

ANNUAL REPORT  
OF THE  
*Mine Inspector for Allegany and  
Garrett Counties,  
Maryland,*  
TO HIS EXCELLENCY  
GOVERNOR AUSTIN L. CROTHERS  
FROM  
*May 1, 1908, to May 1, 1909.*

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JOHN H. DONAHUE,  
*Inspector.*

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1909  
EVENING TIMES PRINT,  
Cumberland, Md.

## Letter of Transmittal

Frostburg, Maryland, April 30, 1909.

TO HIS EXCELLENCY, AUSTIN L. CROTHERS,  
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 first annual report.

JOHN H. DONAHUE,  
INSPECTOR.

## INTRODUCTION.

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The coal field of Maryland is located in the western part of Allegany county and the central part of Garrett county, in the Alleghany range of the Appalachian system of mountains.

This deposit of bituminous coal is the finest steam-making coal in the world, and is geologically known as the Pittsburg, or "Big Vein," seam, with many smaller seams of various names.

For more than half a century the Big Vein seam has been worked and an enormous quantity of this coal has been mined and shipped from the region to nearly all parts of the world where steam-making coal is used.

The industrial depression throughout the country during the year 1908 caused duller times in the Maryland coal field than the people depending upon this industry experienced in many years. During the past year the miners had very poor work and this caused many hardships to the miners and others depending upon the coal industry.

The output of coal in the ten years from 1897 to 1907, according to the State Geological Report, varied from 4,024,688 short tons in 1897, to 5,532,628 short tons in 1907. The average yield during the period mentioned being 4,962,811 tons annually. There was mined in Maryland in 1908, 4,166,443 short tons of coal as against 5,532,628 short tons reported in 1907, showing a decrease of 1,366,194 short tons. Of the above output for the year, Allegany county produced 3,774,305 tons, of which 3,540,897 were mined by pick work, and 233,408 tons by machines. Garrett county produced 392,138 tons, all mined by pick work.

In Allegany county there are thirty-nine machines in operation, as against forty-three in 1907, a decrease of four machines. The total number of men employed in the mining industry of the State for the year of 1908, there were engaged 4,372 miners, 420 drivers, 523 inside laborers and 680 outside laborers, making a total of 5,996 employed in mining, showing an increase of 116 men.

While there was poor work during the year, yet a great many new openings were made in the smaller veins of coal in the region. Nearly all of these veins are an excellent quality of bituminous coal, and when the industrial conditions of the country become normal the Maryland coal field will be in condition to produce as much coal as in the past.

In consequence of the dullness of the coal trade for the past year a number of mines hitherto reported will not appear in this report, as they were not working during the year.

In this connection I wish also to state that I made a number of visits to many mines during the year and found them idle on the dates of my visits. This could not be avoided on account of the irregularity of work in the region, but it caused me much loss of time that could have been devoted to mines that were working.

In many places I found that the law had not been complied with as to the distance between the brake side of the mine cars and the rib—two and one-half feet. In every instance of this kind I called the attention

of the mine authorities to these defects and in most cases my requests were complied with at once.

I found that the man-ways needed attention, and nearly all of these are now in fair condition.

It seems to me that some mine officials are not fully acquainted with the mining laws and for this reason I will have printed with this report a copy of the laws.

One of the most important duties of the office of the Mine Inspector is to look after the careful ventilation of the mines for the welfare of those mining or extracting the coal and fire clay at a great distance under ground from the pure, fresh outside air. I wish to report that I found in most cases the management making efforts to comply with the law to provide good air. Occasionally I found instances where the law was being evaded. In such cases I insisted upon compliance with the law and on my next visit found satisfactory improvement.

On one of my visits I found the ventilation very defective, according to tests and informed the superintendent of the mines that the law must be complied with. After a reasonable time I made a second visit, but did not find a satisfactory condition of ventilation. On my third visit I found that proper work had been done to supply good air.

During the year there were 85 accidents in Allegany county and 12 in Garrett county. Of the 85 in Allegany county, 9 were fatal, and 3 fatal in Garrett county. The most distressing accident during the year was the one that occurred on the Franklin incline and which shocked the entire George's Creek region. A special description of this and other accidents will appear further on in this report.

The weighing of the coal by which the miner is given credit for his daily wages and in the digging and loading of which he is compelled to toil against many difficulties, the setting of props to protect his life, in order to remove the coal from where nature placed it, the laying of a track on which a car may reach his product for shipment to the surface, the many annoyances to which he is subjected during his day's work, such as the cleaning of his coal, removing the slate, and working underground with a dim lamp light, make the miner feel that he should receive full measure for every pound of coal he loads and to which he is justly entitled. In every occupation there are dangers to life, but to the man who goes underground there are more dangers than in other occupations, and to deprive a miner of just weight, to say the least, is an outrage.

During the year I had a number of calls to test the scales at mines where there were strong suspicions of injustice in weighing the coal. I proceeded at once and made the legal test of the scales and found the scales accurate in every instance. At one mine, though the coal was not being weighed according to law, I called the attention of the weigh boss to the requirements of the proper weighing of the coal and I found upon my next visit that he was complying with the law.

There is one very important fact that should receive the attention of every one concerned in the use of the "Big Vein" seam of coal yet to be mined in Maryland. Many fears have been expressed and opinions offered on the early exhaustion of the "Big Vein." Of this there need be no alarm. It is true that during the early years of mining the "Big Vein" there was always a "rush" to fill the daily orders without regard to the economical removal of the coal, and much of the seam was left behind. But in recent years the improved methods in removing the coal, in ventilation, drainage, haulage, and in careful management there will be thousands of tons of this seam mined in Maryland for many years to come.

JOHN H. DONAHUE, Inspector.

# Non-Fatal Accidents in Allegany County From May 1st, 1908 to May 1st, 1909.

No.	Date	Name of Injured	Occupation	Age	Married or Single	No. in family	Nationality	Residence	Nature of Injury	Days Lost	Cause of Accident	Name of Mine	Name of Company
1	1909												
2	May 2	Chas. Black	Miner	18	Single		American	Allegany	Leg broken	5 mos.	Fall of top rock	Union No. 1	New York Mining Co.
3	May 4	Thos. McAllister	Miner	19	Single	6	American	Frostburg	Arm broken	48 dys	Fall of lump of coal	Union Mine	Union Mining Co.
4	May 8	Thos. Lapsie	Scrapper	42	Married	4	American	Lord	Leg broken	22	Fall of breast coal	Ocean No. 7	Consolidation Coal Co.
5	May 14	Wm. Naismith	Laborer	44	Married	3	American	Frostburg	Stomach injured	42	Caught by a rope	Ocean No. 1	Consolidation Coal Co.
6	May 18	Wallace Trentman	Laborer	24	Married	3	American	Westport	Squeezed	21	Caught by cars	Washington No. 5	Piedmont and George's Creek Coal Co.
7	May 18	Geo. Duck worth	Miner	32	Single	3	American	Midland	Foot hurt	24	Fall of slate	Ocean No. 8	Consolidation Coal Co.
8	May 27	Geo. Winslow	Miner	17	Single	5	American	Lonaconing	Foot hurt	43	Run over by car	Ocean No. 7	Consolidation Coal Co.
9	May 26	Henry Bollinger	Trapper	19	Single	3	American	Eckhart	Foot hurt	17	Run over by car	Union Mine	Union Mining Co.
10	June 1	Gilbert Downton	Driver	18	Single	6	American	Allegany	Arm injured	1 mos.	Fall of breast coal	Union No. 1	New York Mining Co.
11	June 8	Jas Cronly	Miner	57	Married	3	American	Frostburg	Foot hurt	34	Fall of rock	Ocean No. 7	Consolidation Coal Co.
12	June 13	Alfred Thomas	Laborer	90	Married	6	Irish	Frostburg	Leg broken, leg hurt	48	Fall of breast coal	Aster Slope	Consolidation Coal Co.
13	June 24	Jas. Higgins	Miner	55	Married	2	Welsh	Hoffman	Leg hurt	24	Run over by car	Washington No. 4	Piedmont and George's Creek Coal Co.
14	July 2	Frank Y. Williams	Miner	46	Married	7	American	Frostburg	Leg hurt	27	Fall of rock	Union Mine	Union Mining Co.
15	July 11	Jabez Mealing	Miner	52	Married	10	American	Lonaconing	Ankle hurt	48	Fall of breast coal	Carlton Mine	Consolidation Coal Co.
16	July 14	Wm. Griffith	Miner	45	Married	6	American	Frostburg	Nose cut	24	Fall of rock	Washington No. 4	Piedmont and George's Creek Coal Co.
17	July 17	Geo. Steen	Miner	25	Single	7	American	Hoffman	Leg broken	27	Fall of slate	Union Mine	Union Mining Co.
18	July 20	Geo. Enter	Miner	35	Married	4	American	Frostburg	Back hurt	89	Fall of breast coal	Vale Summit Mine	Consolidation Coal Co.
19	July 23	Philip Hartig	Miner	40	Married	3	American	Carlton	Bone in leg cracked	14	Fall of rock	Union Mine	Union Mining Co.
20	July 27	Albert Spurling	Motorman	22	Married	4	American	Frostburg	Hand hurt	17	Cut with ax	Carlton Mine	Barton-George's Creek Valley Coal Co.
21	July 28	Edward Hogan	Miner	33	Married	8	American	Frostburg	Finger cut	42	Fall of slate	Union Mine	Union Mining Co.
22	Aug. 5	Urban McKenzie	Miner	62	Single	4	American	Lonaconing	Ankle broken	33	Hurt by motor	Washington No. 5	Piedmont and George's Creek Coal Co.
23	Aug. 14	John P. McGeary	Miner	26	Married	3	American	Midland	Hurt about body and legs	21	Fall of coal	Ocean No. 8	Consolidation Coal Co.
24	Aug. 22	Chas. Legg	Miner	21	Single	9	American	Piedmont	Leg hurt	32	Fall of coal	Ocean No. 1	Consolidation Coal Co.
25	Aug. 26	Thos. Fitzpatrick	Miner	45	Married	5	American	Moscow	Head cut	3	Fall of breast coal	Washington No. 4	Consolidation Coal Co.
26	Sept. 8	Irvin Hoffman	Driver	26	Married	4	American	Lonaconing	Back hurt	27	Fall of top coal	Ocean No. 7	Consolidation Coal Co.
27	Sept. 9	Geo. Adams	Miner	55	Married	3	American	Frostburg	Hurt about stomach	31	Fall of top coal	Ocean No. 1	Consolidation Coal Co.
28	Sept. 18	Robert Gentry	Driver	27	Single	5	English	Carlton	Ribs broken and hip injured	21	Caught between cars	Washington No. 2	Consolidation Coal Co.
29	Oct. 6	Wm. Hines	Miner	47	Single	3	American	Westport	Leg hurt	32	Cut with a piece of steel	Ocean No. 7	Consolidation Coal Co.
30	Oct. 8	Edward Stevenson	Miner	21	Single	5	American	Frostburg	Leg injured	3	Fall of roof	Ocean No. 7	Consolidation Coal Co.
31	Oct. 6	John H. Lapp	Miner	17	Single	3	American	Midland	Leg broke	27	Caught between cars	Washington No. 4	Piedmont and George's Creek Coal Co.
32	Oct. 28	Henry Gillis	Laborer	20	Single	3	American	Frostburg	Eye injured	27	Caught between cars	Washington No. 2	Consolidation Coal Co.
33	Oct. 28	Harry Gable	Driver	47	Married	5	American	Lonaconing	Leg broke	3	Fall of rock	Ocean No. 3	Consolidation Coal Co.
34	Nov. 1	Harry Gable	Miner	47	Married	5	American	Barton	Leg crushed	3	Caught between cars	Ocean No. 7	Consolidation Coal Co.
35	Nov. 5	John Woods	Miner	47	Married	3	American	Lonaconing	Foot hurt	3	Fall of rock	Washington No. 4	Piedmont and George's Creek Coal Co.
36	Nov. 11	Wm. McDonough	Miner	35	Single	3	American	Frostburg	Back and leg injured	27	Fall of top coal	Washington No. 1	Piedmont and George's Creek Coal Co.
37	Nov. 14	Geo. R. Gales	Miner	25	Married	5	American	Lonaconing	Hand smashed	36	Fall of top coal	Washington No. 2	Piedmont and George's Creek Coal Co.
38	Nov. 19	Jno. Bryson	Miner	53	Married	3	American	Eckhart	Leg injured	31	Fall of slate	Washington No. 5	Piedmont and George's Creek Coal Co.
39	Nov. 25	Geo. McIntosh	Miner	21	Single	3	Scotch	Borden Shaft	Hurt about body	27	Caught with cars	Carlton Mine	Barton-George's Creek Valley Coal Co.
40	Nov. 25	Frank McIntosh	Miner	17	Single	3	American	Westport	Foot hurt	27	Fall of breast coal	Washington No. 4	Piedmont and George's Creek Coal Co.
41	Dec. 4	Peter Bergina	Miner	21	Single	3	American	Westport	Leg broke	27	Fall of rock	Washington No. 2	Consolidation Coal Co.
42	Dec. 7	Leslie Pattison	Miner	17	Single	3	Italian	Eckhart	Leg broke	6	Fall of rock	Ocean No. 1	Consolidation Coal Co.
43	Dec. 9	John Lee	Miner	35	Single	3	American	Lonaconing	Back hurt	6	Fall of breast coal	Ocean No. 9	Consolidation Coal Co.
44	Dec. 11	Jas. Gentry	Miner	22	Single	3	American	Lonaconing	Hurt about body	6	Fall of top coal	Ocean No. 1	Consolidation Coal Co.
45	Dec. 12	Jas. Devault	Miner	22	Single	3	American	Lonaconing	Back injured	6	Fall of top coal	Ocean No. 3	Consolidation Coal Co.
46	Dec. 12	Jas. Eberick	Driver	30	Married	3	American	Frostburg	Ribs broken	6	Caught by a motor	Ocean No. 7	Consolidation Coal Co.
47	Dec. 14	Patrick Stanton	Miner	20	Single	3	American	Frostburg	Leg hurt	6	Fall of breast coal	Ocean No. 7	Consolidation Coal Co.
48	Dec. 14	Walter Bluebaugh	Miner	54	Married	7	Scotch	Midland	Back and head hurt	6	Caught with cars	Ocean No. 3	Consolidation Coal Co.
49	Dec. 15	Joseph McGovern	Miner	25	Single	4	American	Frostburg	Back and head hurt	6	Fall of breast coal	Ocean No. 7	Consolidation Coal Co.
50	Jan. 9	Chas. Stevens	Miner	45	Married	4	American	Midland	Fingers mashed	6	Caught with cars	Ocean No. 7	Consolidation Coal Co.
51	Jan. 9	Cecil Stevens	Miner	45	Married	4	American	Frostburg	Back and hips injured	6	Fall of coal	Ocean No. 9	Consolidation Coal Co.
52	Jan. 16	Wm. Scott	Miner	13	Single	4	American	Allegany	Hurt about head	6	Knocked off car	Ocean No. 1	Consolidation Coal Co.
53	Jan. 21	Albert Winner	Mucker	23	Single	4	American	Vale Summit	Burned with powder	6	Bucket of powder exploded	Tyson No. 9	Consolidation Coal Co.
54	Jan. 24	Geo. Brode	Laborer	44	Married	8	American	Hoffman	Burned with powder	6	Bucket of powder exploded	Tyson No. 9	Consolidation Coal Co.
55	Jan. 25	Leopold Lambert	Motorman	26	Married	4	American	Carlton	Ankle broken	6	Fall of breast coal	Ocean No. 8	Consolidation Coal Co.
56	Jan. 25	Everett Phillips	Laborer	35	Married	4	American	Westport	Fingers mashed	6	By a fall of rock	Ocean No. 1	Consolidation Coal Co.
57	Jan. 25	Edward Faye Baker	Laborer	36	Married	5	American	Westport	Foot broken	6	Engine running over foot	Ocean No. 3	Consolidation Coal Co.
58	Jan. 25	Geo. Hamilton	Laborer	19	Single	4	American	Barton	Leg Broken	6	Collision of cars on plane	Washington No. 5	Consolidation Coal Co.
59	Jan. 25	Lewis Luce	Laborer	29	Single	4	American	Westport	Shoulder and face hurt	6	Collision of cars on plane	Washington No. 5	Consolidation Coal Co.
60	Jan. 25	Jas. Govan	Laborer	23	Married	4	Italian	Franklin	Arm and face injured	7			
61	Jan. 25	Jno. Kirk	Laborer	20	Single	3	American	Piedmont	Face injured	7			
62	Jan. 25	Nick Bollare	Brakeman	23	Single	3	American	Barton	Face and head injured	30			
63	Jan. 25	Joseph Luce	Laborer	31	Married	6	Italian	Barton	Ribs broken and breast hurt	34			
64	Jan. 25	Thomas Murphy	Laborer	30	Married	6	American	Piedmont	Shoulder injured	14			
65	Jan. 25	Clarence McAlister	Watchman	28	Single	5	American	Franklin	Leg broken	14			
66	Jan. 28	Harden Baker	Miner	24	Married	5	American	Frostburg	Shoulder dislocated	14			
67	Feb. 3	Isaac Hogan	Miner	34	Married	5	American	Frostburg	Slightly injured	14			
68	Feb. 12	Chas. Ossa	Laborer	30	Single	8	American	Vale Summit	Foot bruised	14			
69	Feb. 15	Peter Canton	Rock Driller	43	Married	8	American	Midland	Shoulder hurt	14			
70	Feb. 18	Jas. Cathcart	Miner	48	Married	8	American	Cresaptown	Head cut	14			
71	Feb. 19	C. K. Porter	Driver	25	Married	8	American	Frostburg	Leg hurt	14			
72	Feb. 22	John McPartland	Miner	62	Married	1	American	Frostburg	Three ribs broken	14			
73	Mar. 4	Thomas Williams	Miner	33	Single	4	American	Lonaconing	Ribs fractured	14			
74	Mar. 4	Thomas Monahan	Motorman	27	Married	2	American	Ocean	Injury slight	14			
75	Mar. 8	Fred Hadley	Car Hitcher	47	Married	7	American	Frostburg	Badly bruised	14			
76	Mar. 13	Michael Lavin	Miner	37	Married	4	American	Frostburg	Foot hurt	16			
77	Mar. 17	Jas. Shea	Miner	55	Married	10	American	Vale Summit	Head hurt	16			
78	Mar. 26	David Turnbull	Miner	39	Married	3	Scotch	Allegany	Toes broken	16			
79	Mar. 26	Edward Bell	Miner	35	Married	4	American	Detmold	Bruised about body	16			
80	July 31	D. W. Wit	Miner	38	Single	4	American	Upper Potomac	Leg and arm broken	19			
81	Sept. 9	Walter Paugh	Miner	33	Single	4	American	Blaine	Thighs bruised	103			
82	Sept. 24	Thos. Boyce	Miner	22	Single	3	American	Barnum	Leg broken	27			
83	Dec. 1	Fred Duggan	Miner	38	Single	3	American	Kitzmiller	Ankle cut and head hurt	27			
84	Jan. 1909	Fred Newell	Driver	19	Single	3	American	Dodson	Collar bone broken	27			
85	Feb. 11	Henry Solars	Miner	23	Single	3	American	Kitzmiller	Leg broken	27			
86	Feb. 25	A. G. Paugh	Miner	24	Single	3	American	Kitzmiller	Foot hurt	27			
87	Mar. 2	F. H. McMillan	Miner	30	Married	3	American	Kitzmiller	Back and ankle injured	27			

# GARRETT COUNTY NON FATAL ACCIDENTS FROM MAY 1st, 1908 TO MAY 1st, 1909.

No.	Date	Name of Injured	Occupation	Age	Married or Single	No. in family	Nationality	Residence	Nature of Injury	Days Lost	Cause of Accident	Name of Mine	Name of Company
1	1908												
2	June 3	Edward Bell	Miner	35	Married	4	American	Upper Potomac	Thighs bruised	19	Caught by fall of rock	Up. Potomac Mine	Upper Potomac Mining Co.
3	July 31	D. W. Wit	Miner	38	Single	4	American	Blaine	Leg broken	103	Fall of roof	Hamill No. 1	Hamill Coal & Coke Co.
4	Sept. 9	Walter Paugh	Miner	33	Single	3	American	Barnum	Ankle cut and head hurt	27	Fall of rock	Three Fork Mine	Three Fork Coal Co.
5	Sept. 24	Thos. Boyce	Miner	22	Single	3	American	Kitzmiller	Collar bone broken	27	Fall of rock	Hamill No. 1	Hamill Coal & Coke Co.
6	Dec. 1	Fred Duggan	Miner	38	Single	3	American	Dodson	Collar bone broken	27	Cutter in coal	Dodson No. 2	Garrett County Coal Co.
7	Jan. 1909	Fred Newell	Driver	19	Single	3	American	Kitzmiller	Leg broken	27			
8	Feb. 11	Henry Solars	Miner	23	Single	3	American	Kitzmiller	Foot hurt	27			
9	Feb. 25	A. G. Paugh	Miner	24	Single	3	American	Kitzmiller	Back and ankle injured	27			
10	Mar. 2	F. H. McMillan	Miner	30	Married	3	American	Kitzmiller	Back and ankle injured	27			

## *Maryland's Mine Inspectors*

Name.	Tenure of Office
PETER GAIN	From first Monday in May, 1874, to first Monday in May, 1876.
DWEN RIORDAN	First Monday in May, 1876, to first Monday in May, 1878.
DWEN 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. HAMILL	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.

## *Fatal Accidents : Description.*

May 19, 1908—Russell Yost, aged 14, single, residing at Westernport, Md., and employed at the Buxton mine of the Davis Coal and Coke Company, was killed detaching three cars from an endless rope on the inside of the mines. He lived but a short time after the accident.

June 2—William Shea, a miner, aged 37 years, married, and residing at Kitzmiller, Md., was killed at the Dill mine of the Blaine Mining Company. He was engaged under-mining a breast of coal when it suddenly gave way, falling upon him and so injuring him that he died a few hours later.

June 8—Charles Hartley, aged 17, single, residing at Blaine, W. Va., and employed at Darwin mine of the Potomac Valley Company, was killed by a fall of breast coal. The young man was boring a hole preparing to put in a shot. The breast contained a "slip," which caused it to give way suddenly, catching the miner and injuring him internally. Death ensued shortly after. Where slips are found there is always danger to the miner. It is the most serious element of the many dangers that confront those engaged in the pursuit of mining. Where the greatest care is taken by the miner, accidents of this character occur. The place in which this accident happened was apparently kept in good condition.

July 15—William Patrick, miner, aged 33 years, married, and residing at Lonaconing, while engaged along with two other men in taking out a "stump" in Ocean Mine No. 7, of the Consolidation Coal Company, was injured so badly that death resulted the following day. The young man, with his father and brother, had almost completed the stump of coal on which they were working, when the breast, without warning, gave way, striking young Patrick and knocking him down. The roof also fell, not an unusual happening in this kind of mine work. Pillaring is always attended with considerable danger, even where the greatest precaution is taken.

The place in which this unfortunate accident occurred showed that the men had taken due precaution to provide for their safety. It was well timbered.

July 19—Joseph Duckworth, a brakeman on a motor, aged 23 years, married, and living at Lonaconing, employed in Ocean Mine No. 1, of the Consolidation Coal Company, was fatally injured while standing behind a truck loaded with wooden rails. A trip of empty cars descending the slope ran in on the wrong track and struck the truck, catching the young man between it and loaded cars standing on the "lie," injuring him so badly that he died the next day.

October 8—J. R. Browning, superintendent of the Hamill Coal and Coke Company, was killed October 8, 1908, at the Hamill mine of the above named company in a very unusual accident.

At this mine the coal is conveyed from the mine to the dump in large buckets which are suspended and carried across to the tippie by an aerial cable. Mr. Browning, with several men, had been making some repairs to the cable. The other men had completed their part of the work, the superintendent remaining to finish some little detail of the repairs, and while doing so was seated on a board which had been placed across one of the buckets. The fastenings to the bucket in some manner gave way. The bucket when released started across the cable toward the dump on the other side, increasing its velocity as it pro-

ceeded, and in a moment Mr. Browning was dashed to death against the tippie on the lower terminal. Mr. Browning was 25 years of age and unmarried.

January 4, 1909—Andrew Schuyler, aged 24 years, miner, single, and residing at Lonaconing, employed at the Big Vein mine of the New Central Coal Company, was killed instantly on January 4, of this year, by a fall of top coal. The fall which caused Mr. Schuyler's death is known as a "horse-back." The danger from this source is very hard to detect, which makes it doubly dangerous. He, along with two other men, were loading the last car for their day's work, when the dreadful accident occurred.

January 25, 1909—The most distressing mine accident of the year, or I may say, in the history of mining in the George's Creek Valley, occurred at the Washington Mine No. 5, of the Piedmont and George's Creek Coal Company, near Franklin. Here on Monday morning, January 25, five men were killed; two outright, two dying within ten hours after the accident, and another on the day following the accident. Nine others were more or less seriously injured. James Condry, laborer, aged 18 years, single, and William Hamilton, blacksmith, aged 46, married, were killed outright. Both men resided at Franklin. Cleaver Kight, carpenter, aged 22 years, single, residing at Westernport, and Joseph Blantt, mine laborer, aged 26 years, single, and residing at Franklin, sustained injuries from which they died shortly after the accident. William Smith, weighmaster, 22 years old, married, and residing at Westernport, died from injuries received two days later.

The accident occurred on the plane, early in the morning. It was the first trip run. The men were riding up the plane to their work, as had been the custom for them to do. The incline-plane is very steep and about 2,200 feet long, which no doubt caused many to ignore the danger and ride up.

In the middle of the incline-plane there is a double track, where the loaded car descending passes the empty car going up. At this point an automatic switch is used, so constructed that the loaded car, going down, passes through and leaves the latches in proper position for the empty car, ascending on the following trip, to pass on the opposite side. The accident happened on the first trip on Monday morning, which accounts for so many men being on the car. No cars had been run on the plane since Saturday evening. For some reason not clear the first trip on Monday, with fifteen men, some on the inside of the car, and others standing on the front and rear bumpers, ran in on the wrong track and collided with the loaded car descending, killing five and injuring nine, as stated before. Of the fifteen on the car only one escaped being injured, and strange to say, this man was riding on the front of the car going up the incline.

On being notified I went to the scene of the accident and made a thorough investigation. I examined the switch carefully and found it in good working condition, in fact, not the least impaired. The only logical conclusion as to the cause of this frightful accident is that the latches were changed some time between the time of the last run on Saturday and the ill-fated one on Monday morning, which dealt death and injury to so many.

## *Table of Inspections.*

Name of Company.	Name of Mine.	Inspection.
Cumberland Basin Coal Co.....	Nos. 1 and 2.....	2
Midland Mining Co.....	Trimble Mine.....	2
Midland Mining Co.....	Enterprise.....	6
New York Mining Co.....	Union No. 1.....	6
New York Mining Co.....	Union No. 2.....	6
Union Mining Co.....	Union Mine.....	6
Consolidation Coal Co.....	Ocean No. 1.....	13
Consolidation Coal Co.....	Ocean No. 3, Hoffman.....	11
Consolidation Coal Co.....	Ocean, No. 3½, Eckhart.....	6
Consolidation Coal Co.....	Ocean No 3½, Tyson, Eckhart	2
Consolidation Coal Co.....	Vale Summit Mine.....	5
Consolidation Coal Co.....	Ocean No. 7, Klondyke.....	13
Consolidation Coal Co.....	Ocean No. 8, Big Vein & Tyson	10
Consolidation Coal Co.....	Ocean No. 9, Tyson.....	6
Consolidation Coal Co.....	Ocean No. 10, Tyson.....	2
H. & W. A. Hitchins Coal Co.....	Borden Mine.....	7
Piedmont & George's Creek Coal Co..	Washington No. 1.....	6
Piedmont & George's Creek Coal Co..	Washington No. 2.....	6
Piedmont & George's Creek Coal Co..	Washington No. 3.....	5
Piedmont & George's Creek Coal Co..	Washington No. 4.....	6
Piedmont & George's Creek Coal Co..	Washington No. 5.....	7
George's Creek Coal & Iron Co.....	Engineside No. 1.....	5
George's Creek Coal & Iron Co.....	Tyson No. 16.....	5
George's Creek Coal & Iron Co.....	No. 12.....	3
George's Creek Coal & Iron Co.....	No. 13.....	4
George's Creek Coal & Iron Co.....	No. 14.....	4
Wachovia Coal Co.....	Montell Mine.....	4
Barton & G. C. Valley Coal Co.....	Carlos Mine.....	6
Bowery Coal Co.....	Bowery Mine.....	6
George's Creek Basin Coal Co.....	Pine City Mine.....	6
New Central Coal Co.....	Koontz Mine.....	5
New Central Coal Co.....	Tyson No. 2.....	5
New Central Coal Co.....	Big Vein Mine.....	5
Maryland Coal Co.....	Appleton Mine.....	6
Maryland Coal Co.....	New Detmold.....	5
Maryland Coal Co.....	Tyson No. 1.....	2
American Coal Co.....	Calidonia.....	5
American Coal Co.....	Jackson.....	1
Piedmont Mining Co.....	Pekin Mine.....	5
Moscow & G. C. Mining Co.....	Moscow Mine No. 3.....	6
Chapman Mining Co.....	Swanton Mines.....	5
Potomac Mining Co.....	Potomac Mine.....	3
Phoenix & George's Creek Coal Co..	Eckhart & Phoenix.....	6
Cumberland & G. C. Coal Co.....	Penn Mine.....	4
Frostburg Fuel Co.....	Fuel Mine.....	2
McCulloh Bros.....	Fuel Mine.....	2
Davis Coal & Coke Co.....	Buxton Mine.....	5
Morrison Land Co.....	Morrison Mine.....	2

Total number inspections...249

## Fatal Accidents in Coal Mines in Allegany and Garrett Counties, May 1st, 1908 to May 1st, 1909.

Date	Name.	Occupation	Married or Single.	No. in family	Nationality	Residence	Age	Cause of Accident	Mine.	Name of Company.	Extent of Injuries.
1908											
May 19	Russell Yost.....	Lye boy....	Single...		American	Westernport.....	14	Run over by cars.....	Buxton.....	Davis Coal & Coke Co.....	Died shortly after accident.
June 2	Wm. Shea.....	Miner.....	Married..	3	American	Kitzmilller.....	37	Caught by a fall of breast coal.	North American..	Blaine Mining Co.....	Died shortly after accident.
June 8	Chas. Hartley.....	Miner.....	Single....		American	Kitzmilller.....	17	Caught by a fall of breast coal.	Darwin.....	Potomac Valley Coal Co.....	Died seven hours after accident.
July 9	Joseph Duckworth.....	Brakeman..	Married..		American	Lonaconing.....	23	Caught between two cars.....	Ocean No. 1.....	Consolidation Coal Co.....	Died the next day.
July 15	Wm. Patrick.....	Miner.....	Married..	2	American	Lonaconing.....	33	Caught by a fall of top coal....	Ocean No. 1.....	Consolidation Coal Co.....	Died the next day.
Oct. 8	J. R. Browning.....	Supt.....	Single....		American	Blaine.....	25	In aerial tramway bucket when it ran away.....	Hamill.....	Hamill Coal & Coke Co.....	Killed instantly.
1909											
Jan. 4	Andrew Schuler.....	Miner.....	Single....		American	Lonaconing.....	24	Caught by fall of top coal.....	Big Veir.....	New Central Coal Co.....	Killed instantly.
Jan. 25	Wm. Hamilton.....	Blacksmith.	Married..	6	American	Franklin.....	44	Cars collided on plane.....	Washington No. 5	Piedmont & George's Creek Coal Co.	Killed instantly.
Jan. 25	Joseph Brunett.....	Laborer.....	Single....		Italian	Franklin.....	23	Cars collided on plane.....	Washington No. 5	Piedmont & George's Creek Coal Co.	Killed instantly.
Jan. 25	Jas. Condry.....	Laborer.....	Single....		American	Franklin.....	19	Cars collided on plane.....	Washington No. 5	Piedmont & George's Creek Coal Co.	Died shortly after accident.
Jan. 25	Cleaver Kight.....	Carpenter..	Single....		American	Westernport.....	22	Cars collided on plane.....	Washington No. 5	Piedmont & George's Creek Coal Co.	Died shortly after accident.
Jan. 25	Wm. Smith.....	Wgh. Master	Married..		American	Westernport.....	20	Cars collided on plane.....	Washington No. 5	Piedmont & George's Creek Coal Co.	Died two days later.

## TABLE OF INSPECTIONS —(Continued.)

**GARRETT COUNTY.**

Name of Company.	Name of Mine.	Inspection.
G. C. Pattison Coal Co.....	Mine 1 and 2.....	4
Bloomington Coal Co.....	Bloomington 1 and 2.....	4
Three Forks Coal Co.....	No. 1.....	4
Monroe Coal Mining Co.....	Elk River 1 and 2.....	4
Potomac Valley Coal Co.....	Darwin 1 and 2.....	5
Blaine Mining Co.....	North American.....	5
Garrett County Coal and Mining Co...	Dodson 1, 2 and 4.....	4
Upper Potomac Mining Co.....	No. 1.....	4
	Total number of visits.....	34

**CLAY MINES.**

Name of Company.	Name of Mine.	Inspection.
Union Mining Co., clay mine.....	No. 5, 6 and 7.....	3
Savage Mountain Fire Brick Co....	No. 5 Mine.....	3
Big Savage Fire Brick Co.....	No. 1 Mine.....	3

# *Description of the Mines*

## **CONSOLIDATION COAL COMPANY.**

H. V. Hesse, General Superintendent.

A. E. Reppert, Asst. Supt.

W. H. R. Thomas, Foreman.

This Company is the largest owner and operator of coal in Maryland. Its operations are conducted chiefly in the famous George's Creek "Big Vein" seam of coal and these mines are designated as "Ocean," which is followed by numbers in the use of this general name for its openings. Operations have also been commenced, within the last few years, in the Tyson seam of coal, in which case the word "Tyson" is applied to the number of the opening in a similar manner as "Ocean" is applied to the "Big Vein" mines.

The general condition of the mines of this company is very good, no expense being spared to meet the requirements of the law and to make the workings as safe as practicable.

### **OCEAN No. 1 MINE.**

Thomas McFarlane, Foreman.

This mine is located at the town of Ocean, about sixteen hundred feet above sea level, on the east side of the region along the Cumberland and Pennsylvania railroad, over which its coal is shipped.

This was one of the earliest openings of the "Big Vein" in the George's Creek region and will continue to ship coal till the region is worked out. This mine, which is a slope, is the second largest opening in the region. The coal is mined by pick-work and machines. The ventilation is carried on by means of a direct-connected Guibal fan, with spiral casings. There are five air locomotives and several mining machines. The drainage is by means of pumps and a tunnel, through which the water empties into George's creek a mile south of the mouth of the mine. The company is engaged at present in driving a rock tunnel and series of rock ditches to connect with the Ocean No. 3 drainage system, and, after this will have been completed, the drainage will be entirely by gravity flow to Ocean No. 3 and thence through the big Hoffman drainage tunnel to Clarysville.

Since May 1st, 1908, a very great improvement has been made in the economy of hauling empty cars from the tippie for return to the mine. Previous to this improvement one track only was used to deliver the loaded cars on the outside and return the empty ones to the bottom of the slope. In order to do this a stationary engine was required to haul the cars, after leaving the tippie and running some distance from the tippie, back over a loop track which joined the track entering the mine. This was the most expensive means of returning empty cars from the tippie to the mine mouth in the region. To do away with the expense of the stationary engine the company enlarged the mouth of the mine, laid a second track from the tippie for some distance inside of the mine, where it joins the main track. This second track is so constructed that the empty cars now run by gravity from the tippie to the mine mouth.

The man-ways are in good condition.

The table below shows the average condition of the air for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan .....	89,220	345	258
Intake from old lye.....	4,800	18	266
Outlet to machine heading dip.....	4,600	26	176
Outlet of straight dip heading.....	4,800	16	300
Intake of Hawkins' heading.....	5,640	51	110
Intake of Walsh's.....	3,600	26	138
Outlet Miller's.....	1,950	15	130
Intake to Carney's.....	2,000	16	125
Intake to 8th right.....	4,000	22	181
Intake to 9th and 10th right.....	4,800	24	200
Intake to 11th right straight slope.....	6,400	31	206
Outlet of 7th right slope.....	3,050	18	120
Intake of 5th left slope.....	4,000	18	222
Outlet of 3rd left slope.....	3,100	16	...
Outlets combined .....	37,850		

#### OCEAN No. 3.

William Sleeman, Foreman.

This mine was originally named Hoffman Hollow mine, and was among the early opening of the region. Its mouth is located at the head of a narrow ravine, at the village of Hoffman, through which the historic Braddock road passed.

This mine has, perhaps, the longest slope in the country, which is over seven thousand feet in length, and is drained by a tunnel through which the water empties into Braddock's run, at Clarysville, which is along the old National Pike, nine miles west of Cumberland. The company is engaged at present in constructing a series of large rock ditches, and another tunnel, one-half mile long, which will drain Ocean No. 1 and No. 7 mines into the large tunnel now in operation.

The ventilation is accomplished by a blowing fan, twenty feet in diameter, located at the mouth of the slope.

Compressed air motors are used to do most of the hauling in this mine.

In altitude this mine is in the lowest part of the Big Vein in the region. The conditions of the mine in general are good.

The coal is shipped over the Eckhart branch of the Cumberland and Pennsylvania railroad. The man-way at this mine is in good condition.

The following table shows the average condition of the air for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from the fan.....	58,880	232	254
Outlet of 1st cross slant.....	3,000	27	111
Intake to Tipping's heading.....	2,520	17	148
Intake to Scobie's heading.....	3,900	20	195
Intake to 5th cross Klondike.....	6,000	12	500
Intake to 3rd left Klondike.....	5,400	22	249
Intake to 2nd left.....	5,400	50	108
Outlet to 1st left.....	2,400	20	120
Intake to north side.....	5,040	42	120
Outlet at mouth of slope.....	17,280		

## ECKHART MINE No. 3½ SLOPE.

James Weston, Foreman.

Maryland mine was the original name of this opening until it was given its present name. This Big Vein mine was one of the early openings in the region. It is located in the center of the town of Eckhart, along the old National pike, a mile and one-half east of Frostburg, and nine and one-half miles west of Cumberland.

The coal from this mine, which is a slope, is shipped over the Eckhart Branch railroad, which has its terminus at the tippie of the mine. A Guibal fan supplies the ventilation for this mine. The drainage is natural. The man-way is in good condition.

The inspection of the air for the year shows the following average:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake from the fan.....	45,600	84	542
Outlet at mouth of slope.....	19,320		

## ECKHART TYSON No. 3½ MINE.

James Weston, Foreman.

This mine, in the Tyson seam, is a new opening of the Consolidation Coal Company, and is located just above the Eckhart slope in the Big Vein, and about one hundred yards north of the old National pike. The opening is about five hundred yards in from the mouth. This mine is being driven south to meet another opening in this seam, which is being driven one hundred and fifty feet from the top of the New Pumping Shaft mouth. The area of the coal which this drift opens up will be about two and one-half square miles.

The ventilation and drainage are natural and good.

The coal from this mine is run by gravity on a tram road to the C. & P. R. R. at Eckhart.

The following is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake to new mine.....	4,250	6	.08
Return to furnace .....	2,280		
Intake to old mine.....	3,320	8	415
Return to furnace.....	2,060		

## OCEAN No. 7.

Jonathan Jenkins, Foreman.

This group of mines is the largest portion remaining of the original nine thousand acres of the virgin Big Vein coal of the Consolidation Coal Company. It is claimed, and no doubt justly so, that this is the largest bituminous coal mine in the United States.

The mine is located on the western, or Savage mountain, side of the region and a half mile from the Cumberland and Pennsylvania railroad, over which its coal is shipped, and five miles southwest of the city of Frostburg.

Here is the town of Lord, but because the mine is up in the mountain

and there is a large area of Big Vein, the popular name given to the town and mine is "Klondyke."

There are three openings at No. 7. An opening made here is a drift on the north side of the valley in which No. 7 is located. This mine will soon be worked out.

Another opening, which is on the south side, has two slopes. The coal from this opening is hauled sixty-six hundred feet from the bottom of this mine by two of the most powerful stationary mining engines in the country. In six minutes a train of fifty mining cars are delivered from the mouth to the bottom of this mine and a similar train of loaded cars landed from the bottom of the slopes to the outside.

A third opening at Ocean No. 7 is in the Tyson seam. It is from the opening in this seam that the slope is being driven to the Tyson mine at No. 8, about two miles southeast.

The drainage from these openings is by a tunnel which empties into the George's Creek at No. 8. The ventilation is carried on by fans. There is black damp where the "drawing" of pillars are being done, but this is one of the conditions in ventilation that is difficult to overcome.

At this group of mines there is a new ambulance which is used when an employe is injured, to convey him to his home. There is also a large medicine case, well supplied with such drugs as can be administered until the service of a physician can be secured.

Approximately 20 per cent of the coal in this mine is worked by machines. The output is from three to four thousand tons per day.

The man-way is in good condition and the mines are well managed for the enormous amount of coal mined.

The following table shows the air inspections for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake from fan.....	131,100	724	181
Intake to 1st right new slope.....	5,760	23	250
Intake to 2nd right new slope.....	6,000	52	115
Intake to 3rd right.....	5,040	22	227
Intake to 4th left.....	4,970	42	118
Intake to 1st cross 4th right.....	1,680	20	81
Intake to 2nd cross 4th right.....	4,120	41	100
Intake to 1st cross 5th right.....	6,680	50	155
Intake to 5th right straight.....	880	4	220
Intake to dip heading.....	3,550	4	887
Outlet of 5th left.....	8,220	12	685
Intake to 1st left new slope.....	6,720	37	181
Intake to new heading new slope.....	9,750	29	336
Intake to 2nd cross second left.....	3,240	9	360
Intake to 2nd right.....	2,560	20	128
Intake to 3rd cross second left.....	4,500	29	165
Intake to 2nd cross third left.....	3,680	35	105
Intake to 3rd cross third left.....	3,920	34	115
Intake to 3rd cross straight.....	9,000	53	169
Intake to 3rd right.....	4,500	11	409
Intake to 4th right.....	2,640	19	138
Intake to 4th left.....	10,240	53	195
Intake to 5th left.....	6,480	42	154
Intake to 5th right.....	5,450	43	126
Outlets at different places.			

## TYSON No. 8 MINE.

W. H. R. Thomas, Foreman.

This mine is located a very short distance northwest of No. 8 Big Vein. It is one of the late openings of the company. A plane delivers the coal from the mine to No. 8 Big Vein switch.

The ventilation is by fan and is good. The drainage is very difficult on account of the many "dips" in the formation of the seam. Bore holes into the workings of No. 8 Big Vein beneath this mine is the only means employed for drainage, which is never good.

There were many "faults" encountered in the plane workings, but the main heading is in splendid coal and promises well for the future of this mine.

The company is now driving a slope from Tyson mine No. 7 to Tyson No. 8. The work will be carried on from both openings and when completed the slope will be six thousand seven hundred (6,700) feet long. This will open up a large territory of Tyson coal. At present the company are at work making another opening in the Tyson in connection with this group of mines in "Squirrel Neck Hollow," a mile west of the town of Midland.

This will be a large area of good Tyson seam. A small locomotive will haul the coal from this new opening over a tram road to No. 8 Tyson tippie.

Air readings as follows:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	12,320	30	410
Intake to straight heading.....	4,000	8	500
Intake to 4th right.....	1,560	8	195
Outlet to 3rd right.....	2,100	4	525
Intake to 2nd right.....	1,120	4	280
Outlet to 1st right.....	1,120	6	187
Outlet mine mouth.....	10,550		

## OCEAN No. 8 MINE—BIG VEIN.

W. H. R. Thomas, Foreman.

This is one of the later openings of the Consolidation Coal Company in the Big Vein seam. It is located at the town of Midland, on the west side of the George's Creek, a short distance from the Cumberland and Pennsylvania railroad, with which it is connected by a switch and over which its coal is shipped.

This mine is ventilated by a large fan. The drainage is carried on through the tunnel which drains No. 1 and empties into George Creek, which is just under the mouth of the mine. Air and drainage are always first class.

The following table gives the average of the ventilation for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	23,400	40	570
Outlet near mouth.....	21,600		

## OUTCROP MINE, OCEAN No. 8—BIG VEIN.

W. H. R. Thomas, Foreman.

Outcrop mine is a new opening in the Big Vein. It is located at the foot of "Squirrel Neck Hollow," a short distance west of the town of Midland. It is the outcrop of the New Lye of Ocean No. 1. This was a small piece of abandoned Big Vein in Ocean No. 1.

In order to reclaim this piece of coal it was found that it would be cheaper to top the coal at this point. The coal is hauled by horses on a tram road to No. 8 Big Vein tippie. Ventilation and drainage are by natural means and are good.

## TYSON No. 9 MINE.

P. J. Kenney, Foreman.

This mine of the Consolidation Coal Company has three openings, A, B, C, situated on the "Y" of the Cumberland and Pennsylvania railroad, one and three-quarters of a mile northeast of Frostburg.

B opening is closed. All the output of 9 opening is used by the locomotives of the C. & P. R. R. Like the Big Vein in the northern end of this region, the "Tyson has "faults," which make satisfactory drainage difficult. Ventilation in these openings is by fan.

This is the largest works of this company in the Tyson in the region, and the coal is of splendid quality, entirely the equal of the Big Vein in every respect.

Inspection of the air for the year shows the following average:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from air hole.....	9,000	58	155
Intake to 1st left.....	2,150	15	143
Intake to 5th left, C.....	900	8	111
Intake to 5th right.....	1,800	14	121
Intake to 4th left.....	1,200	5	240
Intake to 3rd left.....	1,000	3	333
Return to fan.....	9,625		

## TYSON No. 10 MINE.

John Sluss, Foreman.

This is a small fuel mine opened during the past year in the Lower Tyson seam at Carlos Junction.

The opening is on a level with and at the eastern edge of the county road, and the loaded and empty tracks extend on either side of the county road a distance of 600 feet to the tippie on the main line of the Cumberland and Pennsylvania railroad, the engines of which take the coal for fuel.

A wagon tippie for domestic fuel is also located on the edge of the county road, about midway between the opening and railroad tippie.

Ventilation is natural, a shaft eight feet in diameter and twenty feet deep, walled with brick, being sunk near the opening.

Drainage is at present being accomplished by an electric pump, but a drainage is being driven in a small seam twenty feet below the one at the opening, which will extend to the lowest point in the basin and drain the mine through a shaft to the seam above.

A pair of test headings are being driven for future development.

## ASTOR MINE (OCEAN).

Thomas Higgins, Foreman.

This mine is a new opening of the Consolidation Coal Company and is located nearby the George's Creek and Cumberland railroad, at the town of Vale Summit.

The opening was made to reclaim some abandoned coal in the old "Pompey" slope. The coal from this mine is hauled over a tram road by a locomotive to the tippie at Hoffman mine, two miles northeast. At present this mine is closed. Another opening in the Big Vein of this company was made recently nearby the Astor mine. It is known as the "Pompey" mine and was opened to reclaim a piece of abandoned coal in the old Hoffman drift mine.

The coal from this mine is hauled over the tram road of the Astor mine to the Hoffman tippie.

The ventilation and drainage are natural and good.

## PIEDMONT &amp; GEORGE'S CREEK COAL COMPANY.

## WASHINGTON No. 1.

Martin Condry, Superintendent.

P. H. Brown, Foreman.

Washington Mine, No. 1, of this company, is located in the village of Washington Hollow, which is a short distance south of the old National road and nearby Eckhart Mines. This Big Vein seam was abandoned for over a half a century and was one of the very early openings in the region. In consequence of the long time this mine was abandoned the company have been compelled to do much extra timbering. It is also difficult to ventilate this mine, although the air is good. Ventilation is by fan and the drainage is natural. The coal from this mine is shipped over the Eckhart Branch of the Cumberland and Pennsylvania railroad.

Average condition of the air for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	8,400	72	116
Outlet to old works.....	1,390		

## WASHINGTON No. 2—TYSON.

Philip Brown, Foreman.

Mine No. 2 of the Piedmont and George's Creek Coal Company is located a short distance north of Eckhart Mines, and near where the Old Aetna Slope was located. The coal in this mine is an excellent piece of Tyson seam. This is one of the best equipped Tyson mines in the region.

The coal is shipped over the Eckhart Branch of the Cumberland and Pennsylvania railroad. This mine is well drained by means of bore holes into the Big Vein below.

Recently a new electric motor was put in this mine. This makes the second motor in use in hauling the coal out of this drift. The weigh offices and other buildings about the mine have been painted recently, and everything about the mine is in neat condition. There is blasting in this mine and at times there is some annoyance from the smoke,

which it is difficult to get rid of at once, on account of the low roof of the seam.

The following inspection shows the condition of the air for the year:

Where Measured.	Air per M. Employes. Per Man.		
	Cubic ft.	No. of	Air
Intake from fan.....	64,000	130	464
Intake to south side.....	15,600	51	305
Intake to 11 and 12½ south.....	1,200	8	150
Intake to north heading.....	14,800	27	548
Intake to 1st north.....	6,400	5	1,600
Intake to 4th left .....	10,800	35	368
Intake to old mine.....	3,600	5	720
Outlets combined .....	44,200		

#### WASHINGTON No. 3.

Chas. Drenning, Foreman.

This mine is located on the west side of George's Creek, a short distance north of Westernport, which is on the North Branch of the Potomac river. The territory of this mine is eight hundred acres of "Six Foot" or lower Kittanning, on the west side of the synclinal.

There are two openings in this mine, which are connected by a siding with the Cumberland and Pennsylvania railroad, over which the coal is shipped. The coal is run through a seventy-four-foot conveyor from the tippie to the railroad cars.

The later opening at this mine is eight feet below the lowest point in the coal basin and furnishes a gravity draining for the entire property.

The coal is gathered and hauled to the tippie by a four-ton electric traction locomotive. The coal is from five to six feet in thickness. Ventilation is produced by a twelve-foot directed connected steam driven fan. There is some marsh gas in this mine, but not a sufficient quantity to be of a serious nature.

The inspection of the air for the year shows the following:

Where Measured.	Air per M. Employes. Per Man.		
	Cubic ft.	No. of	Air
Intake from fan.....	26,250	33	796
Intake to 1st right.....	3,200	11	290
Intake to old mine.....	5,220	22	234
Outlet at mouth of mine.....	24,650		

#### WASHINGTON No. 4.

W. E. Brown, Foreman.

This mine was formerly the Hampshire mine of the Piedmont Coal Company, and is located on the east side of the George's Creek, and on the east side of the Synclinal, directly opposite Washington No. 3. This is a drift opening of the lower Kittanning, and embraces a territory of about five hundred acres. The coal is mined by pick-work and haulage is by mules.

The coal is let down a short plane near the mine mouth and dumped

into the railroad cars on the siding, which connects with the Cumberland and Pennsylvania railroad, over which the coal is shipped.

Ventilation is by fan. There is a slight amount of marsh gas in this mine.

The inspection of the air for the year shows the following:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	16,100	120	134
Intake to 1st left.....	4,050	8	505
Outlet of 2nd left.....	3,700	16	231
Intake to 1st right.....	5,700	12	475
Intake to 2nd right.....	2,800	26	107
Intake to 3rd right.....	1,500	13	115
Intake to 4th and 5th right.....	4,875	15	325
Outlet of 2nd left straight.....	2,250	6	281
Outlet at mouth of mine.....	14,400		

#### WASHINGTON No. 5.

George Gales, Foreman.

This mine is located west of the synclinal axis of the coal basin, and opposite Franklin Station, on the Cumberland and Pennsylvania railroad. This property contains about six hundred acres and was formerly known as the Michaels Farm mine.

There are three drift openings in the outcrop of the Barton or Bakerstown seam, which has an elevation of about four hundred and fifty feet above George's Creek. The mines are opened on the double entry system, with forty-foot pillars between the rooms. The seam is about four feet in thickness. The mining is by pick-work. The haulage is by an overhead electrical trolley system. One motor is used for haulage.

The mines are connected by a tram road with a tippie located two hundred feet from the top of the plane, where the coal is weighed in the mine cars and then dumped with an automatic cross-over tippie into cars having a capacity of five tons, which are let down a gravity plane two thousand two hundred feet long to an automatic cross-over tippie on the railroad siding, where the coal is dumped into a steel chute twenty feet which convey the coal into the railroad cars. This conveyor is provided with adjustable screen bars for separating the coarse from the fine coal.

The ventilation is produced by a large direct connected steam driven fan.

The average condition of the air for the year was as follows:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	23,520	55	427
Intake to 1st right D.....	4,520	20	225
Intake to 2nd right D.....	4,560	11	414
Outlet to 3rd right D.....	1,280	8	160
Intake to B heading.....	11,270	16	70
Outlets combined .....	20,800		

## THE GEORGE'S CREEK COAL & IRON COMPANY.

R. L. Somerville, Superintendent.

The George's Creek Coal and Iron Company now operate four drift mines in which is designated as the "Big Vein" or Pittsburg seam, and one in the "Tyson" or upper Sewickley.

The "Big Vein" mines operated are Mine No. 1, a mile north of Lonaconing; Mine No. 12, two miles northeast of Lonaconing; Mine No. 13, on the east of the valley, one-half mile from Lonaconing; Mine No. 14, on the west side of the valley, one and one-half miles from Lonaconing, and Mine No. 16, or Tyson, one mile north of Lonaconing.

### MINE No. 1.

R. T. Spear, Foreman.

Mine No. 1 lies on the west side of the George's Creek Valley, three-fourths of a mile north of Lonaconing, adjacent to the Cumberland and Pennsylvania railroad. It is connected with and has tipples on this road and also connected with the George's Creek and Cumberland railroad, on which it has tipples. A double tail rope system operated by a stationary engine is used to bring the coal from the interior of this mine to the surface. This mine is always in good condition and is one of the best mines in the region to work in. But like most others of the "Big Vein," its territory is pretty well worked out.

The following is an average inspection during the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake near the mouth.....	17,010	90	189
Intake to 2nd right.....	7,200	40	180
Intake to Blue heading.....	5,760	50	115
Return to fan.....	21,600		

### MINE No. 12.

John Boyd, Foreman.

This mine is located on the east side of the George's Creek Valley, near Gilmore, and ships over the George's Creek and Cumberland railroad. An incline plane two thousand two hundred feet long is used to convey the cars from the mine to the tipple. There is also a plane on the inside, which is necessary on account of the grade.

The ventilation is by natural means and at all time good. There are openings to the surface on both sides of the mine.

The following indicates the air from both openings:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per man.
Outlet near mouth of mine.....	8,320	44	189

### MINE No. 13.

John Boyd, Foreman.

This mine is on the east side of the George's Creek Valley, above the town of Lonaconing, on the George's Creek and Cumberland railroad. The opening is in the outcrop and is confined to a very small territory,

yet the amount of coal they are likely to get here will keep the number of men employed for quite a few years.

The mine is ventilated by natural means and the ventilation is generally good.

#### MINE No. 14.

R. T. Spear, Foreman.

This mine is on the west side of the George's Creek Valley and is one and one-half miles from Lonaconing, on the George's Creek and Cumberland railroad. This is a drift mine and the coal is brought to the tippie by horses.

The mine has natural drainage and ventilation and the conditions are generally good.

#### MINE No. 16.

Douglas Sommerville, Foreman.

This mine is a drift opening in the upper Sewickley, Tyson, or "Three and a half foot seam," in the hillside just along the opening of the drift of Mine No. 1, "Big Vein." The coal is brought from this mine to the tippie by the retarding conveyor one thousand feet long.

The electric generator also supplies power for a four-ton electric motor for hauling in this mine.

The mine is ventilated by a Guibal fan, and the general conditions are very good.

Below is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth .....	26,880	72	378
Outlet at 4th right.....	1,375	10	137
Outlet at 4th left.....	1,320	10	132
Outlet at 3rd right.....	1,200	12	100
Outlet at 3rd left.....	1,440	12	120
Outlet at 2nd right.....	1,890	12	157
Intake to 2nd left.....	1,600	4	400
Intake to 1st right.....	7,680	12	640
Return to fan.....	32,340		

### AMERICAN COAL COMPANY.

John T. Dobbie, Superintendent.

This company has four mines, Jackson, Tyson Nos. 1 and 2, Koontz seam, which are located near the town of Lonaconing, and have been closed during the year, and Caledonia mines.

#### CALEDONIA MINES.

William Russell, Foreman.

Caledonia mines are located on the west side of the region and a short distance from Barton. The coal is shipped over the Cumberland and Pennsylvania railroad. There are a series of openings in the Big Vein and Tyson.

These openings have natural ventilation and drainage, which are good. The work in the Big Vein seam is the return operation. The coal from these mines is hauled over a tram road by a locomotive to the head of the incline plane, from where the coal cars are lowered to the

tipple. This is one of the finest planes in the region. The grade is so uniform that the cars descend with great evenness to the weigh scales at the bottom of the plane.

In the Tyson seam there are four openings. The coal is from five to seven feet high and is of an excellent quality, even compared with the Big Vein. The coal from these mines is let down planes to the Big Vein tram road.

The ventilation and drainage are by natural means, and generally good.

The air records for the year is shown by the table below:

where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake to No. 1 opening.....	5,160	21	245
Intake to No. 2 opening.....	1,200	5	240
Outlet of No. 3.....	2,625	20	131
Intake at Tyson mine on tram road.....	4,580	16	286
Outlet at Jungle.....	3,600		

## NEW CENTRAL COAL COMPANY.

### KOONTZ MINE No. 1.

Duncan Sinclair, Superintendent.

Wm. Thompson, Foreman.

The opening named above is in the Big Vein, which is exceptionally thick in this part of the region. The Koontz is one of the old mines of George's Creek. It is about two miles from Lonaconing. The coal is hauled out of the mine by a stationary engine to a plane, on which it is lowered to the tipple and dumped on the George's Creek and Cumberlandana railroad for shipment. The coal in this mine is now confined to a small area. Several new openings in the outcrop have been made to the left of the old mine, from which a large quantity has been mined.

The ventilation is by fan, which provides ample air to all parts of the mine.

The following is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	38,200	52	734
Outlet to old workings.....			

### KOONTZ No. 2—TYSON.

Wm. Thompson, Foreman.

Mine No. 2 is an opening in the Tyson or upper Sewickley seam. The coal is of splendid quality and runs pretty regular; however, a great difficulty has been experienced in this opening from the fact that the Big Vein has been taken out from beneath and the falls therefrom have extended to the Tyson and greatly disturbed this seam.

The coal is gathered by small mules from the rooms on the inside of the mine and taken to the main heading, from where it is taken by a rope haulage to the surface and dumped on the same tipple as the Big Vein from Mine No. 1.

The ventilation is by fan. The following is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	25,200	57	442
Outlet to straight heading.....	1,200	4	300
Intake to 1st right.....	2,150	15	144
Intake to 2nd right.....	2,400	19	126
Outlet to 3rd right.....	2,060	17	121
Outlet to mouth of mine.....	8,000		

#### COROMANDEL MINE.

Wm. Thompson, Foreman.

This mine is an opening in the Big Vein at the outcrop. It is on the east side of the George's Creek and Cumberland railroad, over which the coal is shipped. Here, as in many of the operations mentioned in this report, the opening is for the purpose of procuring Big Vein which was supposed to be lost. The company has been quite successful here. A fairly good output has been secured.

This mine is ventilated by natural means; air holes are driven to the surface when necessary for ventilation.

### MIDLAND MINING COMPANY.

#### ENTERPRISE MINE.

W. A. Somerville, Superintendent.

John Askey, Foreman.

The Enterprise mine of the Midland Mining Company is a short distance from Midland and adjoins Ocean Mine No. 1 of the Consolidation Coal Company. This mine has several openings. The principal one now in operation is a slope. The coal mined is the Big Vein or Pittsburg seam. A short slope has been driven to procure the coal that could not be reached from the old Miller mine, abandoned some years ago. A large quantity has been obtained and much more will be procured of the Big Vein that was heretofore inaccessible.

A stationary engine is used to haul the coal to the surface. It is then conveyed over a tram road by horses to the tippie, where it is loaded on the Miller branch of the Cumberland and Pennsylvania railroad for shipment. The drainage is only fair in the slope.

The ventilation is by natural means. Holes are driven to the surface frequently and in this way an adequate supply of air is procured.

#### TRIMBLE MINE.

W. A. Somerville, Superintendent.

Frank Stohl, Foreman.

Trimble mine is located near the town of Mount Savage, on the eastern outcrop of the Big Vein seam. At this point the coal seam is very irregular, which makes the mining of it difficult. Tram roads leading from the three openings land the coal to an incline plane, on which it is let down and loaded on the Cumberland and Pennsylvania railroad for shipment.

The ventilation is by natural means and is generally good.

**MARYLAND COAL COMPANY.****APPLETON MINE.**

Frank E. Brackett, Superintendent.

Wm. Dodds, Foreman.

The Appleton mine is near Lonaconing on the west side of the George's Creek region. The opening is in the Big Vein and gives employment to about fifty men. The coal on the inside of the mine is gathered by horses and is brought to a plane, over which it is sent to the surface. From the mouth of the mine it is conveyed by a small locomotive to the dump, where it is loaded on the George's Creek and Cumberland railroad for shipment.

Ventilation is by fan, which furnishes an ample supply of air.

The following is an average of the air readings of the mine for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth of mine.....	26,100	55	474
Intake to right side.....	2,800	8	350
Intake to left side.....	3,780	10	378
Intake to 1st left.....	9,920	12	810
Outlet to turn heading.....	10,080	21	480
Return to fan.....	28,080		

**NEW DETMOLD MINE.**

Hubert Worgen, Mill Foreman.

The above mine is on the west side of George's Creek, near Lonaconing. It is an opening in the Big Vein or Pittsburg seam. The mine is a drift. The coal is hauled to the surface by horses and dumped near the mouth of the mine. Shipment is on the George's Creek and Cumberland railroad. The work now going on is all pillar work. The mine was formerly ventilated by a fan, but as the pillars have been drawn back toward the mouth of the mine the fan was abandoned and ventilation provided by natural means. In a mine of this kind there is no trouble in providing air.

**TYSON No. 1.**

Wm. Dodds, Foreman.

Tyson No. 1 of the Maryland Coal Company is a small mine located about a mile from their Appleton mine. The coal from this opening is used mainly for coaling the engines of the George's Creek and Cumberland railroad. I understand that some has been shipped in the past, but none during this year.

The following is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth of mine.....	20,880	6	3,813
Return to fan.....	17,640		

## NEW YORK MINING COMPANY.

### UNION No. 1.

John Tippen, Foreman.

This mine of the New York Mining Company is located about the same distance northeast of Frostburg as Union No. 2, and just opposite the latter, on the west side of the valley, in one of four hills of Big Savage mountain, one of the ranges of the Appalachian system. This is one of the largest portions of the Pittsburg, or Big Vein, seam remaining in the region, and consists of seven hundred acres. There are four hundred acres of Tyson and two hundred acres of Waynesburg or Koontz seams on this property.

A branch road, running from this mine to the town of Allegany, connects with the Cumberland and Pennsylvania railroad, over which the coal is shipped. This mine has not been long in operation, but when it is put in full force and when the small seams are open and working up to full capacity, this property will be a source of great income to Frostburg and nearby towns.

The loaded cars run from this drift mine to the tippie by gravity. The tippie is a Phillips Automatic Crossover tippie and is the finest in the region. The coal is dumped into the hopper of a Jeffries conveyor. An automatic door at the bottom of the hopper is worked by a motor. From the hopper the coal is passed on to a five-inch screen and the coal that remains on the screen is passed on to a picking table, where the slate is removed by the tippie men from the coal which passes over the conveyor to the railroad hopper.

The coal that passes through the screen drops upon a five-eighths-inch screen directly under the first screen. Here the slate that passes through the first is removed from the coal which passes on the railroad hopper. The fine falls into a trough, from which it is automatically scraped to a conveyor and passes into a railroad hopper, where it mingles with the coal which is entirely free from slate.

If so desired the fine coal can be loaded into railroad hoppers separately. Three motors, one twenty-five, one seven, and one two-and-one-half horse power operates this coal conveying system. The power is supplied by the power-house at Union No. 2, which is three-quarters of a mile away on the east side of the valley. Only one switchboard is used. The slate is thrown into a conveyor, which carries it to the slate bank.

The following is the average condition of the air for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	49,000	47	1,042
Intake to 1st right.....	5,600	7	800
Intake to 2nd right.....	6,300	5	1,240
Outlet of straight heading.....	7,500	4	1,875
Intake of 4th left.....	6,400	4	1,600
Intake of 3rd left.....	2,600	3	866
Intake to 2nd left.....	15,000	19	789
Outlet of 1st right.....	1,600	5	320
Outlet at mouth of mine.....	28,640		

An opening in the Tyson seam of Union No. 1 is a seam of four feet of clean coal. This mine is a short way up the mountain from No. 1.

The coal will be run over a tram road to an opening in No. 1, where it will be loaded in the large mining cars of No. 1, and run to No. 1 tipple.

#### UNION No. 2.

Henry Shriver, Superintendent.

Wm. Hamilton, Asst. Supt.

John Sullivan, Foreman.

John Hannon, Sub-Foreman.

Union No. 2 of this company is located two miles northeast of Frostburg, and a short distance east of the Cumberland and Pennsylvania railroad, with which it is connected by a switch. Here is the outcrop of the "Big Vein," or Pittsburg seam in the George's Creek region. During the coal-forming period the heavy "wash" of mud, now shale, lodged here. In consequence of this the coal has many "faults" in places and also a thick slate in the middle of the "breast" coal. This irregular condition of the seam compels the miners to do much dead work, since they have to handle much slate, for which work there is nothing paid. Then the company have many men picking the slate from the coal on the tipples. By this amount of dead work the part of the miners and company the coal is brought up to the standard of the "Big Vein" for market.

The haulage is done by means of an electric third rail system and surpasses any other haulage in the region.

There are many difficulties to contend with in taking care of the roads and drainage, but they are always kept in excellent condition.

In employment of men and the amount of ship this is the third largest mine in Maryland and has a large area of coal remaining.

The inspections of the ventilations showed the following average for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake from fan, right side.....	23,580	158	149
Intake to 2nd right.....	3,500	15	233
Outlet of 9th right.....	2,100	15	140
Outlet of straight heading.....	3,200	9	355
Outlet of 5th left.....	3,200	30	106
Outlet of 4th left.....	4,050	15	270
Outlet of 3rd left.....	4,800	15	320
Outlet of Carlow.....	4,000	32	121
Outlet of Jenkins' heading.....	1,750	12	145
Intake to short heading.....	2,760	15	117
Return to fan, left side.....	18,550		
Union Mining Company .....			

#### UNION MINE.

Henry Shriver, Superintendent.

James Aldon, Foreman.

This drift mine is located a short distance northeast of the corporate limits of the town of Frostburg, and at the lower end of the "Y" of the Cumberland and Pennsylvania railroad, over which the coal is shipped.

The Big Vein in this mine is nearly exhausted. The seam being worked lies immediately under the plateau on which the town of Frostburg is built. There is no danger of the surface breaking, as "pillars" remain under the town and the covering is fully three hundred feet in

thickness. The haulage is by horses from the inside of the mine to the tipple.

The drainage is by natural means and the ventilation good.

The following is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	9,400	67	140
Intake to 1st slant.....	2,150	16	134
Outlet of straight heading.....	2,875	24	119
Intake to 1st right.....	2,000	16	125
Outlet of 1st left.....	1,200	5	240
Intake to Huckleberry.....	1,200	2	600

This company has leased from the Consolidation Coal Company the old New Hope Slope, which contains a large quantity of Big Vein coal, enough to last for many years. This slope is 1,325 feet long and the coal is brought to the surface by a 75-horse power stationary engine. The New Hope is but a short distance from the Union mine and the coal from both mines is dumped on the same tipple.

This slope was operated in the early days of coal mining in this county by a company composed of early settlers of Frostburg.

The ventilation is by natural means and the water is pumped out to a tunnel, which empties at the village of Allegany.

## MOSCOW-GEORGE'S CREEK COAL COMPANY.

### MOSCOW Nos. 2 AND 3.

E. R. Brennan, Superintendent and Foreman.

These mines are located near Barton, on the west side of George's Creek, and the coal is shipped over the Cumberland and Pennsylvania railroad.

The coal in the Big Vein was abandoned many years ago in what was known as the Peekhill property. There is a large amount of coal remaining in this property, but it is very difficult to reclaim the coal on account of the vast amount of dead work required. This is a drift mine.

Five hundred feet below the Big Vein they are working the Barkers-town or Barton Four-Foot seam, and dump it on the same tipple as the Big Vein. This is also a drift mine.

The ventilation and drainage are good.

During the year a new electric fan was installed at this mine.

Below is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	21,540	15	1,436
Outlet at mouth.....	17,080		

**H. & W. A. HITCHINS COAL COMPANY.****BORDEN MINE.**

Patrick Brophy, Superintendent.

Patrick Brophy, Foreman.

Borden mine is located a mile north of Frostburg and a short distance west of the Cumberland and Pennsylvania railroad, over which the coal is shipped. This property was operated formerly by the Borden Mining Company, and was among the first mines of the regions. It was abandoned some years ago by the original company, but the present company have made it a success, although having to do much dead work to reclaim this piece of Big Vein coal.

The haulage is by horses from this drift mine to a plane, by which it is let down to a tipple, where it is dumped into the railroad cars.

Ventilation is good and the drainage is natural.

The air conditions for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake at mouth of mine.....	8,190	50	163
Outlet at air shaft.....	2,000		

**BARTON & GEORGE'S CREEK COAL CO.**

Howard Hitchens, Superintendent.

Harry C. Hitchens and Robert Duncan, Foremen.

**CARLOS MINE.**

This mine is located at the town of Carlos, four miles south of the town of Frostburg, and is connected by a siding with the Cumberland and Pennsylvania railroad, over which its coal is shipped. The owners of this mine have always had the most friendly relations with their employes.

Carlos mine is a slope and an excellent piece of the Big Vein seam. The delivery to the bottom of the slope from the diggers is by horses. The coal is then hauled by a stationary engine to the mouth of the mine, from which it is let down over a trestling by the same engine to the tipple.

The drainage is by the tunnel of the Consolidation Coal Company, which empties into the Braddock's run at Clarysville, four miles distant. Ventilation is by fan and is good.

The following is the average conditions of the air for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake from fan.....	25,600	130	208
Outlet of 3rd right.....	2,880	12	240
Intake to 4th right.....	8,900	30	263
Intake to 5th right.....	3,600	21	171
Outlet of Monahan's heading.....	12,240	60	204
Outlet at mouth of slope.....	40,320		

**CHAPMAN COAL COMPANY.****SWANTON MINES.**

John Frenzel, Superintendent and Foreman.

The mines of this company are located on the west side of the coal region and in the vicinity of one of the early Big Seam mines of the George's Creek. This property, like many others of this coal field, was considered worked out and worthless. The owners are now working the Big Vein seam to reclaim much abandoned coal, and with considerable success.

The Tyson, which is the more important seam, and from five to seven feet high, is a superior quality in this part of the region.

The drainage is difficult here in places. This mine has generally good ventilation.

**BARTON FOUR FOOT.**

This company are operating the Barton Four Foot. The coal from these mines is loaded at the same tippie into the railroad cars and shipped over the Cumberland and Pennsylvania railroad.

These coals are of a good quality and will be a benefit to the town of Barton.

Air conditions for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth of Four Foot.....	5,840	3	1,946
Outlet at air hole.....	1,440		
Intake at mouth of Tyson.....	7,600	25	304
Outlet at air hole.....	4,500		

**MORRISON LAND COMPANY.**

William Harvey, Contractor.

This company operates a mine near Reynolds, in the Upper Freeport seam. The coal of this mine is used to generate the power of the Cumberland and Westernport Electric Railway power house, which is only a short distance from the mine.

This is extremely hard coal and verd hard to mine by pick-work, by which the mining is done.

The drainage is natural and the ventilation is carried on by means of a high-speed fan.

Only three men are employed at this mine.

**POTOMAC COAL COMPANY.****POTOMAC MINES NOS. 1, 2, 3, 4.**

Henry Shriver, Superintendent.

J. H. Gallagher, Foreman.

This group of mines is situated on the east side of the region, near the town of Barton, a short distance from the Cumberland and Pennsylvania railroad, over which the coal is shipped. This property is controlled by the Black, Sheridan and Wilson Coal Company.

These openings are in the Barton Four Foot seam and the most extensive development of this seam in the region.

The coal is gathered in by mules and hauled to the mouths of the openings and let down a tram road to the tippie.

The haulage is done by horses. The drainage is difficult in these openings. A large fan produces ventilation. The mines are in general good condition.

**CUMBERLAND-GEORGE'S CREEK COAL COMPANY.**  
**PENN MINES.**

Thomas S. Harris, Superintendent and Foreman.

The Penn mine is situated a short distance north of Westernport, on the west side of the region, and the coal is shipped over the Cumberland and Pennsylvania railroad.

The coal is the Barton Four Foot seam and is of good quality. The mine is a drift and the coal is let down a plant to the tippie. The drainage and ventilation are in general good. This mine has a large acreage of coal.

The coal is dug by pick-work. During the year the company made extensive improvements, ditching, laying new track and giving No. 2 a general overhauling.

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth of mine.....	8,100	20	405
Return to fan.....	7,400		

**PHOENIX & GEORGE'S CREEK COAL COMPANY.**  
**PHOENIX MINE.**

John Rankin, Superintendent.

Ernest Shell, Foreman.

This company is working the Big Vein and Bakerstown or Barton Four Foot vein. Their mines are on the west side of George's Creek, near Franklin, and the output is shipped over the Cumberland and Pennsylvania railroad.

The Phoenix mine is an opening in the outcrop of the Big Vein and is reached by a tram road, a mile and a half in length, over which the coal is hauled by horses and mules to the head of two incline planes, by which it is lowered to the tippie.

The ventilation at this mine is generally good. Air holes are driven to the surface when necessary and in this way a good supply of air is provided at all times.

**ELKHART MINE.**

The Elkhart mine is working the Barton Four Foot or Bakerstown vein, which is of a very good quality here. Considerable difficulty is experienced in providing proper drainage, owing to the many local dips encountered in this seam.

A furnace is used to provide ventilation, which seems to work very well at present, but as the mine grows larger other means will have to be provided to obtain the necessary ventilation.

The following is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth of mine.....	8,500	45	190
Intake at 1st right.....	8,400	25	336
Outlet of 2nd right.....	3,000	20	150
Return to furnace.....	5,040		

**DAVIS COAL & COKE COMPANY.****No. 17, OR BUXTON.**

O. Tibbetts, Superintendent.

Harry Wilson, Foreman.

This mine of the Davis Coal and Coke Company, in the "Davis" seam, is located in Allegany county, although much of the coal mined is in Garrett county.

The coal is shipped over the Western Maryland railroad. The coal from this drift is let down a plane to the tippie, where it is dumped into the railroad cars. The haulage is by means of mules.

The venlation is by fans and the drainage is natural.

The following is an average inspection of the air for the year:

Where Measured.	Air per M. Employes. Per Man.		
	Cubic ft.	No. of	Air
Intake from fan.....	31,200	90	457
Intake to 1st right.....	4,800	20	240
Outlet of 2nd right.....	5,200	25	208
Outlet of Stump heading.....	8,400	45	186
Outlet at mouth of mine.....	31,200		

**CUMBERLAND BASIN COAL COMPANY.****PARKER MINES.**

Davis Williamson, Superintendent.

Robert Blythe, Foreman.

Parker mines of the Cumberland Basin Coal Company are located a short distance northeast of Pamosa. These mines have three miles of railroad track and connect with the Cumberland and Pennsylvania railroad by a siding. This coal is known as a Parker seam and is the lowest workable coal bed in the region. These mines are on the eastern rise of the George's Creek coal basin syncline and nearby the point where the syncline passes into Pennsylvania from Maryland. At present the coal is mined by pick-work, but the management are installing ten machines which will supplant the pickwork.

The haulage in these drift mines is by mule, but in the near future this will be done away with by the introduction of four motors. The drainage is natural and empties into the north branch of Jennings' Run.

The ventilation is by furnace and is generally good.

Where Measured.	Air per M. Employes. Per Man.		
	Cubic ft.	No. of	Air
Intake at mouth.....	5,400	15	360
Return to furnace.....	5,000		

**GEORGE'S CREEK COAL BASIN COMPANY.****SHORT GAP MINE.**

W. H. Morgan, Superintendent.

Frederick Rephorn, Foreman.

This mine is located a quarter of a mile north of the old National pike, three miles east of Frostburg and nine miles west of Cumberland,

and in the extreme eastern outcrop of the coal field. For a long time there was some doubt as to the identity of the seam. It has been definitely determined that it is the Davis seam and is a very good coal.

During the year openings were made in the Bluebaugh and Parker seams. A tunnel was driven from the Parker to the Bluebaugh and a tram road five hundred feet long from the Davis to the Parker opening. By connecting these new openings with the Davis all the coal from three seams is dumped into the one tippie at the Davis opening, which has a bin of one hundred tons capacity.

The coal is then loaded into iron buckets of one thousand pounds capacity, which are conveyed over to and from the mine tippie by a stationary engine of thirty-three horse power an two cables seventeen hundred feet long to a bin of two hundred and fifty tons, from which the coal is loaded into the railroad cars on a switch connected with the Eckhart Branch of the Cumberland and Pennsylvania railroad, over which the coal is shipped.

The drainage is natural and the ventilation is by fan. The conditions of the mine are good. The openings are drifts and the haulage is by mules. The coal is mined by pick-work.

The following is an average of the air readings for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake from fan.....	15,500	12	1,291
Outlet at mouth of mine.....	12,400		

## BRAILOR MINING COMPANY.

(Formerly the Bald Knob Coal Company)

### BRAILOR MINE.

David Brailor, Foreman.

There are three openings here in one of the four hills of Big Savage mountain, in the extreme edge of the western side of the northern outcrop of the "Big Vein."

This property is located one mile north of the town of Mt. Savage.

The coal is hauled by a locomotive over a tram road two miles long to a plane. Here the mine cars are lowered down the plane one-half mile to the tippie, where the coal is dumped into the locomotive cars.

The coal is hauled over a "switch-back" which connects with the Wellersburg branch, which delivers the coal to the Cumberland and Pennsylvania railroad for shipment.

The ventilation is by fan and the drainage is natural.

No air readings are given for this mine owing to the reason that it has been idle. Some fuel coal has been mined during the year.

## WACHOVIA COAL COMPANY.

### MONTEL MINE.

Chas. E. Davies, Superintendent.

Montel Mine of the Wachovia Coal Company is located on Dan's mountain on the east side of the George's Creek region, about a mile

from Clarysville. The coal worked in this mine is the Davis Six Foot, or Lower Kittaning. This is just on the eastern outcrop, or syncline, where all the measures terminate.

About fifty per cent of the coal of this mine is mined by puncher machine. The coal is shipped over the George's Creek and Cumberland railroad. There is so much dust created by the cutting machines and smoke from blasting that it is a very difficult matter to keep the air in good condition. Yet the management keep the mine in good condition under the circumstances.

A rock tunnel has been driven half way into the Parker seam. Below is an average of the air readings:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	10,200	20	510
Intake to 1st right.....	1,800	8	225
Intake to 2nd right.....	2,250	10	225
Outlet at air shaft.....	7,050		

## PIEDMONT MINING COMPANY.

### PEKIN MINE.

J. J. Dobbie, Superintendent.

Charles Bowden, Foreman.

The Pekin mine is located in the little town of Pekin, about two miles west of Lonaconing.

Here the company is working around the outcrop to reclaim abandoned coal, or what was considered a lost coal, and are meeting with great success. A large quantity has already been recovered, and no doubt much more will be reached. The coal is hauled over a tram road, about four miles in length, by a small locomotive, and is then let down an incline plane and loaded on the Cumberland and Pennsylvania railroad, over which it is shipped. This mine has five openings and the ventilation is by natural means. Air holes are driven to the surface frequently and in this way a good supply of air is secured.

## BOWERY COAL COMPANY.

Robert Griffith, Superintendent and Foreman.

This company is operating the Big Vein and Tyson on the west side of the George's Creek and ships over the Cumberland and Pennsylvania railroad. This company is working what is called abandoned coal, and have been very successful, and with the present number of men employed will have work for several years in the Big Vein. They have opened the Tyson seam of coal, a short distance above the Bowery slope, which is a very good quality. The mines are ventilated by natural means, and the conditions are generally good.

# Statistics of the Production of Coal in Maryland in 1908.

## ALLEGANY COUNTY.

Name of Company	Name of Mine	Vein of Coal Being Mined	Employees at the Mines					Days Worked	Output in Tons		
			Miners	Drivers	Insd. Lb.	Outs. Lb.	Total		Pick Mined	Machine Mined	Total Output
Consolidation Coal Co.	Ocean No. 1.	Big Vein or Pittsburg.	369	32	67	68	536	244	321,100	23,373	344,478
Consolidation Coal Co.	Ocean No. 3.	Big Vein or Pittsburg.	329	23	112	57	521	266	278,241	10,358	288,599
Consolidation Coal Co.	Ocean No. 3½.	Big Vein or Pittsburg.	87	7	26	19	139	263	83,796	None	83,796
Consolidation Coal Co.	Ocean No. 7.	Big Vein or Pittsburg.	784	72	40	103	999	254	733,798	170,802	904,600
Consolidation Coal Co.	Ocean No. 8.	Pittsburg or Big Vein	40	6	6	8	60	254	46,092	None	46,092
Consolidation Coal Co.	Ocean No. 3.	Tyson or Sewickley.	6	2	1	2	11	102	8,299	"	8,299
Consolidation Coal Co.	Ocean No. 3½.	Tyson or Sewickley.	6	1	2	1	10	126	2,139	"	2,139
Consolidation Coal Co.	Ocean No. 7.	Tyson or Sewickley.	9	2	5	2	18	268	8,603	"	8,603
Consolidation Coal Co.	Ocean No. 8.	Tyson	39	8	5	8	60	254	22,430	"	22,430
Consolidation Coal Co.	Ocean No. 9.	Tyson.	55	10	5	10	80	257	36,684	"	36,684
Consolidation Coal Co.	Ocean No. 10.	Tyson	9	2	2	5	18	100	2,513	"	2,513
New York Mining Co.	Union No. 1.	Pittsburg or Big Vein.	60	4	2	9	75	240	3,802	"	3,802
New York Mining Co.	Union No. 2.	Pittsburg or Big Vein.	212	12	13	54	291	117	150,251	"	150,251
Union Mining Co.	Union Mine.	Big Vein or Pittsburg.	123	9	7	23	162	263	137,773	"	137,773
Potomac Coal Co.	Potomac.	Barton 4 foot.	40	8	5	8	61	61	1,061	"	1,061
Piedmont & Georges Creek Coal Co.	Washington No. 1.	Big Vein.	71	7	8	7	93	185	41,970	"	41,970
Piedmont & Georges Creek Coal Co.	Washington No. 2.	Tyson	121	21	23	18	183	114	92,689	"	92,689
Piedmont & Georges Creek Coal Co.	Washington No. 3.	Lower Kittanning or Davis 6-foot	68	7	11	9	95	197	67,256	"	67,256
Piedmont & Georges Creek Coal Co.	Washington No. 4.	Lower Kittanning or Davis 6-foot.	102	15	18	14	149	275	96,025	"	96,025
Piedmont & Georges Creek Coal Co.	Washington No. 5.	Barton 4 foot or Bakerstown.	62	4	11	17	94	297	40,988	"	40,988
H. & W. A. Hitchins Coal Co.	Borden.	Big Vein or Pittsburg.	51	6	10	9	76	113	30,588	"	30,588
Georges Creek Coal & Iron Co.	Cutter.	Big Vein.	90	5	6	9	110	215	118,116	"	118,116
Georges Creek Coal & Iron Co.	Mine No. 12.	Big Vein.	40	3	1	4	48	93	24,066	"	24,066
Georges Creek Coal & Iron Co.	Mine No. 13.	Big Vein.	20	2	1	3	26	126	16,716	"	16,716
Georges Creek Coal & Iron Co.	Mine No. 14.	Big Vein.	15	2	1	1	19	260	14,825	"	14,825
Georges Creek Coal & Iron Co.	Mine No. 16.	Tyson.	50	6	3	7	66	167	33,000	"	33,000
Barton & Georges Creek Valley Coal Co.	Carlos Mine.	Big Vein.	151	10	11	17	189	270	188,104	"	188,104
Moscow & Georges Creek Coal Co.	Mine No. 2 and 3.	Big Vein and Barton 4 foot.	13	2	1	1	17	160	5,165	"	5,165
Midland Mining Co.	Enterprise.	Big Vein.	20	3	2	3	28	240	20,956	"	20,956
Midland Mining Co.	Trimble.	Big Vein.	6	1	0	1	8	8	1,634	"	1,634
American Coal Co.	Caledonia.	Big Vein and Tyson	85	8	2	14	109	225	65,758	"	65,758
American Coal Co.	Jackson.	Waynesburg and Big Vein.	29	3	1	4	37	112	11,394	"	11,394
Chapman Coal Mining Co.	Swanton.	Big Vein.	23	2	1	1	27	168	12,000	"	12,000
Chapman Coal Mining Co.	Swanton.	Tyson or Sewickley.	26	3	1	6	36	135	11,500	"	11,500
Chapman Coal Mining Co.	Swanton.	Barton 4-foot.	5	1	.....	.....	6	90	2,250	"	2,250
Maryland Coal Co.	New Detmold.	Big Vein.	33	0	15	.....	48	105	39,626	"	39,626
Maryland Coal Co.	Appleton and Kingsley.	Tyson.	73	0	25	.....	98	114	56,815	"	56,815
Phoenix & Georges Creek Coal Co.	Phoenix.	Big Vein.	25	3	1	9	38	236	15,328	"	15,328
Phoenix & Georges Creek Coal Co.	Eckhart.	Barton 4-foot.	35	4	2	10	51	236	20,223	"	20,223
Piedmont Mining Co.	Pekin.	Big Vein or Pittsburg.	30	4	2	10	46	260	37,120	"	37,120
Piedmont Mining Co.	Moscow.	Big Vein.	Sus-	pend-	ed op-	rations	.....	.....	678	"	678
Rawlings & McCullough Coal Co.	Blaen Avon.	Pittsburg.	7	1	.....	.....	9	.....	3,462	"	3,462
Brailer Mining Co.	Brailer Mine, Mt. Savage	Pittsburg.	1	1	.....	.....	2	180	500	"	500
Frostburg Fuel Co.	Frostburg.	Tyson	3	.....	.....	.....	1	4	2,926	"	2,926
W. Barnard Fuel Mine.	Eckhart.	Pittsburg.	3	1	.....	.....	4	.....	2,071	"	2,071
Sullivan Bros. Fuel Mine.	Eckhart.	Pittsburg.	3	.....	.....	.....	3	.....	1,202	"	1,202
Georges Creek Basin Coal Co.	Short Gap.	Davis 6-foot or Lower Kittanning.	14	1	1	4	20	254	6,200	"	6,200
Bowery Coal Co.	Midlothian.	Big Vein.	38	5	3	1	49	200	19,800	"	19,800
New Central Coal Co.	Koontz No. 1.	Big Vein.	74	5	3	10	92	220	71,900	"	71,900
New Central Coal Co.	Koontz No. 2.	Sewickley.	50	5	3	.....	58	220	23,995	"	23,995
New Central Coal Co.	Big Vein.	Big Vein.	16	2	1	.....	19	265	13,308	"	13,308
Davrs Coal & Coke Co.	Buxton.	Davis 5-foot or Lower Kittanning	96	12	22	19	149	148	101,672	"	101,672
Cumberland & Georges Creek Coal Co.	Penn Colliery.	Barton 4-foot.	20	3	1	3	27	200	8,173	"	8,173
Cumberland Basin Coal Co.	Parker.	Clarion	15	1	2	3	21	62	3,808	"	3,808
Wachovia Coal Co.	Montell.	Lower Kittanning or Davis 6-foot.	23	2	3	4	32	156	3,100	3,875	6,975
			3,777	359	494	597	5,227	.....	3,161,499	208,408	3,367,907

## GARRETT COUNTY.

Blaine Mining Co.	Dill No. 2.	Davis 6-foot or Lower Kittanning.	165	17	7	16	205	252	139,824	None	139,824
Garrett County Coal Mining Co.	Dodson No. 1.	Lower Kittanning or Davis 6-foot.	85	10	5	20	120	174	6,000	"	6,000
Garrett County Coal Mining Co.	Dodson No. 2.	Upper Kittanning.	15	2	1	2	20	110	10,100	"	10,100
Garrett County Coal Mining Co.	Dodson No. 4.	Upper Kittanning.	6	1	1	2	10	45	1,400	"	1,400
Upper Potomac Mining Co.	Upper Potomac.	Lower Kittanning or Davis 6-foot.	55	4	2	9	70	226	37,314	"	37,314
Hamill Coal & Coke Co.	Hamill No. 1.	Lower Kittanning or Davis 6-foot.	29	2	1	4	36	215	15,862	"	15,862
Pattison Coal Co.	Bloomington.	Lower Kittanning or Barton 4-foot.	28	5	.....	3	36	150	22,016	"	22,016
Bloomington Coal Co.	Mine No 1 & 2.	Lower Kittanning or Davis 6-foot.	45	3	4	3	45	250	30,000	"	30,000
Monroe Coal Mining Co.	Elk Run No. 1.	Lower Kittanning or Davis 6-foot.	60	7	3	12	82	144	30,000	"	30,000
Monroe Coal Mining Co.	Elk Run No. 2.	Bakerstown or Barton 4-foot.	60	3	2	4	69	144	14,203	"	14,203
Potomac Valley Coal Co.	Darwin.	Upper Freeport.	48	7	3	8	66	268	43,405	"	43,405
			596	61	29	83	769	.....	350,154	.....	350,154

# Statistics of the Fire Clay Mining Industry in Maryland.

Union Mining Co.	Nos. 5, 6 & 7.	Fire Clay.	37	10	12	17	76	.....	20,288	.....	20,288
Big Savage Fire Clay Co.	Big Savage.	Clay.	6	2	1	1	10	100	5,068	.....	5,068
Savage Mountain Fire Brick Co.	No. 5.	Clay	9	2	.....	3	14	270	8,000	.....	8,000
			52	14	13	21	100	.....	33,356	.....	33,356

The last report available, 1907, shows the total number of men employed in the clay mines of Allegany County 165 and the output 71,395 tons. There was employed 100 men and 33,356 tons of clay mined this year, showing a decrease of 65 men and a falling off in the output of 88,039 tons, or approximately 53 per cent., while the decrease in the number employed was about 39 per cent.

J. H. DONAHUE, Inspector.

# Garrett County Coal Mines.

## G. C. PATTISON COAL COMPANY.

Garrell Pattison, Superintendent and Foreman.

This company is working the Barton Four Foot and the Lower Kittaning or Davis Six Foot veins.

Their mines are located near Bloomington, on the line of the Baltimore and Ohio railroad, over which the output is shipped. The six foot vein has been worked more extensively in the past for the reason that it is difficult at times to procure workmen in the lower seams.

An intake fan is used for ventilation. The air is forced through the different workings and is expelled through the old Brydon mine adjoining. The four foot is of good quality and contains very few rolls or faults.

Not so with the Davis Six Foot, for in this vein many clay seams are found.

The following is an average of the air measurements for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employes.	Air Per Man.
Intake from fan.....	28,000	17	1,647
Intake to all works.....	11,600		
Outlet at Brydon mine.....	17,600		

Mine No. 2, four foot vein, natural ventilation.

## THREE FORKS MINING COMPANY.

### CHAFFEE MINE No. 1.

D. F. Beckman, Superintendent.

Sheridan Stottlemyer, Foreman.

The Three Forks mine began shipping coal in January, 1907. The Lower Kittaning, or Davis Six Foot, is being operated here. The mine is located near Chaffee. Shipment is over the Western Maryland railroad.

Formerly the coal was sent from the mine down a plane and then by a tram way two miles in length to the tippie. So much trouble and expense was experienced by the slipping of the plane that it was abandoned. By extending the tramway and changing the direction at different points the grade was overcome and now the coal is conveyed from the mine by tram way entirely.

A tippie is in course of erection near the mouth of the mine. When completed it is the intention of the management to dump the coal from the smaller cars loaded in the mine into larger cars to be used on the tram road. And this will greatly facilitate the hauling of coal by re-

ducing the number of cars to be hauled on tram road. The haulage is by locomotive. The fan furnishes ample ventilation to all parts of the mine.

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	47,040	57	825
Intake to No. 1 heading.....	10,800	32	337
Intake to No. 2 heading.....	4,320	25	172
Outlet of No. 1 heading.....	15,450		
Outlet of No. 2 heading.....	12,340		

## HAMILL COAL & COKE COMPANY.

### HAMILL MINE No. 1.

W. D. Walker, Foreman.

The above mine is located about a mile east of Blaine, W. Va., and ships its coal over the Western Maryland road.

The opening is a drift and the seam worked, the Lower Kittaning.

A rather unique system of haulage from the mine to the tippie is in use here. An aerial cable has been constructed to which is attached buckets.

The coal at the mine is dumped into a large storage bin. Here the large buckets, having a capacity of two tons, are filled, and transported on the cable, which runs by gravity, to the dump, a distance of about nine hundred feet. Only two buckets are used. The loaded one going across carries the empty back to be reloaded and sent on its way.

The cable in use is attached to the storage bin on one side and tippie on the other. For a mine having a small output this plan seems to work quite successfully.

On my first visit to this mine I found the ventilation, which was by furnace, totally inadequate. On informing the management that some means must be found to supply proper ventilation a promise was made to have a fan installed as soon as possible. On my second visit, a short time later, I was gratified to find that a fifteen-horse power twelve-foot Crawford and McCrimmor fan had been erected and was in operation, furnishing abundance of air to the workings, as the reading given below show:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	43,600	44	990
Intake to 1st right.....	6,600	4	1,650
Intake to 2nd right.....	9,300	20	415
Outlet to 2nd left.....	4,450	8	556
Outlet of 1st left.....	4,320	9	480
Outlet at mine mouth.....	36,500		

**MONROE COAL MINING COMPANY.****ELK RUN MINE Nos. 1 and 3.****ELK RUN MINE, No. 1.**

G. C. McFarline, Superintendent.

H. B. Kight, Foreman.

The above mine is located at Barnum and ships over the Western Maryland railroad. The opening to Mine No. 1 is over the Lower Kittanning. Efforts have been made by this company to locate others of the Kittanings, but so far without success.

I found the ventilation, which is by fan, fair. The headings are in a considerable distance and this taxes the present fan to its utmost. As the heading work advances the capacity of the fan will have to be increased to provide sufficient air supply. The roof in this place is a soft fireclay, which is hard to keep up.

The following is the average measurements for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan, No. 1 mine.....	29,360	40	734
Outlet of 7th right.....	4,420	3	1,473
Outlet of 8th right.....	3,000	3	1,000
Intake to 9th right.....	3,600	6	600
Outlet of main heading.....	2,160	8	276
Outlet of 9th left.....	2,560	9	284
Outlet of 8th left.....	3,600	6	600
Outlyet of 7th left.....	2,800	7	400
Outlet at mouth of mine.....	27,580		

**ELK RUN MINE, No. 3.**

L. B. Kight, Foreman.

Mine No. 3 is in the Barton Four Foot vein, about four hundred feet directly above Mine No. 1. The coal from this opening is run down an incline plane and dumped on the same tipple as the coal from Mine No. 1. The seam as a rule runs regular and is of good quality.

The ventilation is by fan, which supplies an abundance of air to the workings, something very much desired in mining.

The air measurements are as follows:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	16,000	19	884
Intake to 5th left.....	2,400	7	342
Intake to 5th right.....	2,700	7	385
Outlet of 2nd right.....	2,400	5	440
Outlet at mine mouth.....	12,450		

**BLAINE MINING COMPANY.****NORTH AMERICAN MINE, No. 1.**

James G. Boyd, Superintendent.

James Luzader, Foreman.

At this mine the Lower Kittanning, or Davis Six Foot, is being worked. The coal of splendid quality and the output the largest of any

mine in Garrett county. The headings are in a considerable distance and in many places dip, which makes it difficult to provide proper drainage.

Extensive improvements have been made here within the last year. A new incline plane has been built a short distance from the old one. A new iron bridge spanning the Potomac river has been constructed. Also a new tippie erected.

The coal from this opening, though mined in Maryland, is loaded in West Virginia and shipped on the Western Maryland railroad. A new siding has been put in for the railroad cars. The distance from the mine to the dump has been reduced by little thereby.

Quite a little town called Dill, has sprung up since this mine was opened. Fifteen double-block houses for the use of its employes have been built by the company this year.

Ventilation is by fan and is generally good.

The air readings taken show the following:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	32,000	163	196
Intake to 1st right.....	11,250	46	244
Intake to 2nd right.....	9,650	20	482
Intake to 3rd right.....	8,550	27	316
Intake to 4th right.....	6,000	45	133
Intake to 5th right.....	5,000	15	333

## BLOOMINGTON COAL COMPANY.

### BLOOMINGTON MINES Nos. 1 and 2.

E. R. Brydon, Superintendent.

Chas. Brandlier, Sr., Foreman.

This company is operating near Bloomington; the vein being worked is the Lower Kittaning. Two openings have been made. The coal from both mines is hauled on the same tramway and is shipped over the Baltimore and Ohio railroad.

Mine No. 1 is ventilated by a fan from Pattison mine. A furnace is used to provide air for No. 2, which furnishes an ample supply. Owing to the many local dips the drainage is a troublesome proposition here. An effort is being made to provide proper drainage. I trust that it will be carried to completion.

Air measurements are as follows:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth of Mine No. 2.....	4,800	11	436
Return to furnace.....	3,000		
Outlet at mouth of No. 1.....	17,600	17	1,035

## UPPER POTOMAC MINING COMPANY.

### UPPER POTOMAC, No. 1.

R. H. Hamill, Superintendent.

Thomas Robinson, Foreman.

The Upper Potomac mine is located at Hubbard and ships over the Western Maryland railroad.

Here the Davis Six Foot, or Lower Kittaning, is being worked. The

coal is hauled by a locomotive from the mouth of the mine to the head of a plane and thence it is lowered on an incline plane to the dump.

A good system of drainage and ventilation prevails at this working.

At each of my inspections I found that the law was being complied with as to the amount of air supplied, as the following measurements of air will show:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mine mouth.....	19,500	46	423
Intake to 5th right.....	5,040	8	630
Intake to 4th right.....	3,500	14	250
Outlet of 2nd and 3rd right.....	11,250	25	468
Return to furnace.....	24,000		

## POTOMAC VALLEY COAL COMPANY.

### DARWIN MINES Nos. 1 AND 2.

Alfred Fortney, Superintendent.

Geo. Hose, Foreman.

The Darwin mines are about one mile from Blaine, W. Va., and ship their product over the Western Maryland railroad.

The openings are in the Upper Freeport or Thomas vein, which is the hardest coal found in the Maryland area. Over a tramway about one thousand five hundred feet in length the coal is hauled by horses to a plane and by it conveyed to the tippie.

On my first visit to this mine I found the ventilation bad, which is due in part to the use of powder during all the working hours. Even where up-to-date methods are employed to ventilate where blasting powder is used extensively, as is the case at this mine, it becomes a difficult matter to provide a current strong enough to expel the smoke and supply a sufficient quantity of pure air.

A furnace is used to ventilate, which, no doubt, sufficed to furnish proper ventilation when it was installed, but as the headings have proceeded its efficiency has decreased until it no longer provides a proper current to insure good ventilation.

Another matter of great concern here is an accumulation of dust, an element of danger always, and one that should not be regarded lightly. This is due to a lack of moisture and can be remedied by sprinkling frequently and at regular intervals.

Since my first visit the furnace has been repaired and the conditions somewhat improved as to ventilation.

The following is an average of air measurement for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake at mouth of Mine No. 1.....	13,400	38	352
Return to furnace.....	11,000		
Intake at mouth of Mine No. 2.....	11,520	20	562
Return to furnace.....	9,000		

## GARRETT COUNTY COAL & MINING COMPANY.

### DODSON MINES, Nos 1, 2 AND 4.

G. C. McFarline, Superintendent.

H. B. Kight, Foreman.

This company is working both Kittaning, Upper and Lower. The

Upper Kittanning is about four feet in height; it is of good quality and practically free from impurities. It is the only opening in this section of the State in the above seam. It is not certain that the vein is present in Allegheny county.

Mine No. 1 is in the Davis Six Foot and is ventilated by a fan of the Crawford-McCrimmor type. The air is distributed by the overcast or split-system, which is a splendid plan, though it requires close attention to see that the proper amount of air is supplied to each heading.

No. 2 mine is ventilated by a furnace. No. 4 mine is a new opening and is ventilated by natural means, though a foundation for a new fan was being laid on my last visit for use in this opening, when required.

The coal from No. 4 vein is carried over a tramway to a plane, on which it is lowered to the same dump on which the coal from the other veins are loaded.

These mines are located at Dodson and the coal goes over the Western Maryland railroad.

The following is an average of the air current for the year:

Where Measured.	Cubic ft. Air per M.	No. of Employees.	Air Per Man.
Intake from fan.....	56,000	85	658
Outlet of 4th right.....	4,200	8	525
Intake of 5th right.....	4,050	60	675
Intake of 5th left.....	5,200	6	866
Intake of 6th right.....	2,250	9	244
Intake of 6th left.....	5,040	10	504
Intake of 7th right.....	2,600	11	236
Intake of 7th left.....	3,200	8	400
Intake of 8th right.....	3,420	12	285
Intake to 8th left.....	1,600	8	200
Intake to 9th right.....	1,000	7	141
Outlet at mine mouth.....	44,000		
<b>No. 2.</b>			
Intake at mouth of mine.....	3,000	16	187
Return to furnace.....	6,000		

The Beechwood Cumberland Coal Company's mine at Glade run, near Gorman; The Nethkins Coal and Coke Company, located in Garrett county, near Bayard, West Virginia, and the Penn Garrett Coal Company have not been in operation since my induction into office, hence no inspections have been made of those openings.

# *The Fire Clay Mines.*

## THE SAVAGE MOUNTAIN FIRE BRICK CO.

John A. Caldwell, Superintendent.

G. Shuckhart, Foreman.

This company began operations in 1863, and has been running continuously since. The mine from which the fire clay is obtained is in Garrett county, about three miles west of Frostburg, and not far distant from the old National Pike. The clay is of a superior quality and the bricks which are manufactured at the company's large plant in Frostburg are unsurpassed anywhere and are in demand at all times. Owing to the high grade of their product the company have filled orders to be shipped to nearly all parts of the country.

The clay is brought to the surface by mules and then hauled over a tramroad about three-quarters of a mile in length by horses to the dump. Here it is loaded in large wagons and hauled to the yard in Frostburg.

## UNION MINING COMPANY.

Mines Nos. 5, 6 and 7.

Henry Shriver, Superintendent.

James Yantz, Foreman.

The Union Mining Company's brick works are located at Mount Savage and are the largest of the kind in Western Maryland.

This company has three clay mines in operation to supply their plant. Their mines are in Savage Mountain, about three miles from the brickyard. The clay is hauled from the inside by mules to the surface and then lowered on a plane to a tramroad, here the cars are made into a train and hauled by a small locomotive to the yard.

Extensive improvements have been made during the year to Mine No. 7. A mile of tramroad has been constructed and a new Phillip's Cross-Over Tipple erected which will greatly facilitate the handling of the clay.

The same trouble exists here as to drainage as found in other clay mines. It is not by any means good.

## BIG SAVAGE FIRE BRICK COMPANY.

John N. Benson, Superintendent.

Joseph Finzel, Foreman.

The clay mine of the above company is located on the Savage Mountain, east of Frostburg, and about two miles from the small town of Alleghany, where the clay is manufactured into fire bricks. This company, which is composed of local capital, have been in operation less than ten years, but are forging to the front in the brick industry.

The clay is brought from the mines in small cars, drawn by mules, to a tramroad, by which it is conveyed to the brickyard. The haulage on the tramroad is by stationery engine, which hauls four cars on each trip. The drainage in fire clay mines is always a troublesome matter and this opening is no exception. The water flowing from the mines carries with it considerable of the soft clay and the result is a very undesirable quantity of mud. Even at the best the drainage is not what it should be. The ventilation is by natural means and measures up to the requirements of the law.

This company has also a small seam of coal opened and in operation which supplies the coal for the brickyard.

# List of Executive Mine Officials, Ownership of Coal, Transportation, Etc.

## ALLEGANY COUNTY.

Name of Company	Superintendent's Name and Address	Name of Foreman	Mine	No. of Openings	Coal Seam Being Developed.		Where Located	Owner of Land Being Worked.	Transportation
					Geological Name.	Local Name.			
McMullen Bros. Coal Co.	D. F. McMullen, Cumberland, Md.	James Barrett	Partridge Run	2	Brookville	Bluebaugh	Barrellsville	Fairweather & Ladew	C. & P. R. R.
Cumberland Basin Coal Co.	David Williamsou, Pomosa, Md.		Stafford & McGlone	2	Clarion	Parker	Barrellsville	Cumberland Basin Coal Co.	"
Midland Mining Co.	W. A. Somerville, Cumberland, Md.	Frank Stohl	Trimble	2	Pittsburg	Big Vein	Morantown	Midland Mining Co.	"
Midland Mining Cos.	W. A. Somerville, Cumberland, Md.	John S. Askey	Enterprise	1	Pittsburg	Big Vein	Midland	Consolidation Coal Co.	"
New York Mining Co.	Henry Shriver, Mt. Savage, Md.	John Tippin	Union No. 1	2	Pittsburg	Big Vein	Near Allegany	New York Mining Co.	"
New York Mining Co.	Henry Shriver, Mt. Savage, Md.	John Sullivan	Union No. 2	3	Pittsburg & Tyson	Big Vein & Tyson	Frostburg	New York Mining Co.	"
Union Mining Co.	Henry Shriver, Mt. Savage, Md.	James Alden	Union	2	Pittsburg	Big Vein	Borden	Union Mining Co.	"
H. & W. A. Hitchins Coal Co.	Patrick Brophy, Frostburg, Md.	Patrick Brophy	Borden Mine	2	Pittsburg	Big Vein	Borden	Borden Mining Co.	"
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Thos. McFarland	Ocean No. 1	2	Pittsburg	Big Vein	Ocean	Consolidation Coal Co.	"
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	William Sleeman	Ocean No. 3	3	Pittsburg	Big Vein	Hoffman	Consolidation Coal Co.	"
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	James Weston	Ocean No. 3 1/2	2	Pittsburg	Big Vein	Eckhart	Consolidation Coal Co.	"
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	Jonathan Jenkins	Ocean No. 7	3	Upper Sewickly	Tyson	Lord	Consolidation Coal Co.	"
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	W. H. R. Thomas	Ocean No. 8	3	Pittsburg & Tyson	Big Vein	Lord	Consolidation Coal Co.	"
Consolidation Coal Co.	H. V. Hesse, Frostburg, Md.	P. J. Kenny	Ocean No. 9	3	Upper Sewickly	Tyson	Midland	Consolidation Coal Co.	"
Pied. & Georges Creek Coal Co.	Martin Condry, Frostburg, Md.	P. H. Brown	Washington No. 1	2	Pittsburg	Big Vein	Allegany	Consolidation Coal Co.	"
Pied. & Georges Creek Coal Co.	Phillip Brown, Frostburg, Md.	Wm. Condry	Washington No. 2	3	Upper Sewickly	Tyson	Eckhart	Consolidation Coal Co.	"
Pied. & Georges Creek Coal Co.	M. P. Fahey, Westernport, Md.	Chas. Drenning	Washington No. 3	4	Lower Kittanning	Davis six foot	Westernport	Piedmont & Georges Creek Coal Co.	"
Pied. & Georges Creek Coal Co.	M. P. Fahey, Westernport, Md.	Wm. E. Brown	Washington No. 4	2	Lower Kittanning	Davis six foot	Westernport	Piedmont & Georges Creek Coal Co.	"
Pied. & Georges Creek Coal Co.	M. P. Fahey, Westernport, Md.	Geo. Gales	Washington No. 5	3	Bakerstown	Barton four foot	Westernport	Piedmont & Georges Creek Coal Co.	"
Barton & Georges Cr. V. C. C.	H. Hitchins, Frostburg, Md.	H. C. Hitchins	Carlos	3	Pittsburg	Big Vein	Carlos	Consolidation Coal Co.	"
Bowery Coal Co.	Robert Griffith, Frostburg, Md.	Robert Griffith	Bowery Mine	1	Pittsburg	Big Vein	Midlothian	Borden Mining Co.	"
Georges Creek Basin Coal Co.	W. H. Morgan, Frostburg	George Rephan	Pine City Mine	2	Brookville	Bluebaugh	Short Gap	Georges Creek Basin Coal Co.	"
Wachovia Coal Co.	Charles E. Davis, Vale Summit, Md.	Tony Lewis	Montell Mine	1	Lower Kittanning	Davis six foot	Clarysville	Fred Mertens Sons	G. C. & C. R. R.
Georges Creek Coal & Iron Co.	Robert L. Somerville, Lonaconing, Md.	Richard Spear	Engineside and No. 1	2	Pittsburg	Big Vein	Lonaconing	Georges Creek Coal & Iron Co.	C. & P. R. R.
Georges Creek Coal & Iron Co.	Robert L. Somerville, Lonaconing, Md.	Douglas Somerville	No. 16	2	Upper Sewickly	Tyson	Lonaconing and Midland	Georges Creek Coal & Iron Co.	"
New Central Coal Co.	Duncan Sinclair, Fairmont, W. Va.	John M. Boyd	Nos. 3, 9, 12 and 13	5	Pittsburg	Big Vein	Lonaconing	New Central Coal Co.	G. C. & C. R. R.
Coromandal Coal Co.	Duncan Sinclair, Fairmont, W. Va.	William Thompson	Koontz No. 1	3	Pittsburg & Sewickley	Big Vein	Lonaconing	New Central Coal Co.	"
Maryland Coal Co.	Frank E. Brackett, Cumberland, Md.	William Dodds	Big Vein Mine	2	Pittsburg	Big Vein	Lonaconing	Maryland Coal Co.	"
Maryland Coal Co.	Frank E. Brackett, Cumberland, Md.	William Dodds	Appleton Mine	3	Pittsburg & Sewickley	Big Vein & Tyson	Lonaconing	Maryland Coal Co.	"
American Coal Co.	J. T. Dobbie, Lonaconing, Md.	Hubert Worgan	New Detmold	1	Pittsburg	Big Vein	Lonaconing	Maryland Coal Co.	"
American Coal Co.	J. T. Dobbie, Lonaconing, Md.	Robert Gunning	Jackson	7	Pittsburg & Sewickley	Big Vein & Tyson	Lonaconing	American Coal Co.	"
Piedmont Mining Co.	J. T. Dobbie, Lonaconing, Md.	William Russell	Caledonia	10	Pittsburg & Sewickley	Big Vein & Tyson	Barton	American Coal Co.	C. & P. R. R.
Moscow Georges Creek Coal Co.	W. A. Somerville, Cumberland, Md.	C. Bowden	Pekin and Moscow	8	Pittsburg	Big Vein	Pekin	Piedmont Mining Co.	"
Chapman Coal Mining Co.	John Frenzel, Barton, Md.	E. R. Brennan	Moscow No. 2 and 3	3	Pitts. & Bakerstown	Big Vein, Barton 4 ft.	Moscow	A. B. Shaw	"
Potomac Coal Co.	Henry Shriver, Mt. Savage, Md.	John Frenzel	Swanton	3	Bakerst. & Sewickley	Tyson, Barton 4 ft.	Barton	Chapman Coal Mining Co.	"
Frostburg Coal Co.	Henry Shriver, Mt. Savage, Md.	P. H. Gallagher	Potomac	4	Bakerstown	Barton 4 ft.	Barton	Black Sheridan & Wilson Co.	"
Morrison Land Co.	William Harvey, Frostburg, Md.		Ginseng	2	Upper Freeport	Thomas 3 ft.	Near Reynolds	Carrie Morrison	"
Phoenix & G. C. & M. Co.	John Rankin, Piedmont, W. Va.		Reynolds	1	Upper Freeport	Thomas 3 ft.	Reynolds	Morrison Land Company	Domestic
Cumb. Georges Creek Coal Co.	Thos. S. Harris, Westernport, Md.	John Rankin	Phoenix and Elkhart	4	Pitts. & Bakerstown	Big Vein, Barton 4 ft.	Phoenix	Phoenix & Georges Cr. C. & M. Co.	C. & P. R. R.
Davis Coal & Coke Co.	O. Tibbetts, Beryl, W. Va.	Thomas S. Harris	Penn Mine	3	Bakerstown	Barton 4 ft.	Near Franklin	Cumberland Georges Creek Coal Co.	"
		Harry Wilson	Buxton or No. 17	2	Lower Kittanning	Davis 6 ft.	Near Bloomington	Western Maryland R. R. Co.	West Md. R. R.

## GARRETT COUNTY.

G. C. Pattison Coal Co.	Carroll Pattison, Bloomington, Md.	Carroll Pattison	Bloomington	2	Lower Kittanning	Davis 6 ft.	Bloomington	Empire Coal Co.	B. & O. R. R.
Munroe Coal Mining Co.	G. C. McFarlane, Barnum, W. Va.	L. R. Kight	Elk Run Nos. 1 and 3	3	Lower Kittanning	Davis 6 ft & 4 ft.	Barnum	Munroe Coal Mining Co.	West. Md. R. R.
Three Forks Coal Co.	D. F. Beckman, Chaffee, W. Va.	Sheridan Stottlemeyer	No. 1 Mine	2	Lower Kittanning	Davis 6 ft.	Near Chaffee	Beckman Heirs	"
Potomac Valley Coal Co.	Alfred Fortney, Blaine, W. Va.	George Hose	Darwin	2	Upper Freeport	Thomas 3 ft.	Blaine	Wilson Heirs	"
Blaine Mining Co.	James G. Boyd, Blaine, W. Va.	James Luzader	Dill No. 2	2	Lower Kittanning	Davis 6 ft.	Dill	Blaine Mining Co.	"
Garrett County C & M Co.	G. C. McFarlane, Barnum, W. Va.	H. B. Kight	Dodson Nos. 1, 2 and 4	4	Upper & Lo'r Kit'g.	Davis 6 ft.	Dodson	Garrett County Coal and Mining Co.	"
Upper Potomac Mining Co.	R. H. Hamill, Hubbard, W. Va.	Thomas Robinson	Upper Potomac	2	Lower Kittanning	Davis 6 ft.	Upper Potomac	Upper Potomac Mining Co.	"
Stoyer Run Coal Co.	Thos. Melvin, Stoyer, Md.	Thomas Melvin	Stoyer Run	3	Lower Kittanning	Davis 6 ft.	Stoyer	Stoyer Run Coal Co.	"
Beechwood Cumb. Coal Co.	Wilbur Shrout, Gormanian, W. Va.	Wilbur Shrout	Glade Run	1	Upper Freeport	Thomas 3 ft.	Glade Run		"
Fenn Garrett Coal Co. now called Western Md. Coal Co.	C. V. Gould, Friendsville, Md.	Wm. Reese	Mine Nos. 1 and 2	3	Lower Kittanning	Davis 6 ft.	Kendall		Confluence & O. R.
Bloomington Coal Co.	E. R. Brydon, Bloomington, Md.	Charles Brendling	Mine Nos. 1 and 2	2	Lower Kittanning	Davis 6 ft.	Bloomington		B. & O. R. R.

# *Mining Laws of Maryland.*

## CHAPTER 124.

AN ACT to repeal and re-enact with amendments Sections 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 209A, 209B, 209C and 209D of Article No. 1 of the Code of Public Local Laws, entitled "Allegany County," sub-title "Mine Inspector," as the same were enacted by Chapter thirty-four of the Acts of 1898, and to re-enact the same under the title "Mining and Mine Inspector," said Sections as hereby re-enacted and amended to be known as Sections 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 207, 208, 209, 209A, 209B, 209C, 209D, 209E, 209F, 209G, 209H, 209I, 209J, 209K, 209L, 209M, 209N, 209O, 209P, 209Q, and to repeal and re-enact with amendments Sections 150 to 164C, all inclusive, of Article No. 12 of the Public Local Laws, title "Garrett County," sub-title "Manufactures and Mines," as the same were enacted by Chapter 34 of the Acts of 1898, and to add new sections to re-enact and amend the same by enacting the following Sections, in lieu thereof, to wit, Sections 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 164A, 164B, 164C, 164D, 164E, 164F, 164G, 164H, 164I, 164J, 164K, 164L, 164M, 164N, 164O and 164P.

Section 1. Be it enacted by the General Assembly of Maryland, That Sections 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 209A, 209B, 209C, 209D of Article No. 1 of the Public Local Laws entitled "Allegany County," sub-title "Mine Inspector," as the same were enacted by Chapter 34 of the Acts of 1898, be and the same are hereby repealed, and that Sections 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 164A, 164B, and 164C of Article Twelve of the Public Local Laws, entitled "Garrett County," subtitle "Manufactures and Mines," as the same were enacted by Chapter 34 of the Acts of 1898, be and the same are hereby repealed, and that Sections 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 209A, 209B, 209C, 209D, 209E, 209F, 209G, 209H, 209I, 209J, 209K, 209L, 209M, 209N, 209O, 209P and 209Q, are hereby enacted and added to Article No. 1 of the Code of Public Local Laws, title "Allegany County," sub-title "Mine Inspector," to read as hereinafter set forth respectively, and that Sections 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 164A, 164B, 164C, 164D, 164E, 164F, 164G, 164H, 164I, 164J, 164K, 164L, 164M, 164N, 164O and 164P, be and they are hereby enacted and added to Article No. 12 of the Public Local Laws, title "Garrett County," sub-title "Manufactures and Mines," to read as hereinafter set forth, respectively, to wit:

### Appointment of Mine Inspector.

Section 16 of Article 1 and Section 150 of Article 12. That the Governor shall, by and with the advice and consent of the Senate, appoint one Mine Inspector for the counties of Allegany and Garrett, who shall hold his office for two years from the date of his appointment. No person shall be eligible to the office of Mine Inspector until he shall have attained the age of thirty years. He shall possess a competent and practical knowledge of the different systems of mining and properly ventilat-

ing coal mines in said counties, and the nature and constituent parts of the various gases found in coal mines, and of the various ways of expelling the same from said mines, and shall have had five years' practical experience as a miner in one or both counties combined next immediately preceding his appointment, and shall receive an annual salary of fifteen hundred dollars, payable quarterly by warrant of the Comptroller upon the State Treasury for the same. Before entering upon the discharge of the duties of his office the said Mine Inspector shall take the oath provided in the Constitution of the State, and shall give bond in the sum of two thousand dollars, with sureties to be approved by the Chief Judge of the Fourth Judicial Circuit of Maryland. Said Mine Inspector while in office shall not be interested in the operation of any mine, or act as land agent, superintendent, or manager of any mine, and it shall be his duty to make a report to the Governor of his proceedings in office and to set forth in such reports all such information that may be proper or beneficial, and also to make such recommendations and suggestions as he may consider important as to legislation on the subject of mining.

#### Duties of Mine Inspector.

Section 197 of Article 1 and Section 151 of Article 12. Said Mine Inspector shall devote the whole of his time to the duties of his office. It shall be his duty to examine each mine in said counties as often as possible, but a longer period of time than two months shall not elapse between said examinations to see that all the provisions of this Act are observed and strictly carried out, and he shall make a record of all examinations of mines, showing the condition in which he finds them, especially with reference to ventilation and drainage, the number of persons employed in each mine, the extent to which the law is obeyed and progress made in the improvement of mines, the number of serious accidents and the nature thereof, the number of deaths resulting from injuries received in or about the mines, with the cause of such accident or death, which record completed to the first day of May of each and every year shall be filed with the Governor of the State; and one thousand copies of said report shall be printed for distribution at once by the Inspector, and the cost thereof shall be paid by the Treasurer upon the warrant of the Comptroller.

Section 198 of Article 1 and Section 152 of Article 12. It shall be the duty of the Mine Inspector, on examination of any mine, to make out a written or partly written and partly printed report of the condition in which he find such mine and post the same at the mouth of the mine properly protected from the weather. The said report shall give the date of the visit, the number of cubic feet of air in circulation and where measured, and that he has measured the air at the cut-through of one or more rooms in each heading or entry, and such other information as he shall deem necessary, and the said report shall remain posted in the office or conspicuous place, and may be examined by any person employed in or about the mine.

Section 199 of Article 1 and Section 153 of Article 12. In case the Inspector becomes incapacitated to perform the duties of his office or receives a leave of absence from the Governor, it shall be the duty of the Governor to appoint, upon said Mine Inspector's application or that of five miners or five operators, some competent person to fill the office of Inspector until the said Inspector shall be able to resume the duties of his office, and the person so appointed shall be paid in the same manner as hereinbefore provided for the Inspector of Mines.

Section 200 of Article 1 and Section 154 of Article 12. That the Mine Inspector may be enabled to perform the duties herein imposed up-

on him he shall have the right at all times to enter any coal mine to make examination or obtain information, and upon the discovery of any violation of this Act, it shall be the duty of said Mine Inspector to report the same to the Grand Jury for the proper county, and the Grand Juries for each of the said counties are hereby directed to summon said Mine Inspector before them at each term of Court, and the respective Courts of Allegany and Garrett counties shall call this section to the attention of each Grand Jury.

Section 201 of Article 1 and Section 155 of Article 12. Whenever loss of life or serious personal injury shall occur by reason of any accident whatever, in or connected with any coal mine, it shall be the duty of the person having charge of said mine to report the fact without delay, to the Inspector, and the said Inspector shall, if he deem necessary from the facts reported, and in all cases of loss of life, immediately go to the scene of said accident and render every possible assistance to those in need.

Section 202 of Article 1 and Section 156 of Article 12. That the Mine Inspector shall also be an inspector of weights and measures at all mines now or hereafter opened in said counties, and shall weigh several cars of coal mined therein once every two months, on the scales of the different mines, or when requested to do so, especially by any miner or operator, in order to test the accuracy of said scales, and the State shall supply said Mine Inspector with the required weights and apparatus for testing scales, and to do any other act he may deem necessary to ascertain whether the coal be justly weighed at said mine, and it shall be the duty of every person acting as weighmaster for the owner, lessee or agent of said mines, before entering upon the performance of his duty as weighmaster or check-weighman, or before making any report, to make oath before some justice of the peace, in the proper county, that he will perform the duty of weighmaster or check-weighman as prescribed by this Act, at such mines, with honesty and fidelity, and will keep a true and accurate account of all the coal so weighed by him, and will credit and allow the full weight, and no more, of coal in each mining car, to the party or parties who mined the same at the rate of two thousand two hundred and forty pounds per ton, and all fractions thereof be counted in hundred weights, a copy of which said oaths shall be posted up in said weigh-office, where such coal is weighed. But the said oath of weigh-master or check-weighman shall be understood and construed as only requiring said weighmaster or check-weighman to allow and credit said fractions of tons in whole hundred weights (cwts.) in manner following, namely: Where the odd pounds in any mining cars in excess of the whole hundred weight therein, shall equal or exceed fifty-six pounds the said weighmaster or check-weighman shall credit such miner with a whole hundred weight for such odd pounds, but where such odd pounds, less than a whole hundred weight (cwt.) shall be less than fifty-six pounds, then such weighmaster or check-weighman shall give such miner no credit whatever for such odd pounds; and it shall be the duty of said weighmaster and of any check-weighman to perform the several acts and matters prescribed in said affidavit. Provided that every car when weighed shall be uncoupled and stopped on the scales; but the Mine Inspector may make special regulations as to the stopping of cars when necessary.

Section 203 of Article 1 and Section 157 of Article 12. The Mine Inspector shall have power to examine the weighing sheets on which the weight of the miner's cars are registered, and the monthly aggregate of coal weighed on such scales, and shall compare such aggregate monthly weighings with the manifest or shipping reports of the operators, and

thus determine from time to time whether the coal is accurately weighed.

#### Weighing of Coal.

Section 204 of Article 1 and Section 158 of Article 12. That it shall be lawful, however, notwithstanding the provisions of this Act, in relation to weighmaster and the weighing of coal, for any lessee, owner, individual or agent of any mine in said counties of Allegany and Garrett to contract with the miners to mine coal therein or therefrom by measurement; and it shall also be lawful for any owner, lessee or agent of any mine in said counties, at or in which not more than ten miners are employed at one time, in contract with the miner or miners employed therein by the day, week or month, instead of by weight, and in all such cases when the compensation of the miners by their contract or agreement fixed by the day, week or month, be ascertained by the cubic yard or other measurement, as hereinbefore provided, it shall not be obligatory upon such owner, lessee or agent of such mine to provide any weighmaster or weigh the coal mined in such shaft or mine, or taken therefrom; but the mine cars used in any such mine worked by shaft shall be measured by a sworn measurer, and said owner, lessee, or agent, shall cause the capacity of each of said mining cars to be plainly stamped or branded thereon.

Section 205 of Article 1 and Section 159 of Article 12. That at any time upon the request of a majority of the miners then employed in any coal mine in said counties of Allegany and Garrett, the agent, lessee or operator of said coal mine shall permit said miners (but at their own expense) to provide and keep in the said weigh-house at said mine, at the scales kept thereat, for such length of time as such miners may require, a check-weighmaster, who shall have the right at all times to be present when the coal mined at each mine is being weighed by the weighmaster of said mine, and to examine the scales thereof, and to take and keep a full statement of the weight of each mining car load of coal, as shown by the said scales when the coal is being weighed thereon, by said weighmaster, and upon the discovery of such check-weighmaster of any willful violation of any of the provisions of this Act by the weighmaster employed at such mine, it shall be the duty of such check-weighmaster to immediately lay all such information before the State's Attorney of the county in which such weigh house is situated, or the Mine Inspector, for their action upon the same.

Section 206 of Article 1 and Section 160 of Article 12. And it shall be the duty of every person acting as weighmaster in any of the said mines, to keep in ink or indelible pencil a list or statement of the number of mining cars, and the weight of coal in cars mined each day, and the person mining the same and place and keep said list at the weigh-house, where said coal is weighed, where the parties interested therein may inspect it; which lists shall be kept for reference and inspection by all persons interested therein for at least thirty days' time. And it shall be the duty of every operator to provide correct and accurate scales upon which all coal mined in said mine shall be weighed in the state in which it is mined, before the same shall be dumped or taken from the mining cars, in which the miners have loaded the same; and no operator shall dock any miner in excess of five hundred pounds (cwts.) on any one car, and it shall be the duty of the operator to cause the average weight of each empty car used at any such mine to be plainly stamped on the outside of each car.

#### Propping and Care Required.

Section 207 of Article 1 and Section 161 of Article 12. That the owner, lessee or agent of every mine in operation in the counties of Al-

legany and Garrett, shall furnish at their own expense, all props and all requisite timber required to be used in the working said mines, and as the miners employed to work therein proceed with the working of their excavations it shall be the duty of the owner, lessee or agent of said mine, to furnish a sufficient quantity of props and timber of suitable character at the place in the heading, room, cross-cut or other excavation in the mine, where the miners are at work, and the owners, lessee or agent operating any such mine shall, at their own expense, properly timber any headings, rooms, pillars, or other excavations, not recently worked, and lay up roads by contract or otherwise to or in the same, previous to the miners starting new or further work of excavations therein; and said owner, lessee or agent shall construct each heading hereinafter driven in every mine of sufficient width and height, with at least two feet and a half of room on the brake side of such heading, or if no brakes be used, then upon some given side of such heading, so as to admit of the passage of the drivers who may be engaged in driving along said heading. And it shall be the duty of every agent, lessee, owner, operator, weighmaster, or mining boss, overseer, roadman, driver, miner or any other person working or engaged in any employment whatever in or about the said mines in said Allegany and Garrett counties, or tramroad or incline planes leading therefrom, to observe all practical care, caution and prudence in the work in which they may be engaged so that all lives, health and safety of themselves and their co-laborers, and the property of the owners in and about said mines, may be protected so far as practicable, consistent with the dangerous character of the work, from loss or injury, and it shall be the duty of all miners engaged in any of the said mines to carefully prop and timber all rooms, headings and other excavations wherein they may be working, as close up to their work as may be reasonably practicable, so as to guard, as far as practicable, against all accidents from fall of roof, side or breast coal or slate, earth or other surrounding matter, and any miner or other person employed or working in or about said mines, who shall be guilty of any willful negligence in respect of any of the matters specified in this section, whereby the lives, health or safety of any co-laborers in and about said mines may be lost, destroyed or injured, or unnecessarily jeopardized, shall be liable to indictment, and upon conviction to be fined as hereinafter provided, and whenever in any case it shall be brought to the notice of the Mine Inspector that any person is violating any of the provisions of this section, he shall at once order such person to take immediate steps to secure the safety of the persons or property so jeopardized, and in case the refusal of any person to comply with such order, it shall be the duty of said Inspector to proceed at once to have such offender arrested and punished in accordance with the provisions of this Act.

#### Map of Mine.

Section 208 of Article 1 and Section 162 of Article 12. The operator or superintendent of every coal mine shall make, or cause to be made by a competent engineer or surveyor, an accurate map or plan of such coal mine, not smaller than a scale of two hundred feet to an inch, which map shall show as follows: First, all measurements of said mine in feet, or decimal parts thereof. Second, all the openings, excavations, shafts, tunnels, slopes, planes, main entries, cross entries, and rooms in said mines. Third, by darts or arrows made thereon by a pen or pencil, the direction of air currents in the said mine. Fourth, an accurate delineation of the boundary lines so far as possible between said coal mine and all adjoining mines or coal lands, whether owned or operated by the same operator or other operator, and the relation and proximity of the workings of said mine to every other adjoining mine or coal land. Fifth,

the bearings and length of each tunnel or entry and boundary or property lines. The said map or plan, or a true copy thereof, shall be kept in the general mine office by the said operator or superintendent for use of the mine inspector, and for the inspection of any person or persons working in said mine wherever said person or persons shall have cause to fear that any working place is becoming dangerous by reason of its proximity to other workings that may contain water or dangerous gas.

Section 209 of Article 1 and Section 163 of Article 12. At least once in every six months, or oftener if necessary, the operator or superintendent of each mine shall cause to be shown accurately on the map or plan of said coal mine, all the excavations made therein during the time elapsing since such excavations were last shown upon said map or plan; and all parts of said mine which were worked out or abandoned during said elapsed period of time shall be clearly indicated by colorings on said map or plan; and whenever any of the workings or excavations of said coal mine have been driven to their destination, a correct measurement of all such workings or excavations shall be made promptly and recorded in a survey book prior to the removal of the pillars or any part of the same from such workings or excavations.

#### Must Be Two Openings.

Section 209 of Article 1 and Section 164 of Article 12. It shall not be lawful for the operator, superintendent or mine foreman of any coal mine to employ more than twenty persons within said coal mine, or permit more than twenty persons to be employed therein at any one time, unless they are in communication with at least two available openings to the surface from each seam or stratus of coal worked in such mine exclusive of the furnace upcast. But provided, that in any mine operated by a shaft or slope and ventilated by fan, if the air shaft shall be divided into two compartments, one of them may be used for an airway and the other for the purpose of egress and ingress from and into said mine by the persons therein employed, and the same shall be considered a compliance with the provisions of this section hereinbefore set forth. And there shall be cut out or around the side of every hoisting shaft, or driven through the solid strata at the bottom thereof, a traveling way not less than five feet high and three feet wide, to enable persons to pass the shaft in going from one side of it to the other without passing over or under the cage or other hoisting apparatus. The Mine Inspector may, upon application, if he deem it necessary, grant a period of time, not exceeding eighteen months in which the operator shall provide the second opening, under such terms as the inspector shall prescribe, and the second opening required may be through an adjoining mine if the way thereto and the opening itself be kept and maintained in proper condition.

Section 209B of Article 1 and Section 164A of Article 12. The shaft or out-let, other than the main shaft or out-let, shall be separated from the main outlet and from the furnace shaft by a natural strata at all points by a distance of not less than one hundred and fifty feet (except in all mines opened prior to June 30th, 1901, where such distances may be less, if, in the judgment of the inspector one hundred and fifty feet is impracticable.) If the mine be worked by drift two openings, exclusive of the furnace upcast shaft, and not less than thirty feet apart shall be required. Where the two openings shall not have been provided as required hereinbefore by this Act, the Mine Inspector shall cause the second to be made without delay; and in no case shall furnace ventilation be used where there is only one opening into the mine.

#### Passages Required.

Section 209C of Article 1 and Section 164B of Article 12. Unless

the Mine Inspector shall deem it impracticable, all mines shall have at least two entries or other passage-ways, one of which shall lead from the main entrance and the other from the other opening into the body of the mine, and said two passageways shall be kept well drained and in a safe condition for persons to travel therein throughout their whole length, so as to obtain in case of emergency, a second way for egress from the workings. No part of said workings shall at any time be driven more than three hundred feet in advance of the aforesaid passageways, except entries, airways or other narrow work, but should an opening to the surface be provided from the interior of the mine, the passageways aforesaid may be made and maintained therefrom into the working part of the mine, and this shall be deemed sufficient compliance with the provisions of this Act relative thereto; said two passageways shall be separated by pillars of coal or other strata of sufficient strength and width.

Section 209D of Article 1 and Section 164C of Article 12. Where necessary to secure access to the two passageways required in any slope mine where the coal seam inclines and has workings on both sides of said slope, there shall be provided an overcast for the use of persons working therein, the dimensions of which shall not be less than four feet wide and five feet high. Said overcast shall connect the workings on both sides of said slope, and the intervening strata between the slope and overcast shall be of sufficient strength and thickness at all points for its purpose; provided, that if said overcast be substantially constructed it shall be deemed sufficient.

Section 209E of Article 1 and Section 164D of Article 12. The machinery used for lowering or raising the employes into and out of the mines and the stairs used for ingress and egress shall be kept in safe condition, and inspected once in each twenty-hour hours by a competent person employed for the purpose, and such machinery and the method of its inspection shall be approved by the Mine Inspector.

Section 209F of Article 1 and Section 164E of Article 12. No greater number of persons shall be lowered or hoisted at any one time than may be permitted by the Mine Inspector, and notice of the number so allowed to be lowered or hoisted at any one time shall be kept posted up by the operator or superintendent in conspicuous places at the top and bottom of the shaft, and the aforesaid notice shall be signed by the Mine Inspector.

#### Ventilation.

Section 209G of Article 1 and Section 164F of Article 12. The operator or superintendent of every coal mine, whether shaft, slope or drift, shall provide and hereafter maintain ample means of ventilation for the circulation of air through the main entries, cross entries and all other working places to an extent that will dilute, carry off and render harmless all noxious or dangerous gases generated in the mine, affording not less than one hundred cubic feet per minute for each and every person employed therein; provided that in the case of old workings when the Mine Inspector shall deem it impracticable to secure 100 cubic feet of air per minute for each man, then he may reduce it to 80 feet per man per minute, for such old workings.

Section 209H of Article 1 and Section 164G of Article 12. It shall be the duty of the mine foreman to see that proper cut-throughs are made in all the rooms, and pillars, at such distance apart as the Mine Inspector may deem requisite, not more than thirty-five yards in any instance, for the purpose of ventilation, and the ventilation shall be conducted through said cut-throughs into the rooms by means of check-doors made of canvas or other suitable material, placed on the entries or in other suitable places, and he shall not permit any room to be opened in advance of the ventilation current. Should the Mine Inspector dis-

cover any room, entry, or other working places being driven in advance of the air current, or shall discover any cross-cut or cut-through not properly closed or bratticed contrary to the requirements of this Section, he shall order the workmen working in such places to cease work at once until the law is complied with.

Section 209I of Article 1 and Section 164H of Article 12. One year after the passage of this Act, every mine employing more than seventy-five persons must be divided into two or more districts, and each district shall be provided with a separate split of pure air and the ventilation shall be so arranged that not more than seventy-five persons shall be employed at the same time in any one current or split of air; provided, that a larger number, not exceeding one hundred and thirty, may be allowed by the Mine Inspector when in his judgment it is impracticable to comply with the foregoing requirements.

Section 209J of Article 1 and Section 164I of Article 12. In all mines the doors used in guiding and directing the ventilation of the mine shall be so hung and adjusted that they will close themselves, or be supplied with springs and pulleys, so that they cannot be left standing open, and an attendant shall be employed at all the principal doors through which cars are hauled, for the purpose of opening and closing said doors when trips of cars are passing to and from the workings, unless an approved self-acting door is used, which principal doors shall be determined by the Mine Inspector or mine foreman. A hole for shelter shall be provided at each door, so as to protect said attendant from being run over by the cars while attending to his duties, and persons employed for this purpose shall at all times remain at their post of duty during working hours; on every incline plane or road in any mine where hauling is done by machinery, and where a door is used, an extra door shall be provided, to be used in case of necessity.

Section 209K of Article 1 and Section 164J of Article 12. The mine foreman shall measure the air current at least once a week and the Mine Inspector at each visit at the inlet and outlet and at or near the faces of the entries, and shall keep a record of such measurements. An anemometer shall be provided for this purpose by the operator of the mine to the foreman, and the same shall be supplied to the Mine Inspector by the State.

Section 209L of Article 1 and Section 164K of Article 12. All ventilating fans used at the mines shall be provided with recording instruments, by which the number of revolutions of the effective ventilating pressure of the fan shall be registered and the registration with its date for each and every day shall be kept in the office of the mine for future reference for one year from its date.

#### **Bore Holes.**

Section 209M of Article 1 and Section 164L of Article 12. In any place that is being driven toward or in dangerous proximity to an abandoned mine or part of a mine suspected of or containing gases, or which may be inundated with water, bore holes shall be kept not less than twenty feet in advance of the face, and on the sides of such working places, said holes to be drilled diagonally not more than eight feet apart, and any place driven to tap water or gas shall not be more than ten feet wide, and no water or gas from an abandoned mine, or part of mine, and no bore holes from the surface shall be tapped until the employes, except those engaged at such work, are out of the mine, and such work to be done under the immediate instructions of the mine foreman.

#### **General Rules.**

Section 209N of Article 1 and Section 164 M of Article 12. For any injury to person or property occasioned by any violation of this Act, or

any failure to comply with its provisions by any owner, operator or superintendent of any coal mine or colliery, a right of action shall accrue to the party injured against said owner or operator for any direct damages he may have sustained thereby, and in case of loss of life by reason of such neglect or failure aforesaid a right of action shall accrue to the widow and lineal heirs of the person whose life shall be lost, for like recovery of damages for the injury they shall have sustained.

Sub-section A. If any person shall receive any injury in or about the mine, and the same shall come within the knowledge of the mine foreman, and if he shall be of the opinion that the injured person requires medical or surgical treatment, he shall see that said injured person receives the same. The mine foreman shall report monthly to the Mine Inspector on blanks furnished by said Inspector for that purpose all accidents resulting in personal injury.

Sub-section B. No unauthorized person shall enter the mine without permission from the superintendent or mine foreman.

Sub-section C. No person in a state of intoxication shall be allowed to go into or loiter about the mine.

Sub-section D. All employes shall inform the mine foreman, or his assistant of the unsafe condition of any working place, hauling roads or traveling ways, or of damages to doors, brattices or stoppings or of obstructions in the air passages when known to them.

Sub-section E. No person shall be allowed to travel on foot to or from his work on any incline plane, dilly or locomotive roads, when other good roads are provided for that purpose.

Sub-section F. It shall be the duty of operators or superintendents to keep at the mouth of the drift, shaft or slope, or at such other place about the mine as shall be designated by the Mine Inspector, a stretcher, properly constructed, and a woolen and a water-proof blanket in good condition for use in carrying away any person who may be injured at the mine. Provided, that when more than two hundred are employed, two stretchers and two woolen blankets and two water-proof blankets shall be kept.

Sub-section G. No person shall ride upon or against any loaded car or cage in any shaft or slope in or about any coal mine; no person other than the trip runner shall be permitted to ride on empty trips on any slope or incline plane, when the speed of the cars exceed six miles per hour. The transportation of tools in and out of the mine shall be under the direction of the mine foreman.

Sub-section H. No person under the age of twelve years or female of any age, shall be permitted to enter any mine to work therein; nor shall any boy under the age of fourteen years, unless he can read and write, be allowed to work in any mine; and the mine boss shall see that this requirement is fully met.

#### Duties of Employes.

Section 2090 of Article 1 and Section 164N of Article 12. He shall examine his working place before beginning work and see that it is made safe before commencing to dig or load coal.

Sub-section A. It shall be the duty of every miner to mine his coal properly, and after each blast he shall exercise great care in examining the roof and coal, and shall secure them safely before beginning work.

Sub-section B. When a driver has occasion to leave his trip he must be careful to see that it is left, when possible, in a safe place secure from cars and other danger, or from endangering drivers of trips following.

Sub-section C. The driver must take great care while taking his

trips down grades to have the brakes or sprags so adjusted that he can keep the cars under control and prevent them running on to himself or others.

Sub-section D. He shall not leave any cars standing where they may materially obstruct the ventilation current, except in case of accident to the trip.

Sub-section E. No employe shall burn any oil in the mines, composed wholly or in part of petroleum or its products, but such oil must be at least seventy-five per cent. pure lard, provided, this Section shall not prevent the use of "Sunshine" as an illuminant.

Sub-section F. Any person or persons whomsoever, who shall intentionally or carelessly injure any shaft, instruments, air course or brattice, or obstruct or throw open air ways, or injure any part of the machinery or open any door in the mine and not close it again immediately, or open any door which opening is forbidden, or disobey any order given in carrying out the provisions of this Act, or do any other act whatsoever whereby the lives or health of persons or the security of the miners or the machinery is endangered, shall be deemed guilty of a misdemeanor, and may be punished in a manner provided for in this Act.

Section 209P of Article 1 and Section 164O of Article 12. The neglect or refusal to perform the duties required to be performed by any Section of this Act by parties therein required to perform them, or the violation of any of the provisions or requirements hereof, shall be deemed a misdemeanor and shall, upon conviction thereof in the Circuit Court of the County wherein the misdemeanor was committed, or before a Justice of the Peace for such County, be punished by a fine not exceeding five hundred dollars, or imprisonment in the county jail for a period not exceeding six months, or both, in the discretion of the Justice of the Peace, or of the Court. (This Section as amended by Chapter 243, of the Acts of 1904.)

#### Rules of Interpretation.

Section 209Q of Article 1 and Section 164 P of Article 12. In this Act the term "Coal mine" includes the shafts, slopes, adits, drifts or inclined planes, connected with excavations penetrating coal stratum or strata, which excavations are ventilated by one general system of mine railroads over which coal may be delivered to one or more common points outside the mine when such is operated by one operator.

Sub-section A. The term "excavations and workings" includes all the excavated parts of a mine, those abandoned as well as the places actually being worked, also all underground workings and shafts, tunnels and other ways and openings, all such shafts, slopes, tunnels and other openings in the course of being sunk or driven, together with all roads, appliances, machinery and material connected with the same below the surface.

Sub-section B. The term "shaft" means a vertical opening through the strata, and which is or may be used for the purpose of ventilation or drainage, or for hoisting men or material, or both, in connection with the mining of coal.

Sub-section C. The term "slope" means an incline way or opening used for the same purpose as a shaft.

Sub-section D. The term "operator" means any firm, corporation or individual operating any coal mine or part thereof.

Sub-section E. The term "Superintendent" means the person who

shall have, on behalf of the operator, immediate supervision of one or more mines.

Sub-section F. The provisions of this Act shall not apply to any mine employing less than ten persons in any one period of twenty-four hours.

**Mine Inspector's Duties Extended to Fire-Clay Mines.**

Sub-section G. It shall be the duty of the Mine Inspector to make as to the Clay or Fire-Clay Mines in Allegany or Garrett Counties, the examination and reports required as to coal mines under Section 197 of Article 8, and Section 151 of Article 12 of this Act, and to make recommendations to the Governor as to the legislation requisite to protect life and health in such clay mines.

## List of Officials of Coal and Clay Mining Corporations in Maryland

Name of Company	Principal Office	President's Name and Address	Secretary's Name and Address
Consolidation Coal Co. ....	Baltimore, Md. ....	C. W. Watson, Baltimore, Md. ....	T. K. Stuart, Baltimore, Md. ....
Piedmont and George's Creek Coal Co.	Frostburg, Md. ....	M. J. Fahey, Westernport, Md. ....	Philip Brown, Frostburg, Md. ....
George's Creek Coal & Iron Co. ....	Lonaconing, Md. ....	J. J. Alexander, Baltimore, Md. ....	W. T. Cooper, Baltimore, Md. ....
Union Mining Co. ....	Mt. Savage, Md. ....	H. Crawford Black, Baltimore, Md. ....	Van Lear Black, Baltimore, Md. ....
New York Mining Co. ....	Baltimore Md. ....	H. Crawford Black, Baltimore, Md. ....	Van Lear Black, Baltimore, Md. ....
Potomac Coal Co. ....	Baltimore, Md. ....	H. Crawford Black, Baltimore, Md. ....	Van Lear Black, Baltimore, Md. ....
Barton & Geo' 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. T. Hiller, Philadelphia, Pa. ....
Maryland Coal Co. ....	New York, N. Y. ....	T. E. Knapp, New York, N. Y. ....	H. B. Nedham, New York, N. Y. ....
Moscow-George's Creek Mining Co. ....	Cumberland, Md. ....	W. A. Sommerville, Cumberland, Md. ....	D. Askey, Cumberland, Md. ....
Midland Mining Co. ....	Cumberland, Md. ....	W. A. Sommerville, Cumberland, Md. ....	Uriah Jones, Cumberland, Md. ....
American Coal Co. ....	New York, N. Y. ....	W. DeL. Waldridge, New York, N. Y. ....	George M. Brawlby, New York, N. Y. ....
Wachovia Coal Co. ....	Cumberland, Md. ....	John H. Mertens, Cumberland, Md. ....	
Phoenix and Geo' C'k Coal Mining Co.	Cumberland and Phila. ....	W. D. Althouse, Philadelphia, Pa. ....	A. A. Young, Cumberland, Md. ....
Piedmont Mining Co. ....	Baltimore, Md. ....	W. H. Gorman, Baltimore, Md. ....	J. J. Dobbie, Lonaconing, Md. ....
New Central Coal Co. ....	New York, N. Y. ....	Malcolm Baxter, New York, N. Y. ....	Duncan Sinclair, Fairmont, W. Va. ....
Chapman Coal Co. ....	Baltimore, Md. ....	W. J. Chapman, Baltimore, Md. ....	G. W. Chapman, Baltimore Md. ....
Cumberland-George's Creek Coal Co.	Philadelphia, Pa. ....	F. A. Boyneburgh, Philadelphia, Pa. ....	A. L. Boyneburgh, Philadelphia, Pa. ....
Bowery Coal Co. ....	Frostburg, Md. ....	J. B. Williams, Frostburg, Md. ....	T. J. Price, Frostburg, Md. ....
Davis Coal and Coke Co. ....	Baltimore, Md. ....	B. F. Bush, Baltimore, Md. ....	
McMullen Bros. Coal Co. ....	Cumberland, Md. ....	H. A. McMullen, Cumberland, Md. ....	D. F. McMullen, Cumberland, Md. ....
George's Creek Basin Coal Co. ....	New York, N. Y. ....	J. Frank Fields, Hancock, Md. ....	B. H. Narford, New York, N. Y. ....
H. & W. A. Hitchins Coal Co. ....	Frostburg. ....	Howard Hitchins, Frostburg, Md. ....	Emory Hitchins, Frostburg, Md. ....

### GARRETT COUNTY COAL MINES

Blaine Mining Co. ....	New York, N. Y. ....	T. B. Davis, New York, N. Y. ....	W. P. Young, Meyersdale, Pa. ....
Potomac Valley Coal Co. ....	Philadelphia, Pa. ....	John Y. Hlyte, Fairmont, W. Va. ....	J. L. Rafelt. ....
Bloomington Coal Co. ....	Grafton, W. Va. ....	T. B. Davis, Keyser, W. Va. ....	L. B. Brydon, Grafton, W. Va. ....
The Hamill Coal and Coke Co. ....	Blaine, W. Va. ....	R. M. McMullen, Westernport, Md. ....	E. J. Hammill, Kitzmiller, Md. ....
G. C. Pattison ....	Bloomington, Md. ....	G. C. Patterson, Bloomington, Md. ....	
Monroe Coal Mining Co. ....	Barnum, W. Va. ....	Charles M. Dodson, Bethlehem, Pa. ....	Josiah Bachman, Bethlehem, Pa. ....
Garret County Coal and Mining Co. ....	Philadelphia, Pa. ....	E. L. Bullock, Hazelton, Pa. ....	Josiah Bachman, Bethlehem, Pa. ....
Western Md. Coal and Coke Co. ....	Friendsville, Md. ....	Williard Brown, New York, N. Y. ....	T. Richard Tennant, New York, N. Y. ....
Upper Potomac Mining Co. ....	Philadelphia, Pa. ....	R. S. Hubbard, Philadelphia, Pa. ....	E. H. Johnston, Philadelphia, Pa. ....

### OFFICIALS OF CLAY MINES IN MARYLAND

Union Mining Co. ....	Baltimore, Md. ....	H. Crawford Black, Baltimore, Md. ....	A. T. Burr, No. 1 Broadway, New York. .
Big Savage Fire Brick Co. ....	Frostburg, Md. ....	Davison Armstrong, Frostburg, Md. ....	D. Benson, Frostburg, Md. ....
Savage Mountain Fire Brick Co. ....	Frostburg, Md. ....	Chas. C. Gqrsuch, Westminster, Md. ....	John A. Caldwell, Frostburg, Md. ....