a decrease of 15,315 tons under the year 1912.

PIEDMONT AND GEORGE'S CREEK COAL COMPANY.

Martin Condry, Superintendent.
William Hines, Mine Foreman. Oscar Huber, Assistant Foreman.

Washington Mine No. 1 is located east of Eckhart and is a drift opening, working the Pittsburg or Big Vein seam of coal. This mine is ventilated by

natural means and ships over the Eckhart Branch of the Cumberland and Pennsylvania Railroad. There were only a few men employed during the year. They produced 1,648 tons of coal.

PIEDMONT AND GEORGE'S CREEK COAL COMPANY.

Martin Condry, Superintendent.
William Hines, Mine Foreman. Oscar Huber, Assistant Foreman.

Washington Mine No. 2 is a drift opening, working the Tyson seam of coal and is located west of Eckhart, and ships over the Eckhart Branch of the Cumberland and Pennsylvania Railroad. Ventilation is produced by electric fans and is good. Drainage is by pumps and boreholes through the strata to the Big Vein. The coal is hauled to the surface by electric motors. During the year 1913 they employed 190 persons and worked 295 days, producing 129,531 tons of coal.

PIEDMONT AND GEORGE'S CREEK COAL COMPANY.

William E. Brown, Superintendent. Charles Welch, Mine Foreman.

Washington Mine No. 3 is a drift opening located on the west side of the George's Creek near Franklin and is working the Lower Kittanning or Davis six-foot seam of coal. The product is shipped over the Cumberland and Pennsylvania Railroad. During the year 1913 they employed 108 persons and worked 274 days, producing 78,802 tons of coal. Ventilation is produced by an electric fan and is generally good, except at some isolated parts. Haulage is by gasoline motor.

PIEDMONT AND GEORGE'S CREEK COAL COMPANY.

William E. Brown, Superintendent. Charles Gentry, Mine Foreman.

Washington Mine No. 4 is a drift opening and is located on the east side of the George's Creek, near Westernport. It is in the Lower Kittanning or Davis six-foot. Ventilation is produced by a steam fan and is well ventilated. Haulage is by mules to the surface. During the year this mine was abandoned, all the stumps of coal were taken out clean and all buildings and tipple dismantled.

PIEDMONT AND GEORGE'S CREEK COAL COMPANY.

William E. Brown, Superintendent.
Martin O'Rourke, Mine Foreman. F. E. Lambert, Assistant Foreman.

Washington Mine No. 5, located on the west side of the George's Creek, near Franklin, Md., is a drift and has four openings, working the Bakerstown or Barton four-foot seam of coal. The mine is reached by a long plane and tram road over which the coal is taken and shipped over the Cumberland and Pennsylvania Railroad. This mine is equipped with electric haulage system. During the year 1913 they employed 100 persons and worked 287 days, producing 31,334 tons of coal by pick and 32,776 tons by machine, making a total of 64,111 tons. This mine is ventilated by electric fan and is very good.

NEW YORK MINING COMPANY.

William L. Hamilton, Superintendent. James Aldon, Asst. Superintendent.

The New York Mining Company is operating a series of openings in Allegany County and is among the large operators in point of output and number of men employed working the Big Vein and Tyson seams of coal. The mines are situated about two miles northeast of Frostburg along the line of the Cumberland and Pennsylvania Railroad. During the year 1913 this company employed 338 persons and produced 237,344 tons of coal by pick and 21,218 tons by machine, making a total of 258,562 tons, showing an increase of 37,374 tons over the year 1912.

NEW YORK MINING COMPANY.

William L. Hamilton, Superintendent.
James Aldon, Assistant Superintendent. Joseph Finzel, Mine Foreman.

Union Mine No. 1 is located near Allegany on the west side of Jennings Run. The mine is reached by a short branch road of the Cumberland and Pennsylvania Railroad. It is a drift opening, working the Pittsburg or Big Vein seam of coal. Ventilation is produced by a large steam fan and conditions are generally good. The coal is gathered in the interior by horses and wireless motors to the side "lyes," and from there to the tippie it is hauled by an electric third rail motor. The coal is mined by pick and machine. During the year 1913 this mine employed 132 persons and worked 278½ days, producing 79,182 tons of coal by pick and 21,218 tons by machine, making a total of 100,400 tons for the year.

NEW YORK MINING COMPANY.

William L. Hamilton, Superintendent.
James Aldon, Assistant Superintendent. Joseph Finzel, Mine Foreman.

Union Tyson Mine No. 1 is situated directly above Union Mine No. 1 Big Vein. It is a drift opening in the Upper Sewickley and the seam shows a thickness of 44 to 54 inches, which is considered very good at this end of the region, and its development should be encouraged at this point. This coal is taken to the surface by mules. On the outside it is lowered down an incline plane and weighed and dumped into Big Vein mine cars and conveyed through part of Big Vein Mine No. 1 by electric motors to Big Vein tippie, so that the coal will not be mixed with Big Vein coal. Ventilation is by natural means and was found deficient on account of brattices and trap doors being neglected and the air shaft falling in. The foreman has been notified that prosecution will follow if the same conditions are found again.

NEW YORK MINING COMPANY.

William L. Hamilton, Superintendent.
James Aldon, Assistant Superintendent. John Tippen, Mine Foreman.

Union Mine No. 2 is located near Allegany on the main line of the Cumberland and Pennsylvania Railroad. It is a drift opening, working the Pittsburg or Big Vein seam of coal. The coal here has a very heavy shale parting causing the miners and company a great deal of dead labor. The coal is gathered in the interior by horses to the side "lyes." From there it is hauled to the tippie by electric motors. Ventilation is well distributed throughout the mines by a large steam-driven fan. During each inspection conditions were found satisfactory. During the year 1913 this mine employed 177 persons and worked 278½ days, producing 144,351 tons of coal.

UNION MINING COMPANY.

William L. Hamilton, Superintendent. James Aldon, Asst. Superintendent.

Union Mine is located near Frostburg and is operating a small opening in the Pittsburg or Big Vein seam of coal. It is a slope and much of the coal lies to the dip and a great deal of trouble is experienced with water

and "black damp," making mining rather difficult and expensive. The company finally decided to abandon it, the tracks were torn out and the dump and buildings torn down. During the year 1913 they employed 45 persons and worked 147½ days, producing 15,450 tons of coal.

NEW CENTRAL COAL COMPANY.

Duncan Sinclair, General Manager.
Alexander Adams, Superintendent. Joseph Todd, Mine Foreman.

Koontz Mine No. 1 is a drift opening situated on the west side of the George's Creek, near Lonaconing, and is working the Tyson seam of coal. It is ventilated by a large steam fan and during the year a shaft was driven to the surface at the back part of the mine and has proven a great benefit to the ventilation. The coal is gathered on the interior by mules to the side "lyes," then taken from the mines to the head of the plane by an endless rope system and shipped over the George's Creek and Cumberland Railroad. During the year 1913 they employed 116 persons and worked 286 days, producing 87,901 tons of coal.

NEW CENTRAL COAL COMPANY.

Alexander Adams, Superintendent. Robert Merbaugh, Mine Foreman.

Big Vein Mine No. 2 is situated on the east side of Lonaconing. It is a drift opening working the Tyson seam of coal. This is a new development during the year and promises to be a good one. It is ventilated with a gas fan and air conditions are good. The coal is hauled from the mines with mules to the head of a plane and lowered to the Big Vein dump, and shipped over the George's Creek and Cumberland Railroad. During the year they employed 15 persons and worked 286 days, producing 8,613 tons of coal. Conditions were found satisfactory.

MARYLAND COAL COMPANY.

Richard Spears, Superintendent, Lonaconing, Md.

The Maryland Coal Company mines are located on the west side of the George's Creek at Lonaconing and are working a series of openings in the Pittsburg or Big Vein, Tyson and the Waynesburg seams of coal. The product is shipped over the George's Creek and Cumberland Railroad. During the year ending December 31, 1913, they employed 88 miners and produced 50,850 tons of coal.

MARYLAND COAL COMPANY.

Richard Spears, Superintendent.

Tyson Mine No. 1 is located directly above the old Kingsland Big Vein Mine. It is a drift opening operating in the Tyson seam of coal and ships over the George's Creek and Cumberland Railroad. Mule Haulage. Ventilation is produced by a 10-foot gasoline fan. Condition at each inspection was found fair. During the year there was 53 persons employed and worked 270 days, producing 30,597 tons of coal.

MARYLAND COAL COMPANY.

Richard Spears, Superintendent.

Tyson Mine No. 2 is located on the west side of George's Creek near Lonaconing and is a drift opening operating the Tyson seam and ships over the George's Creek and Cumberland Railroad. It is a new mine and only employs 10 men and produced 5,780 tons of coal during the year 1913.

MARYLAND COAL COMPANY.

Richard Spears, Superintendent.

Big Vein Mine No. 12 is located near Lonaconing on the west side of the George's Creek and is a drift opening. The coal is hauled by horses to head of incline plane, which is run by a stationary engine located along the tram road, and then hauled by a small locomotive to tipple. During the year they employed 13 miners and worked 135 days, producing 7,532 tons of coal.

MARYLAND COAL COMPANY.

Richard Spears, Superintendent.

Waynesburg Mine No. 1 is located near Lonaconing and is working the Waynesburg or Koontz seam of coal, lying about 125 feet above Tyson No. 1, and is the only operation working this seam of coal. It is a drift opening. The ventilation is produced by furnace and air conditions are good. The product is hauled by horses over a short tram road to head of a plane, then lowered to head of the Tyson No. 1 plane, then lowered to a separate tipple that is arranged separately to ship Waynesburg, Tyson and Big Vein coal. During the year they employed 12 persons and worked 70 days and produced 6,955 tons of coal.

MIDLAND MINING COMPANY.

J. W. P. Somerville, Superintendent.

John Askey, Mine Foreman.

Neff Run Mine is located near Midland and ships over the Neff Run Branch of the Cumberland and Pennsylvania Railroad. It is a drift opening, working the Pittsburg or Big Vein seam of coal. Ventilation is by natural means and is generally good, air holes being driven to the surface. During the year they employed 51 persons and worked 286 days producing 52,878 tons of coal.

MOSCOW AND GEORGE'S CREEK COAL COMPANY.

J. W. P. Somerville, Superintendent. Edward R. Brennan, Mine Foreman.

Moscow Mine No. 2 is located on the west side of the George's Creek, near Barton, working the Pittsburg or Big Vein seam of coal. Ventilation is by natural means, air holes being driven to the surface. During the year they only worked a few men and produced 2,998 tons of coal.

MOSCOW AND GEORGE'S CREEK COAL COMPANY.

J. W. P. Somerville, Superintendent. Edward R. Brennan, Mine Foreman.

Moscow No. 3 Mine is located near Barton, working the Bakerstown or Barton four-foot seam of coal, and ships over the Cumberland and Pennsylvania Railroad. The mine is a drift opening and is very flat, as a result they are troubled with water. Ventilation is produced by electric fans. During the year they employed 39 persons and worked 282 days, producing 16,200 tons of coal.

SULLIVAN BROS. COAL COMPANY.

John A. Sullivan, Superintendent. Dennis Sullivan, Mine Foreman.

Sullivan-Tyson Mine is located near Eckhart and is working the Upper Sewickley or Tyson seam of coal and ships over the Eckhart Branch of the Cumberland and Pennsylvania Railroad. It is opened up on the double entry system and the ventilation is produced by a 10-foot gas fan. Air is distributed throughout the mine in a satisfactory manner. The drainage is good. The coal is gathered in the interior by mules to the side "lyes" and hauled from there to head of plane with wireless motor. During the year they employed 68 persons and worked 280 days, producing 61,525 tons of coal.

CUMBERLAND AND GEORGE'S CREEK COAL COMPANY.

Thomas S. Harris, Superintendent.

Penn Mine Nos. 1, 2, 3 and 4 is located on the west side of the George's Creek, near Franklin, and is working the Bakerstown or Barton four-foot seam of coal. Ventilation is produced by a large steam fan and is well distributed throughout the mine. Mule haulage. There are four drift openings to this mine. This property should eventually make a big operation in this section. It only wants a little push to make a success of it, as it has never been opened up as originally intended. There are lots of near coal on the property and a big tonnage could be gotten out if all veins are worked, which are principally above water level. They have the very best of siding facilities for handling coal and have sufficient timber for mining purposes. It was originally intended to make a mine of each of the four seams. Some one will take this property and work it and show it up as it should be. During the year they employed 12 men and worked 20 days, producing 6,158 tons of coal.

CHAPMAN COAL MINING COMPANY.

John D. Frenzel, Superintendent and Mine Foreman.

Swanton Mine is located on the west side of the George's Creek in the town of Barton. They are working the Bakerstown or Barton four-foot seam of coal. Ventilation is produced by a gas fan and air conditions are generally found good. Mule haulage. During the year they employed 93 persons and worked 170 days, producing 46,555 tons of coal.

AMERICAN COAL COMPANY.

J. T. Dobbie, Superintendent.

William Russell, Mine Foreman.

Caledonia Mines of the American Coal Company are operating a series of openings in the Pittsburg or Big Vein and Tyson seams of coal. The mines are situated on the west side of the George's Creek along the main line of the Cumberland and Pennsylvania Railroad at Barton. The last stumps of Big Vein was taken out on August 11, 1913. There are five Tyson openings and ventilation is by natural means. During the year they employed 51 persons and worked 198 days, producing 44,412 tons of coal.

BARTON AND GEORGE'S CREEK VALLEY COAL COMPANY.

Howard Hitchens, Superintendent.

Harry Hitchens, Mine Foreman.

Robert Duncan, Assistant Foreman.

Carlos Mines are located on the terminus of the Carlos Branch of the Cumberland and Pennsylvania Railroad. It is a slope opening working the Pittsburg or Big Vein seam of coal. Ventilation is produced by a large steam fan and air conditions are very good. Drainage is through Consol No. 1 Mine of the Consolidated Coal Company, which empties into the drainage tunnel. During the year they employed 86 persons and worked 288½ days, producing 86,427 tons of coal.

PHOENIX COAL MINING COMPANY.

John Rankin, Superintendent.

Earnest Schell, Mine Foreman.

Elkhart mine is located on the west side of the George's Creek, near Reynolds, and is a drift opening working the Bakerstown or Barton four-foot. The coal is hauled by mules and wireless motor to head of plane, then lowered to dump and shipped over the Cumberland and Pennsylvania Railroad. It is ventilated by furnace and air conditions are bad. This is the only company in Maryland that is manufacturing briquettes. During the year they employed 79 persons and worked 220 days, producing 60,749 tons of coal.

DAVIS COAL AND COKE COMPANY.

O. Tibbets, Superintendent.

Harry Wilson, Mine Foreman.

Buxton No. 17 is located near Bloomington and while the coal is mined in Allegany County it is dumped in Garrett and shipped on the Western Maryland Railroad. It is a drift opening working in the Davis six-foot. Ventilation is produced by a large steam fan and ventilation is always found good. During the year they only employed 10 persons and worked 50 days, producing 10,924 tons of coal. This mine was worked out and quit work on March 18, 1913.

BARTON COAL MINING COMPANY.

Oscar Batdorff, Superintendent.

Moscow No. 1 Mine is situated on the east side of the George's Creek on the main line of the Cumberland and Pennsylvania Railroad at Reynolds. Ventilation is produced by a steam fan and ventilation conditions are generally good. It is a drift opening working the Lower Freeport seam of coal. During the year 1913 they employed 23 persons and worked 58 days, producing 2,800 tons of coal.

PIEDMONT COAL COMPANY.

John W. Fitzpatrick, Superintendent.

Patrick Green, Mine Foreman.

Pekin No. 1 Mine is located on the west side of the George's Creek at Pekin and is a drift opening working the Pittsburg or Big Vein seam of coal. The coal is hauled from the mine by a small locomotive over a tram road to the head of a long plane over which the coal is lowered and dumped into railroad cars and shipped over the Cumberland and Pennsylvania Railroad. Ventilation is by natural means and at times conditions are poor. During the year 1913 they employed 13 persons and worked 250 days, producing 4,620 tons of coal. The coal is owned by the Piedmont Mining Company who are the selling agents.

THE ALLEGANY COAL COMPANY.

Edwin J. Roberts, Superintendent.

John Jones, Mine Foreman.

Tacoma No. 1 Mine is located on the west side of the George's Creek and is a drift opening working in the Lower Kittanning or Davis six-foot seam of coal. Ventilation is by furnace and is generally good as there are several openings to assist the furnace. The coal is hauled by mules to the tippie and shipped over the Cumberland and Pennsylvania Railroad. During the year they employed 56 persons and worked 246 days, producing 28,998 tons of coal.

STANTON GEORGE'S CREEK COAL COMPANY.

John Kemp, Superintendent and Mine Foreman.

Stanton Mine is located on the west side of the Braddock's Run, one mile south of Clarysville, along the old National Road. It is a drift opening

working the Kittanning seam of coal. The coal is gathered in the interior by mules and hauled by tail rope to surface, then it is lowered by a plane to the tippie and shipped over the Eckhart Branch of the Cumberland and Pennsylvania Railroad. It is ventilated by a large steam fan and air conditions are very good. During the year they employed 40 persons and worked 145 days, producing 16,281 tons of coal.

REED COAL AND COKE COMPANY.

William C. Reed, President and General Manager.
J. A. Whitfield, Superintendent.

The Reed Coal and Coke Company, formerly the Bowery Coal Co., is located at Midlothian, about two miles west of Frostburg, is operating the Big Vein and Tyson seams of coal. There is only a few men working in the Big Vein as it is an old working in abandoned coal. Tyson No. 2 Mine is located a short distance above the Big Vein. Ventilation is by furnace. Mule haulage. This mine only worked a short time during the year 1913 and employed a few men. 600 tons were reported.

MARYLAND COAL AND IRON COMPANY.

William H. Morgan, Superintendent.

Mine No. 1 of the Maryland Coal and Iron Co. is situated at George's Creek station on the main line of the Cumberland and Pennsylvania Railroad near Barrellsville. It is a drift opening working the Bluebaugh seam of coal. Mule and gasoline motor haulage. Ventilation is produced by a large gas fan. During the year 1913 they employed 60 persons and worked 90 days, producing 10,000 tons of coal. This mine went into the hands of receivers on April 19, 1913.

FRANKLIN COAL COMPANY.

John M. Fahey, Superintendent.

George W. Gales, Mine Foreman.

Franklin Mine No. 1 is located near Westernport and is a drift opening working the Clarion or Parker seam of coal. Ventilation is produced by a large steam fan and air conditions have always been found good. Mule haulage. The product is shipped over the Cumberland and Pennsylvania Railroad and is capable of producing a large daily output. This company went into the hands of receivers in April, 1913.

POTOMAC COAL COMPANY.

P. H. Gallagher, Superintendent.

Potomac Mine is located one mile east of Barton. There are four drift openings working the Barton four-foot seam of coal. The ventilation is produced by a large steam-driven fan and ventilation is always good. The coal is hauled out of the mines by mules to the tippie and dumped into large mine cars and hauled over a tram road by a small locomotive, then

dumped into railroad cars and shipped over the Cumberland and Pennsylvania Railroad. This mine has not worked during the year.

CUMBERLAND BASIN COAL COMPANY.

The Cumberland Basin Coal Company Mines Parker and Bond are situated near Barrellsville in the northeastern section of the region. This company has two openings in the lower coal measures known as the Brookville and Clarion. These mines are equipped with all modern mining machinery and under proper management they could be operated at a profit to the owners and would be a benefit to the locality where they are located. Operations were suspended in January, 1912.

MARYLAND AND GEORGE'S CREEK COAL COMPANY.

Thomas Foster, Superintendent.

Charles Poisel, Mine Foreman.

Mertens Nos. 1 and 2 Mines are situated a few miles east of Frostburg, near Vale Summit, and ships over the George's Creek and Cumberland Railroad. The coal seams worked here are the Lower Kittanning or Davis six-foot and the Parker. The main heading is driven through the Davis Mountain. It is the only operation working the Davis six-foot in the upper end of the George's Creek Basin. Ventilation is produced by a large fan run by compressed air and is good. During the year they employed 13 persons and worked 150 days, producing 12,900 tons of coal.

Description of Mines in Garrett County.

BLAINE MINING COMPANY.

James G. Boyd, Superintendent.

George L. Campbell, Mine Foreman.

George Boyd, Engineer and Assistant Foreman.

Mines Nos. 1 and 2 are drift openings connected together on the west side of the Potomac River at Potomac Manor and are working the Lower Kittanning or Davis six-foot seam of coal. It is the largest operation in Garrett County in point of production and number of men employed. During the year ending December 31, 1913; this company employed 122 persons, worked 268 days and produced 174,013 tons of coal. Ventilation is produced by a large 12-foot steam fan and is good. No expense is being spared to meet the requirements of the law and keep the mines in a safe and healthful condition. The coal is hauled from the interior by electric motors and then taken by a small locomotive over a tram road to the head of the plane where it is lowered to the tippie and shipped over the Western Maryland Railroad.

HAMILL COAL AND COKE COMPANY.

R. A. Smith, Superintendent.

W. D. Walker, Mine Foreman.

Hamill Mines Nos. 1 and 2 are located about one mile below Blaine, W. Va., on the north side of the Potomac River, and are drift openings

LIST OF EXECUTIVE MINE OFFICIALS OF ALLEGANY AND GARRETT COUNTIES.

Name of Company.	Superintendent's Name and Address.	Name of Foreman.	Name of Mine	No. of Openings.	Coal Seam Developed.		Where Located.	Owner of Land Being Worked.	Transportation.
					Geological Names.	Local Names.			
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Thos. McFarland.	Mine No. 1	2	Pittsburgh	Big Vein	Ocean	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Douglas Shaw	Mine No. 2	2	Lower Sewickley	Tyson	Carlos Junction.	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Wm. Sleeman.	Mine No. 3	3	Pittsburgh	Big Vein	Hoffman	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Jas. Weston.	Mine No. 4	1	Pittsburgh	Big Vein	Eckhart	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Robt. L. Edwards.	Mine No. 5	2	Upper Sewickley	Tyson	Midland	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Jenkin Daniels.	Mine No. 6	2	Upper Sewickley	Tyson	Lord	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Jenkin Daniels.	Mine No. 7	3	Pittsburgh	Big Vein	Lord	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Wm. H. R. Thomas.	Mine No. 8	1	Pittsburgh	Big Vein	Midland	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Edward Jenkins.	Mine No. 9	3	Upper Sewickley	Tyson	Allegany	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Frank Myers.	Mine No. 10	1	Upper Sewickley	Tyson	Pumping Shaft.	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Eugene Layman.	Mine No. 11	2	Upper Sewickley	Tyson	Borden Shaft.	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Alex. Neal.	Mine No. 12	2	Pittsburgh	Big Vein	Borden Shaft.	Consolidation Coal Co.	C. & P. R. R.
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	John Bahan.	Mine No. 13	3	Pittsburgh	Big Vein	Frostburg	Consolidation Coal Co.	C. & P. R. R.
Piedmont & George's Creek Coal Co.	John S. Brophy, Frostburg, Md.	Iartin Condry	Mine No. 1	2	Pittsburgh	Big Vein	Eckhart	Piedmont & George's Creek Coal Co.	C. & P. R. R.
Piedmont & George's Creek Coal Co.	John S. Brophy, Frostburg, Md.	Wm. Hines and Oscar Huber.	Mine No. 2	3	Upper Sewickley	Tyson	Eckhart	Piedmont & George's Creek Coal Co.	C. & P. R. R.
Piedmont & George's Creek Coal Co.	John S. Brophy, Frostburg, Md.	E. F. Lambert.	Mine No. 3	1	Lower Kittanning	Davis 6-ft.	Franklin	Piedmont & George's Creek Coal Co.	C. & P. R. R.
Piedmont & George's Creek Coal Co.	John S. Brophy, Frostburg, Md.	Charles Gentry.	Mine No. 4	1	Lower Kittanning	Davis 6-ft.	Franklin	Piedmont & George's Creek Coal Co.	C. & P. R. R.
Piedmont & George's Creek Coal Co.	John S. Brophy, Frostburg, Md.	Matt O'Rourke.	Mine No. 5	4	Bakerstown	Barton 4-ft.	Franklin	Piedmont & George's Creek Coal Co.	C. & P. R. R.
New York Mining Co.	Wm. L. Hamilton, Mt. Savage, Md.	Joseph Finzel.	Mine No. 1	2	Pittsburgh	Big Vein	Allegany	New York Mining Co.	C. & P. R. R.
New York Mining Co.	Wm. L. Hamilton, Mt. Savage, Md.	Joseph Finzel.	Mine No. 1	2	Upper Sewickley	Tyson	Allegany	New York Mining Co.	C. & P. R. R.
New York Mining Co.	Wm. L. Hamilton, Mt. Savage, Md.	John Tippen.	Union No. 2	2	Pittsburgh	Big Vein	Allegany	New York Mining Co.	C. & P. R. R.
Union Mining Co.	Wm. L. Hamilton, Mt. Savage, Md.	James Aldon.	Union	3	Pittsburgh	Big Vein	Allegany	Union Mining Co.	C. & P. R. R.
George's Creek Coal Co., Inc.	John R. Hamilton, Lonaconing, Md.	Douglas Somerville.	Mine No. 1	2	Upper Sewickley	Tyson	Lonaconing	George's Creek Coal Co., Inc.	G. C. & C. R. R.
George's Creek Coal Co., Inc.	John R. Hamilton, Lonaconing, Md.	Nathaniel Somerville.	Mine No. 1	2	Pittsburgh	Big Vein	Lonaconing	George's Creek Coal Co., Inc.	G. C. & C. R. R.
George's Creek Coal Co., Inc.	John R. Hamilton, Lonaconing, Md.	David Dunn.	Mine No. 2	2	Upper Sewickley	Big Vein	Lonaconing	George's Creek Coal Co., Inc.	G. C. & C. R. R.
George's Creek Coal Co., Inc.	John R. Hamilton, Lonaconing, Md.	Nathaniel Somerville.	Mine No. 3	1	Upper Sewickley	Tyson	Lonaconing	George's Creek Coal Co., Inc.	G. C. & C. R. R.
George's Creek Coal Co., Inc.	John R. Hamilton, Lonaconing, Md.	Nathaniel Somerville.	Mine No. 4	1	Upper Sewickley	Tyson	Lonaconing	George's Creek Coal Co., Inc.	G. C. & C. R. R.
George's Creek Coal Co., Inc.	John R. Hamilton, Lonaconing, Md.	William Abbott.	Mine No. 12	1	Pittsburgh	Big Vein	Lonaconing	George's Creek Coal Co., Inc.	G. C. & C. R. R.
George's Creek Coal Co., Inc.	John R. Hamilton, Lonaconing, Md.	David Dunn.	Mine No. 13	1	Pittsburgh	Big Vein	Lonaconing	George's Creek Coal Co., Inc.	G. C. & C. R. R.
Maryland Coal Co.	Richard Spear, Lonaconing, Md.	Richard Spear	Mine No. 9 and 12	2	Pittsburgh	Big Vein	Lonaconing	Maryland Coal Co.	G. C. & C. R. R.
Maryland Coal Co.	Richard Spear, Lonaconing, Md.	Thomas Foster	Mine No. 1	1	Upper Sewickley	Tyson	Lonaconing	Maryland Coal Co.	G. C. & C. R. R.
Maryland Coal Co.	Richard Spear, Lonaconing, Md.	Richard Spear	Mine No. 2	1	Upper Sewickley	Tyson	Lonaconing	Maryland Coal Co.	G. C. & C. R. R.
Maryland Coal Co.	Richard Spear, Lonaconing, Md.	Richard Spear	Mine No. 1	1	Waynesburg	Koontz	Lonaconing	Maryland Coal Co.	G. C. & C. R. R.
Midland Mining Co.	J. W. P. Somerville, Lonaconing, Md.	John S. Askey.	Enterprise	2	Pittsburgh	Big Vein	Midland	Midland Mining Co.	C. & P. R. R.
Midland Mining Co.	J. W. P. Somerville, Lonaconing, Md.	John S. Askey.	Nef Run	2	Pittsburgh	Big Vein	Midland	Midland Mining Co.	C. & P. R. R.
Midland Mining Co.	J. W. P. Somerville, Lonaconing, Md.	F. Stowell.	Trimble	1	Pittsburgh	Big Vein	Morantown	Midland Mining Co.	C. & P. R. R.
American Coal Co.	Jno. T. Dobbie, Lonaconing, Md.	William Russell.	Caledonia	4	Upper Sewickley	Tyson	Barton	American Coal Co.	C. & P. R. R.
American Coal Co.	Jno. T. Dobbie, Lonaconing, Md.	William Russell.	Caledonia	1	Pittsburgh	Big Vein	Barton	American Coal Co.	C. & P. R. R.
Franklin Coal Co.	John M. Fahey, Westernport, Md.	George W. Maies.	Faheys	1	Clarion	Parker	Franklin	Franklin Coal Co.	C. & P. R. R.
Maryland Coal & Iron Co.	W. H. Morgan, Barreilville, Md.	John Layman.	Trotter Run	1	Brookville	Bluebaugh	George's Creek	Maryland Coal & Iron Co.	C. & P. R. R.
Davis Coal & Coke Co.	O. Tibbets, Beryl, W. Va.	Harry Wilson.	Buxton	1	Lower Kittanning	Davis 6-ft.	Bloomington	Davis Coal & Coke Co.	W. M. R. R.
Cumberland-George's Creek Coal Co.	Thos. Harris, Piedmont, W. Va.	Thomas Harris.	Penn. 1 and 2	3	Bakerstown	Barton 4-ft.	Franklin	George's Creek Coal Co.	C. & P. R. R.
Phoenix & George's Creek Coal Co.	John Rankin, Piedmont, W. Va.	Ernest Schell.	Elkhart	2	Bakerstown	Barton 4-ft.	Reynolds	Phoenix & George's Creek Coal Co.	C. & P. R. R.
Moscow & George's Creek Coal Co.	J. W. P. Somerville, Cumberland, Md.	Edward Brannon.	Moscow No. 3	2	Pittsburgh and Bakerstown	Big Vein & Barton 4	Barton	A. B. Shaw	C. & P. R. R.
Maryland-George's Coal Co.	H. F. Mertens, Cumberland, Md.	A. E. Thomas.	Mertens	2	Lower Kittanning	Parker & Davis 6-ft.	Vale Summit	Maryland-George's Coal Co.	C. & P. R. R.
Piedmont Coal Co.	John W. Fitzpatrick, Pekin, Md.	Pekin	Pekin	1	Pittsburgh	Big Vein	Pekin	Piedmont Coal Co.	C. & P. R. R.
New Central Coal Co.	Duncan Sinclair, Fairmont, W. Va.	Joseph Todd.	Koontz No. 2	2	Upper Sewickley	Tyson	Lonaconing	New Central Coal Co.	G. C. & C. R. R.
New Central Coal Co.	Duncan Sinclair, Fairmont, W. Va.	Robert Merbaugh.	Big Vein 1	1	Pittsburgh	Big Vein	Lonaconing	New Central Coal Co.	G. C. & C. R. R.
New Central Coal Co.	Duncan Sinclair, Fairmont, W. Va.	Robert Merbaugh.	Koontz	1	Upper Sewickley	Tyson	Lonaconing	New Central Coal Co.	G. C. & C. R. R.
Barton & G. C. Valley Coal Co.	Howard Hitchins, Frostburg, Md.	Harry Hitchins.	Carlos	2	Pittsburgh	Big Vein	Carlos	Consolidation Coal Co.	C. & P. R. R.
Chapman Coal Co.	John Frenzel, Barton, Md.	John D. Frenzel.	Swanton	2	Upper Sewickley and Bakerstown	Davis 6-ft., Barton	Barton	Chapman Coal Co.	C. & P. R. R.
Sullivan Brothers Coal Co.	John Sullivan, Eckhart, Md.	Dennis Sullivan.	Sullivan	2	Upper Sewickley	Tyson	Eckhart	Chapman Coal Co.	C. & P. R. R.
Bowery Coal Co.	Charles G. Watson, Frostburg, Md.	J. A. Whitfield.	Big Vein	1	Pittsburgh	Big Vein	Midlothian	Bowery Coal Co.	C. & P. R. R.
Bowery Coal Co.	Charles G. Watson, Frostburg, Md.	Benjamin Robertson.	Bowery	1	Upper Sewickley	Tyson	Midlothian	Bowery Coal Co.	C. & P. R. R.
Masco Iron Co.	Oscar Batdorff, Barton, Md.	Edward Clark.	Masco No. 1	2	Upper Freeport	Thomas 3-ft.	Reynolds	Masco Iron Co.	C. & P. R. R.
Allegany Coal Co.	E. J. Roberts, Westernport, Md.	E. J. Roberts.	Tacoma	1	Lower Kittanning	Davis 6-ft.	Westernport	Piedmont & George's Creek Coal Co.	C. & P. R. R.

FIRE-CLAY MINES.

Savage Mountain Fire Brick Co.	John L. Caldwell, Frostburg, Md.	Charles Wolf.	No. 5	1	Fire Clay		Frostburg	Savage Mountain Fire Brick Co.	C. & P. R. R.
Union Mining Co.	W. L. Hamilton, Mt. Savage, Md.	Joseph Jenkins.	No. 5, 6, 7, 8	4	Fire Clay		Mt. Savage	Union Mining Co.	C. & P. R. R.
Big Savage Fire Brick Co.	Davison Armstrong, Frostburg, Md.	Albert Klenck.	No. 1 and 2	2	Fire Clay		Allegany	Big Savage Fire Brick Co.	C. & P. R. R.
Andrew Ramsay Co.	David Williamson, Mt. Savage, Md.	David Williamson.	No. 1	1	Fire Clay		Ellerslie	Andrew Ramsay Co.	B. & O. R. R.

LIST OF EXECUTIVE MINE OFFICIALS FOR GARRETT COUNTY.

Blaine Mining Co.	Jas. G. Boyd, Potomac Manor, W. Va.	Geo. L. Campbell.	No. 1 and 2	2	Lower Kittanning	Davis 6-ft.	Potomac Manor	Blaine Mining Co.	W. M. R. R.
Chaffee Mining Co.	Sheridan Stottlemeyer, Chaffee.	Rutherford Stottlemeyer.	Chaffee	2	Lower Kittanning	Davis 6-ft.	Chaffee	Chaffee Mining Co.	W. M. R. R.
Garrett County Coal Mining Co.	Geo. C. McFarlane, Barnum, W. Va.	H. B. Kight.	Dodson 1 and 4	2	Lower Kittanning	Davis 6-ft.	Dodson	Garrett County Coal Mining Co.	W. M. R. R.
Monroe Coal Mining Co.	Geo. C. McFarlane, Barnum, W. Va.	L. R. Kight.	Elk Run No. 1 and 3	2	Lower Kittanning	Barton 4-ft.	Barnum	Monroe Coal Mining Co.	W. M. R. R.
Pattison Coal Co.	Carroll Pattison, Bloomington, Md.	Carroll Pattison.	Pattison No. 1 and 2.	2	Bakerstown and Kittanning	Barton 4-ft.	Bloomington	Pattison Coal Co.	B. & O. R. R.
Bloomington Coal Co.	E. R. Brydon, Bloomington, Md.	Chas. Brendling.	Empire No. 1 and 2.	2	Lower Kittanning	Davis 6-ft.	Bloomington	Pottomac Valley Coal Co.	B. & O. R. R.
Potomac Valley Coal Co.	D. P. Purcell, Kitzmiller, Md.	F. J. Bell.	Peerless	3	Upper Freeport	Thomas	Kitzmilller	Potomac Valley Coal Co.	W. M. R. R.
Hamill Coal & Coke Co.	R. A. Smith, Blaine, W. Va.	W. D. Walker.	Hamill No. 1 and 2	2	Lower Kittanning	Davis 6-ft.	Deal	Hamill Coal & Coke Co.	W. M. R. R.
S. H. Jordan.	J. T. Jordan, Keyser, W. Va.	J. T. Jordan.	Deal	1	Upper Freeport	Thomas	Deal	S. H. Jordan.	W. M. R. R.
Frank Christopher.	Frank Christopher.	Frank Christopher.	Stoyer	1	Upper Freeport	Thomas	Stoyer	Barnard Coal Co.	W. M. R. R.
Cutchall & Gates Coal Co.	J. C. Chenowith, Bayard, W. Va.	J. C. Chenowith.	Netakin	1	Upper Freeport	Thomas	Bayard	Cutchall & Gates Coal Co.	W. M. R. R.

LIST OF LOCAL DEALERS IN ALLEGANY COUNTY.

Frostburg Fuel Co.	Jno. E. Taylor, Frostburg, Md.	James E. Crupp.	Tyson No. 2	1	Upper Sewickley	Tyson	Frostburg	Consolidation Coal Co.	
Big Savage Fire Brick Co.	D. A. Armstrong, Frostburg, Md.	Albert Klenck.	Big Savage No. 1	1	Freeport	Thomas	Allegany	Big Savage Fire Brick Co.	
Brailer Coal Co.	David Brailer, Mt. Savage, Md.	David Brailer.	Bald Knob	1	Pittsburgh	Big Vein	Mt. Savage	Brailer Coal Co.	
Samuel H. Smith.	S. H. Smith, Midlothian, Md.	S. H. Smith.	Smith	1	Pittsburgh	Big Vein	Midlothian	New York Central Coal Co.	
Solomon Brode.	Solomon Brode, Frostburg, Md.	Solomon Brode.	Brode	1	Pittsburgh	Big Vein	Frostburg	New York Mining Co.	
Michael Barnard.	Michael Barnard, Eckhart, Md.	Michael Barnard.	No. 1	1	Pittsburgh	Big Vein	Eckhart	New York Mining Co.	
Jacob Miller.	Jacob Miller, Lonaconing, Md.	J. H. Miller.	No. 1	1	Pittsburgh	Big Vein	Eckhart	New York Mining Co.	
William Anderson.	Wm. Anderson, Lonaconing, Md.	William Anderson.	Detmold	1	Pittsburgh	Big Vein	Lonaconing	American Coal Co.	
William S. Barnes & Son.	Wm. S. Barnes, Midlothian, Md.	William Barnes.	No. 1	1	Pittsburgh	Big Vein	Lonaconing	American Coal Co.	
Borden Fuel Mines.	Robert Griffith, Frostburg, Md.	Robert Griffith.	No. 1	1	Pittsburgh	Big Vein	Midlothian	New York Mining Co.	
Harvey Mining Co.	William Harvey, Frostburg, Md.	Robert Harvey.	Reynolds	1	Upper Freeport	Thomas 3-ft.	Reynolds	New York Mining Co.	
Green Mining Co.	J. O. J. Greene, Westernport, Md.	J. O. J. Greene.	Green	1	Lower Kittanning	Davis 6-ft.	Westernport		
Daniel Stewart Mining Co.	Daniel Stewart, Westernport, Md.	Daniel Stewart.	Stewart	1	Lower Kittanning	Davis 6-ft.	Westernport		

working the Lower Kittanning or Davis six-foot seam of coal. The ventilation is distributed by a 12-foot gas fan and is good. The coal is mined by pick and hauled to the surface by mules and dumped into a large storage bin, and there loaded into two large aerial tramway buckets and conveyed across the Potomac River a distance of 900 feet to the railroad tipple, and shipped over the Western Maryland Railroad. During the year ending December 31, 1913, they employed 110 persons and worked 275 days, producing 115,000 tons of coal.

GARRETT COUNTY COAL AND MINING COMPANY.

George C. McFarland, Superintendent.
Howard B. Kight, Mine Foreman. Charles H. Jones, Assistant Foreman.

Dodson Nos. 1, 3 and 5 are located at Dodson on the northwest side of the Potomac River and are drift openings working the Upper and Lower Kittannings. During the year ending December 31, 1913, they employed 124 persons and worked 275 days, producing 106,932 tons of coal. This mine is ventilated by a 14-foot steam fan and is worked on the double entry system. During each visit I have found the ventilation conditions satisfactory. During the year 2,900 feet of track were constructed to Nos. 3 and 5 Mines. No. 5 was opened and developed and is the only opening working in the Upper Kittanning. The area of this seam is unknown on account of faults. A fan and boiler were installed at No. 3 Mine and a seven-ton gasoline motor. A new tipple was built and installed with a 50 horse-power gas engine and shaker screens and picking table to facilitate cleaning the coal. Openings Nos. 2 and 4 were abandoned during the year.

MONROE COAL MINING COMPANY.

George C. McFarlane, Superintendent. L. R. Kight, Mine Foreman.

Elk Run Mine No. 1 is located at Barnum on the northeast side of the Potomac River and is a drift opening working the Lower Kittanning or Davis six-foot seam of coal. The mine is ventilated. Ventilation is produced by a large steam fan and the air is well distributed throughout the mine. The coal is mined by pick and is gathered in the interior by mules to the side tracks, and from there it is hauled by gasoline motor to the tipple and loaded into railroad cars and shipped over the Western Maryland Railroad. Mine No. 3 is located directly above No. 1 and is working the Barton four-foot or Bakerstown seam of coal, and is a drift opening. It is reached by a long plane over which the coal is lowered to the tipple at No. 1. The coal is mined by pick and ventilation conditions are good. All others conditions fully comply to the law. During the year they employed 77 persons and worked 279 days, producing 61,934 tons of coal.

POTOMAC VALLEY COAL COMPANY.

D. T. Purcell, Superintendent. Joseph P. Tewson, Mine Foreman.

Peerless Mine No. 1 is located about one mile north of Blaine, W. Va., on the northwest side of the Potomac River. The coal is mined in Maryland and the weigh scales and dump are situated in West Virginia and is shipped on the Western Maryland Railroad. There are three drift openings work-

ing in Upper Freeport seam of coal. Ventilation is produced by a large gas fan and the ventilation conditions are good. The coal is gathered to the side "lyes" with mules and hauled to the surface by gasoline motors. During the year they employed 88 persons and produced 86,400 tons of coal.

CHAFFEE COAL COMPANY.

Sheridan Stottlemeyer, Supt. Rutherford Stottlemeyer, Mine Foreman.

Chaffee Mine is located on the northwest side of the Potomac River, two and one-half miles from the Chaffee station, on the main line of the Western Maryland Railroad, and is a drift opening working the Lower Kittanning or Davis six-foot. It is worked on the double entry system with fan ventilation. The coal is mined by pick and hauled by mules to side "lyes" and taken to head of plane with gasoline motors. From there it is lowered to a new tippie equipped with link belt picking table and dumped into large railroad cars and hauled to the main line of the Western Maryland Railroad by a small locomotive. During the year they employed 87 persons and worked 100 days, producing 38,430 tons of coal. Each visit to this mine has found conditions satisfactory.

PATTISON COAL COMPANY.

Carroll Pattison, Superintendent. H. L. Kline, Mine Foreman.
Garland Howard, Assistant Foreman.

Pattison Mines Nos. 1 and 2 are located about one mile west of Bloomington, on the main line of the Baltimore and Ohio Railroad, and are drift openings working the Lower Kittanning and the Bakerstown-seams of coal. No. 1 Mine is ventilated by a 12-foot fan and is generally good. The return air from this mine furnishes ventilation for the Brydon Mine of the Bloomington Coal Company, which openings serve as an outlet. No. 2 opening is located above No. 1 and is reached by a long plane and tram road over which the coal is taken to the tippie and shipped over the Baltimore and Ohio Railroad. Ventilation is by natural means. Only a small number of miners are employed in this opening. During the year they employed 45 persons and worked 220 days, producing 30,434 tons of coal.

BLOOMINGTON COAL COMPANY.

E. Richard Brydon, Superintendent. Charles P. Brendlen, Mine Foreman.

Bloomington Mines are located near Bloomington, on the main line of the Baltimore and Ohio Railroad, and is a drift opening working the Lower Kittanning or Davis six-foot seam of coal. This mine is ventilated by a fan located at the Pattison Mine and is generally good. The coal is gathered from the interior by mules and ponies and hauled over a tram road to the tippie and shipped over the Baltimore and Ohio Railroad. During the year they employed 39 persons and worked 295 days, producing 32,754 tons of coal.

L. H. JORDON COAL COMPANY.

John Clark Jordon, Superintendent.

Jordon Mine is situated about two and one-half miles west of Branard, on the main line of the Western Maryland Railroad, and is a slope working the Upper Freeport seam of coal. The mine is reached by a tram road over which the coal is lowered to the tipple by a stationary engine. This operation is not very extensive and does not come under the mining laws. During the year they only employed seven persons and produced 5,500 tons of coal.

AJAX CONSOLIDATED COAL COMPANY.

William J. Woods, Superintendent.

The Ajax Mine, known as the Upper Potomac, is located at Hubbard, on the main line of the Western Maryland Railroad. The coal seam worked is the Lower Kittanning or Davis six-foot and is reached by a long incline plane from the head of which a tram road leads to the mine over which a small locomotive hauls the coal. The ventilation is by a steam fan. During the year 1913 this mine worked a short time and employed a small number of men and does not come under the mining laws.

CUTCHALL AND GATES COAL COMPANY.

J. E. Cutchall, Superintendent.

Nethkin Mine is located near Bayard, W. Va., on the main line of the Western Maryland Railroad. It is a drift opening working the Upper Freeport seam of coal. This mine worked very little during the year. The only coal mined was for local consumption in the town of Bayard, W. Va.

Clay and Fire-Clay Mines in Allegany County.**UNION MINING COMPANY FIRE-CLAY MINES.**

William L. Hamilton, Superintendent. Joseph Jenkins, Mine Foreman.

The Union Mining Company Fire Clay Mines are located about four miles west of Mt. Savage on the Savage Mountain. They are operating four mines. The clay at these mines is loaded into small cars in the interior and gathered by mules and taken to the surface where it is hauled by a small locomotive a distance of one mile, the head of a long plane, then lowered a distance of one mile by gravity, then hauled by a small locomotive a distance of two miles to the yards in Mt. Savage where it is prepared into all kinds of bricks for the market. During the year 1913 they employed 86 persons and worked 265 days, producing 55,068 tons of clay. Ventilation is by natural means, air holes being driven to the surface in drifts Nos. 7 and 8 and is generally good. Drifts Nos. 5 and 6 are ventilated by a fan stationed at No. 6. A new dump was erected at No. 5.

SAVAGE MOUNTAIN FIRE-BRICK COMPANY.

John A. Caldwell, Superintendent.

Charles Wolf, Mine Foreman.

The Savage Mountain Fire-Brick Mine is located about three miles northwest of Frostburg. The clay is gathered in the interior by mules and hauled to the surface. From the mines it is hauled over a tram road by horses to a large storage dump, and from there it is transported down the National Pike in large wagons to their brick yards at Frostburg where it is prepared for market. The yards are located east of Frostburg, along the main line of the Cumberland and Pennsylvania Railroad. Ventilation is by natural means, air holes being driven to the surface. New air courses were driven and conditions are good. A new tiple has been erected. During the year ending December 31, 1913, they employed 19 persons and worked 320 days, producing 12,800 tons of clay.

BIG SAVAGE FIRE-BRICK COMPANY.

Albert Klink, Superintendent.

Harry Larue, Mine Foreman.

The Big Savage Fire-Brick Mines are located on the Big Savage Mountain, about three miles northwest of Frostburg. The clay is gathered in the interior by mules and taken to the head of a plane over which the clay is lowered to a large storage dump and loaded into large cars, then conveyed down the mountain a distance of two and one-half miles by a stationary engine to the brick yards at Allegany, on the main line of the Cumberland and Pennsylvania Railroad. Ventilation is by natural means. During the year they employed 25 persons and worked 300 days, producing 10,500 tons of clay.

ANDREW RAMSEY CORPORATION.

Andrew Ramsay, General Manager, Mount Savage, Md.

The Andrew Ramsay Mines are drift openings in the fire clay, about two and one-half miles southwest of Ellerslie, where it is manufactured into all kinds of bath and toilet room equipment. The mine did very little work during the year 1913.

Local Coal Mines in Allegany County.

During the year ending December 31, 1913. The local coal mines in operation in Allegany County employed 17 persons and produced 13,396 tons of coal for domestic purposes. These mines are located in different sections of the County and each mine employs a small number of men. They do not come under the provisions of the mining laws.

SMITH MINE.

Samuel Smith, Manager.

The Smith Mine is located near Midlothian and is a drift opening working the Big Vein seam of coal. It employed two men and worked 250 days,

TABLE OF NON-FATAL ACCIDENTS FOR ALLEGANY AND GARRETT COUNTIES FOR FISCAL YEAR ENDING APRIL 30, 1914.

No.	Date.	Name of Injured.	Occupation.	Age.	Married or Single.	Days Lost.	No. in Family.	Nationality.	Residence.	Nature of Injury.	Cause of Accident.	Name of Mine.	Name of Company.
1	May 1	William E. Cain	Laborer	40	Married	30	6	American	Midland, Md.	Fingers mashed	By cars	Consolidation No. 8	Consolidation Coal Company
2	May 1	Irvin Doettner	Miner	27	Married			American	Frostburg, Md.	Arm broken, back hurt	Fall of roof coal	Consolidation No. 3	Consolidation Coal Company
3	May 2	Almeta Matello	Miner	32	Married	26		Italian	Morantown	Hand mashed	Fall of slate	Union No. 1	New York Mining Company
4	May 5	Fred Bowen	Miner	35	Married		3	American	Lonaconing, Md.	Finger mashed by fall of rock	By fall of rock	George's Creek No. 4	George's Creek Coal Company, Incorporated
5	May 5	George Filsinger	Miner	22	Married	20	3	American	Eckhart, Md.	Body and face crushed	By fall of rock	Washington No. 2	Piedmont and George's Creek Coal Company
6	May 8	John Mansley	Miner	52	Married		7	Irish	Midland, Md.	Back sprained	By motor	Consolidation No. 1	Consolidation Coal Company
7	May 13	William Patton	Miner	27	Single			American	Lonaconing, Md.	Shoulder injured	By piece of rock	George's Creek No. 1	George's Creek Coal Company, Incorporated
8	May 16	Charles Kelley	Laborer	30	Single			American	Shaft, Md.	Finger crushed	By cars	Consolidation No. 12	Consolidation Coal Company
9	May 19	Thomas Hughes	Miner	42	Married		6	Irish	Midland, Md.	Leg crushed	By car	Consolidation No. 1	Consolidation Coal Company
10	May 20	David Thomas	Miner	38	Married			American	Carlos, Md.	Finger crushed	By car	Consolidation No. 12	Consolidation Coal Company
11	May 23	Austin Duckworth	Machine-runner	22	Single	20		American	Westernport	Leg hurt	By bar of iron	Consolidation No. 7	Consolidation Coal Company
12	May 24	Paolo Castagno	Miner	34	Single	16		Italian	Eckhart	Foot hurt	By fall of rock	Washington No. 5	Piedmont and George's Creek Coal Company
13	June 1	Arthur Baker	Miner	35	Married	56	7	American	Mt. Savage, Md.	Broken ankle	By rope	Washington No. 2	Piedmont and George's Creek Coal Company
14	June 3	George Buskey	Miner	56	Married	36	6	American	Eckhart, Md.	Ribs broken	Struck with tamper bar	Union No. 1	New York Mining Company
15	June 6	Joseph Barise	Miner	23	Single			Italian	Morantown	Finger mashed	By cars	Consolidation No. 9	Consolidation Coal Company
16	June 6	David Holsinger	Driver	24	Single			American	Eckhart, Md.	Hips hurt	By cars	Consolidation No. 4	Consolidation Coal Company
17	June 7	William Strickler	Miner	24	Married	12	3	American	Westernport, Md.	Finger mashed	By car and prop.	Washington No. 3	Piedmont and George's Creek Coal Company
18	June 10	Raymond Wilson	Miner	27	Single			American	Lost Creek, W. Va.	Back broken	Fall of rock	Washington No. 5	Piedmont and George's Creek Coal Company
19	June 10	David Holmes	Miner	37	Married		5	American	Midland, Md.	Sprained back	Loading car	Consolidation No. 1	Consolidation Coal Company
20	June 20	Noel Thrasher	Brakeman	19	Single			American	Midland, Md.	Foot hurt	By cars	Consolidation No. 12	Consolidation Coal Company
21	June 24	Burt Frederick	Miner	32	Single	20		Italian	Piedmont, W. Va.	Hand bruised	By fall of rock	Washington No. 3	Piedmont and George's Creek Coal Company
22	June 25	John Condry	Miner	23	Married		3	American	Eckhart, Md.	Shoulder hurt	By fall of rock	Washington No. 2	Piedmont and George's Creek Coal Company
23	June 25	Patrick Offen	Miner	49	Married			Hungarian	Eckhart, Md.	Leg hurt	By bump of coal	Consolidation No. 4	Consolidation Coal Company
24	June 28	Stanley Chidester	Cage Boy	19	Single			American	Frostburg, Md.	Toe mashed	Between car and motor	Consolidation No. 11	Consolidation Coal Company
25	June 28	William Bennett	Miner	29	Married	33	4	American	Mt. Savage, Md.	Ankle hurt	Fall of coal	Union No. 1	New York Mining Company
26	June 18	Joseph Clark	Miner	18	Single	9		American	Frostburg, Md.	Leg hurt	By cars	George's Creek No. 3	George's Creek Coal Company, Incorporated
27	June 21	Isaac Scollick	Miner	49	Married		7	American	Lonaconing, Md.	Arm hurt	Fall of rock	Mine No. 1	Savage Mt. Firebrick Company
28	June 18	Bert Minnick	Driver	18	Single			American	Finzel, Md.	Leg hurt by cars	By cars	George's Creek No. 16	George's Creek Coal Company
29	June 11	Al Wilkison	Brakeman	28	Single			American	Lonaconing, Md.	Hand hurt	By bar of iron	Washington No. 5	Piedmont and George's Creek Coal Company
30	July 11	John Fahety	Dumpman	19	Single	17		American	Westernport, Md.	Thumb mashed	Lifting timber	Dodson No. 1	Garrett Coal and Mining Company
31	July 12	Oscar Berry	Laborer	24	Single	22		American	Westernport, Md.	Ruptured	By fall of rock and coal	Consolidation No. 3	Consolidation Coal Company
32	July 12	Jacob Crosby	Laborer	41	Single			American	Frostburg, Md.	Back and leg hurt	By fall of slate	George's Creek No. 16	George's Creek Coal Company
33	July 18	Edward Anderson	Miner	53	Married		3	American	Carlos, Md.	Hent hurt	Falling spikes	Washington No. 1	Piedmont and George's Creek Coal Company
34	July 18	Elias McKinsey	Miner	33	Married		5	American	Lonaconing, Md.	Broken leg	By fall of rock	Consolidation No. 1	Consolidation Coal Company
35	July 18	Matt Fitzpatrick	Miner	38	Married		7	American	Barton, Md.	Back injured	By fall of rock	Consolidation No. 2	Consolidation Coal Company
36	July 22	Michael Fitzpatrick	Roadman	67	Married			Irish	Lonaconing, Md.	Hand hurt	By car	Consolidation No. 1	Consolidation Coal Company
37	July 22	William Morgan	Miner	17	Single			American	National, Md.	Heat and leg hurt	Between car and rib	Consolidation No. 4	Consolidation Coal Company
38	July 22	Isaac Porter	Miner	25	Single			American	Eckhart, Md.	Heat and leg hurt	Between car and rib	Consolidation No. 4	Consolidation Coal Company
39	July 22	James Hitchens	Laborer	28	Single	18		American	Carlos, Md.	Leg hurt	Struck by prop.	Consolidation No. 9	Barton and George's Creek Valley Coal Company
40	July 24	Conrad Brode	Miner	59	Married			American	Frostburg, Md.	Leg hurt	Pushing car	Consolidation No. 10	Consolidation Coal Company
41	July 24	Frank Male	Miner	13	Single			Italian	Eckhart, Md.	Back and leg hurt	Fall of rock	Union No. 1	New York Mining Company
42	July 26	Henry Glime	Miner	27	Married	45	2	German	Frostburg, Md.	Mashed foot	Fall of slate	Dodson No. 1	Garrett Coal and Mining Company
43	July 31	Ora Corner	Motorman	26	Married	18	1	American	Dodson	Hand mashed	Cranking motor	Consolidation No. 9	Consolidation Coal Company
44	August 6	Frank Winner	Miner	29	Married			American	Frostburg, Md.	Ribs broken	By car	Consolidation No. 3	Consolidation Coal Company
45	August 11	Milton Largean	Miner	32	Married			American	Eckhart, Md.	Foot hurt	By roof and prop.	Consolidation No. 3	Consolidation Coal Company
46	August 13	John Skelley	Miner	42	Married			American	Frostburg, Md.	Finger smashed	By fall of rock	Consolidation No. 3	Consolidation Coal Company
47	August 18	John Myers	Miner	42	Married			American	Eckhart, Md.	Fingers cut	By fall of rock	Consolidation No. 3	Consolidation Coal Company
48	August 23	John Clark	Miner	29	Single			American	Lonaconing, Md.	Back hurt	By fall of rock	George's Creek No. 3	George's Creek Coal Company, Incorporated
49	September 3	Joseph Miller	Miner	23	Married	18		American	Lonaconing, Md.	Ribs broken	By fall of rock	George's Creek No. 16	George's Creek Coal Company, Incorporated
50	September 6	John Grindle	Miner	40	Married		3	American	Lonaconing, Md.	Shoulder hurt	Squeezed by horse and car	Consolidated No. 7	Consolidation Coal Company
51	September 9	George Humberson	Driver	27	Married			American	Ocean, Md.	Shoulder hurt	By fall of coal	Consolidated No. 8	Consolidation Coal Company
52	September 10	John Hrubik	Miner	22	Single			Hungarian	Lord, Md.	Foot hurt	By fall of rock	Washington No. 3	Piedmont and George's Creek Coal Company
53	September 17	Patrick O'Rourke	Miner	17	Single			American	Midland, Md.	Foot smashed	By rail	George's Creek No. 16	George's Creek Coal Company, Incorporated
54	September 19	Patrick Cavin	Miner	45	Married	22		American	Pekin, Md.	Foot hurt	By fall of rock	Washington No. 3	Piedmont and George's Creek Coal Company
55	September 13	Joseph Fyston	Miner	23	Single			American	Gilmore, Md.	Thumb cut	By saw	George's Creek No. 16	George's Creek Coal Company, Incorporated
56	September 23	William Fazenbaker	Laborer	35	Single	10		American	Westernport, Md.	Ribs hurt	Unloading barrel from wagon	Washington No. 3	Piedmont and George's Creek Coal Company
57	September 23	Henry Eisel	Miner	45	Married			American	Lord, Md.	Back and legs hurt	By fall of roof coal	Consolidation No. 7	Consolidation Coal Company
58	September 30	John Kieling	Miner	40	Married		5	American	Frostburg, Md.	Toe cut	By Ax	Consolidation No. 12	Consolidation Coal Company
59	September 4	Giovanni Launio	Miner	48	Single			Italian	Eckhart, Md.	Back and leg hurt	By fall of rock	Washington No. 2	Piedmont and George's Creek Coal Company
60	September 5	George Filsinger	Miner	22	Married	17	3	American	Eckhart, Md.	Foot hurt	By fall of rock	Washington No. 2	Piedmont and George's Creek Coal Company
61	September 23	Charles Buskey	Miner	27	Married	10		American	Eckhart, Md.	Hand hurt	By fall of rock	Washington No. 2	Piedmont and George's Creek Coal Company
62	September 23	Joseph Cutler	Driver	23	Married			American	Lonaconing, Md.	Leg broken	By cars	Tyson No. 1	Maryland Coal Company
63	October 7	John Strutz	Miner	19	Single		1	American	Frostburg	Toe mashed	By cars	Consolidation No. 11	Consolidation Coal Company
64	October 7	Ben Wilkes	Miner	50	Married	15	9	American	Lonaconing	Foot mashed	By cars	George's Creek No. 4	George's Creek Coal Company
65	October 11	James Stakem	Miner	62	Married		6	Irish	Midland	Thumb broken	By piece of slate	Consolidation No. 1	Consolidation Coal Company
66	October 13	George Jenoshe	Miner	47	Married	7		German	Westernport	Mashed finger	Between car and roof	Consolidation No. 3	Piedmont and George's Creek Coal Company
67	October 14	John Bruner	Miner	24	Single	19		American	Eckhart, Md.	Foot hurt	By cars	Washington No. 2	Piedmont and George's Creek Coal Company
68	October 16	Joe Corrigan	Miner	47	Married			American	Midland, Md.	Foot hurt	Struck by prop.	Consolidation No. 8	Consolidation Coal Company
69	October 16	Michael Clupp	Miner	43	Married			American	Midland, Md.	Broken arm	Fall of slate	Consolidation No. 8	Consolidation Coal Company
70	October 22	Frank Chambers	Laborer	24	Married		3	American	Eckhart, Md.	Head and foot hurt	By rock	Washington No. 2	Piedmont and George's Creek Coal Company
71	October 24	Clark Dunn	Driver	19	Single			American	Lonaconing	Foot hurt	By car	Mine No. 16	George's Creek Coal Company, Incorporated
72	October 28	John Condry	Miner	23	Married	21	3	American	Eckhart, Md.	Head and foot hurt	By rock	Washington No. 2	Piedmont and George's Creek Coal Company
73	October 29	William Ward	Miner	40	Married		7	American	Frostburg	Foot hurt	By rock	Washington No. 2	Piedmont and George's Creek Coal Company
74	October 26	Isaac Martin	Fireman	21	Single			American	Grahamtown	Back hurt	Cleaning fire	Consolidated No. 11	Consolidation Coal Company
75	October 30	Arthur Sanders	Miner	19	Single			American	Gilmore, Md.	Hand hurt	By car	George's Creek No. 16	George's Creek Coal Company
76	November 2	John Kline	Driver	17	Single			American	Frostburg	Ribs broken	Kicked by mule	Consolidation No. 9	Consolidation Coal Company
77	November 3	John Cammauf	Miner	37	Married		4	American	Midland	Foot hurt	Fall of coal	Consolidation No. 1	Consolidation Coal Company
78	November 4	John Manley	Miner	78	Married	38	7	Irish	Midland	Foot hurt	Fall of coal	Consolidation No. 1	Consolidation Coal Company
79	November 8	John Byrne	Miner	34	Married	30	4	Irish	Lonaconing	Hand cut	With ax	Consolidation No. 1	Consolidation Coal Company
80	November 12	Leslie Jones	Miner	20	Married		3	American	Lonaconing	Head and back hurt	With fall of rock	Consolidation No. 7	Consolidation Coal Company
81	November 15	Harry Taylor	Driver	35	Married	21	2	American	Frostburg	Arm hurt	Squeezed by horse	Consolidation No. 3	Consolidation Coal Company
82	November 22	James Lewis	Miner	36	Married		3	American	Frostburg	Leg and rib fractured	By fall of coal	Consolidation No. 3	Consolidation Coal Company
83	November 22	James Morgan	Miner	37	Single	73		American	Moscow	Mashed hand	By car	Pekin, Md.	Fitzpatrick Coal Company
84	November 28	Dominick Gionnia	Miner	28	Married			Italian	Frostburg	Arms and legs hurt	By fall of draw-rock	Consolidation No. 10	Consolidation Coal Company
85	November 3	Jacob Dilguard	Miner	20	Married			American	Gorman	Legs hurt	By cars	Consolidation No. 10	Consolidation Coal Company
86	December 1	Sinclair C. Bishop	Miner	49	Married		1	American	Lonaconing	Hand hurt	By fall of slate	George's Creek No. 4	George's Creek Coal Company, Incorporated
87	December 3	William Timney	Miner	32	Married		2	American	Moscow	Ankle hurt	By fall of slate	George's Creek No. 16	George's Creek Coal Company, Incorporated
88	December 6	Cerron Manning	Miner	30	Single			American	Frostburg	Ruptured	Lifting car	Consolidation No. 13	Consolidation Coal Company
89	December 8	Maurice Lee	Motorman	27	Married		1	American	Frostburg	Hand hurt	By trolley pole	Consolidation No. 10	Consolidation Coal Company
90	December 9	John Jones, Sr.	Miner	58	Married		4	American	Frostburg	Foot hurt	By piece of coal	Consolidation No. 12	Consolidation Coal Company
91	December 11	John Wallace	Motorman	26	Single	29		American	Pekin, Md.	Leg hurt	Collision of motors	Washington No. 5	Piedmont and George's Creek Coal Company
92	December 13	Daniel Moran	Slate-picker	50	Married		4	American	Franklin, Md.	Head arm and rib hurt	Fall of rock	Washington No. 5	Piedmont and George's Creek Coal Company
93	December 19	John Machin	Miner	30	Married		3	American	Franklin, Md.	Foot hurt	Fall of rock	Washington No. 5	Piedmont and George's Creek Coal Company
94	December 19	William Greenhorn	Miner	35	Married	61	5	American	Piedmont, W. Va.	Legs and rib hurt	Fall of bone coal	Washington No. 5	Piedmont and George's Creek Coal Company
95	December 10	John Baker	Miner	21	Single			American	Mill Run	Back hurt	Fall of bone coal	Washington No. 5	Piedmont and George's Creek Coal Company

producing 2,940 tons of coal. The product is consumed around Midlothian and Frostburg.

BIG SAVAGE COAL MINE.

Albert Klenk, Manager.

Big Savage Mine is located about two and one-half miles northwest of Allegany and is working the Davis six-foot. It is a drift opening. The output is consumed at the fire-brick yards at Allegany. This mine is operated by the Big Savage Fire-Brick Company. During the year they produced 1,000 tons of coal.

JACOB MILLER FUEL MINES.

James H. Miller, Manager.

The Miller Mine is located east of Lonaconing and is a drift opening working the Big Vein seam of coal. It employs five men and worked 290 days and produced 5,377 tons of coal. The production is consumed around Lonaconing. Ventilation is by natural means, air holes being driven to the surface and ventilation conditions are good.

WILLIAM BARNES & SON.

The Barnes Mine is located near Midlothian and is a drift opening working the Big Vein seam of coal. The production of this mine is consumed around Midlothian and Frostburg. During the year 1913 they employed three men and worked 213 days, producing 1,335 tons of coal. Ventilation is by natural means and is generally good; air holes being driven to the surface. Two hundred and fifteen dollars were spent on improvements.

BRODE MINE.

Solomon Brode, Manager.

The Brode Mine is located near Frostburg and is a drift opening working in the Big Vein seam of coal. During the year 1913 they employed four men and produced 1,644 tons of coal. The production is consumed around Frostburg. Ventilation is by natural means, air holes being driven to the surface. Conditions are generally good.

BRAILER FUEL MINES.

David Brailer, Manager.

The Brailer Mine is located about two and one-half miles northeast of Mt. Savage and is a drift opening working the Big Vein seam of coal and employs a small number of men. During the year they produced 1,100 tons of coal. Improvements during the year amounted to \$450.

BORDEN FUEL MINES.

Robert Griffith, Manager.

The Borden Mine is located northeast of Frostburg and is a drift opening working in the Big Vein. The production from this mine is consumed around Frostburg for domestic uses. The ventilation is by natural means and is good.

At the recent Cumberland meeting of the West Virginia Coal Mining Institute, Mr. R. A. Walter, of Frostburg, Md., Chief Engineer of the Consolidation Coal Company, Maryland Division, presented a historical sketch of the George's Creek region. With his permission this article appears in this report.

The plates used in this report showing the early methods of mining and transportation are used through the courtesy of "Coal Age," Floyd W. Parsons, Editor.

An Historical Sketch of the George's Creek Coal Region.

The George's Creek coal basin lies almost wholly in the western part of Allegany County, Maryland in the valley between Dan's and Savage Mountains. The synclinal axis of this canoe shaped basin extends from a point four miles north of the Pennsylvania State line, south 27 degrees, west 25 miles to Westernport, the basin maintaining an average width of six miles. The upper Potomac basin southwest of Westernport is geologically a continuation of the George's Creek basin, but has always been commercially considered as distinct and separate from the George's Creek field.

Frostburg, the largest town in the region, is located on the synclinal axis of the basin, 11 miles west of Cumberland, five miles south of the Pennsylvania State line and 10 miles south of the northern end of the basin. It is situated on the divide between Jennings Run, which drains the north end of the basin, and George's Creek, which drains the south end of the basin, and from which the field derives its name.

Eckhart, Loartown and Vale Summit are located near the eastern edge of the basin on the headwaters of Braddock's Run, which flows through Short Gap, a break in the coal-bearing measures, about three miles east of Frostburg, thence eastwardly to Wills Creek a short distance above Cumberland. Mount Savage and Barrelville lie northeast of Frostburg, near the northern limits of the basin, Midland, Lonaconing, Barton and Westernport being located southwest.

Space does not permit a history of the field in detail, but only such events are noted as were of importance to the general development of the region. The early history of the field, the struggles of the mine owners, the introduction of railroads and canals, the formation and growth of the coal companies and the mining methods of different periods will be briefly dealt upon.

Allegany County, Maryland, is especially rich in general historical details, very complete authentic history dating back to 1749 being readily obtainable. In that year a patent was granted to what was known as the Ohio Company for 500,000 acres south of the Ohio, between the Monongahela and Kanawha Rivers and west of the Alleghenies. This company immediately began an exploration of the country and in 1750 built a trading post at Wills Creek, now Cumberland.

In 1751 a trail from this trading post west across the George's Creek Valley, thence north to the present site of Pittsburg was marked by Col.

Statistics of the Production of Coal and Fire-Clay for the Year 1913 for Allegany and Garrett Counties.

Name of Company.	Name of Mine.	Vein of Coal Being Worked.	Employees at the Mines.				Output in Tons.				Kind and Number of Mining Machines.	
			Miners.	Drivers.	Inside Laborers.	Outside Laborers.	Total.	Days Worked.	Pick Mined.	Machine Mined.		Total Output.
Consolidation Coal Company	Consolidated No. 1.	Pittsburg or Big Vein	368	29	64	59	520	302	421518		421518	
Consolidation Coal Company	Consolidated No. 2.	Lower Sewickley or Tyson	21	4	1	2	28	307	13819		13819	
Consolidation Coal Company	Consolidated No. 3.	Pittsburg or Big Vein	408	37	64	55	564	305	441256		441256	
Consolidation Coal Company	Consolidated No. 4.	Pittsburg or Big Vein	83	8	35	22	148	305	95192	5996	447252	Nine punchers.
Consolidation Coal Company	Consolidated No. 5.	Upper Sewickley or Tyson	25	3	3	3	35	16	697		697	
Consolidation Coal Company	Consolidated No. 6.	Upper Sewickley or Tyson	37	5	1	1	48	304	31036		31036	
Consolidation Coal Company	Consolidated No. 7.	Pittsburg or Big Vein	443	36	16	61	556	301	544368		544368	
Consolidation Coal Company	Consolidated No. 8.	Pittsburg or Big Vein	82	10	19	14	125	309	91612		91612	
Consolidation Coal Company	Consolidated No. 9.	Upper Sewickley or Tyson	130	19	25	18	192	306	96342	14106	110448	One Sullivan Continuous Cutter.
Consolidation Coal Company	Consolidated No. 10.	Lower Sewickley or Tyson	82	6	9	8	105	305	71407		71407	
Consolidation Coal Company	Consolidated No. 11.	Lower Sewickley or Tyson	55	7	2	1	65	305	49582		49582	
Consolidation Coal Company	Consolidated No. 12.	Pittsburg or Big Vein	201	21	31	21	274	303	240394		240394	
Consolidation Coal Company	Consolidated No. 13.	Pittsburg or Big Vein	78	6	1	10	95	54	9606		9606	
George's Creek Coal Company, Incorporated	George's Creek No. 1.	Pittsburg or Big Vein	40	2	2	2	46	280	59510		59510	
George's Creek Coal Company, Incorporated	George's Creek No. 2.	Tyson	27	2	1	1	31	202	16179		16179	
George's Creek Coal Company, Incorporated	George's Creek No. 3.	Tyson	27	2	1	1	31	202	16179		16179	
George's Creek Coal Company, Incorporated	George's Creek No. 4.	Tyson	32	3	3	2	40	302	16962		16962	
George's Creek Coal Company, Incorporated	George's Creek No. 2.	Pittsburg or Big Vein	5	1	1	1	8	292	30772		30772	
George's Creek Coal Company, Incorporated	George's Creek No. 12.	Pittsburg or Big Vein	5	1	1	1	8	202	6740		6740	
George's Creek Coal Company, Incorporated	George's Creek No. 16.	Tyson	35	2	2	2	41	41	9559		9559	
Piedmont and George's Creek Coal Company	Washington No. 1.	Pittsburg or Big Vein	130	12	10	23	175	276	140403		140403	
Piedmont and George's Creek Coal Company	Washington No. 2.	Upper Sewickley or Tyson	6	1	1	1	9	33	1648		1648	
Piedmont and George's Creek Coal Company	Washington No. 3.	Lower Kittanning	144	2	22	23	190	295	129531		129531	
Piedmont and George's Creek Coal Company	Washington No. 4.	Lower Kittanning	72	2	14	13	108	274	78802		78802	
Piedmont and George's Creek Coal Company	Washington No. 5.	Bakertown or Barton Four-Foot	20	2	2	6	29	56	7031		7031	
New York Mining Company	Union No. 1.	Pittsburg or Big Vein	64	5	19	19	100	287	31334	32776	64111	Five Sullivan Long Wall.
New York Mining Company	Union No. 2.	Pittsburg or Big Vein	96	5	12	12	132	278	79182	21218	100400	One Short Wall.
New York Mining Company	Union No. 3.	Tyson	125	7	31	4	177	278	144351		144351	
Union Mining Company	Union Mine	Pittsburg or Big Vein	25	2	1	1	29	278	13811		13811	
Maryland Coal Company	Tyson No. 1.	Upper Sewickley or Tyson	35	2	1	4	45	147	15450		15450	
Maryland Coal Company	Tyson No. 2.	Upper Sewickley or Tyson	40	3	3	3	53	270	30953		30953	
Maryland Coal Company	Waynesburg	Waynesburg	8	1	1	1	10	95	5780		5780	
Midland Mining Company	Big Vein	Pittsburg or Big Vein	10	1	1	1	12	70	6955		6955	
Moscow and George's Creek Coal Company	Enterprise C Neff Run	Pittsburg or Big Vein	12	1	1	1	13	135	7532		7532	
Moscow and George's Creek Coal Company	Moseow No. 2	Pittsburg or Big Vein	40	4	2	5	51	286	52878		52878	
Moscow and George's Creek Coal Company	Moseow No. 3	Bakertown or Barton Four-Foot	3	1	1	3	3	200	2998		2998	
American Coal Company	Oaledonia	Upper Sewickley or Tyson	40	3	1	7	39	282	16200		16200	
Davis Coal and Coke Company	Buxton No. 17	Lower Kittanning	20	3	3	4	30	50	44412		44412	
Cumberland Coal Company	Penn 1, 2, 3, 4	Barton Four-Foot	9	1	1	1	12	200	10924		10924	
Maryland Coal and Iron Company	Mine No. 1	Brookville	48	3	3	6	60	90	10000		10000	
Maryland Coal and Iron Company	Mertens	Davis Six-Foot	8	1	1	3	13	150	12900		12900	
New Central Coal Company	Koontz No. 1	Tyson	90	10	6	10	116	286	87901		87901	
New Central Coal Company	Koontz No. 2	Tyson	11	1	1	1	15	286	8613		8613	
Barton and George's Creek Valley Coal Company	Carlos	Pittsburg or Big Vein	68	4	5	9	86	288	86427		86427	
Chapman Coal Mining Company	Swanton	Barton Four-Foot	75	8	2	8	93	170	46555		46555	
Sullivan Bros. Coal Company	Sullivan	Tyson	48	9	4	7	68	280	61525		61525	
Bowery Coal Company	Bowery	Big Vein	10	1	1	1	13	15	200		200	
Bowery Coal Company	Bowery	Tyson	25	1	1	1	32	15	600		600	
Phoenix and George's Creek Mining Company	Elkhart	Barton Four-Foot	60	8	2	9	79	220	60749		60749	
Allegany Coal Company	Tacoma	Kittanning or Davis' Six-Foot	47	4	2	3	56	246	28998		28998	
Stanton-George's Creek Coal Company	Stanton No. 1	Kittanning	26	6	3	5	40	145	16281		16281	
Fitzpatrick Coal Company	Pekin No. 1	Big Vein	10	1	1	1	13	250	4620		4620	
Barton Coal Company	Masco	Lower Freeport	15	2	1	3	23	58	2800		2800	

LOCAL COAL MINES IN ALLEGANY COUNTY.

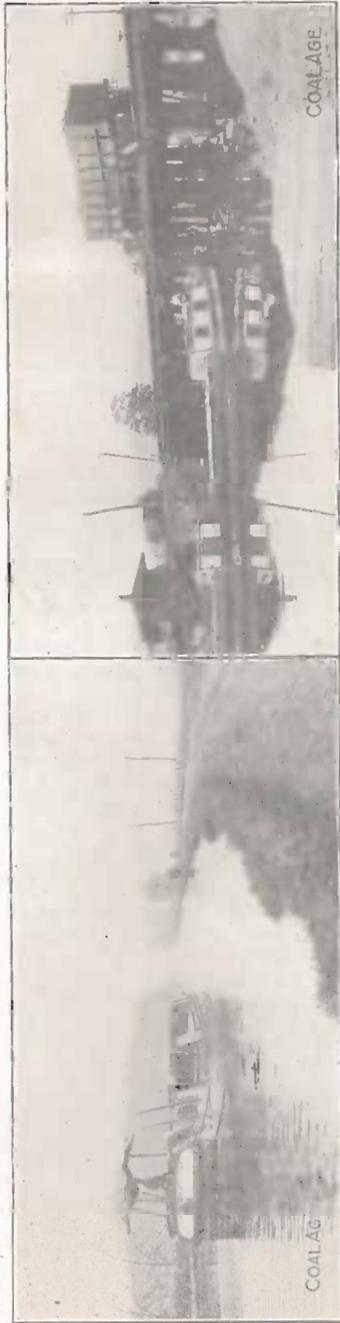
William H. Barnes	Barnes	Big Vein	2	1			213	1335		1335	
Jacob Miller	Miller	Big Vein	4	1			290	5377		5377	
Samuel E. Smith	Smith	Big Vein	2				250	2940		2940	
J. O. J. Greene	Greene	Lower Kittanning	1				100	200		200	
Solomon Brode	Brode	Big Vein	2	1	1		4	1644		1644	
Brailer Coal Company	Brailer	Big Vein	2				205	1100		1100	
Big Savage Fire-brick Company	Big Savage	Davis' Six-Foot	1				275	1000		1000	
Allegany County Totals			3665	336	436	529	9860	12561	3524650	74096	3598746
			Dec'e	Dec'e		Dec'e	Aver'ge	Increase	Dec're	Increase	
Decrease Above Year 1912			283	3		59	85	211	196735	27291	160544

GARRETT COUNTY PRODUCTION FOR THE YEAR 1913.

Blaine Mining Company	Mine No. 1	Lower Kittanning	74	12	6	17	105	268	174013		174013
Blaine Mining Company	Mine No. 2	Lower Kittanning	14	1	2		17	268			
Chaffee Coal Company	Chaffee	Davis' Six-Foot	60	9	4	14	87	100	38430		38430
Garrett County Coal Mining Company	Dodson No. 1	Lower Kittanning	61	9	4	21	95	275	96295		96295
Garrett County Coal Mining Company	Dodson No. 3	Lower Kittanning	15	1	1	1	19	106	7637		7637
Garrett County Coal Mining Company	Dodson No. 5	Upper Kittanning	7	1	1	1	10	95	3000		3000
Monroe Coal Mining Company	Elk Run No. 1	Davis' Six-Foot	25	4	4	8	40	279	31771		31771
Monroe Coal Mining Company	Elk Run No. 3	Barton Four-Foot	25	2	2	7	37	279	30163		30163
Patterson Coal Company	Patterson	Kittanning	32	1	1	5	45	220	30434		30434
Bloomington Coal Company	Bloomington	Lower Kittanning	30	4	1	4	39	295	32754		32754
Potomac Valley Coal Company	Peerless	Upper Freeport	65	9	5	9	88	275	86400		86400
Hamill Coal and Coke Company	Hamill 1 and 2	Kittanning	90	10	4	6	110	275	115000		115000
L. H. Jordan	Deal	Freeport	5	1			7	250	5000		5000
Garrett County Totals			503	71	35	94	699	2985	640897		640897
Decrease Under 1912			52	5	2	6	57	229	6618		6618
Total for State			4168	407	471	623	5559	15696	4165547	74096	4239643
			Dec'e	Dec'e	Dec'e	Inc'e	Dec'e	Av. In'e	Increase		78368
Increase			14			2	12	295	6913		6913

PRODUCTION OF FIRE-CLAY MINED IN ALLEGANY COUNTY FOR THE YEAR 1913.

Union Mining Company	Union Nos. 5, 6, 7 and 8	Fire-Clay Seam	46	9	9	22	86	265	55068		55068
Savage Mountain Fire-brick Company	No. 5	Fire-Clay Seam	13	2		4	19	320	12800		12800
Big Savage Fire-brick Company	No. 1	Fire-Clay Seam	17	3		5	25	300	10500		10500
Andrew Ramsay Company	Ramsay Mine	Fire-Clay Seam									
Total, 1913			76	14	9	31	130	885	78368		78368
Increase			Dec'e			Inc'e	Dec'e	Av. In'e	Increase		6913
			14			2	12	295	6913		6913



A canal paralleling the Potomac and largely used for conveying George's Creek coal to Georgetown. Unloading coal into Canal Boats at Cumberland.

The Chesapeake and Ohio Canal.

Thomas Cresap accompanied by Namacolin, an Indian guide. This trail was used by George Washington on his expedition against the French in 1753; and improved by him to such an extent that after his return over the same route in the following year it had become a fairly passable road. It was again used after the completion of Fort Cumberland in 1755 by General Braddock on his ill-fated attempt to capture Fort Duquesne, and has since been known as the Braddock Road. Notwithstanding Washington's protest, Braddock halted to "level every mole hill and bridge every brook." As everyone familiar with early American history knows, these delays were primarily responsible for his defeat by the French and Indians. His road building operations, however, were of great benefit to the George's Creek and other regions lying west of Fort Cumberland by opening to settlers this hitherto inaccessible country.

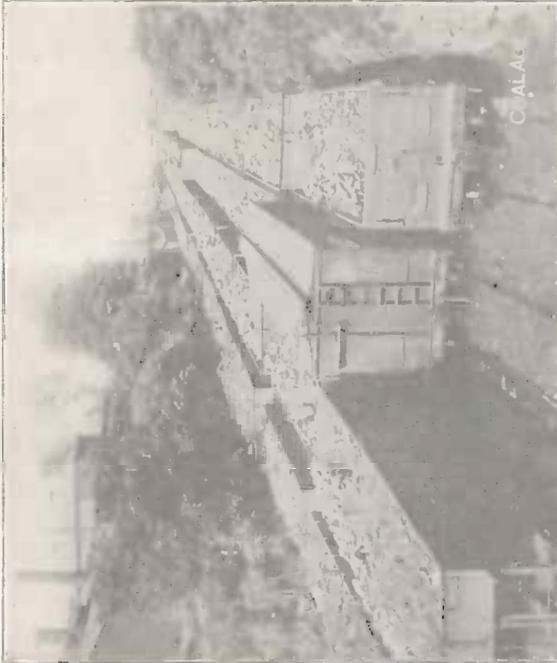
It is believed that the first settlement in the George's Creek region was made near Loartown shortly after Braddock's retreat. However, very few settlers moved west of Fort Cumberland until after 1768, as the French-Indian allies were terrorizing the whole frontier by their massacres. About 1768 the Indians were subdued and a stream of settlers began pouring westward to the fertile lowlands along the Ohio. Quite a few of these stopped along the way, the pioneer settlers of the George's Creek region being recruited from their ranks. After 1788 the awarding of over 4,000 military lots west of Fort Cumberland to soldiers of the Revolution was the greatest factor in populating this region until the development of the coal industry began.

Braddock's Road from incessant use eventually became almost impassable. No provision was made, nor were funds available for its repair, and its condition after 50 years use can readily be imagined. The need for a good road was realized by such men as Washington, Clay and others who were its earnest advocates and supporters. In 1806 the National Government authorized the building of a turnpike from Cumberland to Wheeling. This road reached the George's Creek region in 1814 and gave the flow of emigration renewed impetus.

Very little is known about the discovery or early development of the coal deposits in the George's Creek region. Tradition states that the Indians in their early intercourse with the white settlers sometimes referred to a black stone found here which burned like wood. From the same source we also hear that the soldiers of Braddock's Army in passing through this region on their ill-fated march in 1755 to Fort Duquesne, discovered coal and burned some in their camp fires. Captain Orme, who kept a fairly comprehensive record of the happenings on this expedition, makes no mention of the presence of coal, but it is certain that the excavations made for the Braddock Road on the steep hill sides directly on the outcrop of large seams exposed the coal to view. Whether it was recognized as coal must remain an unsettled question.

The first authentic record of the discovery of coal in the George's Creek region is noted on a map made by M. Bonne bearing date 1782. As this map was made in France from information previously acquired in America and as the map shows a coal mine at the mouth of George's Creek, the existence of coal in this vicinity must have been known some time prior to that date.

During the next 28 years mention is made but once of the occurrence of coal in this region. However, the country was rapidly being cleared and settled and it is very likely that during this period the outcrop of the coal seams was exposed at a number of places and the coal mined for local use. It is reported that in 1810 there was an exceptionally violent freshet which washed the earth off a considerable area of a large coal seam—probably the Pittsburg or Big Vein—near Barton. The exposure of this coal is sup-



Freight Yards of the Cumberland and Pennsylvania Railroad at Mt. Savage, Md.



A Small Seum Mine.

posed to have caused great excitement and people came for miles to see it. Some of the more enterprising dug it up and hauled it by wagon as far east as Romney and even Winchester where it was used for smithing purposes. Later it was hauled to Westernport only, and there loaded on flat boats and rafts and floated to Washington.

In the report of the United States Geological Survey the statement is made that coal was first discovered near Frostburg in 1804. According to Scharf's history of Western Maryland, the first coal mined in the region was taken from the Sheetz farm, one and one-half miles east of Frostburg—date not given—and hauled to Cumberland. Both of these references probably are to the same mine. It is certain that the mine on the Sheetz farm was operating in 1816, for at that date the coal from this mine was used in the manufacture of glass in Cumberland.

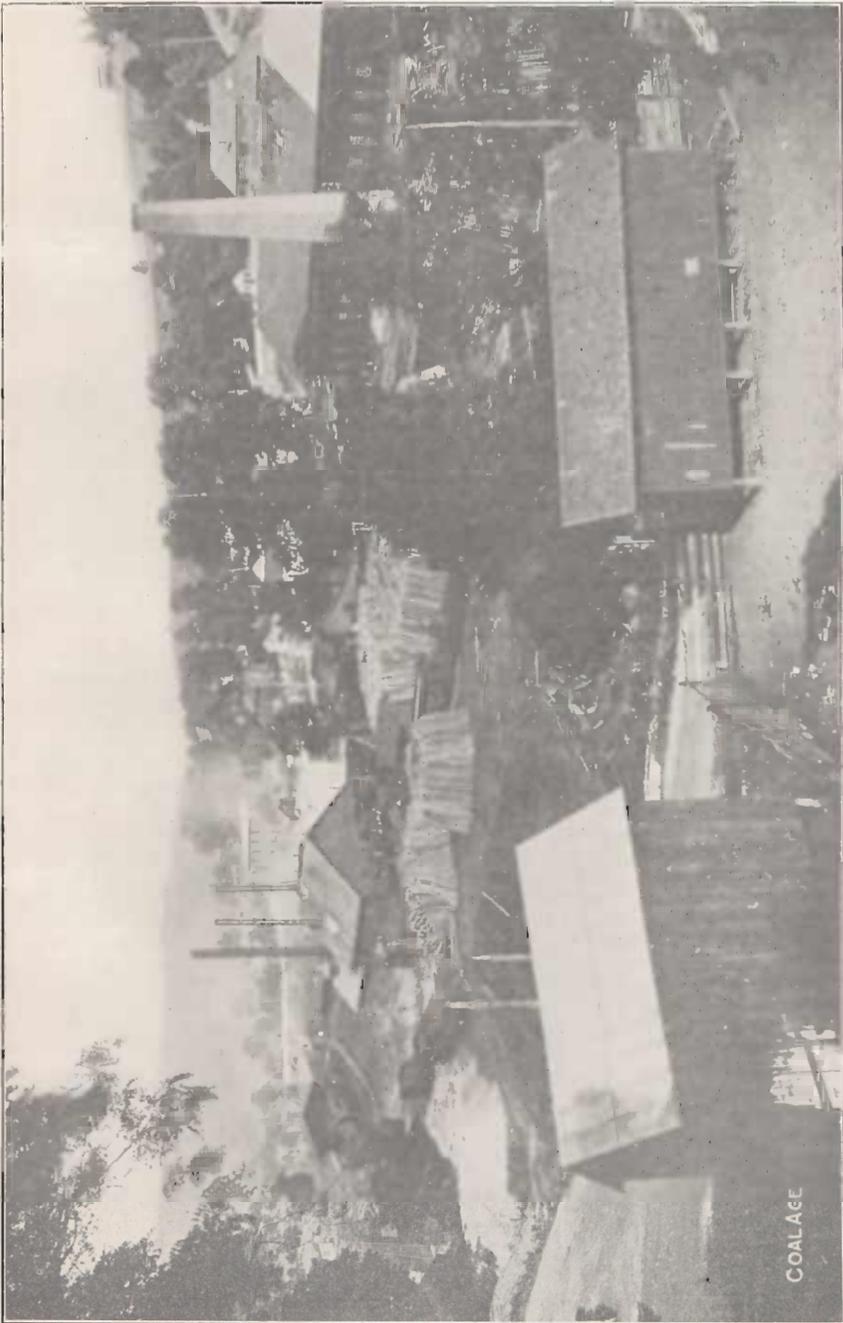
Again we have the record that during the construction of the National Turnpike in 1814 coal was found at Eckhart, which must have been in the same general vicinity as the mine just mentioned, and wagoned to Cumberland and other points as far east as Baltimore.

The small amount of coal which thus reached the markets was of excellent quality and gave such satisfaction that a demand was created for all that the mine owners could deliver. To deliver coal by wagon without having any return freight was not an economical proposition, hence it was transported in this way only when the teamster desired to bring back with him a load of supplies. This, of course, did not satisfy the demand, and as railroads were then unknown and no other means of transportation available, the mine owners began shipping the coal in boats. These boats were flat bottomed, with square raking ends, about 80 feet long, 13 feet wide and three feet deep, holding from 50 to 60 tons. They were poorly constructed and very clumsy. The combined efforts of the entire crew of four men were required to steer them.

A practical means of transportation having now been discovered, more mines were opened up and operated intermittently throughout the year, the coal hauled by wagon to Cumberland where it was unloaded near the present Municipal Pumping Station on Green Street and stored in large piles on the river bank awaiting a freshet of sufficient height to float the boats with safety. The boats were generally built on the banks of Wills Creek of the finest white pine which abounded along this stream, and at the first signs of a sustained rise were floated to the stock pile of coal. The coal was loaded as rapidly as possible, the men working day and night. The crew then took charge of the boat, floated it to its destination—anywhere between Cumberland and Georgetown or Washington—and sold the boat and contents, returning to their homes on foot.

By 1820 this traffic had assumed commercial importance and gradually increased until the completion of the Baltimore and Ohio Railroad to Cumberland in 1842, from which date it rapidly dropped off until after the completion of the Chesapeake and Ohio Canal to Cumberland in 1850, when it was abandoned altogether. While at its height as many as forty boats have been known to depart in one day. Not only mine owners, but farmers, merchants, mechanics and men of every occupation participated in these boating ventures as a quick way of obtaining cash, which was then, as in all frontier communities, very scarce.

This method of transportation, however, was at its best very uncertain and it could be readily perceived that no systematic profitable development of the coal seams could be expected unless the carrying facilities were improved. The need for some cheap method of transporting freight had been realized many years before, and well organized efforts had been made to secure it. Washington can be considered as the originator of these movements. On his several journeys through the region between Cumberland and the Ohio River, he had been impressed with its wonderful natural resources and it was owing to his personal efforts that the Potomac Company,



The Oldest Mine in Maryland—Eckhart, Md. It was Opened in 1842.

the predecessor of the Chesapeake and Ohio Canal Company, was organized in 1785. The object of this company was to so improve the channel of the Potomac River as to render it navigable as far as Cumberland.

Under the direction of Washington, who was its first president and who remained with it in that capacity until he resigned to accept the Presidency of the United States, the Potomac Company started work at once and pursued it intermittently until 1820, by which time the public was thoroughly convinced that the Potomac River could not be made navigable by the expenditure of the limited amount of money then available.

The charter was then withdrawn from this company and granted to the Chesapeake and Ohio Canal Company, organized in 1828 to build a canal from Georgetown to Cumberland and thence to the Ohio River, with an auxiliary canal to Baltimore. The latter was never built, but the main canal was after great financial difficulties completed to Cumberland in 1850 at a total cost of over \$11,000,000.

Just prior to the transfer of the charter of the old Potomac Company to the Chesapeake and Ohio Canal Company great interest was aroused by the experiments of Stephenson in England and Cooper in America with the steam railroad locomotive. Philip E. Thomas and George Brown, two citizens of Baltimore, were firm believers in the practicability of the railroad and called a meeting of the leading men of the city to discuss the advisability of building a railroad instead of a canal, from Baltimore to Cumberland and Wheeling. A plan for the organization of this road was drawn up and presented to the General Assembly of Maryland in February, 1827, and an act of incorporation passed a few days later. The Baltimore and Ohio Railroad Company was organized the same year and in July, 1828, work was commenced. The practicability of using the steam locomotive for haulage purposes was firmly established in 1831, and on November 5, 1842, the road was completed to Cumberland and in operation.

It is a significant fact in connection with the organization of these two great transportation companies, that the first regularly incorporated coal company of the George's Creek field was organized in 1828, the same year that ground was broken for the construction of both canal and railroad. The excellence of George's Creek coal was appreciated at this early date and the assurance of some reliable means of transportation was all that was required to interest eastern capital in the development of these coal deposits.

The first incorporated company was the Maryland Mining Company, operating at Eckhart, and was followed ten years later by the Maryland and New York Mining Company, operating between Frostburg and Mount Savage. These companies were the pioneers in exploring and systematically examining the field, but sad to say, they were organized too far in advance of the arrival of adequate transportation facilities. They eked out a rather precarious existence up to the arrival of the Baltimore and Ohio Railroad in 1842, but finally failed and their property was acquired by others. Both companies started to build a railroad to Cumberland, one down the valley of Jennings Run and the other down the valley of Braddock's Run. The latter was started in 1845 and completed in 1846 by the Maryland Mining Company. The other road was not completed by the original company, but by the Mt. Savage Iron Company, its successor. Before the completion of these roads all the coal was shipped over the Baltimore and Ohio Railroad after having been hauled by wagon to Cumberland.

The George's Creek Coal and Iron Company, organized in 1835, built a tram road from Lonaconing and connected with the Maryland Mining Company's railroad at Clarysville in 1847, and in 1853 built a railroad from Lonaconing to Piedmont to connect with the Baltimore and Ohio Railroad at that point. This railroad was purchased in 1864 by the Cumberland and Pennsylvania Railroad Company, which had meanwhile acquired pos-

LIST OF COAL AND CLAY CORPORATIONS OF MARYLAND.

Name of Company.	Principal Office.	President's Name and Address.	Secretary's Name and Address.
Consolidation Coal Company.....	Continental Building, Baltimore, Md.....	J. H. Wheelwright, Baltimore, Md.....	T. K. Stuart, Secretary, Baltimore, Md.....
Piedmont and George's Creek Coal Company	Frostburg, Md.....	John S. Brophy, Frostburg, Md.....	John Keating, Cumberland, Md.....
George's Creek Coal Company.....	Cumberland, Md.....	H. E. Weber, Cumberland, Md.....	W. F. Coale, Cumberland, Md.....
Union Mining Company.....	Mt. Savage, Md.....	H. Crawford Black, Baltimore, Md.....	A. T. Burr, New York City.....
New York Mining Company.....	Baltimore, Md.....	H. Crawford Black, Baltimore, Md.....	Van Lear Black, Baltimore, Md.....
Barton and George's Creek Valley Coal Co.	Baltimore, Md.....	H. Crawford Black, Baltimore, Md.....	Van Lear Black, Baltimore, Md.....
Cumberland Basin Coal Co.....	Philadelphia, Pa.....	R. A. Hatfield, Philadelphia, Pa.....	J. P. Hiller, Philadelphia, Pa.....
Maryland Coal Company.....	Lonaconing, Md.....	J. W. Galloway, No. 1 Bdway, N. Y. City.....	W. F. Chalmers, No. 1 Broadway, N. Y. City.....
Moscow and George's Creek Coal Company.	Cumberland, Md.....	J. W. P. Somerville, Cumberland, Md.....	W. A. S. Somerville, Cumberland, Md.....
Midland Mining Company.....	Cumberland, Md.....	J. W. P. Somerville, Cumberland, Md.....	W. A. S. Somerville, Cumberland, Md.....
American Coal Company.....	No. 1 Broadway, New York City.....	W. DeL. Walbridge, New York.....	H. B. Walbridge, New York.....
Maryland George's Creek Coal Company.....	Cumberland, Md.....	Fred Mertens, Washington, D. C.....	Henry Mertens, Cumberland, Md.....
Phoenix and George's Creek Coal Company.	Cumberland, Md.....	W. D. Althouse, Philadelphia, Pa.....	A. A. Young, Cumberland, Md.....
New Central Coal Company.....	New York.....	Malcolm Barter, Jr., New York.....	Malcolm Baxter, No. 17 Battery Pl., N.Y. City.....
Chapman Coal Company.....	Baltimore, Md.....	W. J. Chapman, Sharp & Lombard, Baltimore	G. W. Chapman, Sharp & Lombard, Balto., Md.
Cumberland George's Creek Coal Co.....	Market Street, Camden, N. J.....	F. A. Von Boyneburgh, Camden, N. J.....	A. L. Von Boyneburgh, Camden, N. J.....
Reed Coal and Coke Company.....	Baltimore, Md. (Phoenix Building).....	William C. Reed, Baltimore, Md.....	William C. Reed, Baltimore, Md.....
Davis Coal and Coke Company.....	Baltimore, Md.....	Mr. A. Robertson, Baltimore, Md.....	Mr. J. T. Trimmeion, Baltimore, Md.....
Maryland Coal and Iron Company.....	Barrelsville, Md.....	H. B. Avery, Barrelsville, Md.....	W. H. Morgan, Barrelsville, Md.....
Fitzpatrick Coal Company.....	Pekin.....	John W. Fitzpatrick.....	John W. Fitzpatrick, Westernport, Md.....
Sullivan Brothers Coal Company.....	Eckhart, Md.....	John A. Sullivan, Eckhart, Md.....	Dennis Sullivan, Eckhart, Md.....
Allegheny Coal Company.....	Westernport, Md.....	E. J. Roberts, Westernport, Md.....	G. S. Dickey, Baltimore, Md.....
Stanton George's Creek Coal Company.....	Frostburg, Md.....	Louis Stanton.....	Louis Stanton, Frostburg, Md.....
Franklyn Coal Company.....	Westernport, Md.....	M. P. Fahey, Westernport, Md.....	T. L. Wilson, Piedmont, W. Va.....
Barton Coal Mining Company.....	Philadelphia, Pa. (Stock Exchange Bldg.).....	W. F. Jacoby, Philadelphia, Pa.....	Walter S. Simms, Philadelphia, Pa.....
Brode Fuel Mines.....	Frostburg, Md.....	Solomon Brode, Frostburg, Md.....	Solomon Brode, Frostburg, Md.....

GARRETT COUNTY.

Blaine Mining Company.....	No. 1 Broadway, New York.....	T. B. Davis, No. 1 Broadway, New York.....	J. E. Davis, No. 1 Broadway, New York.....
Garrett County Coal Mining Company.....	Bethlehem, Pa.....	E. L. Bullock, Hazleton, Pa.....	Josiah Buchman, Bethlehem, Pa.....
Potomac Valley Company.....	Fairmont, W. Va.....	John Y. Hite, Fairmont, W. Va.....	Lewis Rafelto, Philadelphia, Pa.....
Patterson Coal Company.....	Bloomington, Md.....	G. C. Patterson, Bloomington, Md.....	G. C. Patterson, Bloomington, Md.....
Bloomington Coal Company.....	Grafton, W. Va.....	W. C. Clayton, Keyser, W. Va.....	L. B. Brydon, Grafton, W. Va.....
Hamill Coal and Coke Company.....	Blaine, W. Va.....	R. W. McMillan, Westernport, Md.....	E. J. Hamill, Kitzmiller, Md.....
Monroe Coal Mining Company.....	Bethlehem, Pa.....	C. M. Dodson, Bethlehem, Pa.....	A. C. Dodson, Bethlehem, Pa.....
Chaffee Coal Company.....	1632 Real Estate Trust Bldg., Phila., Pa.....	P. J. Baral, Philadelphia, Pa.....	Howard D. Pfeiffer, Philadelphia, Pa.....
Barnard Coal Company.....	Piedmont, W. Va.....	Frank Christopher, Stoyer, Md.....	Stoyer, Md.....
S. H. Jordan Coal Company.....	Keyser, W. Va.....	S. H. Jordan, Keyser, W. Va.....	S. H. Jordan, Keyser, W. Va.....
Cutchall and Gates Coal Company.....	Six-Mile Run, Pa.....	J. E. Cutchall, Six-Mile Run, Pa.....	J. E. Cutchall, Six-Mile Run, Pa.....
Ajax Consolidated Coal Company.....	No. 437-445 Title Building, Baltimore, Md.....	James G. Pugh, Baltimore, Md.....	James G. Pugh, Baltimore, Md.....

FIRE-CLAY—ALLEGANY COUNTY.

Union Mining Company.....	Mt. Savage, Md.....	H. Crawford Black, Baltimore, Md.....	A. T. Burr, Baltimore, Md.....
Savage Mountain Fire-brick Company.....	Frostburg, Md.....	Charles C. Gorsuch, Westminster, Md.....	H. C. Gorsuch, Mt. Airy, Md.....
Big Savage Fire-brick Company.....	Frostburg, Md.....	D. A. Armstrong, Frostburg, Md.....	D. A. Benson, Frostburg, Md.....
Andrew Ramsey Company.....	Mt. Savage, Md.....	Andrew Ramsey, Mt. Savage, Md.....	J. J. Gardner, Mt. Savage, Md.....

session of the Mount Savage Iron Company's road and extended it through Frostburg to Lonaconing. This was the first through railroad and remains to date the only railroad traversing the entire region.

In 1872 the Pennsylvania Railroad interests constructed a railroad to the Pennsylvania-Maryland State line at Ellerslie, and the Cumberland and Pennsylvania built a connecting link between this road and its line at Kreigbaum. Eight years later the George's Creek and Cumberland Railroad, connecting with the Pennsylvania at Cumberland, was constructed from Cumberland to Lonaconing. No further additions were made to the shipping facilities until 1912, when the Western Maryland Railroad acquired control of the George's Creek and Cumberland Railroad and extended their trunk line across the northern end of the field.

Thus we have a record of the transportation facilities for over a century, from primitive wagon and flatboat until at present there are two competitive railroads with outlets over three competitive trunk lines and over the Chesapeake and Ohio Canal. These splendid shipping facilities, its proximity to tidewater and its high grade of coal have given this region decided advantages over other coal fields for shipments into the world's fuel markets.

In addition to the coal companies already enumerated, there were incorporated before 1850 the Frostburg Coal Company, Allegany Mining Company, Washington Coal Company and the Borden Mining Company. Of these only the latter is now in existence. A detailed record could be given of the other companies incorporated since that time, but with few exceptions, the financial history of one is the history of all. Many were organized prematurely, others were continually on the verge of financial ruin, almost all were merely existing.

No better illustration can be given of conditions than that shown to exist by the following circular issued in 1869 by a committee of the five principal mining companies of the region, including the Consolidation Coal Company, which had been incorporated in 1860 and was at this time operating the properties originally owned by the Ocean Steam Coal Company, Frostburg Mining Company, Mount Savage Iron Company and the Cumberland and Pennsylvania Railroad:

"To the Stockholders of the companies mining Cumberland coal in Allegany County, Maryland:

"An experience of 25 years has convinced many of the most practical and sagacious persons, whose interests have been identified with the development of the Cumberland coal mines, that those interests can be only made reasonably remunerative by a complete change in the system of management. The total product of 1,708 tons in 1842 has been increased by the legitimate demands of the trade to 1,330,443 tons in 1868, with a prospect of 1,500,000 tons in 1869, and yet, of the immense capital which has been invested in Allegany County in coal property, how large a proportion has been swept away, and of that now representing the mining interests how insignificant is the portion which, even occasionally, makes any return to the proprietors. Three reasons may be given to explain those unsatisfactory results. First, remoteness from our principal markets, with insufficiency and high cost of transportation thereto; second, heavy expenses of multiplied administration, and third, ruinous and under existing circumstances, uncontrollable competition.

The first of these obstacles would inevitably subside, if not disappear under a systematic and unified apportionment of production to demand; the second and third would obviously vanish by the substitution of a single management in the common interest for the 21 separate organizations which with their complicated and expensive machinery now absorb the modicum of profit which is left to the owners of the mines.

Five of the largest companies having with others tried for years, but in vain, to remedy the evils above adverted to, by harmony of action, have

at length determined to find, if practicable, a solution of the problem by uniting their properties under one organization, permanent and homogenous. A suitable agent has been selected to investigate the relative areas and values of their respective coal lands preliminary, it is hoped, to the adoption of an equitable basis of incorporation. These five companies are now moving in perfect accord toward that object, and have established a joint committee on consolidation. Within a month it is hoped that they will be prepared to proceed to the consideration of such a basis. To this end it is earnestly desired that as many companies now operating in the Cumberland coal region of Allegany County should unite in having their lands surveyed and appraised; or, if not that, that they will, at least, appoint a representative, or more than one and not more than three, to meet with the joint committee and discuss with them the bearings of this scheme on their various interests. Stockholders are earnestly requested to press this important subject upon the consideration of their directors."

The five companies issuing this circular were the American Coal Company, Borden Mining Company, the Consolidation Coal Company, Cumberland Coal and Iron Company and Hampshire and Baltimore Coal Company.

An agent was selected to report on the acreage and values of the various companies, and after six months' labor submitted a very thorough report showing there remained unworked in the region about 15,000 acres of the "Big Vein" seam alone. The report was unsatisfactory, however, to a number of the operators and the plan failed in attracting into the consolidation any other company than the Cumberland Coal and Iron Company. The acquisition of the property of this company by the Consolidation Coal Company gave the latter more than half the coal lands of the region and all the railroad facilities. These holdings were still further increased a few years later by the purchase of the property of the Allegany Coal Company by the Consolidation Coal Company.

Although this proposed consolidation of all companies in the region failed, its effect on the Cumberland coal market was invaluable. The enlarged company introduced better methods of mining and selling and fixed a high standard of excellence for its product, which has always been maintained. Being on a sound financial footing, it was in position to undertake improvements impossible of execution by any of its smaller component companies. It was the pioneer company of the region to install steam-driven fans for ventilation and mine haulage locomotives. It has always been in advance of other companies in the region in conservation of its property and has been making strong efforts toward the ultimate extraction of every available ton of coal. It is the only company in the region that has solved the problem of satisfactorily and economically draining those mines below water level, thus increasing the ultimate recovery from the region and lengthening its life and prosperity. It has, since its inception, paid regular dividends to its stockholders, something unheard of before in this region, and is a fair representative of that class of consolidations which are beneficial alike to competitors, employees and the consumer.

Numerous companies have been incorporated since the organization of the Consolidation Coal Company. Those which were organized along conservative lines with good financial backing and good management were successful, while others over capitalized and mismanaged have had a rather checkered career.

The early development was almost exclusively in the Pittsburg or George's Creek Big Vein Seam and the mining methods followed at first were of the crudest. An opening was made into the coal on the outcrop driven very wide and poorly timbered for a hundred feet or so by which time it generally caved in, then another opening was made and the performance repeated. This method was gradually modified until about 1840, at which date the general mode of procedure seemed to be to drive a single heading as far as possible without any artificial ventilation. Rudimentary



The Largest Opening in Maryland.
Consolidation Coal Mine No. 7.

Drainage Tunnel Draining the Big Vein Seam at Clarksville.

rooms, seldom over 50 feet long but about 20 feet wide, were then driven to the right and left with but very little coal remaining between them. This operation was continued as near the outcrop as the condition of the seam and roof would permit and the opening then allowed to fall in.

Mines developed in 1850 show that recognition was being given to the need of better ventilation, in some few instances double entries were driven with furnaces as the ventilating force. There was no regularity, however, in regard to cross-cuts or break throughs, or to the spacing of rooms. Rooms were driven of irregular width, very crooked and running into each other at all sorts of angles, with no provision for the ultimate extraction of all the coal.

The following description of a trip through a George's Creek mine in 1860 by William Cullen Bryant, the famous poet, will no doubt be interesting, and will give some idea of the mining methods of that period:

"Our party made a visit to a coal mine some three miles distant from Mount Sayage. From one of the black entrances flowed a lively little stream with yellow waters, into which I dipped my finger to ascertain their flavor. It was acidulous and astringent, holding in solution both alum and copperas. Leaving the Stygian rivulet we came to another entrance, out of which a train of loaded trucks was passing, every one of which was attended by a miner blackened from head to foot with the dust of his task, and wearing in the front a small crooked lamp to light his way. As they emerged from the darkness they looked like sooty demons of the mine with flaming horns coming from the womb of the mountain. We now entered, each carrying a lantern, attended by a guide. The vein of coal is from eight to ten feet thick, and the passage is of that height, with a roof of glistening slate, propped in some places by wooden posts. Here and there on each side of the passage yawned chambers cut in the veins of coal, and extending beyond the reach of the eye in the faint light of our lanterns. At length we heard the sound of sledges, and proceeding for some distance farther came to the end of the passage, where the workmen, each with a lamp in his cap, were driving wedges into the cracks and fissures of the coal to separate it from the roof and walls. We saw several large blocks detached in this manner, the workmen jumping aside when they fell, and then we retraced our steps. Before returning to the entrance, however, our guides took us into a branch of the main passage, in which, after proceeding a little way, we heard a roar as of flames, and then saw a fierce light before us. A furnace appeared, in which a fierce fire was blazing; the blackened workmen were stirring and feeding it, and a strong current of air rushing by us went with the flames up the shaft, which reached above to the surface of the ground. This, we are told, was a contrivance to ventilate the mine. All the foul air and all the fire damp and other noxious gases are drawn up and carried off from the passages and chambers by this method. On our way back to the entrance we perceived that the veins lay at just such an inclination as allowed the workmen to roll the loaded trucks by hand along an easy descent to the mouth, as I hear is the case with all the mines."

Workings of 1870 show in some places rooms regularly spaced and driven on points. Some portions of workings were still, however, driven on the old method and those rooms that were driven at regular intervals were too wide and the pillars too narrow. The need of ventilation was now more fully realized and almost all headings were paralleled by air courses. No mechanical devices had as yet been resorted to for ventilating purposes. The furnace was, however, coming into more extensive use.

Slope haulage engines had been in use since 1845, but this decade—1870 to 1880—witnessed the installation of steam locomotives for mine haulage and also the first power-driven fan for mine ventilation. This was an exceptionally important step forward and one that was soon generally adopted throughout the region.

The mine workings show a regular and decided improvement between 1880 and 1890. At the close of this period all rooms were being driven on points, they were more regularly spaced, were driven narrower and the pillars between the rooms wider than before. Efforts were now being made to secure all the coal by pillaring. The results were not as gratifying as at present, but were far better than anything attempted before.

The next decade marked the installation of mining machines, compressed air motors for inside haulage and also the first successful development of the smaller seams of coal. Previous to 1890 mining had been confined almost exclusively to the Pittsburg or Big Vein seam, but since that date the high quality of the coals of the smaller seams has been realized and at present there are more mines working in these beds than in the "Big Vein" seam.

In 1900 about 75 per cent. of the coal was being recovered, but this by careful management and a more thorough knowledge of the action of the overlying strata has been increased until at present a record of 95, 96 or even 97 per cent. ultimate recovery in some of the mines is by no means uncommon.

The total amount of coal shipped from the George's Creek region by rail and canal since 1842, the year of the completion of the Baltimore and Ohio Railroad to Cumberland, when 1,708 tons were marketed, to the present time with its annual production of 4,000,000 tons, has been upwards of 145,000,000 tons. Since 1853 the neighboring Upper Potomac region has shipped 53,000,000 tons, making a total of approximately 200,000,000 tons of Cumberland coal shipped to date.

Miners' Hospital, Frostburg, Md.



This beautiful modern building stands on an elevation which overlooks Jennings Valley and commands a view of magnificent extent. Through the efforts of Hon. Walter W. Wittig, of Frostburg, member of the Maryland Assembly, at its session in 1912, was secured the passage of a bill authorizing the construction of the Miners' Hospital at Frostburg and appropriating \$25,000 for that purpose. The Mayor and City Council donated the ample grounds upon which it stands and citizens, mining companies and civic bodies contributed upwards of \$5,000 for its interior equipments and furnishings. Nothing has been overlooked that would add to the comfort of patients. Every essential is there of the most approved and modern character for the treatment of the sick and disabled. The operating room is one of the most complete in the State. The institution is provided with a corps of skilled physicians and surgeons and trained nurses under Miss

A. B. Montana, a most competent and skilled woman. The directors of the hospital are Dr. Timothy Griffith, president; Herman V. Hesse, vice-president; Walter W. Wittig, secretary; Roberdeau Annan, treasurer, and William R. Gunter, John H. Dunston and Dr. J. Marshall Price, all citizens of Frostburg. The Miners' Hospital is a blessing to the miners of this section and is destined to become an institution of note in the State. Its beautiful location, the health-favoring atmosphere of the mountains and water that cannot be surpassed for purity; its quiet and freedom from the noise and dust of the city; its accessibility by rail and otherwise make it an ideal institution for the care of the sick and injured. The day is not far distant when many infirm persons from a distance will seek this healthful spot to assist their convalescence. It contains 51 beds and in case of emergency could accommodate 75 or 80 beds.