## FIFTH ANNUAL REPORT

OF THE

## MARYLAND BUREAU OF MINES

OF THE

## STATE OF MARYLAND

Under the Supervision of the State Board of Labor and Statisties DR. J. KNOX INSLEY, Commissioner

CALENDAR YEAR 1927


TO

# HON. ALBERT C. RITCHIE <br> GOVERNOR OF MARYLAND 

JOHN J. RUTLEDGE<br>Chief Mine Engineer

Press of 20 th Century Printing Co. 404-406 W. Redwood Street Baltimore, Md.

## LETTER OF TRANSMITTAL

## To His Excellency,

Hon. Albert C. Ritchie,
Governor of Maryland:
Sir:
I have the honor to submit herewith the Fifth Annual Report of the Maryland Bureau of Mines for the period January 1 to December 31, 1927, in compliance with the requirements of the Maryland Mining Law.

Very respectfully,
John J. Rutledge,
Chief Mine Engineer.

# REPORT OF THE MARYLAND BUREAU OF MINES 

## To His Excellency,

Hon. Albert C. Ritchie, Governor of Maryland:

Sir:
The report herewith submitted is for the calendar year 1927, and is the fifty-first annual report upon conditions of the Coal and Clay mines within the State.

The reports from the various mining operators throughout the State show the tonnage to be as follows:

## CLAY AND COAL PRODUCTION

Calendar Year 1927.
(Net Tons)




## COAL PRODUCTION, ALLEGANY COUNTY

During the calendar year 1927, Allegany County employed 1,796 miners, 168 drivers, 409 inside laborers and 299 outside employees, making a total of 2,672 men. The production of coal for Allegany County during the calendar year, 1927 , was $2,055,816.00$ net tons. This shows a production of 1,144 net tons for each miner employed during this period.

## COAL PRODUCTION, GARRETT COUNTY

During the calendar year 1927, Garrett County employed 609 miners, 75 drivers, 145 inside laborers and 140 outside employees, making a total of 969 men. The production of coal for Garrett County during the calendar year 1927 was $716,291.06$ net tons. This shows a production of 1,176 net tons for each miner employed during this period.

## FIRE CLAY PRODUCTION

During the calendar year 1927 the Fire Clay Mines in Allegany County employed 62 miners, 12 drivers, 52 inside laborers and 29
outside employees, making a total of 155 men. The production of clay for Allegany County for the calendar year 1927 was $60,383.10$ net tons. This shows a production of 974 net tons of clay for each miner employed during this period.

## TONNAGE PER FATALITY (BY COUNTY)

In Allegany County for the calendar year 1927 there were 685,272 net tons of coal produced for each fatal accident; number of fatalities per 1,000 employees were 1.1227, and number of fatalities per $1,000,000$ tons of coal produced 1.4592.

In Garrett County for the calendar year 1927 there were 358,145 net tons of coal produced for each fatal accident; number of fatalities per 1,000 employees were 2.0639 , and number of fatalities per $1,000,000$ tons of coal produced 2.7921.

## TONNAGE PER FATALITY FOR ENTIRE STATE

During the calendar year 1927 there were 554,421 net tons of coal produced for each fatal accident.

In the entire State the fatalities per $1,000,000$ tons of coal were 1.803 .

In the entire State the fatalities per 1,000 employees were 1.373 .

## LABOR CONDITIONS

During the entire period of the calendar year 1927 there was a surplus of labor in Western Maryland. The Kelly-Springfield Tire Company, the American Cellulose and Chemical Company, the Baltimore and Ohio Railroad Company and other industries in and near Cumberland continued to draw considerable portion of their labor from the Georges Creek region, and most of these men were formerly employed as coal miners. It is probable that about one thousand men, former coal mine employees, were thus employed.

The rubber plants in Akron, Ohio, and the automobile factories in Detroit, and vicinity, continued to attract labor from the Western Maryland coal field.

There were no strikes or serious labor troubles in Western Maryland during the year, although there were several readjustments of day wages and tonnage prices necessary on account of market conditions, and these in some instances caused a cessation of mining for a short time; still there were no real labor strikes. Some of the mining labor, especially that in the Upper Potomac region, suffered severely for lack of employment.

## MARYLAND COAL TRADE DURING 1927

The British coal strike, which occurred during the last four months of the calendar year 1926, gave a great impetus to Maryland coal mining, as well as to coal production in other states shipping coal to the Atlantic Seaboard. A portion of this activity in the export trade lasted a short time after the strike of the British miners had been settled and extended over into the first part of the calendar year 1927.

Some considerable business for Maryland coal was also secured in Central and South American ports, as shown by the statistics of the export coal business of the Port of Baltimore kindly furnished by the Export and Import Bureau of the Baltimore Association of Commerce, Mr. George H. Pouder, Director, given on another page. The cooperation of this Bureau and the information and advice furnished has been and continues to be invaluable to the Bureau of Mines.

With the cessation of the British strike, the British producers of coal made strenuous efforts to recover the trade which they had lost, and in such endeavors they were, in a very large measure, successful, and practically no coal is going to Central and South America at the present time, and very little coal is going to the Mediterranean ports.

Many British vessels coming to the Port of Baltimore to load merchandise for export, carry sufficient coal in their bunkers to bring the vessel from the British port to Baltimore and to make the return voyage, and usually this coal is obtained at British ports.

As in past years Maryland coal miners and operators have profited most by labor troubles in other fields; usually strikes in the anthracite mines of Pennsylvania have led to good business among Maryland coal operators and miners. This situation obtains largely due to the relatively high freight rate that the Maryland mines must pay compared to that enjoyed by coal producers in Southern West Virginia. This inequality of coal freight rates will have to be remedied before there can be any improvement in Maryland coal trade.

The year 1927, especially the latter part of it, was a season of depressed prices for Maryland-mined coal. Some of the coal mined from the thin seams was sold at prices less than $\$ 2.00$ per ton and even some of the Big Vein coal was sold for as low as $\$ 2.10$ and $\$ 2.15$ per ton. There was great discouragement for Maryland coal operators and except in the mines operated by the larger companies, work was very slack. As is usual in coal mining, depressed coal prices resulted in the necessity of rearranging tonnage price and day wages. These rearrangements were made, however, with no very great amount of friction and this is testimonial to
the intelligence and understanding of the coal mine employees of Western Maryland.

## PORT OF BALTIMORE EXPORT BITUMINOUS COAL CALENDAR YEAR 1927

| Country Ves | Vessels | Tons | Vessels | Tons |
| :---: | :---: | :---: | :---: | :---: |
|  | $\cdots$ | 6,553 | 7 | 37,018 |
|  | ... 6 | 35,559 | 36 | 194,796 |
| Azores .-. | $\cdots$ | ............ | 2 | 6,105 |
|  | $\cdots$ | 27,467 | 10 | 55,867 |
| British Columbia .....an*) | $\cdots$ |  | 1 | 1,574 |
| British West Africa ............. | $\cdots$ |  | 1 | 3,038 |
|  | $\cdots \times$. | 3,364 | 1 | 6,391 |
| Canary Islands | - .-. .-. |  | 6 | 34,596 |
| Cape Verde Islands ............... |  |  | 2 | 14,021 |
| Chile |  | 3,517 |  |  |
|  |  |  | 1 | 4,011 |
|  | $\cdots$ | 42,238 | 7 | 41,750 |
| Denmark .-.-*) |  |  |  | 12,857 |
| Egypt .... | - - 5 | 38,147 | 32 | 179,153 |
|  | $\cdots \times$ | 48,845 | 566 | 3,742,538 |
| France |  |  | 29 | 169,095 |
| French West Indies ............... | $\cdots$ | 1,208 | 4 | 12,526 |
|  | - . |  | 6 | 30,730 |
| Holland | ....... ... | $\cdots$ | 1 | 5,992 |
|  |  |  | 70 | 349,866 |
|  | $\cdots \times .18$ | 112,743. | 103 | 716,271 |
|  | ....... | - | 1 | 50 |
| Malta - ${ }_{\text {a }}$ ( | $\cdots \cdots$ |  | 1 | 4,955 |
| Martinique ....) | . | 1,220 |  |  |
|  | ....... |  | 1 | 3,724 |
| Morocco | - .i. ... | $\cdots \cdots \cdots \cdots \cdots$ | 1 | 3,440 |
| Norway | .-...) ... | $\cdots \cdots \cdots \cdots \cdots \cdots$ | 9 | 40,583 |
|  |  |  | 1 | 4,919 |
| Porto Rico ....) | ...... 11 | 7,141 | 8 | 3,167 |
| Portugal | ...... 1 | 6,431 | 1 | 4,274 |
| Portugese West Africa | - ..... ... | $\cdots$ |  | 2,917 |
|  |  | $\cdots$ | 1 | 3,832 |
| Scotland ..... | -..... ... | $\cdots$ | 1 | 7,767 |
|  | ... | $\cdots$ | 1 | 4,488 |
|  | $\cdots$ | $\cdots$ | 2 | 9,116 |
| Uruguay --- | - | $\ldots$ | 3 | 16,303 |
|  | $\cdots$ | $\cdots$ | 1 |  |
| Wales .-... |  | $\cdots$ | 6 | 32,786 |
| West Indies ...).ana - - | $\cdots$ | $\cdots$ | 1 | 23 |
|  | ... 65 | 334,433 | 929 | 5,760,543 |

## IMPROVED MINING METHODS

Several of the larger companies, especially The Consolidation Coal Company, continued trying out new methods of mining with improved underground machines, particularly underground coal conveyors. This Company also introduced an improved method of recovering the pillars in the Big Vein seam.

Considering the number of mines it is believed that Maryland coal mines have been relatively as prompt to adopt new mining methods and are as progressive as any other coal mining region in the country.

## COAL TRANSPORTED BY THE RAILROADS TRAVERSING THE WESTERN MARYLAND COAL FIELD

The Cumberland and Pennsylvania Railroad Company, which traverses the centre of George's Creek coal field, hauled during the calendar year 1927 from coal mines in Western Maryland, 1,301,013 gross tons or $1,457,134.56$ net tons of coal.

The Western Maryland Railway Company hauled 1,098,870 net tons of coal from Maryland mines. Of this total 456,395 net tons were shipped from mines in the Georges Creek region.

The Baltimore and Ohio Railroad Company hauled only commercial shipments from Maryland mines. There were 706 cars or 41,373 net tons of coal.

## MARYLAND MINE INSPECTORS



## PERSONNEL, MARYLAND BUREAU OF MINES



SCALE OF WAGES IN THE GEORGE'S CREEK FIELD FROM MAY 1, 1880, TO DECEMBER 31, 1922

|  | Per Gross Tons Picked |
| :---: | :---: |
| May 1, 1880 | \$0.65 |
| June 1, 1882 | . 50 |
| December 1, 1884. | . 40 |
| March 1, 1887. | . 50 |
| April 1, 1894. | . 40 |
| April 1, 1896. | . 45 |
| April 1, 1900 | . 55 |
| April 1, 1903. | . 65 |
| April 6, 1904. | . 60 |
| April 1, 1910 | . 63 |
|  | . $651 / 2$ |
| January 15, 1916. | . 68 |
| October 16, 1916 | . 75 |
| March 1, 1917. | . 85 |
| May 1, 1917. | . $9311 / 2$ |
| November 1, 1917 | 1.04 .7 |
| November 1, 1919. | 1.19.4 |
| April 1, 1920 | $1.311 / 2$ |
| December 31, 1922 | 1.311/2 |
| December 31, 1923. | $1.311 / 2$ |
| December 31, 1924 | . 90 |
| December 31, 1924-Loading after machines...- | … .65-. 82 |

The Maryland coal operators made two increases in 1920. Effective April 1, 1920, the mining rate was increased from $\$ 1.194$ to $\$ 1.315$, and labor increased $\$ 1.00$ per day. Effective August 16,

1920, day labor was increased $\$ 1.50$ per day, no increase being made in mining. No further changes were made until May 1, 1924, when the following scale went into effect:

|  | Per Gross Tons |
| :---: | :---: |
| Pick Mining | . 90 |
| Machine Mining | . 807 |

There was a very considerable change in tonnage price and day wages during the latter part of the calendar year 1926; in fact, the price was suddenly increased by one or two successive raises to an amount that was equal to that paid during the World war. There was some slight difference in the wages and tonnage price in the various parts of the district and it has not been possible to give all the various prices paid but a general average has been taken and it is believed that the prices are in the main correct.

## In the Upper Potomac District:

Pick mining
Machine mining
Basic inside labor rate.
Basic outside labor rate.
Pick mining
Machine mining
Basic inside labor rate.
Basic outside labor rate
Pick mining:
Machine mining
Basic inside labor rate.
Basic outside labor rate.

Jan. 1 to Oct. 31, 1926, Incl. $\$ 0.70$ gross ton
0.52 gross ton
0.50 per hour
0.45 per hour

Nov. 1 to Nov. 30, 1926, Incl.
$\$ 1.22$ gross ton
0.86 gross ton
0.86 per hour
0.76 per hour

Dec. 1 to Dec. 31, 1926, Incl.
$\$ 0.90$ gross ton
0.70 gross ton
0.60 per hour
0.55 per hour

Lower George's Creek Region, Bakerstown seam:

|  | Jan. 1 to Nov. 1, 1926 |
| :---: | :---: |
| Loading after mining machine | 0.75 gross ton |
| Machine cutting | 0.15 gross ton |
| Outside labor. | 0.44 to 0.50 per hour |
| Inside labor. | 0.56 per hour |
|  | . 1 to Nov. 30, 1926, Incl. |
| Machine loading | \$1.362 ${ }_{1}{ }^{\text {grass }}$ gross ton |
| Machine cutting | 0.25 gross ton |
| Inside labor | 0.90 3/4 per hour |
| Outside labor. | $0.903 / 4 \mathrm{per}$ hour |
| Yardage | 1.25 per yard |
| Pick mining | 1 to Dec. 31, 1926, Incl. |
| Machine loading | 0.84 gr |
| Machine cutting | $0.171 / 2$ gross ton |
|  | 1.72 per yard |

Lonaconing and Vicinity, Big Vein coal seam:

| Jan. 1-Oct. 31 | $\begin{aligned} & -1926- \\ & \text { Nov. 1-30 } \end{aligned}$ | Dec. 1-31 |
| :---: | :---: | :---: |
| Pick mining, gross ton................. $\$ 0.75$ | $\begin{aligned} & \$ 1.315 \text { and } \\ & 1.415 \end{aligned}$ | \$1.00 |
| Tunneling, per yd. headings...... 5.00 | 8.50 | 5.91 |
| Tunneling, per yd. pillars.......... 4.50 | 7.65 | 5.31 |
| Motorman, per 8-hour day.......... 4.40 | 7.42 | 5.16 |
| Brakeman, per 8-hour day........... 4.24 | 7.26 | 5.00 |
| Drivers, per 8-hour day............... 4.24 | 7.26 | 5.00 |
| Roadmen, per 8-hour day........... 4.40 | 7.42 | 5.16 |
| Asst. Roadmen, per 8-hour day 4.24 | 7.26 | 5.00 |
| Timberman, per 8-hour day........ 4.24 | 7.26 | 5.00 |
| Tippleman, per 8-hour day........ 3.60 | 6.62 | 4.40 |
| Blacksmith, per 8-hour day....... 6.00 | 8.00 | 6.80 |
| Carpenters, per 8-hour day........ 4.40 | 7.26 | 5.16 |
| Outside labor, per 8-hour day... 3.20 | 6.54 | 4.00 |

## Upper George's Creek:



Pick mining (all gross tons) :

| Big Vein .......... | \$0.75 | \$1.315 | \$1.00 |
| :---: | :---: | :---: | :---: |
| Tyson ........ | 0.75 | 1.415 | 1.00 |
| Drivers, per hour | 0.50 | $.90{ }^{3} / 4$ | . 625 |
| Iotormen | 0.53 | . $923 / 4$ | . 645 |
| Brakemen | 0.50 | . $903 / 4$ | . 625 |
| Roadmen | 0.50-. 53 | . $903 / 4-.923 / 4$ | . 625 |
| Timbermen | 0.48 | . 85 | . 60 |
| Electricians | 0.64-.65 | . $913 / 4-1.00$ | . 70 |
| Outside labor | 0.40 | . $813 / 4$ | . 50 |
| nside labor | 0.48 | . $823 / 4-.85$ | . 60 |
| Machine loading (Tyson) .... | 0.54 | ...... | ...... |
| Cutting and Scraping. | 0.09-. 13 | ..... | ..... |
| Machine loading, Tyson: |  |  |  |
| Loading | 0.54 | . 95 | 1.02 |
| Cutting ..................................... | . ..... | . 12 | . 13 |
| Scraping ................................... | $\cdots$ | . 11 | . 12 |

# SCALE OF WAGES-CALENDAR YEAR 1927 LOWER GEORGE'S CREEK REGION 

|  | $\begin{gathered} \text { Period } \\ \text { Jan.-Feb., } \\ 1927 \end{gathered}$ | Period Feb.-June, 1927 | $\begin{aligned} & \text { Period } \\ & \text { June-Dec., } \\ & 1927 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Pick (per gross ton) ............ | \$1.00-1.01 | \$ .81-.85 | \$ .74-.75 |
| Labor (per hour) |  |  |  |
| Drivers | . $621 / 2$ | . 55 | . 50 |
| Boss motormen. | . $651 / 2$ | . 58 | . 53 |
| Motormen -..-- | . $621 / 1 / 2-.66$ | . $55-.581 / 2$ | . $50-.55$ |
| Firemen | . $561 / 4$ | . $4911 / 2$ | . 45 |
| R. R. car runners. | . $561 / 4$ | . $4911 / 2$ | . 45 |
| Blacksmiths | . $651 / 2-.85$ | . $58-.62^{1 / 2}$ | . $53-.75$ |
| Blacksmith helpers....... | $\cdots$ | . 49112 | . 45 |
| Carpenters | . $561 / 4-.66$ | . $4911 / 2-.60$ | . $45-.55$ |
| Brakemen ........ | . $621 / 2$ | . 55 | . $50-.521 / 2$ |
| Boss roadsmen. | . $65.1 / 2$ | . 58 | . 53 |
| Roadsmen | . $6211 / 2-.65$ | . $55-.571 / 2$ | . $5211 / 2-.53$ |
| Outside labor.. | . 50 | . $42^{1 / 2}-.49^{1 / 2}$ | . $32-.37^{1 / 2}$ |
| Inside labor. | . $621 / 2$ | . 55 | . 50 |
| Timbermen .-.. | . $621 / 2$ | . 55 | . 50 |
| Electricians | . $621 / 2$ | . 55 | . 50 |
| Assistant roadsmen.. | . $621 / 2$ | ..... | . 50 |
|  | . 55 | $\cdots$ | . 44 |
| Trackmen | . $621 / 2$ | . 55 | . 50 |
| Timber framers. | . $62{ }^{1 / 2}$ | . 55 | . 50 |
| Helpers ...- ${ }^{\text {an* }}$ | . $571 / 2$ | . 50 | . $47^{1 / 2}$ |
| Dumpers | . 55 | . 45 | . $421 / 2$ |
| Trimmers | . $521 / 2$ | . 45 | . 40 |
| Pickers | ... 50 | . $42^{1 / 2}$ | . $371 / 2$ |
| Weigh boss ....). | . 70 | . $621 / 2$ | . $573 / 2$ |
| Tunneling (per yard) |  |  |  |
|  | -. 5.91 | ..... | 4.74 |
| Pillars .... | 5.31 | $\cdots$ | 4.26 |
| Yardage (per yard) |  |  |  |
|  | 8.50-9.54 | 7.15 | 6.81-6.96 |
|  | 7.25 | 6.90 | 6.51 |

# SCALE OF WAGES-CALENDAR YEAR 1927 

 UPPER GEORGE'S CREEK REGION|  | $\begin{gathered} \text { Period } \\ \text { Jan. 1-Feb. 1, } \\ 1927 \end{gathered}$ |  | $\begin{gathered} \text { Period } \\ \text { Feb. } 1 \text {-June } 16, \\ 1927 \end{gathered}$ |  | Period June 16Dec. 31, 1927 Big Vein and Tyson |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ig Vein | Tyson | Big Vein | Tyson |  |
| Pick (per gross ton) ..... ${ }^{\text {a }}$ | \$1.315 | \$1.411/2 | \$1.00 | \$1.10 | \$ 7.75 |
| Machine (per gross ton) |  |  |  |  |  |
|  | . 95 | 1.02 | . 78 | . 78 | . 54 |
| Cutting ........................ | . 12 | . 13 | . 10 | . 10 | . 07 |
| Scraping ................. | . 11 | . 12 | . 09 | . 09 | . 06 |
| Labor (per hour) 50 |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Motormen .... | .923/4 | . $923 / 4$ | . $641 / 2$ | . $641 / 2$ | . 53 |
| Firemen | .883/4 | . $883 / 4$ | . 61 | . 61 | . 43 |
| R. R. car runners ....... | -. 853 /4 | .853/4 | . 59 | . 59 | . 43 |
| Blacksmiths ................. | . $913 / 4$ | . $913 / 4$ | . 63 | . 63 | . 51 |
| Blacksmith helpers.... | . $813 / 4$ | . $813 / 4$ | . 56 | . 56 | . 40 |
| Carpenters ............. | . $913 / 4$ | . $913 / 4$ | . 63 | . 63 | . 51 |
| Brakemen .--*- | -. $903 / 4$ | . $903 / 4$ | . $621 / 2$ | . $6211 / 2$ | . 50 |
| Roadsmen .................... | -. $.923 / 4$ | .923/4 | . $641 / 2$ | . $6411 / 2$ | . 53 |
|  | ... . $813 / 4$ | . 813 3/4 | . 56 | . 56 | . 40 |
|  | -. . 85 | . 85 | . 58 | . 58 | . 47 |
| Timbermen ...- |  | ..... | . $621 / 2$ | . $621 / 2$ | . 50 |
| Electricians .- |  |  | .713/4 | . $713 / 4$ | . 58 |
| Electrician helpers........ | ... | $\cdots$ | . $6411 / 2$ | . $641 / 2$ | . 50 |

## SCALE OF WAGES-CALENDAR YEAR 1927 UPPER POTOMAC REGION

Period
Jan. 1-23, 1927

| er gross ton) | . 90 |
| :---: | :---: |
| Machine (per gross ton) | . 70 |
| Arcwall cutting (per gross ton) | 10 |
| Shortwall cutting (per gross ton)........ | . 13 |
| Machine runners.. | . 65 |
| Trackmen | . 65 |
| Trackman helpers | . 62 |
| Motormen |  |
| Brakemen | .61 |
| Wiremen | . 65 |
| Drivers | . 60 |
| Picking table boss. | . 65 |
| Picking table boys. | . 35 |
| Blacksmith | . 65 |
| Dumper | . 60 |
| Shifter | . 60 |
| Carpenter | . 65 |
| Firemen | . 65 |

Machine scraper ....
Pick (per gross ton) ……

Arcwall cutting (per gross ton) ............ . 10 . 08
Shortwall cutting (per gross ton) ........ . 13 . 08
Machine runners....*) . 55

Trackman helpers.......................................... . 62 . 50

Brakemen ......................................................... .61-.63 .51-.53

Drivers ........................................................... .60-.65 . 50


Carpenter

Period
Jan. 24-Dec. 31, 1927
. 55
-. 30

- . 50


## MINES NOT WORKING DURING CALENDAR YEAR 1927

## Allegany County

Allegany Coal Company.
Brydon Bros. Coal Corporation, Moscow Mine.
Brydon Bros. Coal Corporation, Pekin Mine.
Campbell Coal Company, Hampshire-Freeport Mine.
Darby Brady Coal Mines.
Frostburg Big Vein Coal Company.
George's Creek Coal Mining Co., Mine No. 2 (Waynesburg).
George's Creek Coal Mining Co., Mine No. 1 (Tyson).
Green's Coal Company.
J. O. J. Green Coal Company.

Guy Helbig Fuel Mine.
Little Pittsburgh Coal Company.
Maryland Coal Company, Tyson Mine.
Metz Bros. Coal Company.
Old Colony Coal Company.
Piedmont \& George's Creek Coal Co., Bowery Furnace No. 1.
Piedmont \& George's Creek Coal Co., Washington No. 2.
Schramm \& Davis Coal Company.
Smith Coal Company, Speir Mine.
United Big Vein Coal Company.
West Virginia Pulp and Paper Company.
William H. Barnes Fuel Mine.

## Garrett County

Aberdeen Coal Company, Steyer Mine.
Bloomington Coal Company, Brookville Mine.
Bloomington Coal Company, Mine No. 4.
Cass Coal Company.
Casselman Valley Coal Mining Company.
Earl Fazenbaker.
Elk Run Coal Company.
McMahon Bros.
Maryland Smokeless Fuel Company.
R. W. Miller Coal Mines.

Morgart Coal Mining Corporation.
Pendergast \& Ashby.
Potomac Fuel and Supply Company.
Potomac Valley Coal Company.
Standard Coal Company.
C. E. Stanton Coal Company.
U. M. Stanton Coal Mines.

Tri-State Consolidated Coal Company.
Yough Coal Company.

# MINES WORKED OUT AND ABANDONED CALENDAR YEAR 1927 

Allegany County
Campbell Coal Company, Franklin Big Vein Mine. Campbell Coal Company, Hampshire Big Vein Mine. Union Mining Company, Union No. 3.

WAGON MINES
Allegany County
Arch Michaels Coal Company. Campbell Bros. Fuel Mine. J. Daddysman. Darby Brady Coal Mines. Eckhart Fuel Mine.
H. G. Evans Coal Company. Frostburg Mining Company. J. O. J. Green Coal Company. Guy Helbig Fuel Mine. Howard \& Maybury Coal Company. Langham \& Boal.
Metz Bros. Coal Company.
O. T. Porter Coal Company. M. W. Race.

Robert Griffith.
R. C. Roberts Coal Company. Schramm \& Davis Coal Company. Smith Coal Company. Supply Coal Company. Vincent Engle \& Sons Coal Company. William H. Barnes Fuel Mine. Workman Coal Company.

## Garrett County

Earl Fazenbaker. George Moreland. McMahon Bros. Melvin Weimer. Myers Coal Company. Ezra Michaels Coal Company Miller \& Collins.

# TABLE OF MINE INSPECTIONS ALLEGANY COUNTY FOR CALENDAR'YEAR 1927 



# TABLE OF MINE INSPECTIONS-Continued ALLEGANY COUNTY FOR CALENDDAR YEAR 1927 

| Date. | Name of Company and Mine. | Location | Inspector. |
| :---: | :---: | :---: | :---: |
| July | 9-Consolidation Coal Co., No. 10.................................. | Eckhart <br> Barrellsville <br> Barton <br> Franklin <br> Franklin <br> Frostburg <br> Hoffman | Powers |
|  |  |  |  |
|  | 11- George's Crk. \& Barrellsville Coal Co., Parker Mine 19-Big Vein Coal Co. of Lonaconing, Caledonia |  |  |
|  |  |  | Watkins |
|  |  |  | Watkins |
|  | Consolidation Coal Co., No. |  | Powers |
|  | 29-Consolidation Coal Co., No. 3-..- |  | Powers |
| August | 2-George's Creek Coal Co., No. 4 A | Lonaconin | Powers |
|  |  | Gannons | Watkins |
| " | 5-George's Creek Coal Co., Inc., No. 4 B | Lonaconin | Powe |
| "' |  | Eck | Powers |
| " | 9-Annan \& Jeffries, Union No. 1-Tyson...-----.----.....- | Zihlman | Powers |
| " |  | Lonaconin | Powers |
|  | 12-Chapman Coal Mining Co., Swanton-Bakerstown | Barton | Watkins |
| $\because$ | $12-$ Chapman Coal Mining Co., Swanton-Big Vein.....- | Barton | Watkin |
| * | 15-George's Creek Coal Co., Inc., No. 2 Big Vein- -- | Clarysvill | Po |
|  | ${ }^{15-G e o r g e ' s ~ C r e e k, ~ C o a l ~ C o ., ~ I n c ., ~ N o . ~} 2$ Big Vein----. | Lonaconin | Powers ${ }^{\text {Watkins }}$ |
|  | 15-Moscow George's Creek Mining Co., No. 2.-....-...-- |  | Watkins |
|  | 15-Moscow George's Creek Mining Co., Bakerstown <br> No. 1 | Bart | Watkins |
|  | 16-Campbell Coal Co., Donald Mine.................................-- |  |  |
|  |  | Ocean | Powers |
|  | 17-McDonald Coal Co., McDonald Mine-.....--.............. | Barton | Watki |
|  | 18-Koontz Coal Co., McKee No. 2, | Koontz Hollo | Powers |
|  | 19-Annan \& Jeffries Co., Union-Big Vein...................... 22-Hoffa Bros. Coal Co., Hoffa Mine | Zihlman | Powers |
|  |  | Phoenix | Watkins |
| September 7-Campbell Coal Co., Hampshire No. 2...................... |  | Reynolds | Watkins |
|  | ${ }_{9}^{7-\text { Campbell }}$ Coal Co., Hampshire No. ${ }^{\text {Coal }}$ Co. of Lonaco | Reynolds | Watkins |
|  | ${ }_{9}^{9-B i g}$ Vein Coal Co - of Lonaconing, Castle No. 1--- | Lonaconing | Powers |
|  | 9-Big Vein Coal Co. of Lonaconing, Castle No. 2-... <br> 12-13-George's Creek Coal Mining Co., Sonny Mine | Lonaconing |  |
|  | 14-Supply Coal Co.......................................... | Barton |  |
| " |  | Barton | Watkins |
|  |  | Barton | Watkins |
|  | 21 - Union Mining Co., No. $4 . .$. | Mt. Savage | Powers |
|  | $20-$ Piedmont \& George's Creek Coal Co., Wash. No. 5 | Franklin | Watkins |
|  |  | Mt. Savage | Powers |
|  |  | Gannons | Watkins |
|  |  | Franklin | Watkins |
|  | $30-\mathrm{Big}$ Vein Coal Co- of Lonaconing, Caledonia---------1 | Barton | Watkins |
| October | ${ }_{11}^{6-S u l l i v a n ~ B r o s . ~ C o a l ~ C o ., ~ S u l l i v a n ~ N o . ~ 3 . . . . . . . . . . . . . . . . . . . ~}$ | Clarysville | Watkins |
|  |  | Westernport | Watkins |
|  | 11-R. C. Roberts Coal Co., Roberts No. 2-................... | Westernport | Watkins |
|  | 11 -Hoffa Bros. Coal Co., Hoffa No. 1.......................... | Franklin | Watkins |
|  | 11 -Howard \& Maybury, Nos. 1 and 2........................ | Mill Run | Watkins |
|  | 12--Moseow George's Creek Mining Co., Pecal No. 1 | Moscow | Watkins |
|  |  | Franklin | Watkins |
| " |  | I onaconing | Powers |
|  |  | Franklin | Watkins |
|  | $25-$ Consolidation Coal Co., No. 1........................ | Ocean | Power |
|  |  | Barton | Watkins |
| November 17-Consolidation Coal Co., No. ${ }^{\text {a }}$, |  | Gannons | Watkin |
|  |  |  | Hoffman | Powers |
|  | 21-Annan \& Jeffries Coal Co., Union-Big Vein........... | Zihlman | Power |
|  | 22-Hoffa Bros. Coal Co., Hoffa Mine..................... | Phoenix | Watkins |
|  | 25-Consolidation Coal Co., No. 4................................... | Fckhart | Powers |
|  | 28-Annan \& Jeffries Coal Co., Union-Tyson...-.............. | Zihlman | Powers |
| December 6-10-McNitt Coal Co., McNitt No. 2............-................... |  | Lonaconing | Powers |
|  |  | Midrothian | Powers |
|  | 7-Consolidation Coai Co., No. 12.........................------ | Shaft | Powers |
|  | 8-Mt. Savage Mining Co., Liberty Mine... | Mt. Savage | Powers |
|  |  | Mt. Savag | Powers |

# TABLE OF MINE INSPECTIONS-Continued ALLEGANY COUNTY FOR CALENDAR YEAR 1927 

| Date. | Name of Company and Mine. | Location | Inspector. |
| :---: | :---: | :---: | :---: |
| Dec. ". | 13-16-Sullivan Brothers Coal Co., Mine No. 3.................... <br> 15 -Hoffa Bros. Coal Co., Hoffa 2 | Clarysville Culvert Hill Oak View Barton | Powers Watkins Watkins |
|  |  |  |  |
|  | 16-Campbell Fuel Mine, Campbell Mine- |  |  |
| ، $،$ | 16-Chapman Coal Mining Co., Swanton-Bakerstown... |  | Watkins |
| ، |  | Franklin | Watkins |
| " | 20-Campbell Coal Co., Franklin-Bakerstown ---......... | Franklin | Watkins |
| " | 21-Campbell Coal Co., Hampshire-Bakerstown........... | Reynolds | Watkins |
| $\because$ | $22-C a m p b e l l ~ C o a l ~ C o ., ~ H a m p s h i r e-B a k e r s t o w n . ~$ | Reynolds | Watkins |
| "، | $28-$ Big Vein Coal Co. of Lonaconing, Castle 1-2. | Lonaconing | Powers |
| " | $28-\mathrm{Big}$ Vein Coal Co. of Lonaconing, No. 1. | Lonaconing | Powers |

## GARRETT COUNTY <br> FOR CALENDAR YEAR 1927

| Date. Name of Company and Mine. | Location | Inspector. |
| :---: | :---: | :---: |
| January 3--Penn-Maryland Colleries, Inc | Bayard, W. Va. | Watkins |
| 12-Potomac Fuel Supply Co., Dodson No. 1. |  | Watkins |
| 12--Potomac Fuel Supply Co., Dodson No. 6. | Dodson | Watkins |
| "/ 12-Poiomac Fuel Supply Co., Dodson No. 8... | Dodson | Watkins |
| 17-W. D. Althouse \& Co., Georgian Mine.... | Gorman | Watkins |
| ". 25-Hamill Coal \& Coke Co., Hamill 1-2..................... | Kitzmiller | Watkins |
| ". ${ }_{28}{ }^{26-M a n o r ~ C o a l ~ C o ., ~ N o . ~ 1 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~}$ | Vind | Watkins |
|  | Friendsville | Powers |
|  | Kempton | Watkins |
| 29-Boyd Mining Co., North American Mine | Potomac Manor | Watkins |
| 30-Penn-Maryland Collieries, Inc., Nethkin | Bayard, W. Va. | Watkins |
| April 25-26-Davis Coal \& Coke Co., No. 42 | Kempton | Watkins |
| May 10-Penn-Maryland Collieries, Inc., Nethkin. | Bayard, W. Va. | Watkins |
| " 10-W. D. Althouse \& Co., Georgian. |  | Watkins |
| " 11-Pendergast \& Ashby Coal Co., Pendergast | Crellin | Watkins |
| " 11-Yough Coal Co., Yough Mine | Crellin | Watkins |
| 25-26-Wolf Den Coal Co., Wolf Den Mine. | Shallmar | Watkins |
| ". 27 -Hamill Coal \& Coke Co., Hamill Mine................. | Kitzmiller | Watkins |
| " 31-June 1-2--Davis Coal \& Coke Co., No. 42 | Kempton | Watkins |
| July 21 - Hamill Coal \& Coke Co., Freeport. | Kitzmiller | Watkins |
| ${ }^{27-H a m i l l ~ C o a l ~ \& ~ C o k e ~ C o ., ~ H a m i l l ~} 1$ | Kitzmiller | Watkins |
| " 28-H. B. Smith Coal Co., Hamill 2. | Vindex | Watkins |
| August 9-10-Davis Coal \& Coke Co., No. 42 | Kempton | Watkins |
| 18-R. J. Ross Coal Mines, Inc, Bakerstown. | Bloomington | Watkins |
| September 8-Wolf Den Coal Co., Inc., Wolf Den Min | Shallmar | Watkins |
| 9-Manor Coal Co., Manor No. 1... | Vindex | Watkins |
| " 12-W. D. Althouse \& Co., Georgian | Gorman | Watkins |
| " 12-Penn-Maryland Collieries, Inc., Nethkin | Bayard | Watkins |
| "\% 13-Boyd Mining Co., North American Mine. | Potomac Manor, | Watkins |
| ". 16-Arch Michaels Coal Co., Arch Michaels Min | Mill Run | Watkins |
| "، 16-Ezra Michaels Coal Co., Ezra Michaels Mine | Mill Run | Watkins |
| ". 19-Geo. Moreland Coal Co., Table Rock Mine... | Table Rock | Watkins |
| * 30-McCullough Coal Co., No. 1. | Friendsville | Powers |
| Oetober 4-A. G. Shrout, Shrout Mine.................. | Oakland | Watkins |
| 7-Hemill Coal \& Coke Co., Freeport Mine. | Kitzmiller | Watkins |
| 10-Hamill Coal \& Coke Co., Hamill No. 2. | Kitzmiller | Watkins |
| 17-20-Davis Coal \& Coke Co., No. 42. | Kempton | Watkins |
| 31-Penn-Maryland Collieries, Inc., Nethkin. | Bayard, W. Va. | Watkins |
| December 7-8-9-R. J. Ross Coal Mines, Inc., Bakerstown. | Bloomington | Watkins |
| November 28-Hamill Coal \& Coke Co., Hamill Mine. | Kitzmiller | Watkins |
| 29-Dec. 1-Wolf Den Coal Co., Inc., Wolf Den Mine... | Shallmar | Watkins |
| December 12-Manor Coal Co., Manor No. I Mine.,.... | Vindex | Watkins |
| 13-Boyd Mining Co., North American Mine............... | Potomac Manor | Watkins |

## FATAL ACCIDENTS

A determined effort to reduce the number of fatal accidents was made by the District Mine Inspectors, Mine Foremen, Superintendents and mine employees during the year 1927 and their united efforts were attended by success until June 2, 1927, when the first fatal accident occurred.

In all, five fatal accidents were charged against the year but the fifth one should not properly, in the judgment of this Bureau, be classed as a mine accident, though it is included in the list of fatal accidents in accordance with the previous custom to class as fatalities all accidents for which the State Industrial Commission makes awards.

Most of these accidents could have been avoided if ordinary caution had been exercised.

## FATAL ACCIDENTS

ALLEGANY COUNTY, 1927
On July 21, 1927, Mr. Myran Andres, a Brakeman employed by the Consolidation Coal Company, in Mine No. 10, Tyson seam, was killed by being crushed between the rib and the motor. Mr. Andres was riding the front end of the motor.

There were no witnesses to this accident with the exception of Mr. Raymond Siforth, the motorman, who makes the following statement: "We were coming out of the heading and only had the motor on three points. Just as we struck the curve the loads bumped the motor and the front end left the track going into the rib, catching the brakeman."

> Time of Accident-11:30 A. M., July 21.
> Name of Injured—Myran Andres.
> Nationality-American.
> Age- 27 years.
> Married-Yes.
> Dependents-Widow and three children.
> Residence-Eckhart, Maryland.
> Inspector-John B. Watkins.
> Mine Foreman-Frank Carter.

Recommendation: Brakemen should ride rear end of motors.

On September 23, 1927, Mr. Pierce Meyers, a Miner employed by The Consolidation Coal Company, in Mine No. 10, Tyson seam, was injured while pushing a loaded car out of his place, from which injuries he died September 29, 1927, in the Miners Hospital, Frostburg, Maryland.

Mr. Meyers was working with Mr. Siegmyer and they were taking out the Air Course pillar in the 18th right heading; they had finished loading a car and were pushing it out to the heading when a lump of coal on the car became wedged against the roof and according to the statement of Mr. Siegmyer, while they were pushing the car Mr. Meyers said he was sick. Mr. Siegmyer released the lump of coal that was binding the car and they pushed it out to the heading. Mr. Meyer walked out of the mine with Mr. Siegmyer and never told anyone that he had injured himself and according to the Mine Foreman, no report of the injury was received until Monday, September 26, 1927.

Had this accident been reported immediately the injured man would have been carried out of the mine and taken to his home or hospital immediately.

Time of Accident-about 1:00 P. M., September 23.
Time of Death-September 29, 1927.
Name of Injured-Pierce Meyers.
Nationality-American.
Age-45 years.
Married-Yes.
Dependents-Widow and ten children.
Residence-Frostburg.
Inspector-Frank T. Powers.
Mine Foreman-Frank Carter.
Recommendation: Mine Foreman investigate accidents promptly and insist on hospital treatment of injury.

On October 14, 1927, Mr. John J. Kelley, a Weighboss employed by the Burtner Coal Mining Company, was killed by being struck by the handle of the windlass.

Mr. Kelley was pulling some old timber out of the way beneath the tipple, being afraid it would fall and strike the truck driver. As he got too close to the windlass the handle came around and struck him in the face causing injuries from which he died the same day.

> Time of Accident-8:20 A. M., October 14, 1927.
> Name of Injured-John J. Kelley.
> Nationality-Irish.
> Age-61 years.
> Married_Yes.
> Dependents-Widow and five children (children of age).
> Residence-Westernport.
> Inspector-John B. Watkins.
> Mine Foreman-William Barnard.

Recommendation: Be sure that the person operating the windlass is clear of the handle of the same.

## GARRETT COUNTY

On June 2, 1927, Mr. L. D. Knapp, a miner employed by The Davis Coal and Coke Company, in Mine No. 42, Six Foot or Kittanning seam, was almost instantly killed by a fall of rib and draw slate.

Mr. Porter Bell was working with Mr. Knapp but at the time the accident occurred was working at the upper end of the stump and did not see the accident. It appears that Mr. Knapp was loading a car when the rib gave way catching him, causing a fracture of the back, fracture of the left leg and crushed through the hips. The place was well timbered, 17 props being set within a distance of 48 feet along the roadway.

Time of Accident-10:00 A. M., June 2, 1927.
Time of Death-11:30 A. M., June 2, 1927.
Name of Injured-L. D. Knapp.
Nationality-American.
Age-48 years.
Married--Yes.
Dependents-Widow and five children.
Residence-Kempton.
Inspector-John B. Watkins.
Mine Foreman-Robert Gibbs.
Recommendation: The miner should be sure that the rib coal is solid.

On September 20, 1927, Mr. Gregory Barkus, a Driver and Coal Loader employed by the Boyd Mining Company, Six Foot seam, was killed by a fall of dynamite or middle rock.

There were no witnesses to this accident but the deceased man had remained in the mine for the purpose of taking down rock and getting coal ready for the next day.

Time of Accident-Between 3 and 4 P. M., September 20.<br>Time of Death-September 20, 1927.<br>Name of Injured-Gregory Barkus.<br>Nationality-Italian.<br>Age- 33 years.<br>Married-Yes.<br>Dependents-Widow and four children.<br>Residence-Kitzmiller, Maryland.<br>Inspector-John B. Watkins.<br>Mine Foreman-George D. Campbell.

Recommendation: Miners should make sure that the dynamite rock is secure.

FATAL ACCIDENTS-

| Date | Name of Company | Name of Person <br> Injured | Occupation | Age |
| :---: | :---: | :---: | :---: | :---: |
| July 21 | Consolidation Coal Co. | Myran Andres | Brakeman | 27 |
| Sept. 23 | Consolidation Coal Co. | Pierce Meyers | Miner | 45 |
| Oct. 1.4 | Burtner Coal Mining Co. | John J. Kelley | Weighboss | $\mathbf{6 1}$ |

FATAL ACCIDENTS-

| Date | Name of Company | Name of Person <br> Injured | Occupation | Age |
| :---: | :--- | :--- | :--- | :---: |
| June 2 | Davis Coal \& Coke Co. | L. D. Knapp | Miner | 48 |
| Sept. 20 | Boyd Mining Co. | Gregory Barkus | Driver and Coal <br> Ioader | 33 |

## ALLEGANY COUNTY, 1927

| Married or Single | No. in Family | Nationality | Residence | Canse of Accident <br> Nature and Extent of Injury |
| :---: | :---: | :---: | :---: | :---: |
| Married | 4 | American | Eckhardt | In rounding curve the loads bumped motor, causing it to leave track. Deceased was |
| Married | 11 | American | Frostburg | Presumably from injury claimed to have been caused by strain pushing mine cars. |
| Married | 6 | American | Westernport | Struck by handle of windlass. Died October |

GARRETT COUNTY, 1927

| Married or <br> Single | No. in <br> Family | Nationality | Kesidence | Cause of Accident <br> Nature and Extent of Injury |
| :--- | :---: | :--- | :--- | :--- |
| Married <br> Married | $\mathbf{6}$ | American | Moore, W. Va. <br> Kitzmiller | Rib coal and draw slate falling. <br> Fall of dynamite or middle rock. |

FOR THE CALENDAR YEAR 1927

| Name of Company | Mine | Superintendent | Mine Foreman |
| :---: | :---: | :---: | :---: |
| Allegany Coal Co. | Tacoma Mines | R. C. Roberts |  |
| Andrew Brode, Sr., \& Son | Brode Mine | Andrew Brode, Jr. |  |
| Annan \& Jeffries | Mines 1 and 2 | W. H. R. Thomas | W. H. R. Thomas |
| Arch Michaels Coal Co. | Michaels Mine | Arch Michaels | Arch Michaels |
| Barton-Potomac Coal Co. | Potomac Mine | E. Richard Brydon | E. Richard Brydon |
| D. A. Benson |  |  | Eugene Stevens |
| Big Vein Coal Co, of Lonaconing, Inc. | Caledonia | John L. Casey | John Bradley |
| Big Vein Coal Co. of Lonaconing, Inc. | Castle | John L. Casey | Harrison Davis |
| Big Vein Coal Co. of Lonaconing, Inc. | Wilkheart | John L. Casey | Fred. Beaman |
| Burtner Coal Mining Co. | No. 6 |  | T. A. Harris, assisted by W. S. Barnard |
| Campbell Bros. Fuel Mine |  | M. J. Camphen |  |
| Campbeil Camplal Co. Coal Co. | Donald-Bakerstown | John J. Faherty | George D. Campbell <br> John S. Athey--Thos. Muwheay |
| Campbell Coal Co. | Franklin-Bakerstown | George D. Campbell George D. Campbell | John S. Athey-Thos. Muwheray John S. Athey--Thos. Mowbray |
| Campbell Coal Co. Campbell Coal Co. | Tranklin-Big Vein | George D. Campbell George D. Campbell | John S. Athey--Thos. Mowbray John S. Athey-Thos. Mowbray |
| Campbell Coal Co. Campbell Coal Co. | Franklin-Tyson | George D. Campbell | John S. Athey-Thos. Mowbray |
| Campbell Coal Co. | Hampshire-Bakerstown | George D. Campbell | William Rogan- George Crow |
| Chapman Coal Mining Co. | Swanton-Bakerstown | R. M. Ashby | A. L. Frenzel |
| Chapman Coal Mining Co. | Swanton-Big' Vein | R. M. Ashby | R. M. Ashby |
| Consolidation Coal Co. | No. 1 | G. M. Gillette, General Manager, Penn-sylvania-Maryland Division | Richard Hawkins, assisted by Michael MeGeady |
| Consolidation Coal Co. | No. 3 |  | Alex. Neal, asst. by Charles Shields |
| Consolidation Coal Co. | No. 4 | " 4 " ${ }^{\prime \prime}$ | Frank Carter, asst, by George Richard son and Andrew Peaman |
| Consolidation Coal Co. | No. 9 | "' "، "' | James H. Close |
| Consolidation Coal Co, | No. 10 | " "، ${ }^{\text {a }}$ | Frank Carter |
| Consolidation Coal Co. | No. 12 | " ${ }^{\prime \prime}$ | R. L. Edwards |
| Consolidation Coal Co. | No. 17 | " ${ }^{\text {a }}$ | Robert Ewing |
| Dailey Coal Co. | No. 1 |  | Ernest Schell |
| David Yates | Yates | David Yates |  |
| Frostburg Mining Co, | Spates No. 1 | Frank H. Spates | Fred Entler |
| George's Creek Coal Co., Inc. | Parker Mine | J. S. Means | J. S. Means |
| George's Creek Coal Co., Inc. | George's Creek No. 2 (Sewickley) | J. R. Hamilton | Clarkson Iaird |
| George's Creek Coal Co., Inc. | George's Creek No. 4 (Sewickley) | J. R. Hamilton | Robert Todd |
| George's Creek Coal Co., Inc. | Waynesburg No. 3 . | J. R. Hamilton | Richard Moffatt |
| George's Creek Coal Co., Inc. | George's Creek No. 2 (Pittsburgh) | J. R. Hamilton | Clarkson Laird |
| George's Creek Coal Mining Co. | Sonny-Big Vein | Louis F. Gerdetz | Frank Quinn, asst. by Edward Atkinson |
| Hoffa Bros. Coal Co. | Phoenix Hoffa No. 2 | William H. Hyde | Chester A. Hyde |
| Hoffa Bros. Coal Co. | Mine No. 3 (Kittanning) | Leslie Smith | Leslie Smith |
| Howard \& Maybury | Bakerstown Mine | Robert H. Maybury | Sim Groves |
| John E. Smith | Smith Mine | John E. Smith | Charles Preston |
| Koontz Coal Co. | MaKee No. 2 | Robert T. Shaw | Walter Kallmyer |
| Langham \& Boal | Langham Mine | H. Langham | H. Langham |
| McDonald Coal Co. | McDonald Mine | J. J. McDonald | Joseph Shuhart |
| McKee \& Fuller Coal Co. |  |  | Henry McKee |



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Causc of Accident, Nature and Extent of Injury.

CAMPBELL COAL COMPANY-DONALD Mine—Continued




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> Cause of Accident, Nature and Extent of Injury.
Mule stumbled and fell against injured man's hand, causing a fracture.
While making wedge, handle of axe struck something, glanced and cut thumb,
Car jumped track and caught man's thumb between car and prop badly mashing
In thumb. op a set of timber, axe glanced and cut leg near knee.









georger creek coal mining company-sonny mine-continued GEORGES CREEK COAL MINING COMPANY-SONNY MINE-Continued
Married or Number Days Number in

 HOFFA BROS. COAL COMPANY

| $\begin{array}{c}\text { Married or } \\ \text { Single. }\end{array}$ | $\begin{array}{c}\text { Number Days } \\ \text { Lost. }\end{array}$ | $\begin{array}{c}\text { Number in } \\ \text { Family. }\end{array}$ | Nationality. |
| :--- | :---: | :---: | :---: |
| Sinzle | $\mathbf{5}$ wks. | $\ldots$ | American |
| Married | $\mathbf{5}$ wks. | $\ldots$ | American |
| Single | 2 wks. | $\ldots$ | American |
| Married | $\ldots$ | $\ldots$ | $\cdots$ |
| Married | 6 | $\ldots$ | American |

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& \text { Outside laborer } \\
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& \text { Driver } \\
& \text { Miner } \\
& \text { Laborer } \\
& \text { Miner } \\
& \text { Miner } \\
& \text { Team driver } \\
& \text { Trackman } \\
& \text { Laborer } \\
& \text { Laborer }
\end{aligned}
$$

Cause of Accident，Nature and Extent of Injury．
Putting sprac，on car and horse started and caught second finger on his left hand
between the wheel and spraas，crushing it．
Bumped hand on side of car and buised it；it became gathered．
Cause of Accident，Nature and Extent of Injury．
Was loading car when top cosi fell striking foot．Crushed great toe．
Top coal fell，catching leeg，bruising right leg．
Was lifting car on track，wheel slipped ort rail catching foot between car and






 second toe on right ioot mashed
Coal ferl from face and caucht ankle．Bruised and sprained ankle．
Coal fell from face striking leg．Small laceration to rixht leg．
 Coal fell striking head．Laperation to head． Was of right hand Was pullng on lump of coal with pick，pick of left elbow．
fell striking elbow of left arm．Contusion of lind
Draw slate and top coal fell on man as he was drilling hole to shoot coal．Bruised back．
Was helpug trackman bend rail with rail－bender；rail broke and the bar that he
was using in bender came down and mashed finger．Continued to work．Mashed second finger from thumb on right hand．
In laying drag on motor in some way hit drag against motor，catching his finger．
masheo seond finger from thumb on right hand．
Was opening sand－pine on motor and brakes．Was loosening brakes on trip．When
 Man threw rail down and it bounced and hit him on foot．Bruised left toe．
Was picking eaal and in some manner struck leg with pick．Point of piek made
small lacerated wounds． small lacerated wounds．
Man－trip was running behind another trip and power went off and man－trip．
bumped into other trip．Cacerated under lip．pill down；it fell on his shoulder
Was workinu under bone which he had tried to pull dow
 Draw slate fell striking man on toe，mashing it．
Jumped back from piece of coal and draw slate and in some way strained ankle．
Went to set brakes on machine and jerked arm too hard，dislocating shoulder．



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davis coal and coke company-kempton no. 42-Continued






Cause of Accident, Nature and Extent of Injury.
Fall of bone coal and rock. Back, limbs and heel, neck and head injured.




McCUlloUgh COAL CORPORATION-McCULLOUGH MINE әэиәр!sяя Married or
Single.

 $\begin{array}{cccc}{ }^{21} & \cdots & \text { American } & \text { Bloomington } \\ \text { PENN-MARYLAND } & \text { COLLIERIES-NETHKIN MNE }\end{array}$ | PENN-MAR |  |
| :---: | :---: |
| $\begin{array}{c}\text { Number Days } \\ \text { Lost. }\end{array}$ | $\begin{array}{c}\text { Number in } \\ \text { Fanuily. }\end{array}$ |
| 32 | 2 |
| 20 | $\cdots$ |
| 1.4 | 3 |
| 30 | 4 |
| 50 | 9 |
| 30 | 9 |
|  |  |
|  |  |



Mining coal and Diece of rock fell catching him on back. Contusion of the muscles
of the back and breast.


| POTOMAC FUEL SUPPLY |  |  |  | COMPANY-DODSON MINE |
| :--- | :---: | :---: | :---: | :---: |
| $\begin{array}{c}\text { Married or } \\ \text { Single. }\end{array}$ | $\begin{array}{c}\text { Number Days } \\ \text { Lost. }\end{array}$ | $\begin{array}{c}\text { Number in } \\ \text { Fanily. }\end{array}$ | Nationality. | Residence. |
| Married | $\ldots$ | 5 | American | Kitzmiller |

R. J. ROSS COAL MINES, INC.-FROG HOLLOW MINES


 Married or
Single. $\quad \begin{gathered}\text { Number Days } \\ \text { Lost. }\end{gathered}$



 Fell and bruised knees.
peece of rock hit him on arm.
Buised hand.



$$
\begin{aligned}
& \text { Name of Person Injured. }
\end{aligned}
$$

STATISTICS OF PRODUCTION, 1927 ALLEGANY COUNTY

ALLEGANY COUNTY－Continued


## STATISTICS OF PRODUCTION， 1927 <br> fire clay mines，allegany county

| Name of Company． | Name or Number of Mine． | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Openings. } \end{gathered}$ | Coal Seam Worked． | Distribution of ${ }_{\text {of }}$ |  |  |  |  | 皆 | Output Statistics． |  |  | Acci－ dents． |  | Mining Machines Used． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 管 |  |  |  | $\begin{aligned} & \dot{\vec{y}} \\ & \text { 㤩 } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \stackrel{9}{x} \\ & \dot{\theta} \end{aligned}$ | $\begin{aligned} & \dot{E} \\ & \text { Byyyyyyyyyyyyyyyy} \end{aligned}$ |  | $\stackrel{\text { ¢ }}{\substack{5 \\=1}}$ |  |  |
| Andrew Ramsay Co． |  | 1 | Fire Clay | 3 |  |  | 2 |  | 250 | 1，271．00 |  | 1，271．00 | $\cdots$ | $\cdots$ |  |
| ${ }^{\text {Big Savage Fire Brick Co．}}$ | No． 1 | ${ }_{1}^{1}$ | ${ }_{\text {Fire Clay }}$ | 5 8 8 | ${ }_{2}^{1}$ | 6 5 | 4 4 4 | 16 19 | ${ }_{2}^{268}$ | 10，514．06 | 9，130．19 | $9,130.19$ $10,514.06$ | $\ldots$ | $\cdots$ | 5 air drills |
| Savage Mountain Fire Brick Co． | No．${ }^{\text {No．}}$ N ${ }^{\text {N }}$ |  | Fire Clay | 36 | 6 | 15 | 15 | 72 | 234 |  | 25，145．16 | 25，145．16 | $\cdots$ | 8 | D．P． 33 Sullivan |
| Union Mining Co． | No． 7 |  | Fire Clay | $\cdots$ | 1 | 17 | ${ }_{2}$ | 20 | ${ }^{204}$ | 10，571．10 |  | ${ }^{10,571.10}$ | $\cdots$ | 2 |  |
| Union Mining Union Mining Co． | No． 11 No． 10 |  | $\underset{\text { Fire Clay }}{\substack{\text { Fire Clay }}}$ | 10 | 1 | 5 <br> 4 | 1 1 | 16 | 164 39 | $2,007.05$ $1,742.14$ | $\cdots$ | $2,007.05$ $.1,742.14$ | $\ldots$ | $\cdots$ |  |
|  |  |  |  | 62 | 12 | 52 | 29 | 155 | 1409 | 26，106．15 | 34，276．15 | 60，383．10 | $\cdots$ | 11 |  |

STATISTICS OF PRODUCTION， 1927
GARRETT COUNTY

| Name of Company． | Name or Number of Mine． | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { Openings. } \end{aligned}$ | Coal Seam Worked． | $\begin{aligned} & \text { Distribution of } \\ & \text { Employees. } \end{aligned}$ |  |  |  |  |  | Output Statistics． |  |  | Acci－ dents． |  | Mining Machines Used． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 完 |  |  | $\begin{aligned} & \text { 霖 } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \dot{H} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { By } \\ & \text { 感 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ji } \\ & \text { é } \\ & \hline \end{aligned}$ |  | 砢 |  |
| W．D．Althouse \＆Co． <br> Big Vein Coal Co．of Lonaconing，Inc． Boyd Mining Co． <br> Davis Coal and Coke Co． | Georgian <br> Georgian <br> No． 1 <br> Kempton No， 42 | 1 1 1 1 | Upper Freeport Upper Freeport Lower Kitanning Kittanning | 19 27 32 113 | 4 4 5 4 | 8 3 7 7 51 | $\begin{array}{r}6 \\ 6 \\ 12 \\ 18 \\ \hline\end{array}$ | $\begin{array}{r}32 \\ 40 \\ 56 \\ 186 \\ \hline\end{array}$ | 225 222 $1001 / 2$ 221 | 25，049．00 $95,855.00$ | $24,152.03$ $2,573.00$ $119,621.00$ | $24,152.03$ 2.537 .00 25.04 .900 $215,476.00$ | $\cdots$ <br> $\cdots$ <br> 1 <br> 1 | $\begin{array}{r}1 \\ \cdots \\ \cdots \\ 58 \\ \\ \hline\end{array}$ | 1 Jeffrey are－wall |
| Dodson Bituminous Coal Corp． George Moreland | Arnold ${ }_{\text {Table }}$ |  | Kittanning | 3 1 1 | $\cdots$ | $\cdots$ | $\cdots$ | 3 1 | 104 62 | 705.14 471.00 | －．．．．．．．．．．．．．．． | 705.14 471.00 | $\cdots$ | $\cdots$ |  |
| Hamill Coal \＆Coke Co． | Hamill | 1 | Freeport | 24 | $\cdots$ | $\stackrel{\square}{2}$ | 7 | 38 | 183 | 27，827．00 | $\cdots$ | 27，827．00 | $\cdots$ | 8 |  |
| Hamill Coal ${ }_{\text {M }}{ }^{8}$ Coke Collongh Coal Corp． | Hamill | 1 | Kittanning | 44 18 | 10 2 | 4 | 12 5 | 70 <br> 38 | 183 225 | 50，923．00 | 36，787．00 | $50,923.00$ $36,787.00$ | $\cdots$ | 12 4 4 |  |
| MeCullough Coal Corp． | McCullough Manor No． 1 | 1 | ${ }_{\text {Lower Kime }}^{\text {C－Pitanning }}$ | ${ }_{53}^{18}$ | ${ }_{13}^{2}$ | ${ }^{8}$ | ${ }_{13}^{5}$ | 38 <br> 85 | ${ }_{206.5}$ | 16，244．00 | 36，785．00 <br> 17,550 | 74，999．00 | $\cdots$ | 6 | 2 Jeffrey shortwalls |
| Manor Coal Co． | Manor No． 2 | 1 | Clarion | 30 | 4 | 4 | 4 | 42 | 76 | 987.00 | 17，300．00 | 18，287．00 | $\cdots$ | 1 | 1 Jeffrey shortwall |
| Melvin Weimer | No． 2 |  |  | 1 | 1 |  | 1 | ${ }_{3}^{3}$ | 103 | 612.00 1.440 .00 |  | 612.00 $1,440.00$ | $\cdots$ |  |  |
| Ezra Michaels Coal Co． | Michaels No． 2 Shrout Mine |  |  | ${ }_{2}^{2}$ | $\cdots$ | $\cdots$ | $\cdots$ | $\stackrel{2}{2}$ | 179 10 | $1,440.00$ 60.00 | $\cdots$ | $1,440.00$ 60.00 | $\cdots$ | $\ldots$ |  |
| Myers Coal Co． | ${ }_{\text {Shrout Mine }}$ | 1 | ${ }_{\text {C－Prime }}$ | ${ }_{6}$ | $\cdots$ | 1 | $\cdots$ | 9 | 1971／2 | 8，371．04 | － | 8，371．04 | $\cdots$ |  |  |
| G．C．Pattison | Bakerstown Mine |  | ${ }^{\text {Bakerstown }}$ | ${ }^{5}$ | $\stackrel{\square}{2}$ | $\cdots$ | $\cdots$ | ${ }^{5}$ | 53 | ${ }_{3}^{1,122.17}$ |  | 1，122．17 | $\cdots$ | 1 |  |
| Penn－Maryland Collieries，Inc． | Nethkin | ${ }_{1}^{1}$ | Freeport | 15 <br> 6 | ${ }_{6}$ | $\begin{array}{r}8 \\ 14 \\ \hline\end{array}$ | 20 | －${ }^{24} 105$ | 264 200 | 3，178．02 $40,261.00$ | ${ }^{14,815.12}$ | 17，993．14 $97,393.01$ | $\cdots$ | $2{ }^{6}$ | 1 Shortwall； 1 are－wall |
| Ryland Coal Co． |  | 1 | ＂B＂Seam | 2 |  |  |  | 2 |  | 418．00 |  | 418.00 | $\cdots$ |  |  |
| Shallmar Mining Corp． <br> （formerly Wolf Den Coal Co．） | Wolf Den | 2 | Lower Kittanning | 77 | 7 | 21 | 17 | 122 | 8 | 2，157．00 | 2，723．00 | 4，880．00 | $\ldots$ | 3 | 3 arc－walls |
| A．G．Shrout | Shrout Mine |  | Kittanning | ， |  | $\cdots$ | $\cdots$ | 1 | 23 | 51.00 | ．．．．．．．．．．．．．． | 51.00 | $\cdots$ | $\cdots$ |  |
| H．B．Smith Coal Co． Wolf Den Coal Company | Trout Mine Wolf Den | 1 | Kittanning 6－Foot Lower Kittanning | 3 6 | $\cdots$ | 18 | 15 | 105 | 16 212 | \％ $\begin{array}{r}\text { 451．00 } \\ 30,081.15\end{array}$ | 76，203．18 | ${ }_{106,285.13}^{45.00}$ | $\cdots$ | 14 | 3 arc－walls |
|  |  |  |  | 609 | 75 | 145 | 140 | 969 | 2873.5 | 306，264．12 | 410，026．14 | 716，291．06 | 2 | 139 |  |

NAMES OF SUPERINTENDENTS AND MINE FOREMEN, ALLEGANY COUNTY, CALENDAR YEAR 1927

| Name of Company | Mine | Superintendent | Mine Foreman |
| :---: | :---: | :---: | :---: |
| MaNitt Coal Co. | McNitt No. 2 | James Jenkins | John Fatkin |
| Marva Coal Co. | Marva | Joseph G. Martin | Joseph G. Martin |
| Maryland Coal Co. | Kingsland-Big Vein | L. Burton Stevens | Felix Foot, Day Foleman Harold Molgan, Night Foreman |
| Midlothian Coal Co. | Tyson No. 1 | L. McNeal |  |
| Moscow-George's Creek Mining Co. | No. 1 Pittsburgh | J. W. P. Somerville | Carson Thomas |
| Moscow-George's Creek Mining Co. | No. 2 Pittsburgh | J. W, P. Somerville | Carson Thomas |
| Moscow-George's Creek Mining Co. | No. 3 Bakerstown | J. W. P. Somerville | E. R. Brennan |
| Mt. Savage Fuel Co. | Newtown Mine | Lawrence Barth | John Carter |
| Mt. Savage-George's Creek Co. | Mt. Savage No. 1 | H. B. Averv | William Eisel |
| Mt. Savage Independent Fuel Mines | No. 3 Bakerstown | A. D. Martin | A. D. Martin, asst. by J. A. Emrick |
| Mt. Savage Mining, Co. | Liberty Mine | Joseph Jenkins |  |
| Piedmont \& George's Creek Coal Co. | Bowery Furnace No. 2 | Harry C. Hitchins | Oscar Huber, asst. by James Taylor |
| Piedmont \& George's Creek Coal Co. | Washington No. 1 | J. A. Cosgrove | William P. Brophy |
| Pledmont \& Gearge's Creek Coal Co. Porter \& Kreitzburg | Washington No. 5 | J. A. Cosgrove | Jolin Wallace, asst. by John Hughes |
| Porter \& Kreitzburg R. C. Roberts Coal Co. | No. 1 Bakerstown | Marshall Porter Marry Wilson | M. Portel <br> Martin Peck |
| Stanton George's Creek Coal Co. | No. 1 Bakerstown | M. L. Stanton | M. L. Stanton |
| Sullivan Bros. Coal Co. |  | J. A. Sullivan | B. D. Byrnes |
| Supply Coal Co. |  |  | Joseph Robertson |
| Union Mining Co. | Union No. 4 | Joseph E. Finzel | Albert Deffenbaugh |
| Vincent Engle \& Sons Westermport Coal Co. | Engle Mine ${ }^{\text {Mine }}$ No, 1 and No, 2 | William Engle |  |
| Westernport Coal Co. | Mine No. 1 and No. 2 | Thomas Dailey | George Dailey |

NAMES OF SUPERINTENDENTS AND MINE FOREMEN, ALLEGANY COUNTY, FIRE CLAY MINES CALENDAR YEAR 1927

| Name of Company | Mine | Superintendent | Mine Foreman |
| :---: | :---: | :---: | :---: |
| drew Ramsay Co | Ellersilie | Hugh Stevenson | Henry Lowery |
| Big Savage Fire Brick Co. | No. $\frac{1}{6}$ |  | Charles Wolfe |
| Savage Mountain ${ }^{\text {Union }}$ Mining Co. | Nos. 6, 7, 1 and 10 | Joseph E. Finzel | Thomas Machin, asst. by William Baker |

NAMES OF SUPERINTENDENTS AND MINE FOREMEN, GARRETT COUNTY, CALENDAR YEAR 1927

| Name of Company |  | Superintendent | Mine Foreman |
| :---: | :---: | :---: | :---: |
| W. D. Althouse \& Co. . | Georgian | J. T. Jordan |  |
| Big Vein Coal Co. of Lonaconing, Inc. (formerly known as Georgian Mine of the W. D. Althouse Co.) |  | J. T. Jordan |  |
| Boyd Mining Co. | No. 1 | George Boyd | C. R. Gibbs, asst. by E. G. King |
| Davis Coal and Coke Co. | Kempton No. 42 | Walter Iman, succeeded by R. C. Mubs | Fire Bosses: L. M. Hellyer, Mike Morris, Albert King |
| Hamill Coal and Coke Co. | Freeport Mine | R. A. Smith | William Hartley ( W. C. Paugh |
| Hamill Coal and Coke Co. | Kittanning | R. A. Smith | C. J. Waberts ${ }^{\text {J. }}$ Wast. by W. C. Paugh |
| MaCullough Coal Corporation | McCullough | ${ }_{\text {Wm }}$ Roberts ${ }^{\text {crichton Jr }}$, R. H. Yokum, Asst. | G. W. Pritts |
| Manor Coal Co. | No. 1 | Wm. Crichton, Jr. : R. R. | R. E. Diveley |
| Manor Coal Co. ${ }_{\text {(Ezra }}$ Michaels Coal Co. | No. ${ }^{2}$ Michaels No. 2 |  |  |
| Myers Coal Co. | Beachey |  | Norman Buat ${ }^{\text {Elmer Bush }}$ |
| G. C. Pattison | Bakerstown Mine |  | W. H. Cutchall |
| Penn-Maryland Collieries, Inc. | ${ }_{\text {Nethkin }}$ Mine | E. O. Smith | William Lemon and Owen Keegan |
| Potomac Fuel Supply Co. | Bakerstown Mine | L. R. Kight | J. P. Guy, asst. by Luther Evans |
| Shallmar Mining Corporation <br> (formerly Wolf Den Coal Co.) | Wolf Den Mine | H. A. Marshall | J. B. James, asst, by George Parrish |

NAMES OF OFFICERS, ALLEGANY COUNTY, CALENDAR YEAR . 1927

NAMES OF OFFICERS, ALLEGANY COUNTY-Continued

| Name of Company | Principal Office | President's Name and Address | Secretary's Name and Address |
| :---: | :---: | :---: | :---: |
| Marva Coal Co. | 125 E. Fayette St., Baltimore, Md. 1 Broadway, New York City |  | Norman E. Fryer, Baltimore, Md. H. S. Rodgers, New York City |
| Maryland Coal Co. | 1 Broadway, New York City | J. W. Gallaway, New York City | H. S. Rodgers, New York City |
| Midlothian Coal Co. | Cumberland, Md. | Carl C. Hetzel | R. L. Stallings |
| Moscow-George's Creek Mining Co. | Cumberland, Md. | J. W. P. Somerville | W. A. S. Somerville |
| Mt. Savage Fuel Co. Mt. Savage-George's Creek Coal Co. | Mt. Savage, Md. | Lawrence Barth | Clinton Uhl |
| Mt. Savage-George's Creek Coal Co. | Mt. Savage, Md. | Harry Finn, Leonard and Scholes Sts., Brooklyn, N. Y. | H. B. Avery, Mt. Savage, Md. |
| Mt. Savage Independent Fuel Mines Mt. Savage Mining Co. | Mt. Savage, Md. Cumberland, Md, | B. H. Biays, Continental Bldg., Balto., Md. | J. W. Young, Cumberland, Md. |
| Piedmont \& George's Creek Coar Co. | Frostburg, Md. | John S. Brophy, Frostburg, Md. | Alex. G. Close |
| O. T. Porter Coal Co. | Barton, Md. |  |  |
| Porter \& Kreitzburg | Eckhart Mines, Md. |  |  |
| M. W. Race | Frostburg, Md. |  |  |
| Robert Griffith | Frostburg, Md. |  |  |
| R. C. Roberts Coal Co. | Westernport, Md. | R. C. Roberts, Westernport, Md. |  |
| Stanton George's Creek Coal Co. | Frostburg, Md. |  |  |
| Sullivan Bros. Coal Co. | Frostburg, Md. | D. P. Sullivan | W. J. Sullivan |
| Supply Coal Co. | Barton, Md. | P. H. Gallagher, Barton, Md. |  |
| Union Mining Co. | Mt. Savage, Md. | Roberdeau Annall, Mt. Savage, Md, | C. F. Talbott |
| Vincent Engle \& Sons | Eekhart, Md. | Vincent Engle W |  |
| Westernport Coal Co. C. O. Workman | Barion, Md. Frostburg, Md. | Thomas Dailey, Westermport, Md. J. O. Workman, Owner | J. T. Dobbie, Lonaconing, Md. |
| NAMES OF OFFICERS, FTRE CLAY MINES, ALIEGANY COENTY, CALENDAR YERE1927 |  |  |  |
| Name of Company | Principal Office | President's Name and Address | Secretary's Name and Address |
| Andrew Ramsay Co. | Mt. Savage. Md. | Henry Shriver, Cumberland, Md. | William Hopkins, Mt. Savage, Md. |
| Big Savage Fire Brick Co. | Zihlman, Md. | D. Armstrong. Frostburg, Md. | F. J. Clark, Frostburg, Md. |
| Savage Mountain Fire Brick Co. Union Mining Co. | Frostburg, Md. | H. G. Caldwell, Frostburg, Md. | W. F. Caldwell, Piedmont, W. Va. |
| Union Mining Co. | Mt. Savage, Md. | Roberdeau Annan, Mt. Savage, Md. | C. F. Talbott, Mt. Savage, Md. |

NAMES OF OFFICERS, GARRETT COUNTY, CALENDAR YEAR 1927

| Name of Company | Principal Office | President's Name and Address | Secretary's Name and Address |
| :---: | :---: | :---: | :---: |
| W. D Althouse \& Co. | 1119 Liberty Bldg. Philadelphia. Pa. | A. K, Althouse, Philadelphia, Pa. | W. D. Althouse, Philadelphia, Pa. |
| Boyd Mining Co. <br> Davis Coal and Coke Co. | Potomac Manor, W. Va. Cumberland, Md. | James G. Boyd, Potomac Manol', W. Va. | George Boyd, Potomac Manor, W. Va. |
| George Moreland | Gormania, W. Va. | more, Md. |  |
| Hamill Coal and Coke Co. | Blaine, W. Va. | R. A. Smith | J. A. Shore |
| MeCullough Coal Corp. | Friendsville, ${ }^{\text {Md }}$. | J. W. McCullough, Friendsville, Md. | F. C. McCullough, Friendsville |
| Manor Coal Co. | Tohnstown, Pa. | A. B. Crichton | H. A. Crichton . |
| Melvin Weimer | Oakland, Md. Barton. Md. |  |  |
| Miller \& Collins | Oakland, Md. | H. E. Miller, Oakland, Md. |  |
| Myers Coal Co. | Grantsville, Md. | J. A. Beachy, Grantsville, Md. | C. A. Bender, Grantsville, Md. |
| G. C. Pationn | Bloomington, Md. |  |  |
| Penn-Maryland Collieries Co. | Bayard, W. Va. | J. Warren Gates, Harrisburg, Pa. <br> A. G. Smith |  |
| Potomac Fuel Supply Co. | Dodson, Md. | A. G. Smith | J. W. Hartley |
| R. J, Ross Coat Mines, Inc. Ryland Coal Co. | Westernport, Md. | R. J. Ross, Westernport, Md. | J. B. Mullen, Piedmont, W. Va. |
| Ryland Coal Co. | Friendsville, Md. 17 Battery Place | $\underset{\text { W. C. W. Ryland, Owner }}{ }$ | Tohn D Kline New York Office |
| Shallmar Mining Corporation (formerly Wolf Den Coal Co.) | Whitehall Bldg., 17 Battery Place, New York City | W. A. Marshall, New York Office | John D. Kline, New York Office |
| A. G. Shrout | Oakland, Md. |  |  |
| H. B. Smith Coal Co. Steyer Coal Co. | Vindex, Md. |  |  |
| Steyer Coal Co. Wolf Den Coal Co. | Steyer, Md. (See Shallmar Mining Co.) |  |  |

## TONNAGE FOR ALLEGANY COUNTY, CALENDAR YEAR 1927

Net Tons

Andrew Brode, Sr., \& Son ..... 498.00
Annan \& Jeffries ..... 63,408.07
Arch Michaels Coal Company ..... 949.00
Barton-Potomac Coal Company ..... 558.12
C. C. Bennett ..... 739.00
D. A. Benson. ..... 3,875.18
Big Vein Coal Company of Lonaconing, Inc. ..... 117,129.08
Burtner Coal Mining Company ..... 13,611.00
Campbell Bros. Fuel Mines. ..... 505.00
Campbell Coal Company ..... 182,187.14
Chapman Coal Mining Company ..... 18,791.00
Consolidation Coal Company ..... 755,597.00
Dailey Coal Company ..... 5,871.00
David Yates ..... 127.00
Douglas Waddell ..... 2,130.00
Eagan Mine (Charles J. Eagan) ..... 471.00
Eckhart Fuel Mines ..... 632.00
Edw. J. McKinzie ..... 1,718.10
H. G. Evans ..... 1,664.00
Frostburg Mining Company ..... 5,568.00
Georges Creek Rarrellsville Company ..... 8,209.18
Georges Creek Coal Company, Inc. ..... 92,064.00
Georges Creek Coal Mining Company ..... 154,581.01
Hoffa Bros. Coal Company ..... 30,333.06
Hope Coal Mining Company ..... 793.00
Howard \& Maybury. ..... 1,579.00
James E. Darrow ..... 265.11
John E. Smith ..... 855.00
Koontz Coal Company ..... 48,845.00
Langham \& Boal ..... 158.00
McDonald Coal Company ..... 23,883.12
McKee \& Fuller Coal Company. ..... 1,404.00
MeNitt Coal Company ..... 45,368.00
Marva Coal Company ..... 12,401.06
Maryland Coal Company ..... 100,202.17
Midlothian Coal Company ..... 6,244.17
Moscow George's Creek Mining Company ..... 16,610.11
Mit. Savage Fuel Company ..... 9,925.00
Mt. Savage-Georges Creek Coal Company ..... 26,637.00
Mit. Savage Independent Fuel Mines ..... 2,019.00
Mt. Savage Mining Company ..... 27,877.18
Piedmont \& Georges Creek Coal Company ..... 174,486.00
O. T. Porter Coal Company ..... 1,320.00
Porter \& Kreitzburg ..... 1,474.00 ..... 253.00
M. W. Race
Robert Griffith ..... 818.00
R. C. Roberts Coal Company ..... 4,287.00
Stanton Georges Creek Coal Company ..... 1,557.18
Sullivan Bros. Coal Company. ..... 47,234.00
Supply Coal Company798.00
Union Mining Company ..... 32,903.36
Vincent Engle \& Sons ..... 1,213.00
Westernport Coal Company ..... 843.00
C. O. Workman ..... 2,338.00
Total ..... 2,055,816.00

TONNAGE FOR ALLEGANY COUNTY, CALENDAR YEAR 1927

## Fire Clay Mines

|  | Net Tons |
| :---: | :---: |
| Andrew Ramsay Company | 1,271.00 |
| Big Savage Fire Brick Company | 9,130.19 |
| Savage Mountain Fire Brick Company. | 10,514.06 |
| Union Mining Company | 39,467.05 |
| Total | 60,383.10 |

TONNAGE FOR GARRETT COUNTY, CALENDAR YEAR ..... 1927

|  | Net Tons |
| :---: | :---: |
| W. D. Althouse \& Company | 24,152.03 |
| Big Vein Coal Company of Lonaconing. | 2,537.00 |
| Boyd Mining Company...... | 25,049.00 |
| Davis Coal \& Coke Company. | 215,476.00 |
| Dodson Bituminous Coal Corporation | 705.14 |
| George Moreland | 471.00 |
| Hamill Coal \& Coke Company. | 78,750.00 |
|  | 36,787.00 |
| Manor Coal Company. | 93,286.00 |
| Melvin Weimer | 612.00 |
| Michaels Coal Company (Ezra) | 1,440.00 |
| Miller \& Collins | 60.00 |
|  | 8,371.04 |
| G. C. Pattison | 1,122.17 |
| Penn Maryland Collieries ....*) - | 17,993.14 |
|  | 97,393.01 |
| Ryland Coal Company | 418.00 |
| Shallmar Mining Corporation (formerly Wolf Den Coal Co.) .......... | 4,880.00 |
| A. G. Shrout. | 51.00 |
| H. B. Smith Coal Company | 450.00 |
| Wolf Den Coal Company.... | 106,285.13 |
| Total. | 716,291.06 |

## TONNAGE BY COAL SEAMS, CALENDAR YEAR 1927

Allegany County

|  | Net Tons |
| :---: | :---: |
| Big Vein | 916,150.05 |
| Tyson | 669,788.01 |
| Bakerstown | 277,105.01 |
| Franklin | 505.00 |
| Brush Creek | 11,643.10 |
| Bluebaugh | 55,443.18 |
| Waynesburg | 20,335.00 |
| Kittanning | 40,186.13 |
| Maynadier | 27,877.18 |
|  | 36,780.14 |
| Total. | 2,055,816.00 |

TONNAGE BY COAL SEAM
allegany county-Calendar Year 1927

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TONNAGE BY COAL SEAM
allegany county－Calendar Year 1927－Continued

| Name of Company | $\begin{aligned} & E \\ & \stackrel{E}{5} \\ & \text { 曷 } \end{aligned}$ |  |  | 㡶 | 长 |  |  | $\begin{aligned} & \text { en } \\ & \stackrel{y}{E} \\ & \frac{0}{\#} \\ & E \\ & E \\ & E \\ & E \end{aligned}$ | 梁 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mt．Savage Mining Co．，Liberty Mine |  |  |  |  |  |  | ．－．．．．．．．．． | ．．．．．．．．．．．．．． | ．．．．－．．．．．．．．．－ | 27，877．18 | ．．．．．．．．． |
| Piedmont \＆George＇s Creek Coal Co．，Bowery Furnace No． 2 | $\cdots$ | 132，025．00 | ．．．．．．．．．．．．．． | － | ．．．．．．．．．－－＊ | － | －．．．．．．．．．． | －－．．．．．．．．．． | $8,038.00$ | ．．．．．．．．．．．．．．． | ．．．．．．． |
| Piedmont \＆George＇s Creek Coal Co．．Washington No． 1 | ．．．．．．．．．．．．．．． | －．．．．．．．．．．．． | 34.423 .000 | ．．．．．．．．．．．．．．．．． | ．．． | ．．．．．．．．．．．．．． | ．．．． | $\ldots$. | 8，038．00 | ．．．．．．．．．．．．．．． | －－－－－ |
| Piedmont \＆George＇s Creek Coal Co．，Washington No． 5 O．T．Porter Coal Co． | ．．． | $\cdots$ | 1，320．00 | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | －7．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．．． | －．．．．．．．．．．．．．－ | ．．．．．．．．．．．．．．． |
| Porter \＆Kreitzburg | 1，474．00 |  |  | ．－．．．．． | －．．．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | －－．．．．．．．．．．．． | ．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．．．． | ． |
| M．W．Race．Washington Hollow Mine | 253.00 |  | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | －．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | －．．．．．．．．．．．．．－ | －．－－－．－．．．．．．．－ |
| Robert Griffith，Bordon Mine | ．．． | 818.00 | 4，287．00 | ．－．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | ．－－－－．．．．．．．．．．．． | ．－．．．．．．．．．．． | －－－．－．．．．．．．．．．．．－ | $\cdots$ |
| R．C．Roberts Coal Co． Stanton George＇s Creek Coal Co． | ．．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．． | 4，287．00 | －－．．．．．．．．．．．．．．．． | －．．．．．．．．．．．．．．．． |  |  |  | 1，557．18 | ．－．．．．．．．．．．．．．．．．． | ．．．．．．．．． |
| Sullivan Bros．Coal Co． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | 798.00 | ．．．．．．．．．．．．．．． | ．－．．．．．．．．．．．． | －．．．．．．．．．．．．－ | 47，234．00 | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | ． | ．－．－－．．．．．．．．．． |
| Supply Coal Co． |  | ．．．．．．．．．．．． | 798.00 | － |  |  | － | $\cdots$ | －－．－．－．．．．．． | －－ | 32，903．36 |
| Union Mining Co． | 1，213．00 | ．． |  | ．．． | ．．．．．．．．．．．．．． | ．．．．． | ．．．．．．．．．．．．．．．．．． | ．．．． |  | ．－．－－－ | 22，00．36 |
| Westernport Ccal Co． |  | ．．．．．．．．．．．．．．． | 843.00 | －．．．．．．．．．． |  | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． |
| C．O．Workman | 2，338．00 |  |  |  |  |  |  |  | ．．．．．．．．．．．．．． |  | ．．．．．．．．．．．．．．． |
|  | 916，150．05 | 669，788．01 | 277，105．01 | 505.00 |  | 11，643．10 | 55，443．18 | 20，335．00 | 40，186．13 | 27，877．18 | 36，780．14 |

GARRETT COUNTY－Calendar Year 1927

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## Garrett County

Net TonsKittanning ..... 479,350.07
Freeport ..... 72,509.1745,158.04
Clarion ..... 18,287.00
Bakerstown ..... 98,515.18418.00
Unclassified ..... 2,052.00
Total 716,291.06

## IMPROVEMENTS

## Allegany County

Chapman Coal Mining Company<br>Bakerstown Mine-Cross Over Drop back completed.<br>Pittsburgh Mine-New Heading to Face completed.<br>Georges Creek Coal Mining Company<br>Extensive development of No. 2 Mine.

## Garrett County

Penn-Maryland Collieries, Inc.
New Hauling Road.
There have been several decided improvements in methods of mining and equipment during the calendar year 1927. These included improved methods of mining in the thinner seams and continued improvements in the recovery of Big Vein coal pillars described in articles at the conclusion of this report.

# DESCRIPTION OF MINES IN ALLEGANY COUNTY FOR THE CALENDAR YEAR 1927 

ALLEGANY COAL COMPANY
R. C. Roberts $\qquad$
Tacoma Mines Nos. 2, 4 and 5 are located on the west side of George's Creek at Franklin. Mine 4 has been abandoned. Mine No. 5 is located about 1 mile west of Westernport and during the year 1926 became known as the R. C. Roberts Mine. These are drift openings working the Lower Kittanning and Bakerstown coal seams. Ventilation is produced by fan driven by electric motor.

During the period of this report these mines were idle.
ANDREW BRODE, SR., \& SONS
Andrew Brode
Mine Foreman.
Brode mine is located about 1 mile southwest of Frostburg. It is a drift opening in the Upper Tyson coal seam. Ventilation is by natural means. Coal from this mine is sold to domestic trade.

During the calendar year 1927 this mine employed 2 men, worked 98 days and produced 498.00 tons of coal.

## ANNAN \& JEFFRIES COAL COMPANY

Union No. 1
Albert Rice..................................................Mine Foreman.
This mine is located at Zihlman and is a drift opening working the Tyson coal seam. Ventilation is produced by an electrically driven fan and is found satisfactory. This mine is located on the C. \& P. R. R.

During the calendar year 1927 this mine employed 17 men, worked $2711 / 2$ days and produced $13,789.00$ tons of coal.

Union No. 2
W. H. R. Thomas.... Superintendent and Foreman.

This mine is located at Zihlman and is a drift opening working the Big Vein coal seam. Conditions are found to be satisfactory. Ventilation is produced by an electrically driven fan and is conducted to the working faces by means of doors, overcasts and stoppings. The Mine is located on the C. \& P. R. R.

During the calendar year 1927 this mine employed 60 men, worked $2711 / 2$ days and produced $49,619.07$ tons of coal.

## ARCH MICHAELS COAL COMPANY

Arch Michaels............................................. Mine Foreman.
This is an opening in the Bakerstown seam located about $11 / 4$ miles above Reynolds on Mill Run. It is a wagon mine. Ventilation is by natural means and is found to be satisfactory.

During the calendar year 1927 this mine employed 1 man, worked 168 days and produced 949.00 tons of coal.

## C. C. BENNETT

This mine is located about 1 mile east of Eckhart. It is a drift opening working the Big Vein coal seam. It is a small wagon mine supplying coal for domestic trade.

During the calendar year 1927 this mine employed 2 men, worked 134 days and produced 739.00 tons of coal.

> D. A. BENSON

Eugene Stevens Mine Foreman.

This mine is located on the tram road of the Big Savage Fire Brick Company, about $11 / 2$ miles northeast of Zihlman. It is a drift opening working the Freeport coal seam. This is a wagon mine supplying domestic trade. Ventilation is produced by a fan driven by an electric motor. Drainage is by natural means and found in a satisfactory condition.

During the calendar year 1927 this mine employed 5 men, worked 268 days and produced $3,875.18$ tons of coal.

## BIG VEIN COAL COMPANY OF LONACONING. <br> Caledonia Mine



This mine is located on the west side of George's Creek at Barton, on the C. \& P. R. R., and consists of two drift openings, working the Big Vein seam of coal. Ventilation is produced by electrically driven fan.

During the calendar year 1927 this mine employed 38 men, worked 214 days and produced $32,638.18$ tons of coal.

# BIG VEIN COAL COMPANY OF LONACONING <br> Castle Run Mine 

John L. Casey<br>Superintendent.<br>Harrison Davis<br>Mine Foreman.

This mine is located on the Western Maryland Railway on the west side of George's Creek at Lonaconing. It is a drift opening working the Pittsburgh coal seam. Ventilation is produced by an electrically driven fan.

During the calendar year 1927 this mine employed 89 men, worked 263 days and produced $83,868.05$ tons of coal.

## BIG VEIN COAL COMPANY OF LONACONING

Elkheart Mine

> John L. Casey._-
> Fred. Beeman

This mine is located on the C. \& P. R. R. at Moscow on the west side of George's Creek. It is a drift opening working the Bakerstown coal seam. Ventilation is produced by an electrically driven fan.

During March of this year the lease on this mine was given up to the Maryland Coal Company.

During the calendar year 1927 this mine employed 21 men, worked 13 days and produced 622.05 tons of coal.

## BRAILER MINING COMPANY

Charles Winner. Mine Foreman.

Bald Knob Mine is located at Mt. Savage. It consists of two openings working the Big Vein coal seam. It is developed on the double entry system. Ventilation is produced by electrically driven fans. The air conditions are good and the timbering well taken care of. This mine is located on the C. \&. P. R. R.

This mine was worked out and abandoned during the year 1926.
BRYDON BROS. COAL CORPORATION
Moscow Mine
This mine is a drift opening in the Bakerstown coal seam, is on the C. \&. P. R. R., on the east side of George's Creek at Barton. Ventilation is produced by a fan driven by an electric motor and is found satisfactory.

During the calendar year 1927 this mine was idle.

# BRYDON BROS. COAL CORPORATION. Pekin Mine 

This mine is on the C. \& P. R. R., on the west side of Pekin. It is a drift opening working the Pittsburgh or Big Vein coal seam. Ventilation is produced by natural means. Drainage is by natural means and ditches.

During the calendar year 1927 this mine was idle.

## BURTNER COAL MINING COMPANY, INC.

Burtner Mine No. 6

| V. T. Burtner | Superintende |
| :---: | :---: |
| Wm. Barnard. | Mine Forem |

This mine is located on the west side of George's Creek near Franklin. It is a drift opening working the Bakerstown coal seam. This mine is developed on the double entry system; ventilation is produced by a large gasoline-driven fan.

During the calendar year 1927 this mine employed 25 men, worked 215 days and produced $13,611.00$ tons of coal.

## CAMPBELL BROS. FUEL MINE

M. J. Campbell Mine Foreman.

This mine is located at Gilmore, Md. It is a drift opening working the Franklin coal seam. Ventilation is by natural means. This is a small wagon mine and the coal is sold to domestic trade.

During the calendar year 1927 this mine employed 2 men, worked 104 days and produced 505.00 tons of coal.

## CAMPBELL COAL COMPANY

Donald Mine
John Faherty Mine Foreman.

These are drift openings in the Bakerstown coal seam located near Lauder on the west side of George's Creek on the C. \& P. R. R. Ventilation is produced by a fan driven by an electric motor.

During the calendar year 1927 this mine employed 68 men, worked 214 days and produced $46,733.13$ tons of coal.

## CAMPBELL COAL COMPANY

## Franklin Mines

> Thomas Mowbray.... Mine Foreman. John S. Athey._- Mine Foreman.

Mines Nos. 1, 2 and 3 are drift openings, working the Bakerstown, Big Vein and Tyson coal seams and are located at Franklin. Ventilation in No. 1 mine is produced by fan driven by an electric motor. Ventilation in Nos. 2 and 3 mines is by natural means and found to be satisfactory.

During the calendar year 1927 the Big Vein mine was worked out.

During the period of this report production was as follows: Bakerstown Mine, worked 173 days, employed 50 men and produced 30,114.03 tons of coal; Big Vein Mine employed 6 men, worked 85 days and produced $2,353.13$ tons of coal; Tyson Mine employed 8 men, worked 172 days and produced $3,853.17$ tons of coal.

## CAMPBELL COAL COMPANY Hampshire Mines

William Rogan .-.-.-Mine Foreman.
George Crow.
Asst. Foreman.

Hampshire Mines Nos. 1 and 3 are openings in the Bakerstown and Freeport coal seams, respectively, located near Reynolds. Ventilation is produced by a fan driven by an electric motor. Hampshire Big Vein mine is located at Reynolds near Barton; this is a drift opening. Ventilation is by natural means and found to be satisfactory.

During the calendar year 1927 production was as follows: Mine No. 3, Freeport, idle; Big Vein Mine abandoned; Mine No. 2 working the Bakerstown seam employed 107 men, worked 210 days and produced $98,132.08$ tons of coal.

## CHAPMAN COAL MINING COMPANY

Swanton Mines
Randolph Ashby...................... Superintendent. Albert Frenzel. . Mine Foreman.

Swanton Mines Nos. 1 and 2 are located at Barton on the west side of George's Creek. These are drift openings, working the Bakerstown and Pittsburgh coal seams, and developed on the double entry system. Ventilation in the Bakerstown mine is produced by
a fan driven by an electric motor. Ventilation in the Pittsburgh mine is by natural means.

During the calendar year 1927 production was as follows: Bakerstown Mine employed 21 men, worked 146 days and produced $7,360.00$ tons of coal; Big Vein Mine employed 29 men, worked 155 days and produced $11,431.00$ tons of coal. MINE—B

THE CONSOLIDATION COAL COMPANY<br>Maryland Division<br>G. M. Gillette, General Manager...-..........Somerset, Pa.<br>W. C. Snyder, General Superintendent --...........Frostburg, Md.

The Maryland Division of this Company is in Allegany County. It is the largest operation in the State, operating 7 mines and working the Pittsburgh or Big Vein and Tyson coal seams. The general condition of these mines is good and no expense is spared to keep them in a healthful and safe condition, and they also meet the requirements of the law.

The production during the calendar year 1927 was as follows: employed 845 men and produced $755,597.00$ tons of coal.

## CONSOLIDATION MINE NO. 1

| Richard H | Mine F |
| :---: | :---: |
| Michael McGeady | Asst. Forema |

This mine is located on the C. \& P. R. R. at Ocean on the east side of George's Creek. It is a slope opening working the Pittsburgh or Big Vein coal seam, and is opened under the double entry system. Ventilation is produced by an electrically driven fan and the air current is conducted to the working faces by overcasts, doors and stoppings. It is found in a satisfactory condition. Drainage is very difficult, owing to the low condition of the mine and a heavy expense is incurred in keeping it satisfactory. It is obtained by being drained through the Hoffman tunnel.

During the calendar year 1927 this mine employed 127 men, worked 298 days and produced 113,385 tons of coal.

CONSOLIDATION MINE NO. 3

| Alex. Neal. | Mine Foreman. |
| :---: | :---: |
| Charles Shields | Asst. Foreman. |

This mine is located at Hoffman, $11 / 2$ miles east of Frostburg* on the Eckhart branch of the C. \&. P. Railroad. It is a slope opening working the Big Vein coal seam, and is developed on the double
entry system. Ventilation is produced by an electrically driven fan and the air current is conducted to the working faces by overcasts, doors and brattices.

Drainage is most difficult and it is necessary to have a number of pumps and ditches in order to keep the drainage in a lawful condition. Drainage is through the Hoffman ditch which empties into Braddock Run at Clarysville. Timbering is found in good condition but the mine requires a great deal of timbering to keep the roof in a safe condition.

During the calendar year 1927 this mine employed 88 men, worked 288 days and produced $88,649.00$ tons of coal.

CONSOLIDATION MINE NO. 4

| Frank Carter | Mine Foreman |
| :---: | :---: |
| George Richardson. | Asst. Mine Foreman |
| John Barry | Asst. Mine Forema |

This mine is a slope opening working the Pittsburgh or Big Vein coal seam located at Eckhart. It is developed on the double entry system. Ventilation is produced by an electrically driven fan and is conducted to the working faces by brattices. Drainage is very difficult, but by the use of pumps and ditches it is kept in a lawful condition. The roof is of a dangerous character, owing to the age of the mine. The timbering, however, is well looked after. This mine is located on the C. \& P. R. R.

During the calendar year 1927 this mine employed 63 men , worked 287.9 days and produced $65,457.00$ tons of coal.

CONSOLIDATION MINE NO. 9

| James Close | Mine Foreman. |
| :---: | :---: |
| Arthur Weisenborn. | Asst. Foreman. |

'This mine is located at the end of the 'Y' on the C. \& P. R. R. It is a drift opening working the Tyson coal seam. Ventilation is found to be in a satisfactory condition and is produced by an electrically driven fan. Drainage is kept in a lawful condition by holes driven to the Big Vein and by the use of pumps.

During the calendar year 1927 this mine employed 84 men, worked 287 days and produced $88,048.00$ tons of coal.

CONSOLIDATION NO. 10

Frank Carter
William Donahue
Clyde Rowe
This mine is located at Eckhart just west of Consolidation No. 4 on the Eckhart Branch of the C. \& P. R. R. It is a drift opening
working the Tyson or Sewickley coal seam and is developed on the double entry system. Ventilation is produced by an electrically driven fan. Drainage is kept in a lawful condition by holes being driven through to the Big Vein. The roof is of the usual character found in the Tyson seam, being disturbed in some places by the removal of the coal in the seam below.

During the calendar year 1927 this mine employed 283 men, worked 286.3 days and produced $224,565.00$ tons of coal.

## CONSOLIDATION MINE NO. 12

Robert Edwards
Patrick Kenny

This mine is located at Borden Shaft on the main line of the C. \& P. R. R. It is a shaft opening working the Big Vein Coal seam. It is developed on the double entry system. Ventilation is produced by an electrically driven fan located at the pumping shaft. Drainage is by natural means and is through the Hoffman tunnel. The roof is of the usual character and requires a great deal of timbering.

During the calendar year 1927 this mine employed 174 men, worked 268.1 days and produced $166,403.00$ tons of coal.

## CONSOLIDATION MINE NO. 17

Robert Ewing
Mine Foreman.
This mine is located at Lord, Md. It is a drift opening working the Tyson or Sewickley coal seam and is developed on the double entry system. Ventilation is produced by an electrically driven fan and is conducted to the working faces by doors and stoppings.

During the calendar year 1927 this mine employed 26 men, worked 200.6 days and produced $9,090.00$ tons of coal.

## J. DADDYSMAN

This is a drift opening in the Bakerstown seam, located onehalf mile northeast of Westernport. Ventilation is by natural means.

During the calendar year 1927 this mine was idle.

## DAILEY COAL COMPANY

Ernest Schell Mine Foreman.
This mine is located at Franklin and is a drift opening working the Bakerstown coal seam. Ventilation is produced by an electri-
ally driven fan. This mine was formerly known as Mine No. 2 of the Westernport Coal Company.

During the calendar year 1927 this mine employed 11 men, worked 202 days and produced $5,871.00$ tons of coal.

## DARBY BRADY COAL MINES

This is a wagon mine located near Frostburg. It is a drift opening working the Tyson coal seam.

During the calendar year 1927 this mine was idle.

## DAVID YATES

This mine was formerly No. 16 of The Consolidation Coal Company and is located about 2 miles east of Midland on the Eckhart Branch of the C. \& P. R. R. The outcrop is now being worked by Mr. Yates. It consists of a series of openings and was developed on the double entry system. Nos. 1 and 2 are slope openings.

During the calendar year 1927 this mine employed 4 men, worked 35 days and produced 127.00 tons of coal.

## DOUGLAS WADDELL MINE

This mine is located on the east side of George's Creek at Lonaconing on the Western Maryland Railway. It is a drift opening working the Pittsburgh or Big Vein coal seam. Ventilation is by natural means.

During the calendar year 1927 this mine employed 3 men, worked 175 days and produced $2,130.00$ tons of coal.

## EAGAN MINING COMPANY

Charles Eagan Mine Foreman.

This mine is located at Midland on the Western Maryland Railway. It is a drift opening working the Big Vein coal seam. Ventilation is by natural means.

During the calendar year this mine employed 2 men, worked 70 days and produced 471.00 tons of coal.

## ECKHART FUEL MINE

This mine is located about 1 mile east of Eckhart. It is a drift opening working the Big Vein coal seam. It is a small wagon mine supplying coal for domestic trade.

During the calendar year 1927 this mine employed 2 men, worked 149 days and produced 632.00 tons of coal.

## EDW. J. McKINZIE

This mine is located near Mt. Savage, Md., and is operating the Brush Creek coal seam. The coal is used for domestic trade and is hauled from the mine in trucks.

During the year 1927 this mine employed 6 men, worked 219 days and produced $1,718.10$ tons of coal.

## H. G. EVANS COAL COMPANY

Borden Mine is a wagon mine located at Borden near Frostburg. There are two drift openings working the Big Vein coal seam. Ventilation is produced by natural means. Drainage is also by natural means and is in a lawful condition. The roof is of a dangerous character and requires a great deal of attention to keep it safe.

During the calendar year 1927 this mine employed 3 men, worked 183 days and produced $1,664.00$ tons of coal.

## FROSTBURG BIG VEIN COAL COMPANY

W. H. R. Thomas<br>Mine Foreman.

This mine is located at Zihlman on the C. \& P. R. R. It has a number of openings in the Pittsburgh and Tyson coal seams. Ventilation is produced by electrically driven fans.

During the calendar year 1927 this mine was idle.

## FROSTBURG MINING COMPANY

Frank H. Spates.........Superintendent and Mine Foreman.
Spates No. 1 Mine is located at the Old Consolidation Village about 1 mile west of Frostburg. It is a wagon mine and is a drift opening working the Pittsburgh coal seam. Ventilation is by natural means.

During the calendar year 1927 this mine employed 7 men, worked 300 days and produced $5,568.00$ tons of coal.

GEORGE'S CREEK AND BARRELLVILLE COAL COMPANY Parker Mine

Sheridan Means $\qquad$ Supt. and Mine Foreman.

Parker Mine is located at Barrellville working the Bluebaugh seam of coal. Ventilation is produced by a 7 -ft. fan driven by
electricity. Drainage is in a lawful condition. This mine is on the C. \& P. R. R.

During the calendar year 1927 this mine employed 24 men, worked 184 days and produced $8,209.18$ tons of coal.

## GEORGE'S CREEK COAL COMPANY, INC.

John R. Hamilton Superintendent. Robert Todd $\qquad$ Mine Foreman, Mines Nos. 1-4. Clarkson Laird Mine Foreman, Big Vein and Tyson Mines. John D. Robertson Mine Foreman, Waynesburg Mine. Richard Moffatt. Mine Foreman, Waynesburg Mine.

Mines Nos. 1 and 4 are located on the west side of the George's Creek at Lonaconing on the Western Maryland Railway. They are drift openings working the Sewickley or Tyson coal seam. They are equipped with electrically driven fans. The air conditions are very good.

Mine No. 2, working the Tyson and Big Vein coal seams, is located on the east side of George's Creek at Lonaconing on the Western Maryland Railway.

Mine No. 3, working the Waynesburg seam, is located on the Western Maryland Railway, on the west side of George's Creek. It is a drift opening, and is equipped with an electrically driven fan. The conditions are unusually good.

During the calendar year 1927 production was as follows: George's Creek No. 2 (Sewickley) employed 20 men, worked 190 days and produced $11,314.00$ tons of coal; George's Creek No. 4 Mine (Sewickley) employed 68 men, worked 201 days and produced $48,499.00$ tons of coal; George's Creek No. 3 Mine (Waynesburg) employed 34 men, worked 185 days and produced $20,335.00$ tons of coal; George's Creek No. 2 Mine (Pittsburgh) employed 14 men, worked 190 days and produced 11,916.00 tons of coal.

## GEORGE'S CREEK COAL MINING COMPANY



This mine is located at Lonaconing, working the Pittsburgh or Big Vein coal seam. Ventilation is produced by an electrically driven fan and is conducted to the working faces by doors and stoppings. It is found in a satisfactory condition, no expense be-
ing spared to comply with the law. This mine is on the Western Maryland Railway.

During the calendar year 1927 this mine employed 162 men, worked $2181 / 2$ days and produced $154,581.01$ tons of coal.

## Mine No. 2

This mine, also known as the Waynesburg Mine, is located on the Western Maryland Railway at Lonaconing. It is a drift opening, working the Waynesboro seam. Ventilation is by natural means and is found to be in a satisfactory condition.

During the calendar year 1927 this mine was idle.
Mine No. 1
This mine is located at Lonaconing on the Western Maryland Railway, working the Tyson or Sewickley coal seam. It is a drift opening, developed on the double entry system. Ventilation is produced by electrically driven fans and is found to be in a satisfactory condition.

During the calendar year 1927 this mine was idle.

## GREEN'S COAL COMPANY

A. F. Green $\qquad$ Mine Foreman.

This mine is on the Western Maryland Railway at Lonaconing, on the east side of George's Creek. It is a drift opening working the Tyson coal seam. Ventilation is produced by an electrically driven fan.

During the calendar year 1927 this mine was idle.

## J. O. J. GREEN COAL COMPANY

This is an opening in the Bakerstown seam. Ventilation is produced by a fan driven by a gasoline motor. The mine is located about $11 / 2$ miles above Reynolds, on Mill Run.

During the calendar year 1927 this mine was idle.

## guy helbig fuel mine

Guy Helbig.... Owner and Foreman.
Helbig Mine is located about 1 mile east of Mt. Savage. This is a drift opening in the Bakerstown coal seam. Ventilation is produced by natural means. This is a wagon mine and the coal is sold to domestic trade.

During the calendar year 1927 this mine was idle.

## HOFFA BROS. COAL COMPANY

William Hyde, Sr.
Superintendent.
Chester Hyde Mine Foreman.

Phoenix Mine No. 2 consists of 7 openings in the Pittsburgh or Big Vein coal seam and is located on the west side of George's Creek at Lauder on the C. \& P. R. R. Ventilation is by natural means.

During the calendar year 1927 this mine employed 37 men, worked 192 days and produced $26,379.11$ tons of coal.

William Hyde, Sr...................................Superintendent.
Lester Smith Mine Foreman.

This mine, formerly one of the Westernport Coal Company's mines, is located at Franklin. It is a drift opening, working the Lower Kittanning coal seam. Ventilation is produced by an electrically driven fan.

During the calendar year 1927 this mine employed 8 men, worked 78 days and produced $3,953.15$ tons of coal.

## HOPE MINING COMPANY

Thomas Smith
Mine Foreman.
This mine formerly known as the Shaw Coal Company, is an opening in the Bakerstown coal seam, located at Moscow on the C. \& P. R. R. Ventilation is by natural means.

During the calendar year 1927 this mine employed 5 men, worked 119 days and produced 793.00 tons of coal.

## HOWARD \& MAYBURY COAL COMPANY

Sim Groves
Mine Foreman.
Kern Mine is a drift opening near Barton, in the Bakerstown seam, $1 / 2$ mile above Reynolds, on Mill Run. Ventilation is by a fan driven by gasoline engine. This is a wagon mine.

During the calendar year 1927 this mine employed 3 men, worked 214 days and produced $1,579.00$ tons of coal.

## JAMES DARROW

Coramandel Mine.
This mine is on the Western Maryland Railway at Lonaconing, and is a drift opening, working the Pittsburgh or Big Vein coal seam. It is developed on the double entry system. Ventilation is by natural means.

During the year 1927 this mine employed 4 men, worked 28 days and produced 265.11 tons of coal.

## KOONTZ COAL COMPANY

McKee No. 2


This mine is located about 1 mile west of Lonaconing on the Western Maryland Railway, working the Tyson coal seam. Ventilation is produced by a steam-driven fan. Drainage is by natural means and is found in good condition.

During the year 1927 this mine employed 50 men, worked 234 days and produced $48,845.00$ tons of coal.

## LANGHAM \& BOAL

## Herbert Langham............................... Foreman.

This is a wagon mine located about 1 mile west of Barton, and is a drift opening, working the Bakerstown coal seam. Ventilation is produced by a gasoline-driven fan.

During the year 1927 this mine employed 2 men, worked 25 days and produced 158 tons of coal.

## LITTLE PITTSBURGH COAL COMPANY

A. F. Green... Mine Foreman.

This mine is located on the east side of George's Creek at Lonaconing, on the Western Maryland Railway. It is a drift opening, working the Little Pittsburgh coal seam. Ventilation is produced by natural means.

During the year 1927 this mine was idle.

## MCDONALD COAL COMPANY

Joseph Shuhart........................................
Arcadia Mine is an opening in the Bakerstown coal seam, located on the west side of George's Creek near Barton, on the C. \& P. R. R. Ventilation is produced by a fan driven by an electric motor.

During the year 1927 this mine employed 33 men, worked 168 days and produced $23,883.12$ tons of coal.

McKEE \& FULLER COAL COMPANY<br>Henry McKee<br>Mine Foreman.

No. 1 Mine is a wagon mine located at Lord, Md. It is a drift opening, working the Big Vein coal seam. This mine was opened in June, 1925, and it is expected to reclaim some of the pillar coal left in the first working. The coal is hauled by wagon and trucks to the C. \& P. R. R. at Woodland, where it is loaded into railroad cars for shipment.

During the year 1927 this mine employed 5 men, worked 130 days and produced $1,404.00$ tons of coal.

## McNITT COAL COMPANY

| James Jenkins | Superintendent. |
| :---: | :---: |
| John Fatkin | Mine Foreman. |

This mine is located at Midlothian, on the C. \& P. R. R. It is a slope opening working the Sewickley or Tyson coal seam. Ventilation is produced by a steam-driven fan.

During the year 1927 this mine employed 73 men, worked $1791 / 4$ days and produced $45,368.00$ tons of coal.

## MARVA COAL COMPANY

Jos. G. Martin $\qquad$ Superintendent and Mine Foreman.

Pine Hill Mine is located on the Western Maryland Railway near Lonaconing, on the east side of George's Creek. It consists of a number of openings in the Big Vein coal seam. Ventilation is by natural means.

During the calendar year 1927 this mine employed 12 men, worked 161 days and produced $12,401.06$ tons of coal.

MARYLAND COAL COMPANY

| S | Superintendent. |
| :---: | :---: |
| Felix Foot | Mine Foreman. |
| Harold Morgan | Asst. Foreman |

The Big Vein and Tyson Mines of this Company are located on the Western Maryland Railway on the west side of George's Creek at Lonaconing. Mine No. 1 is a drift opening working the Tyson seam and is developed on the double-entry system.

Mine No. 2 is a drift opening working the Pittsburgh or Big Vein coal seam. The roof is good and timbering well looked after.

Ventilation in these mines is produced by electrically driven fans. Drainage is difficult, but is kept in a lawful condition by means of ditches and pumps.

During the year 1927 the Big Vein Mine employed 124 men, worked $1553 / 4$ days and produced $100,202.17$ tons of coal. The Tyson Mine was idle.

METZ BROS. COAL COMPANY
Walter J. Metz Mine Foreman.

This mine is located near Barton on the east. side of $\cdot$ George's Creek, working the Bakerstown coal seam.

During the year 1927 this mine was idle.

## MIDLOTHIAN COAL COMPANY

Leo McNeal......................................
This Company's mines are located on the C. \& P. R. R. at Midlothian, about 2 miles west of Frostburg. The mine consists of five drift openings working the Tyson and Big Vein coal seams. Ventilation is produced by natural means.

During the year 1927 production was as follows. Tyson No. 1 employed 8 men, worked 229 days and produced $5,721.15$ tons of coal; Tyson No. 2 employed 8 men, worked 20 days and produced 523.02 tons of coal.

## MOSCOW-GEORGE'S CREEK MINING COMPANY


These mines are located near Barton on the west side of George's Creek. They are drift openings working the Pittsburgh or Big Vein and Bakerstown coal seams. Ventilation in the Bakerstown mine is produced by a fan driven by electric motor. In the Pittsburgh or Big Vein mine it is produced by natural means.

During the year 1927 production was as follows: No. 1 (Big Vein) employed 8 men, worked 244 days and produced $8,803.06$ tons of coal; No. 2 (Big Vein) employed 8 men, worked 244 days and produced $5,054.05$ tons of coal; No. 3 (Bakerstown) employed 8 men, worked 120 days and produced $2,735.00$ tons of coal.

## MOUNT SAVAGE FUEL COMPANY

Lawrence Barth $\qquad$ Superintendent. John Carter Mine Foreman.

This mine is located at Mt. Savage and is a drift opening on the C. \& P. R. R., working the Brush Creek or Rock seam of coal, and is developed on the double-entry system. Ventilation is produced by an electrically driven fan.

During the year 1927 this mine employed 18 men, worked 258 days and produced $9,925.00$ tons of coal.

## MT. SAVAGE AND GEORGE'S CREEK COAL COMPANY

| H. B. Avery | Mine Foreman. |
| :---: | :---: |
| William Eisel | Asst. Foreman. |
| Melvin Reed | Asst. Foreman. |

Mine No. 1 is located at George's Creek Village, on the main line of the C. \& P. R. R. It is a drift opening working the Brookville or Bluebaugh coal seam. Ventilation is produced by an electrically driven fan located at a shaft 204 feet deep.

During the year 1927 this mine employed 76 men, worked 106 days and produced $26,637.00$ tons of coal.

MT. SAVAGE \& INDEPENDENT FUEL COMPANY
A. D. Martin
Mine Foreman.

This mine is located about 1 mile east of Mt. Savage on the C. \& P. R. R. It is a drift opening working the Bakerstown coal seam. This mine was formerly known as the Potomac \& Cumberland Coal Company.

This mine during the calendar year 1927 employed 9 men, worked 107 days and produced $2,019.00$ tons of coal.

## MT. SAVAGE MINING COMPANY

Jos. Jenkins.........Superintendent and Mine Foreman.
Liberty Mine is located at Mt. Savage on the C. \& P. R. R. It is a drift opening working the Maynadier coal seam. Ventilation is produced by an electrically driven fan.

During the year 1927 this mine employed 29 men, worked 227 days and produced $27,877.18$ tons of coal.

## OLD COLONY COAL COMPANY

Jos. E. Small Mine Foreman.

Nos. 1 and 2 Mines are located at Moscow. They are drift openings working the Bakerstown coal seam. Ventilation is produced by a fan driven by an electric motor.

During the year 1927 this mine was idle.

## PIEDMONT \& GEORGE'S CREEK COAL COMPANY

## Bowery Furnace No. 1

This mine is located at Midlothian, working the Redstone seam of coal. It is located on the C. \& P. R. R. Ventilation is produced by a fan driven by an electric motor.

During the year 1927 this mine was idle.
Bowery Furnace No. 2

| Harry H | Superintendent. |
| :---: | :---: |
| Oscar Huber | Asst. Foreman. |
| James Taylor | Asst. Foreman. |

This mine is located at Midlothian on the C. \& P. R. R., working the Tyson seam of coal. It is developed on the double-entry system and is kept in a lawful condition. Ventilation is produced by an electrically driven fan.

During the year 1927 this mine employed 138 men, worked 257 days and produced $132,025.00$ tons of coal.

## Washington No. 1

| J. A. Cosgrove | .Superintendent. |
| :---: | :---: |
| William Brophy | Mine Foreman. |
| J. J. Kenny. | Mine Foreman. |

This mine is located on the west side of George's Creek near Franklin, on the C. \& P. R. R. It is a drift opening working the Lower Kittanning seam of coal and is developed on the double-entry system. Ventilation is produced by an electrically driven fan. Drainage is by means of pumps and is kept in a lawful condition.

During the year 1927 this mine employed 15 men, worked 158 days and produced $8,038.00$ tons of coal.

Washington No. 2
Martin Condry
This mine is located at Eckhart on the Eckhart Branch of the C. \& P. R. R. It is a drift opening working the Big Vein and Redstone seam of coal.

During the year 1927 this mine was idle.
Washington No. 5
John Wallace .... Mine Foreman.
John Hughes.... Mine Foreman.
This mine is located near Franklin, on the C. \& P. R. R. It is a drift opening working the Bakerstown coal seam and developed on the double-entry system. Ventilation is produced by an electrically driven fan.

During the year 1927 this mine employed 51 men, worked 163 days and produced $34,423.00$ tons of coal.

## O. T. PORTER COAL COMPANY

Oliver T. Porter $\qquad$ Mine Foreman.

This mine is located near Barton and is a wagon mine, supplying domestic trade. It is a drift opening working the Bakerstown coal seam. Ventilation is produced by natural means.

During the year 1927 this mine employed 1 man, worked 211 days and produced $1,320.00$ tons of coal.

$$
\begin{aligned}
& \text { PORTER \& KREITZBURG COAL COMPANY } \\
& \text { Porter Mine } \\
& \text { Marshall Porter-. }
\end{aligned}
$$

This mine is located about 1 mile east of Eckhart Mines and is a wagon mine, supplying domestic trade. It is a drift opening working the Pittsburgh or Big Vein coal seam. Ventilation is by natural means.

During the year 1927 this mine employed 3 men, worked 176 days and produced $1,474.00$ tons of coal.

## M. W. RACE

M. W. Race Superintendent.

The Washington Hollow is a wagon mine located near Eckhart Mines. It is a drift opening working the Pittsburgh or Big Vein coal seam. Ventilation is by natural means.

During the year 1927 this mine employed 3 men, worked 68 days and produced 253 tons of coal.

## REESE HARRIS FUEL MINE

Harris Mine is located at Grahamtown, near Frostburg. It is a drift opening working the Upper Tyson coal seam.

This mine was abandoned several years ago.

## ROBERT GRIFFITH

Robert Griffith $\qquad$ Mine Foreman.

This is known as the New Griffith Mine, the old Griffith Mine having been abandoned during the year 1925, due to encountering faults. It is a wagon mine and is located about 1 mile west of Frostburg.

During the year 1927 this mine employed 4 men, worked 88 days and produced 818.00 tons of coal.

## R. C. ROBERTS COAL COMPANY

Harry Wilson
Roberts Mine No. 1 is located one-half mile northeast of Westernport. It is a drift opening operating in the Bakerstown seam. Ventilation is furnished by a fan driven by gasoline engine and found to be satisfactory.

Roberts Mine No. 2 is located 1 mile northeast of Westernport. It is a drift opening operating in the Bakerstown coal seam. Ventilation is provided by a fan driven by gasoline engine and found to be satisfactory.

During the year 1927 the No. 1 mine employed 8 men, worked 281 days and produced $4,287.00$ tons of coal.

## SCHRAMM \& DAVIS COAL COMPANY

Potomac, Bakerstown, Mine is located on the Hoffa Bros. tram road near Barton. It is a drift opening working the Bakerstown
coal seam. Ventilation is produced by an electrically driven fan, and drainage is by natural means.

During the year 1927 this mine was idle.

## SMITH COAL COMPANY

Speir Mine is a wagon mine located on the east side of George's Creek at Barton. It is a drift opening working the Bakerstown coal seam. Ventilation is produced by a fan driven by gasoline motor and is found to be in a very satisfactory condition.

During the year 1927 this mine was idle.

## STANTON \& GEORGE'S CREEK COAL COMPANY Marshall Stanton.... Mine Foreman.

Stanton's Mine is located on the Eckhart Branch of the C. \& P. R. R., on the west side of Braddock's Run, 1 mile south of Clarysville, along the old National Road. It is a drift opening working the Kittanning seam of coal. Ventilation is by natural means.

During the year 1927 this mine employed 4 men, worked 166 days and produced $1,557.18$ tons of coal.

## SULLIVAN BROS. COAL COMPANY

John Sullivan $\qquad$ Superintendent.
Bernard D. Byrnes $\quad$ Mine Foreman.

Sullivan No. 1 Mine is located near Eckhart, on the Eckhart Branch of the C. \& P. R. R. It is a drift opening working the Upper Sewickley, better known as the Tyson, coal seam, and also the Big Vein coal seam. This mine is developed on the double-entry system. Ventilation is produced by an electrically driven fan and is conducted to the working faces by doors and brattices. During the year 1927 this mine was idle.

Sullivan No. 3 Mine is located on the Eckhart Branch of the C. \& P. R. R. at Clarysville, about 3 miles east of Frostburg. It is a slope opening in the Kittanning coal seam. Ventilation is produced by an electrically driven fan.

During the year 1927 this mine employed 75 men, worked 183 days and produced $47,234.00$ tons of coal.

## SUPPLY COAL COMPANY

Joseph Robertson Mine Foreman.

This mine is located at Barton, on the Hoffa Bros. tram road. It is a drift opening working the Bakerstown coal seam. Ventilation is by natural means. This is a small wagon mine.

During the year 1927 this mine employed 2 men, worked 90 days and produced 798 tons of coal.

UNION MINING COMPANY

## Union No. 4

Joseph Finzel
Albert Deffenbaugh
$\cdots \quad-\quad . \quad$ Superintendent.

This mine is located near Mt. Savage, on the C. \& P. R. R. It is a drift opening and was formerly the old Black Hill Mine. Ventilation is produced by an electrically driven fan and is conducted to the working faces by doors and stoppings.

During the year 1927 this mine employed 48 men, worked 287 days and produced $32,903.36$ tons of coal.

## UNITED BIG VEIN COAL COMPANY

> H. W. Rowe
> Frederick Rowe
> Superintendent. Mine Foreman.

This mine is located west of Mt. Savage, on the C. \& P. R. R. It consists of two drift openings working the Pittsburgh or Big Vein coal seam. It is developed on the double-entry system. Ventilation is produced by an electrically driven fan. Drainage is kept in a lawful condition by natural means and ditches.

During the period of this report the mine was idle.

## VINCENT ENGLE \& SONS COAL COMPANY

Vincent Engle $\qquad$ Mine Foreman.

This is a wagon mine located about 1 mile east of Eckhart. It is a drift opening working the Big Vein coal seam.

During the year 1927 this mine employed 4 men, worked 145 days and produced $1,213.00$ tons of coal.

## WEST VIRGINIA PULP AND PAPER COMPANY <br> Devon Mine

This mine is located at Luke, on a branch of the Western Maryland Railway. It is a drift opening working the Brookville seam. Ventilation is produced by a fan driven by an electric motor.

This mine has been idle for several years.

## WILLIAM H. BARNES FUEL MINE

Barnes Fuel Mine is located at Midlothian, and is a wagon mine. It is a drift opening in the Pittsburgh coal seam. Ventilation is by natural means and the coal is sold to domestic trade. This mine had not been operated for several years, worked during 1926, but was idle during 1927.

## WESTERNPORT COAL COMPANY <br> Mine No. 2

George Dailey Mine Foreman.

This mine is located at Franklin. It is a drift opening working the Bakerstown coal seam. Ventilation is produced by an electric fan. After January, 1927, this mine became known as the Dailey Coal Company.

During January, 1927, this mine employed 22 men and produced 843.00 tons of coal.

## WORKMAN COAL COMPANY

C. O. Workman Mine Foreman.

This is a wagon mine located about 1 mile north of Frostburg. It is a drift opening working the Pittsburgh or Big Vein coal seam. Ventilation is by natural means.

During the year 1927 this mine employed 4 men, worked 184 days and produced 2,338.00 tons of coal.

## DESCRIPTION OF FIRE CLAY MINES IN ALLEGANY COUNTY CALENDAR YEAR 1927

## THE ANDREW RAMSAY FIRE CLAY COMPANY

> Henry Lowery.... Mine Foreman.

Ellerslie Mine is located about 2 miles southwest of Ellerslie and is a drift opening working the fire-clay seam. Ventilation is by natural means. The mine is located on the Baltimore \& Ohio Railroad.

During the year 1927 this mine employed 5 men, worked 250 days and produced $1,271.00$ tons of fire clay.

## BIG SAVAGE FIRE BRICK COMPANY

Clarence Raley
Mine Foreman.
These mines are located on the Big Savage Mountain, about 3 miles northwest of Frostburg. It is a drift opening working the fire-clay seam. Ventilation is produced by natural means.

During the year 1927 this mine employed 16 men, worked 268 days and produced $9,130.19$ tons of fire clay.

## SAVAGE MOUNTAIN FIRE BRICK COMPANY

G. A. Shuckhart
Superintendent. Charles Wolfe $\qquad$ Mine Foreman.

This mine is located about 3 miles northwest of Frostburg. It is a drift opening working the fire-clay seam. Ventilation is by natural means.

During the year 1927 this mine employed 19 men, worked 250 days and produced $10,514.06$ tons of fire clay.

## UNION MINING COMPANY

| Joseph Finzel | Superintend |
| :---: | :---: |
| William Werner | Mine Foreman. |
| William Baker. | Mine Foreman. |

This Company's fire-clay mines are located about 3 miles west of MIt. Savage, on Savage Mountain. They are drift openings working the fire-clay seam. Ventilation is produced by a fan.

During the year 1927 production was as follows: Opening No. 6 employed 72 men, worked 234 days and produced 25,145.16 tons of fire clay; Opening No. 7 employed 20 men, worked 204 days and produced $10,571.10$ tons of fre clay; Opening No. 1 employed 7 men, worked 164 days and produced $2,007.05$ tons of fire clay; Opening No. 10 employed 16 men, worked 39 days and produced $1,742.14$ tons of fire clay.

# DESCRIPTION OF MINES IN GARRETT COUNTY CALENDAR YEAR 1927 

## ABERDEEN COAL COMPANY

Steyer Mine is an opening in the Kittanning seam, located on the Western Maryland Railway at Steyer. Ventilation is produced by a fan driven by a gasoline motor.

During the year 1927 this mine was idle.

## W. D. ALTHOUSE \& COMPANY

J. T. Jordan Mine Foreman.

Georgian Mine is located about 1 mile west of Gorman. It is a drift opening working the Freeport coal seam. Ventilation is produced by a fan driven by an electric motor.

On December 1, 1927, this mine was taken over by the Big Vein Coal Company of Lonaconing, Inc., Lonaconing, Md.

During the first 11 months of 1927, while still known as W. D. Althouse \& Company, this mine employed 32 men, worked 225 days and produced $24,152.03$ tons of coal.

During December, 1927, while known as the Big Vein Coal Company of Lonaconing, Inc., this mine employed 40 men, worked 22 days and produced $2,537.00$ tons of coal.

## BLOOMINGTON COAL COMPANY

Brookville Mine is an opening in the Brookville seam on the main line of the Baltimore \& Ohio Railroad near Bloomington, Md.

During the year 1927 this mine was idle.

## BLOOMINGTON COAL COMPANY

Mine No. 4 is an opening in the Kittanning or Davis Six Foot seam on the main line of the Baltimore \& Ohio Railroad near Bloomington. Ventilation is produced by a fan.

During the year 1927 this mine was idle.

## BOYD MINING COMPANY

George Boyd Superintendent. George Campbell Mine Foreman.

Mines Nos. 1 and 2 are located at Potomac Manor, on the west side of the Potomac River, on the main line of the Western Mary-
land Railway. They are drift openings working the Lower Kittanning coal seam, and are developed on the double-entry system. Ventilation is produced by a 12 -foot fan. This was formerly the Blaine Mining Company.

During the year 1927 this mine employed 56 men, worked $1001 / 2$ days and produced 25,049.00 tons of coal.

## CASS COAL COMPANY

Cass Mines Nos. 1 and 2 are openings in the Upper Freeport seam, located near Crellin on the Kendall Branch Railway. Ventilation is by natural means.

During the year 1927 this mine was idle.
CASSELMAN VALLEY COAL MINING COMPANY
R. Wilburn $\qquad$ Mine Foreman.

This mine is located on the Casselman Valley Railroad, near Jennings. It is a drift opening working the Bakerstown coal seam. Ventilation is produced by natural means.

During the year 1927 this mine was idle.

## DAVIS COAL AND COKE COMPANY

Kempton No. 42
Robert Gibbs
Mine Foreman.
E. G. King Assistant Foreman.
L. M. Hellyer

Fire Boss.
Mike Morris
Fire Boss.
Albert King
Fire Boss.
This mine is located at Kempton. It is a shaft opening working the Lower Kittanning coal seam. Ventilation is produced by an approved fan driven by an electric motor. Drainage is kept in a lawful condition by means of pumps.

During the year 1927 this mine employed 186 men, worked 221 days and produced $215,476.00$ tons of coal.

EARL FAZENBAKER
Earl Fazenbaker. $\qquad$ Mine Foreman.

This is a wagon mine and is a drift opening in the Pittsburgh or Big Vein coal seam, and is located 5 miles northeast of Westernport. Ventilation is by natural means.

During the year 1927 this mine was idle.

# ELK RUN COAL COMPANY <br> (Formerly Monroe Coal Mining Company) 

Elk Run Mines Nos. 1 and 3 are located at Barnum, on the west side of the Potomac River, on the main line of the Western Maryland Railway. They are drift openings working the Bakerstown and Lower Kittanning coal seams. Ventilation is produced by fans driven by a steam engine.

During the year 1927 this mine was idle.

## GEORGE MORELAND <br> Table Rock Mine

George Moreland $\qquad$ Mine Foreman.

This is a wagon mine and is a drift opening in the Kittanning seam, located 5 miles from Gorman, Md. It is a fuel mine.

During the year 1927 this mine employed 1 man, worked 62 days and produced 471.00 tons of coal.

HAMILL COAL \& COKE COMPANY<br>J. J. Walker (-_- Mine Foreman (Kittanning Mine)<br>William Hartley ..........Mine Foreman (Freeport Mine)

These mines are located about 1 mile south of Kitzmiller, on the main line of the Western Maryland Railway. They consist of two openings working the Kittanning and Freeport coal seams. Ventilation is produced by a fan.

During the year 1927 the Freeport Mine employed 38 men, worked 183 days and produced $27,827.00$ tons of coal. The Kittanning Mine employed 70 men, worked 183 days and produced $50,923.00$ tons of coal.

## McCULLOUGH COAL CORPORATION

Chris. Roberts. Superintendent and Mine Foreman.

McCullough Mine is located at Friendsville. It is a drift opening working the Kittanning coal seam. Ventilation is produced by an electrically driven fan and is conducted to the working faces by doors, stoppings and overcasts, and is usually in a very good condition. This mine is located on the Kendall Branch of the Baltimore \& Ohio Railroad.

During the year 1927 this mine employed 33 men, worked 225 days and produced $36,787.00$ tons of coal.

## McMAHON BROS.

Yoder Mine
Leonard Shaffer
Mine Foreman.
Yoder Mine is located about 1 mile east of Grantsville. It is a wagon mine and is a drift opening working the Freeport coal seam. Ventilation is by natural means.

During the year 1927 this mine was idle.
MANOR COAL COMPANY
Mine No. 1
R. E. Diveley $\qquad$ Mine Foreman.

This mine is located at Vindex, on the Chaffe R. R., about 3 miles east of Kitzmiller. It is a drift opening working the Lower Kittanning coal seam. Ventilation is produced by an electrically driven fan.

During the year 1927 this mine employed 85 men, worked 206.5 days and produced $74,999.00$ tons of coal.

> MANOR COAL COMPANY
> Mine No. 2
R. E. Diveley $\qquad$ Mine Foreman.

This mine is located at Vindex, on the Chaffe R. R., about 3 miles east of Kitzmiller. It is a drift opening working the Clarion seam of coal. Ventilation is produced by an electrically driven fan.

During the year 1927 this mine employed 42 men, worked 76 days and produced $18,287.00$ tons of coal.


Yommer Mine of this Company is located on the Casselman Valley Railroad, near Jennings, Md. It is a drift opening working the Bakerstown or Honeycomb coal seam. Ventilation is produced by a fan driven by a gasoline motor.

During the year 1927 this mine was idle.

MELVIN WEIMER
Melvin Weimer. Mine Foreman.

This is a small wagon mine located near Oakland. It is a drift opening working the Lower Freeport coal seam. Ventilation is by natural means. This coal is mined for domestic use.

During the year 1927 this mine employed 3 men, worked 103 days and produced 612.00 tons of coal.

MEYERS COAL COMPANY
Norman Patton
Mine Foreman.
J. A. Beachy. Mine Foreman.

Beachy Mine is a wagon mine located about one-half mile west of Grantsville. It is a drift opening working the C-Prime coal seam. Ventilation is by natural means and complies with the law.

During the year 1927 this mine employed 9 men, worked $1971 / 2$ days and produced $8,371.04$ tons of coal.

## (EZRA) MICHAELS COAL COMPANY

Ezra Michaels
Mine Foreman.
This is a wagon mine opening in the Bakerstown coal seam, located about $11 / 2$ miles above Reynolds, on Mill Run. Ventilation is produced by a fan driven by a gasoline motor.

During the year 1927 this mine employed 2 men, worked 179 days and produced $1,440.00$ tons of coal.

## R. W. MILLER COAL MINES

R. W. Miller $\qquad$ Mine Foreman.

This mine is located about 3 miles northwest of Grantsville, on the Jennings Branch Railroad. It is a drift opening working the Bakerstown coal seam. Ventilation is by natural means.

During the year 1927 this mine was idle.
MILLER \& COLLINS
(Formerly A. G. Shrout)
This is an opening located 3 miles west of Oakland. Ventilation is by natural means. It is a fuel mine and the coal is delivered by wagon.

During the year 1927 this mine employed 2 men, worked 10 days and produced 60.00 tons of coal.

## MORGART COAL MINING CORPORATION

| Louis A. Morga | Superintendent. |
| :---: | :---: |
| Arch Stewart | Mine Foreman. |
| W. J. Kyle | Mine Foreman. |

Mines 1, 2 and 5 are located about 1 mile west of Jennings, on the Jennings Branch Railroad, working the Bakerstown and the Upper Freeport coal seams. Ventilation is produced by fans driven by gasoline motors and is found in a satisfactory condition.

During the year 1927 these mines were idle.

> G. C. PATTISON

George Brandlen Mine Foreman.

Pattison Mines Nos. 1 and 2 are drift openings in the Bakerstown and Kittanning coal seams, located near Bloomington, on the main line of the Baltimore \& Ohio Railroad. Ventilation is by natural means.

During the year 1927 this mine employed 5 men, worked 53 days and produced $1,122.17$ tons of coal.

## PENDERGAST \& ASHBY

Mine No. 1 is located near Crellin, on the Kendall Branch Railroad. It is a drift opening working the Lower Kittanning coal seam: Ventilation is produced by a fan driven by a gasoline motor and is found in a very satisfactory condition.

During the year 1927 this mine was idle.

## PENN-MARYLAND COLLIERIES, INC.

W. H. Cutchall

Mine Foreman.
Nethkin Mine is a drift opening in the Freeport coal seam, located one-half mile east of Bayard, W. Va., and is developed on the double-entry system. Ventilation is produced by a fan driven by electric motor. This mine was originally known as the McKanwig Coal Company, after which it became known as Cutchall and Gates, finally by the above name.

During the year 1927 this mine employed 24 men, worked 200 days and produced 17,993.14 tons of coal.
POTOMAC FUEL \& SUPPLY COMPANY (Formerly Garrett County Coal and Mining Co.)

> William Lemon..._- Mine Foreman. Owen Keegan.

Dodson Mines Nos. 1, 3, 6 and 8 are located at Dodson, on the main line of the Western Maryland Railway. It consists of four drift openings working the Kittanning coal seams. Ventilation is produced by approved fans. During the period of this report Opening No. 3 was abandoned and No. 8 was opened in the Upper Kittanning.

During the year 1927 these mines were idle.

# POTOMAC VALLEY COAL COMPANY <br> Louise Mine 

Dan. Walker, Sr.................. Mine Foreman.
Louise Mine is located on the Chaffee Branch Railway. It is a drift opening working the Lower Kittanning coal seam.

During the year 1927 this mine was idle.

## POTOMAC VALLEY COAL COMPANY <br> Peerless Mine

Dan. Walker, Sr....

This mine is a drift opening in the Freeport seam, located 1 mile east of Blaine, W. Va., on the Western Maryland Railway. Ventilation is produced by a 12 -foot fan driven by a steam engine, and is found to be satisfactory.

During the year 1927 this mine was idle.

## R. J. ROSS COAL MINES, INC.

| L. R. Kight. | Superintendent |
| :---: | :---: |
| Luther Evans | Mine Foreman. |
| J. P. Guy. | Mine Foreman. |

This mine is located near Bloomington, on a branch of the Western Maryland Railway. It is a drift opening working the Bakerstown coal seam. Ventilation is produced by a fan driven by an electric motor.

During the year 1927 this mine employed 105 men, worked 264 days and produced $97,393.01$ tons of coal.

## RYLAND COAL COMPANY

This Company is operating a small fuel mine located at Friendsville, Md. The coal is used for domestic trade.

During the year 1927 this mine employed 2 men and produced 418:00 tons of coal.

## H. B. SMITH COAL COMPANY



This is the Trout Mine leased from the Hamill Coal \& Coke Company, and has two openings. It is located at Vindex, on the Chaffee Branch Railroad, working the Kittanning and Clarion seams of coal. The Clarion seam has not been worked for several years.

During the year 1927 this mine employed 3 men, worked 16 days and produced 450.00 tons of coal.

## STANDARD COAL COMPANY

Standard No. 1 is a drift opening in the Clarion seam, located on the Chaffee Branch Railroad, 1 mile east of Chaffee. Ventilation is produced by a fan driven by a gasoline motor.

During the year 1927 this mine was idle.

> C. E. STANTON COAL COMPANY
C. E. Stanton. Mine Foreman.

This mine is located at Jennings, on the Casselman Valley Railroad. During the year 1927 this mine was idle.

## SHALLMAR MINING CORPORATION

| J. B. James | Mine Foreman. |
| :---: | :---: |
| eorge Parris | Mine Forem |

This mine was formerly known as the Wolf Den Coal Company, but in December, 1927, changed to the name of Shallmar Mining Corporation. For description please see Wolf Den Coal Company in this report.

During the period known as above (December, 1927) this mine employed 122 men, worked 8 days and produced $4,880.00$ tons of coal.

## A. G. SHROUT

This mine is now known as Miller \& Collins, and a description will be found under that name, it having changed hands in January, 1927.

During the period it was known as A. G. Shrout Mine, there was employed 1 man, the mine worked 23 days and produced 51.00 tons of coal.

## U. M. STANTON COAL MINES

U. M. Stanton Mine Foreman.

This mine is located on the Casselman Valley Railroad, near Jennings, Md. It is a drift opening working the Bakerstown or Honeycomb coal seam.

During the year 1927 this mine was idle.


This mine is located near Jennings, on the Casselman Valley Railroad. It is a drift opening working the Bakerstown or Honeycomb coal seam. Ventilation is produced by a fan driven by a steam engine, and is conducted to the working faces in a lawful manner.

During the year 1927 this mine was idle.

## WOLF DEN COAL COMPANY

| Howard Marshall | Superintendent. |
| :---: | :---: |
| J. B. James | Mine Foreman. |
| George D. Pa | t Mine Foreman. |

This mine is located at Shallmar, on the Western Maryland Railway. It is a drift opening working the Upper and Lower Kittanning coal seams. Ventilation is produced by a large fan driven by an electric motor. Drainage and timbering are well looked after. The general condition of the mine is good.

December 1, 1927, the name of this Company was changed to Shallmar Mining Corporation.

During the period this mine was known as Wolf Den Coal Company, January to November, 1927, inclusive, it employed 105 men, worked 212 days and produced 106,285.13 tons of coal.

## YOUGH COAL COMPANY

Yough No. 1 is a drift opening operating in the Clarion seam of coal located near Crellin, on the Kendall Railway. Ventilation is produced by a fan driven by a gasoline engine.

During the year 1927 this mine was idle.

## PROSECUTIONS, CALENDAR YEAR 1927

A complaint was filed against a miner for violation of cage permit. The defendant was tried in the Justice Court and found guilty. As he had been confined in the County Jail for three days, he was fined $\$ 1.00$ and costs, making a total of $\$ 10.50$ and three days in jail.

A complaint was filed before a Justice of the Peace against a miner for changing and removing checks on miners' cars. The defendant was never apprehended, and is still out of the jurisdiction of the Court.

Complant was made on September 15th, 1927, by the District Mine Inspector of the action of a motorman, brakeman and one other underground employe for pushing a trip of empty cars during the night shift through a door and leaving the door open all night and tearing down a canvas curtain. All three men were working on the night shift. Warrants were served on the above-mentioned men and they appeared before the Judge in the People's Court at Frostburg and pleaded guilty. The Court suspended the fine of $\$ 100.00$ and the men were released on payment of the costs in the case.

## SAFETY ORDERS, CALENDAR YEAR 1927

On December 27, 1927, a Special Safety Order was issued regarding the ventilation of a certain Big Vein Mine and the making of a second opening to the outside for the location of a fan. This order was complied with without the necessity of resorting to Court action.

## MINE RESCUE AND FIRST AID

As in the past, the Bureau has cooperated with the operators and the United States Bureau of Mines in giving instruction in Mine Rescue and First Aid. Mine Rescue and First Aid were taught during the Short Course for Coal Mine Employees by District Mine Inspector Watkins, and as in the past to other mine employees by employees of the United States Bureau of Mines, as well as by the First Aid miners and safety engineers in the employ of The Consolidation Coal Company.

MT. SAVAGE, MD.
Trained at Mt. Savage, Md., October 10-14, 1927, by Thomas F. Brown.
Additional Training

| Name and Occupation | Company |
| :---: | :---: |
| Raymond Boore, Miner | nion Mining Co. |
| Henry E. Burkhart, Miner | Union Mining Co. |
| Frank Snyder, Miner. | Union Mining Co. |
| Marshall Snyder, Miner | Union Mining Co. |
| Albert C. Rice, Miner. | Union Mining Co. |
| Henry Sotz, Miner. | Union Mining Co. |
| Dan Williams, Painter | Union Mining Co. |
| Edward Carter, Trip Rider | Union Mining Co. |
| Albert Deffenbaugh, Mine Forem | Union Mining Co. |
| Thomas Machin, Mine Forema | Union Mining Co. |
| Patrick O'Tighe, Miner. | Mt. Savage Mining Co. |
| Daniel Miller, Miner | Mt. Savage Mining Co. |
| William Snyder, Miner | Mt. Savage Mining Co. |
| Charles Grady, Miner | Mt. Savage Mining Co. |
| Norman T. Boore, Mine | Mt. Savage Mining Co. |
| John Nolan, Miner | ...Union Mining Co. |
| William Norriss, Machin | Union Mining Co. |
| John Deffenbaugh, Machinist | Union Mining Co. |
| James Worton, Miner. | Mt. Savage Mining Co. |
| Frank Stowell, Miner. | Mt. Savage Mining Co. |
| Perry Assna, Miner. | Mt. Savage Mining Co. |
| Harry Dunn, Miner. | .Mt. Savage Mining Co. |

Combination
Joseph M. Brailer, Miner................................................................................ Savage Mining Co.
John Carter, Foreman.... Mt. Savage Fuel Co.
Gilbert M. Machin, Miner. Union Mining Co.

* Joseph J: Jenkins, Mine Foreman Mt. Savage Mining Co.
*Edward A. Stowell, Miner. Union Mining Co.

*John J. Henaghan, Driver...
Union Mining Co.
*Additional-Combination.

First Aid

William M. House, Miner...........................................................................Union Mining Co.
M. David Morgan, Miner.......................................... Savage \& George's Creek Mining Co.

Hugh J. McKenzie, Miner..................................................................................................... Mining Co.


Lewis D. Neubeiser, Miner.
Union Mining Co.
Roy Chee, Miner. Consolidation Coal Co., No. 10
Eugene R. Miller, Miner.
Aden J. Lavin, Miner.
Mt. Savage Fuel Co.


Trained at Lonaconing, Md., October 17-21, 1927, by Thomas F. Brown.

Additional Training
Name and Occupation

Patrick J. Creegan, Laborer... $\underbrace{}_{-}$

Richard Hawkins, Foreman.................................................. 1
Allan Ravenscroft, Driver.
J. Frank Quinn, Mine Foreman

John P. Stephenson, Mine Clerk
Robert K. Todd, Mine Foreman
George's Creek Coal Co., Inc. George's Creek Coal Co., Inc.
Thomas J. Fitzhugh, Miner- George's Creek Coal Co., Inc.

Lawrence Dunn, Miner. George's Creek Coal Mining Co.
Simeon H. Duckworth, Jr. $\qquad$


William Brodie, Miner........................................................... Creek Coal Co., Inc.


William H. Thomas, Miner.........................................................Consolidation No. 1
James Phillips, Sr., Miner...-a)

Combination
John G. Powers, Timberman_-George's Creek Coal Mining Co.
*Walter Kallmyer, Foreman.
Koontz Coal Co.
*Richard Moffatt, Foreman
George's Creek Coal Co., Inc.

Harry Beeman, Miner..............................................Big Vein Coal Co. of Lonaconing
*Simeon Duckworth, Sr., Miner. Maryland Coal Co.
*Additional-Combination.

First Aw
John Elliot, Miner.
George's Creek Coal Co., Inc.
W. O. Jones, Miner

Troxel Warnick, Motorman
..George's Creek Coal Mining Co.
Foster Fresh, Timberman.
George's Creek Coal Co., Inc.
Ambrose Fitzpatrick, Miner.
Consolidation No. 1
Robert V. Hunt, Miner
Consolidation No. 1
Consolidation No. 1
Harry Sulser, Laborer. Consolidation No. 1
William H. Neff, Miner.................................................. Creek Coal Co., Inc.
Arch Stewart, Miner.......................................................
James Phillips, Jr., Glass Worker.
Miner's Son
Alexander Barclay, Miner Maryland Coal Co.
John Barclay, Miner
John Steel, Miner Maryland Coal Co.
Wilford J. Moyer, Miner.
Koontz Coal Co.
George's Creek Coal Co., Inc.

## Mine Rescue Only

John P. Smith, Foreman
Simeon Whiteman, Laborer.............................................

FROSTBURG, MD.
Trained at Frostburg, Md., October 31-November 4, 1927, by Thomas F. Brown.
Additional
Name and Occupation CompanyConsolidation No. 17
Frank W. Carter, Foreman Consolidation No. 10
Henry W. Rizer, Miner Consolidation No. 9
William H. Rephorn, Mine Clerk Consolidation No. 4
Clarence J. Powers, Asst. Foreman Consolidation No. 10
Henry Lloyd, Miner Consolidation No. 12
John N. Powers, Laborer Consolidation No. 12
Thomas Gracie, Miner Consolidation No. 10
William Allen, Brakeman Consolidation No. 10
William Horton, Driver Consolidation No. 12
*Victor Meagher, Brakeman Consolidation No. 10
Archie Davis, Laborer Consolidation No. 10
Robert L. Edwards, Foreman Consolidation No. 12
*Robert Ewing, Foreman ..... Consolidation No. 17
James Ritchie, Miner Consolidation No. 10
Charles Wolfe, Foreman ..... Savage Mountain Fire Brick Co.
Frank Madero, Laborer Consolidation No. 10
William J. Donahue, Foreman Consolidation No. 10
James A. Weisenborn, Foreman Consolidation No. 9
Joseph Metzner, Tippleman Consolidation No. 3
Harry B. Davis, Mine Clerk Consolidation No. 10
*Thomas B. Powell, Mining Engineer ..... Consolidation Coal Co. Office
C. Walter Hars, Mine Clerk Consolidation No. 3
George Taylor, Yard Foreman Consolidation No. 10
George M. Richardson, Foreman Consolidation No. 4
William H. Simpson, Electrician Consolidation No. 12
*Albert L. Simpson, Electrician Consolidation No. 9
Harry A. Schurg, Miner ..... Annan \& Jeffries
Eugene Stevens, Miner Annan \& Jeffries
James Close, Mine Foreman Consolidation No. 1
Arthur Meek, LaborerConsolidation No. 12
Allan Dennison, Miner Consolidation No. 9
Harry C. Hitchins, Mine Foreman. Piedmont \& George's Creek Coal Co.
Alexander C. Neal, Mine Foreman Consolidation No. 3
Clyde J. Rowe, Mine Foreman. ..... Consolidation No. 10
Chris. Walbert, Miner Consolidation No. 9*Advanced Mine Rescue, week of November 7th.
First Aid
Leo McNeil, Foreman Midlothian Coal Co.
John F. Manley, School Teacher Board of Education, Allegany County
William Walbert, Miner Consolidation No. 9
John S. Davis, Miner Coldation No. 12
George Wellings, MinerConsolidation No. 9
Samuel Cosgrove, Miner. Consolidation No. 9
Davis E. Harriman, Miner Consolidation No. 10
John Perbaugh, Miner. ..... Consolidation No. 9
Theodore Davis, Pumpman Consolidation No. 12
Lloyd Davis, LaborerConsolidation No. 3
William Lancaster, Miner ..... Consolidation No. 9
Milton Lohr, Carpenter Consolidation No. 9
William T. Porter, Motorman Consolidation No. 10

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| John W. Laslow, Electrician.--*. |
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| James McKee, Miner - ${ }_{\text {a }}$ |
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| Hugh Muir, Miner.... |
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| Daniel Cullen, Miner ${ }_{\text {a }}$ ( ${ }_{\text {a }}$ |
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| Thomas Higgins, Brakeman .-- Piedmont \& George's Creek Coal Co. |
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| Lee Barnett, Miner.....................................Piedmont \& George's Creek Coal Co. |
| Combination |
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| Joseph G. Martin, Superintendent...*) |
| William McKee, Motorman |
| First Aid and Comb |
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| rst Aid and Combination, also Advanced Mine Rescue, week Nov. |

## FROSTBURG, MD.

Trained at Frosthurg, Md., November 7-11, 1927, by R. S. Corbin.
First Aid
Name and Occupation Company
Bray Thompson, Clerk Consolidation Coal Co.
Peter Granato, Miner Consolidation Coal Co.
Joe Greco, Trackman Consolidation Coal Co.
Samuel Repol, Miner Consolidation Coal Co.
George Truly, Electrician



FINZEL, MD.
Trained at Finzel, Md., November 14-18, 1927, by Thomas F. Brown.

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| :---: | :---: |
| upation | Company |
| orin Nickel, Miner....o. |  |
| illiam Baker, Forema | ion Mining C |
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| Clyde Baker, Miner..... |  |
| Clem McKenzie, Miner <br> Roy E. Crowe, Miner $\qquad$ Union Mining Co. |  |
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| George Finzel, Miner...-n-u- |  |
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| Lester Snyder, Labor | Union Mining Co. |
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| Arthur Baker, Miner Charles Baker, Miner |  |
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| Charles Baker, Miner |  |
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First Aid
Jonas Layman, Miner Union Mining Co.
Cecil Larue, Miner Union Mining Co.
Carl Hastetler, Miner Union Mining Co.
Wesley Wilhelm, Miner Union Mining Co.
Howard Wagner, Miner. Union Mining Co.
Cecil Warner, Student
Edward Clark, Foreman Union Mining Co.
Arthur Clark, Miner Union Mining Co.
Melvin Yutzy, Miner. ..... Union Mining Co.
Albert Clark, Miner Union Mining Co.
Calvert Klink, Miner. Union Mining Co.
Frank Baker, Miner's Son
Arch Wolfe, Miner Savage Mountain Fire Brick Co.Albert Werner, Painter.Self
Oscar Larue, Miner Mt. Savage \& George's Creek Coal Co.
James McKenzie, Miner Big Savage Fire Brick Co.
Carl McKenzie, Miner. Big Savage Fire Brick Co.
John R. Werner, Store Manager. ..... Self
Nelson Werner, Farmer. ..... Self
Raymond Crowe, Student Miner's Son
Albert McKenzie, Student ..... Miner's Son
Ervin McKenzie, Student ..... Miner's Son
Carl Baker, Student. ..... Miner's Son
John Karol, Farmer.Joseph Knepp, StudentMiner's Son
Gerald Bear, Farmer.Willard Crowe, Student.Miner's Son
FROSTBURG, MD.
The following men received Mine Rescue Training at Frostburg, Md., duringthe week of October 31 to November 4, 1927, instruction being givenby Messrs. R. D. Corbin and Thomas F. Brown of theU. S. Bureau of Mines.

Name and Occupation
Robert Walsh, Laborer
Robert Brown, Laborer
Joseph Cavey, Miner
Philip Hartig, Jr., Engineer
Thomas McKernan, Engineer.
Arthur Vogtman, Mine Clerk
Clifton Hitchins, Electrician
James O. Spiker, Miner.
Joseph G. Martin, Superintendent.
William McKee, Motorman
Thomas Gracie, Brakeman
John Barry, Foreman.
George Tipping, Miner.

Company
Sullivan Bros. Coal Co. Sullivan Bros. Coal Co. Consolidation Coal Co., No. 12 Piedmont \& George's Creek Coal Co. Piedmont \& George's Creek Coal Co. Piedmont \& George's Creek Coal Co. Piedmont \& George's Creek Coal Co. Consolidation Coal Co., No. 3 Marva Coal Co. Consolidation Coal Co., No. 16 Consolidation Coal Co., No. 4 Consolidation Coal Co., No. 4 Consolidation Coal Co., No. 3

## KITZMILLER, MD.

The following men received Mine Rescue Training at Kitzmiller, Md., during the week of November 28 to December 3, 1927, instruction being given by Mr. Corbin of the U. S. Bureau of Mines.


ECKHART, MD.
Trained by Thomas Brown November 7-11, 1927.

| First Ai |  |
| :---: | :---: |
| ne and Occupation |  |
| uis E. Connor, Miner. | lidation No. 10 |
| aymond Miller, Mine | olidation No. 10 |
|  |  |
| Bernard W. Connelly, Laborer-...........- Consolidation No. 10 |  |
| Dewey Blank, Miner <br> Thomas Eckhart, Laborer $\qquad$ Consolidation No. 4 <br> Wilbert Williams, Miner. Consolidation No. 10 |  |
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| Samuel Meyers, Student. |  |
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| William Pape, Laborer | Consolidation No. 10 |
| John Neil, Miner | Consolidation No. 10 |
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| Joseph Groter, Motorman $\qquad$ Consolidation No. 10 <br> Robert Pyan, Miner Consolidation No. 10 |  |
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| Henry E. Weisenborn, Coal Inspector Consolidation No. 10 William Feldman, Laborer. $\qquad$ Consolidation No. 10 |  |
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| Additional Training |  |
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| James A. Weisenborn, Foreman $\qquad$ Consolidation No. 9 George Taylor, Foreman $\qquad$ Consolidation No. 10 |  |
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| Andrew Penman, Timberman <br> Henry Pape, Miner $\qquad$ Consolidation No. 4 $\qquad$ Consolidation No. 10 |  |
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| additional and Advanced Mine Rescue |  |
| Frank W. Carter, Forema | Consolidation No. 10 |
| William Rephorn, Mine Clerk |  |
| James Close, Foreman |  |
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| Jacob Seibert, Mine Laborer..................................................Consolidation No. 10 |  |
| Albert C. Sandrik, Miner-- ${ }_{\text {- }}$ |  |
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## WESTERNPORT, MD.

November 14-19, 1927.

Name and Occupation
Earl C. Kalbaugh, Mine Foreman
Sherdan Evans, Laborer
Guy McKenzie, Motorman
*Luther Evans, Foreman.
Henry A. Guy, Motorman.

Company
Campbell Coal Co. . J. Ross Coal Mines, Inc. R. J. Ross Coal Mines, Inc.
R. J. Ross Coal Mines, Inc. R. J. Ross Coal Mines, Inc.
**Thos. Swan; Foreman James W. Barnard, Laborer John F. Guy, Trackman.
Ben S. Mellon, Blacksmith
Theo. Evans, Driver.
Jos. P. Guy, Foreman
R. J. Ross Coal Mines, Inc.
*Howard Sutherland, Electrician .........................Piedmont \& George's Creek Coal Co.
Andrew J. Whetzel, Miner.
*Wm. S. Barnard, Foreman......................................................................
Paul E. Fazenbaker, Motorman....................................................................... Coal Mines, Inc.
Edward T. Gales, Driver...................................................................................
Russell Ross, Clerk $\ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ C o a l ~ M i n e s, ~ I n c . ~$
Lewis R. Kight, Superintendent................................................................................ Coal Mines, Inc.
John Rankin, Foreman.
William L. Ross, Miner's Son.
Oliver Crowe, Miner's Son.
George Crowe, Foreman
J. W. Fisher.
$\qquad$ R. C. Roberts Coal Co.

Campbell Coal Co. School Board
James Satino, Miner.
Joseph Kight, Motorman................................................................. Ross Coal Mines, Inc.
John Wallace, Foreman...............................................
James Treman, Laborer................................................................................. Coss Coal Mines, Inc.

Jess Smith, Machine Runner.
Albert kiggleman, Laborer....................................................................
Howard Trenum, Laborer ...........................................................................................
*Ed. D. Beaver, Coal Miner................................................................................................
 *Combination.
**Mine Rescue.

> BAYARD, W. VA.
> Week of November $21-25,1927$.

## Name and Occupation

Charles E. Miller, Miner.......................................................
Vincent H. Casey, Miner.
Wesley S. Michaels, Miner.
Edward Williams, Driver...


Homer Kitzmiller, Miner..............................................Emmons Coal Co., Bayard, W. Va.

Oliver M. Miller, Miner.......................................................
Zellie L. Moyer, Miner.................................................................................. Bmons Coal Co., Bayard, W. Va.
Jacob W. Carr, Trackman........................................................................... Bayard, W. Coal Co.,
*David McKinley, Mine Foreman..............................
Claude Shaffer, Laborer..............................................................

Frank F. Cline, Motorman...........................................................Maryland Collieries, Inc.


*Walter H. Cutchall, Mine Foreman...........................................................
**Frank Funk, Miner.
Emmons Coal Co., Bayard, W. Va.
Robert Guthries, Miner.
**Raymond Kisner, Miner. The above training was given by Mr Go....................... of Mines.
*Combination.
**Mine Rescue.

## BARTON, MD.

Week of October 24-29, 1927.
Conducted by Mr. Brown of the U. S. Bureau of Mines.
Name and Occupation
Company
John Bradley, Foreman Big Vein Coal Co. of Lonaconing
*Joseph Shuhart, Foreman.
*Chester Hyde, Foreman McDonald Coal Co.

Robert T. Myer, Laborer. Hoffa Bros. Coal Co.

Cecil Broadwater, Miner.
Carson Thomas, Foreman.
Matthew Fitzgerald, Laborer.
David Clark, Laborer
Reginald Kyle, Laborer
Charles Duckworth, Weigh Boss.
Kinsley McDonald, Clerk
Gilbert C. Cooling, Principal
Dewey Powell, Student
George McVicker, Laborer.
Charles E. Symons, Laborer.
Harmon B. Arnold, Weigh Boss
William H. Hyde, Superintendent.
Randolph Ashby, Superintendent.
Curtis Griffith, Miner.

* Arthur Hoffa, Operator.
*Adam F. Laupert, Motorman
James Gatten Miner $\quad$ Can
James Gatten, Miner........................................................................ampbell Coal Co.
Thomas Mowbray, Miner.......................................................................
C. M. Inskeep, Miner
**C. Smith, Miner.
**Samuel Neat, Miner.
**Joseph Robinson, Miner
**Simon Duckworth, Miner.
**Walter Beeman, Miner $\qquad$
*Combination.
**Mine Rescue.

Hope Coal Mining Co. Chapman Coal Mining Co. Moscow \& George's Creek Mining Co. Hoffa Bros. Coal Co.
Big Vein Coal Co. of Lonaconing MeDonald Coal Co.
Chapman Coal Mining Co. McDonald Coal Co.

High School
Chapman Coal Mining Co. ..Campbell Coal Co.
Big Vein Coal Co. of Lonaconing
$-\quad$ Hoffa Bros. Coal Co.
Chapman Coal Mining Co.
Chapman Coal Mining Co. Hoffa Bros. Coal Co.

Chapman Coal Mining Co. Hoffa Bros. Coal Co. Big Vein Coal Co. of Lonaconing - Campbell Coal Co.

Big Vein Coal Co. of Lonaconing

## STATE MINE EXAMINING BOARD

## Examinations of August 23-24, 1927

## FIRST CLASS CERTIFICATE OF COMPETENCY

$\qquad$
SECOND CLASS CERTIFICATE OF COMPETENCY
339-Atkinson, Edward G.................................................................................aconing

341—Barnard, William S. ..-.


344-Carter, Edward H....
345—Duckworth, Charles J......................................................................................Barton




364-Stowell, Edward A..-(



374—Hoffa, Arthur P..................................................................................................Barton


378—Smith, Leslie ................................................................................................Barton

## FIRE BOSS CERTIFICATES



## REPORT OF THE NIGHT CLASSES IN MINING

For the Period September 20, 1926, to May 13, 1927
L. C. Hutson

Vocational Mining Instructor.

## ORGANIZATION AND SCHEDULE

The classes were organized and conducted at the following points, beginning September 20th, 1926, and closing on May 13, 1927 :

| Monday Night. | Savage |
| :---: | :---: |
| Tuesday Night...................-...........Barto |  |
| Wednesday Night..........................Finzel |  |
|  |  |
| Friday Nig |  |

The above schedule was maintained for a period of thirty-three weeks, exclusive of holidays. All of the above classes were designated as elementary classes to distinguish them from the classes at Barton and Frostburg, taught by Mr. R. C. Fleming, which were termed advanced classes.

## SUBJECTS

The subjects taught were as follows:
Ventilation
Map Reading
Mine Gases

## Enrollment

Mt. Savage ..... 26
Barton ..... 32
Finzel ..... 50
Lonaconing ..... 18
Frostburg ..... 31
Total enrollment ..... 157
PREVIOUS EDUCATIONAL PREPARATION
School Years, Average Per Student
Mt. Savage ..... 6.4
Barton ..... 8.6
Finzel ..... 5.3
Lonaconing ..... 7.2
Frostburg ..... 6.8Average previous educational preparation per student, all classes, 6.8 years.

Average Age of Students

| Mt. Savage | 31.1 years |
| :---: | :---: |
| Barton | 36.7 years |
| Finzel | 29.9 years |
| Lonaconing | 39.8 years |
| Frostburg | 37.6 years | Average age of men, all classes, 35 years.

Occupations
Miners (men working at the face) ................... 102

Mine Foremen :............................................................. 28
Operators .......

Miscellaneous .......................................................... 5
157

## Nationalities

Americans (native born)......................................... 155


Attendance
The average attendance per week for the school year for each class was as follows:


The percentage of men who did written work was................................... $99 \%$

Men enrolled who actually attended throughout the year.......................... $57 \%$
Sixty-four (64) men received Certificates of Attendance showing that they had made at least $80 \%$ attendance.

Eight men did not miss a class during the school year. One of these men has not missed a class for three years. In addition to the above, there are two other men who have missed but one class in four years and two others who have missed but one in three years.

The percentage of men enrolled who are miners is $65 \%$.
The class at Finzel was remarkable in that it was, as far as known, the first class ever held for the instruction of clay miners. The men in this class practically all combine clay mining with farming, and as a result the class was held at a country school building, and the students attended from the neighboring farms within a radius of three miles.

CONCLUSION
This is the conclusion of the fourth year of Night School instruction for miners in Maryland, and it may be interesting to note that on a basis of 3600 mine employes, in the State, a total of 640 men have received instruction during this period, or by percentage, $17 \%$ of the total. The effect of the above on the mine accident rate of this State should be material. As to promotions, with their increased earning power of students, the record shows that as a direct result of this instruction the increase in wages of fifty-three of the students has amounted to $\$ 48,000$ per annum.

## REPORT OF THE NIGHT CLASSES IN ELEMENTARY MINING

## Period October 3, 1927, to December 31, 1927

L. C. Hutson<br>Vocational Mining Instructor.

ORGANIZATION AND SCHEDULE
The Night Classes in Elementary Mining were organized for the school year 1927-1928 at the following points:

|  |  |
| :---: | :---: |
|  |  |
| Barton |  |
|  |  |
| Frostb | Friday |

On the above schedule, the classes have met each week, with the exception of legal holidays, for a period of twelve weeks.

The subjects studied by the classes to date are as follows:
Kempton.................... $\left.\begin{array}{l}\text { Crellin } \\ \text { Barton } \\ \text { Finzel } \\ \text { Frostburg }\end{array}\right\}$ Coal Mine Ventilation
The time was apportioned as follows:


Number of men enrolled............................................................. 17
Average age of men..................................................................... 27
$\begin{array}{lr}\text { Average age of men......................................................................... } & \mathbf{7 . 4} \text { years }\end{array}$
Nationalities
Americans (Native born) .................................................... 13


Russian ............................................................................................................................... 1

Occupations


Laborers ...............................................................................................................................

Fire Boss ............................................................................................ 1

## CRELLIN CLASS

Number of men enrolled ..... 24
Average age of men 35.5 yearsAverage previous educational preparation.9.5 years
Nationalities
Americans (Native born) ..... 24
Occupations
Miners ..... 10
Mine Foramen ..... 2
Laborers ..... 9
Superintendents ..... 1
Operators ..... 1
Engineers ..... 1
BARTON CLASS
Number of men enrolled. ..... 35
Average age of men ..... 38.5 years
Average previous educational preparation ..... 6.5 years
Nationalities
Americans (Native born) ..... 35
Occupations
Mine Foremen ..... 16
Laborers ..... 12
Miners ..... 3
Office men ..... 1
Superintendents ..... 1
Operators ..... 1
Teachers ..... 1
FINZEL CLASS
Number of men enrolled ..... 43
Average age of men ..... 30.3 years
Average previous educational preparation. ..... 6.3 years
Nationalities
Americans (Native born) ..... 43
Occupations
Miners ..... 25
Laborers ..... 8
Students ..... 5
Mine Foremen ..... 2
County Official ..... 1
Merchant ..... 1
Farmer ..... 1

## FROSTBURG CLASS

Number of men enrolled. ..... 67
Average age of men ..... 35.9 years
Average previous educational preparation ..... 7.6 years
Nationalities
Americans (Native born) ..... 63
Austrian ..... 1
English ..... 1
Welsh ..... 1
Italian ..... 1
Occupations
Miners ..... 25
Laborers ..... 23
Mine Foremen ..... 14
Inspectors ..... 2
Superintendents ..... 1
Operators ..... 1
Engineer Corps ..... 1
SUMMARY
Total number of men enrolled. ..... 186
Average weekly attendance ( 5 classes) ..... 126
Average weekly attendance, Frostburg Class ..... 41
Average weekly attendance, Finzel Class ..... 35
Average weekly attendance, Barton Class ..... 26
Average weekly attendance, Crellin Class ..... 15
Average weekly attendance, Kempton Class. ..... 11
Average age of men enrolled ..... 33.4 years
Average previous educational preparation ..... 7.4 years
Attendance of men enrolled. ..... $67 \%$

# REPORT OF NIGHT CLASSES IN MINING 

Conducted by
R. C. Fleming

Associate Vocational Mining Instructor.

## Covering Period January 1, 1927, to May 15, 1927

## ORGANIZATION AND SCHEDULE

In addition to the elementary night mining classes organized and conducted by Mr. L. C. Hutson during the past school year, two classes in advanced night mining work were organized and conducted by Mr. R. C. Fleming to provide instruction for those men who had progressed beyond the need of the elementary classes. These classes were organized October 4, 1926, as follows:

> Monday Night...................................Frostburg
> Friday Night.
> Barton

The first class was held at Frostburg on Monday night, October 4th, meeting every Monday night thereafter until the close of the school year on May 14th, 1927. The first class was held at Barton on Friday night, October 8th, meeting every Friday night thereafter until its discontinuance.

Besides these advanced classes and in addition to the elementary work already conducted by Mr. Hutson, another elementary class was organized on October 27th, 1926, as follows:

Tuesday Night......................................
This class met every Tuesday night thereafter for the school year.

The following statistics cover the period January 1, 1927, to May 14th, 1927:

SUBJECTS
The subjects taught since the first of the calendar year were as follows:

| ostburg | Geology of Coal |
| :---: | :---: |
| Kempton.. | Ventilation of Mines |
| Barton..... | Coal Analysis |

NUMBER OF CLASS PERIODS
Classes were held one night each week at the points designated, making the total number of periods from the first of the calendar - year to the close of the school year as follows :

| Frostburg |  |
| :---: | :---: |
| Kempton |  |
| Barton |  |

Due to a drop in attendance, the class at Barton was discontinued on February 25, 1927.

## ENROLLMENT

The number of men enrolled in these classes was as follows:
Frostburg .................................................. 31
Barton -
Kempton ............................................... 25


## PREVIOUS EDUCATIONAL PREPARATION

The average amount of schooling, or previous educational preparation of each man, by classes:
Frostburg
Barton
Kempton
Average of all the classes, weighted, 8.6 years.

In this is included only the public school and college preparation proper, and no account is taken of previous attendance at the elementary classes conducted heretofore. Practically every man, however, has attended the elementary classes at least for one year before enrolling in the advanced class. As is to be expected, the men with the most educational preparation took work in the advanced classes.

AVERAGE AGE OF STUDENTS
Frostburg ..... 38.8 years
Barton ..... 37 yearsKemptonAverage age of men in all classes, weighted, 36.5 years.
OCCUPATIONS OF MEN ENROLLED
Frostburg
Mine Foremen ..... 10
Engineers ..... 6
Superintendents ..... 5
Assistant Mine Foremen ..... 3
Miners ..... 4
Inspector ..... 1
Students (High School) ..... 1
Clerks ..... 1
Total ..... 31
Barton
Mine Foremen ..... 9
Clerks ..... 2
Miners ..... 4
Students ..... 1
Teachers (High School) ..... 1
Total. ..... 17

## Kempton Class

Miners ..... 16
Fire Bosses ..... 3
Superintendents ..... 1
Mine Foremen ..... 1
Clerks ..... 1
Brakemen ..... 1
Car Repairer ..... 1
Farmer ..... 1
Total ..... 25
NATIONALITY

The nationality of all the men enrolled is American, with one exception, this man being an Italian.
Percentage of native-born Americans. ..... $98.6 \%$

## ATTENDANCE

The average attendance per week for each class for this part of the school year was as follows:


The average weekly attendance, all classes, for this part of the school year was 29.5.

## CERTIFICATES OF ATTENDANCE

Men in these classes who attended $80 \%$ or more of the class periods received a Certificate from the Vocational Department of the University of Maryland attesting to their faithful attendance. The number of men who received Certificates at the conclusion of the course was as follows:

Frostburg ................................................................. 15
Kempton
Total........................................................................ 25
Note-The above attendance record included the period October to December, 1926, report of which was incorporated in the 1926 annual report.

## VOCATIONAL TRAINING FOR MINORS

At a conference of vocational teachers and Bureau of Mines officials in May, 1927, it was decided to try organizing a class in one of the high schools in a mining community of the State, the class to be of the nature of a manual training class with credit given for it in high school work, and to be for the purpose of instructing minor
boys in the care and efficient handling of mining tools and instruction in mining problems.

The town of Kitzmiller was chosen for this experiment, inasmuch as approximately $85 \%$ of the high school boys of that community take up mining as their vocation. With the cooperation of the Garrett County School Board and the principal of the high school at Kitzmiller, a class was recruited from the freshmen and sophomore boys, 17 in number, with high school credit to be given them in General Science for satisfactory conclusion of the work. A vacant store building was secured for training quarters, a sufficient complement of mining and carpentry tools was procured and work benches were constructed. Under the supervision of an approved vocational teacher, Mr. George W. Mills undertook the practical instruction in working with tools.

Instruction has been and is to be of such nature as teaching the boys how to sharpen and rehandle picks, shovels and all hand mining tools; constructing work benches, learning how to construct and erect timber sets for the support of the mine roof; making handles, etc.

Two divisions were made of the class, one meeting each Thursday afternoon from 1 o'clock until 4.00 , and the other meeting Friday afternoon at the same hour. Before the conclusion of the high school year each boy will have received instruction for eight periods, each of two hours. This work is now in progress.

## REPORT OF THE SHORT COURSE IN COAL MINING, 1927

L. C. Hutson, Director.

The fourth annual short course in Coal Mining, held at Frostburg, Md., conducted by the University of Maryland under the supervision of the Maryland Bureau of Mines, opened on June 6, 1927, and closed July 22nd, 1927.

The first three weeks of the course were held in the State Normal School building, and the remaining three weeks of classroom instruction were held in the Beall High School building.

## INSTRUCTION STAFF AND SUBJECTS

L. C. Hutson-

Explosives, Ventilation, Drainage and Pumping, Mine Fires and Explosions, Map Reading.
R. C. Fleming-

Electricity in Mines, Mine Gases, Haulage, Geology of Coal—Drawing.
J. J. Rutledge-

Mining Methods.
J. B. Watkins-

First Aid, Mine Rescue, Maryland Mining Law.
SCHEDULE OF CLASSES
Hours: 8:00-12:00 A.M.
1:00-4:00 P.M.
No classes were held on Saturday afternoons.
First Week-
Explosives, Mining Methods, First Aid.
Second Week-
Mining Methods, Electricity in Mines, Map Reading, Mine Rescue.

## Third Week-

Electricity in Mines, Ventilation, Map Reading, Mine Rescue.
Fourth Week-
Ventilation, Mine Gases, Drawing.
Fifth Week-
Drainage and Pumping, Haulage, Drawing.
Sixth Week-
Geology of Coal, Mine Fires and Explosions, Map Reading.

## Seventh Week: Field Trip-

Monday-U. S. Bureau of Mines Experiment Station, Pittsburgh, Pa.
Tuesday-Experimental Mine, Bruceton, Pa.
Wednesday-Springdale Mine, Allegany Pittsburgh Coal Co., Logans Ferry, Pa.
Thursday-Montour Mine No. 10, Pittsburgh Coal Co., Library, Pa. Friday-Nemacolin Mine, Buckeye Coal Co., Nemacolin, Pa.
Classes wexe also held each morning of the course for six weeks in Mining Mathematics, and each afternoon in Maryland Mine Law. ENROLLMENT
The total enrollment of students numbered nineteen, of which seventeen finished the course.

Seven of the students were either sent by their respective employers, or received aid from them which made it possible for them to attend. Twelve worked on the night shift in order to attend the morning classes.

The voluntary offer of a public-spirited citizen of Frostburg to advance the necessary funds, without interest, to enable men to attend the course was taken advantage of by two students in the class.

| Name | Address | Occupation | Sent by |
| :---: | :---: | :---: | :---: |
| Walter Cutchall | Gorman | Mine Foreman | ..Penn-Maryland Collieries. |
| Melvin Reed | Mt. Savage. | Mine Foreman. | *Self. |
| Edward Carter | Mt. Savage............... | Laborer | ..Self. |
| Edward Stowell. | Mt. Savage. | Miner | *Self. |
| Robert Hunt. | Midland | Laborer | Self. |
| Foster Fresh. | Midland | Laborer | *Self. |
| George Tennant. | Frostburg | Laborer | ..Self. |
| Daniel Sisler | Friendsville | Miner | .. McCullough Coal Co. |
| George Crowe. | Barton | Mine Foreman | ..Campbell Coal Co. |
| James McFarlane.......... | Lonaconing | Miner | Self. |
| Kinsley McDonald.......... | Barton ..... | Clerk | Self. |
| Russell Ross................... | Westernport | Clerk | :Self. |
| Andrew Seiforth | Frostburg | Miner | Self. |
| Harold Kallmyer. | Frostburg | Miner | ${ }^{*}$ Self. |
| Edward Atkinson. | Lonaconing | Mine Foreman | * George's Creek Coal Mining Co. |
| John P. Smith. | Lonaconing | Mine Foreman. | *George's Creek Coal Mining Co. |
| Walter Festerman | Frostburg . | Miner | *Self. |
| Charles Wolfe ... | Frostburg | Mine Foreman. | *Savage Mountain Fire Brick Co. |
| Andrew Penman. | Frostburg .--.-.---...---- | Mine Foreman. | *Self. |

* Men who worked on the night shift.


## CONCLUSION

| Average previous educational preparation | 8 years |
| :---: | :---: |
| Average age of students. | 36 years |
| Men attending on their own resources. | $63 \%$ |
| Miners and laborers attending | $52 \%$ |

The number of students enrolled, nineteen, was the same as last year, but the number of men who finished the course was greater as compared with the number who finished last year.

In view of the slack time during which the course was held and other adverse factors which were general in the industry at this
time, the instructors feel that the above report is very gratifying. The willingness to sacrifice both time and money under unfavorable conditions was strongly evidenced. The application and the resulting progress thereby obtained were accordingly excellent.

The comparatively large number of students who worked on the night shift in order to attend part time was one of the remarkable features of the course. It is to be hoped, however, that next year a larger number of men will take advantage of the full-time course, as the part-time idea, while commendable in certain cases, does not lend itself to fullest efficiency, either for the student or instructor.

# ROOF CONTROL IN OPERATION OF LONG FACE IN LOW SEAM BY THE USE OF LORAIN JACKS 

By<br>J. D. Snyder

In previous experiments in the operation of long faces, the roof was controlled by single timbers placed along the working face and by use of timber cribs back of the face. The amount of timber used in this system made the cost of roof control excessive, and an experiment was made with the Lorain Steel Roof Jack, the idea being to break the roof by the removal of these jacks, thus eliminating the timber cribs.

The Lorain Jack used is a steel jack, 15 inches long, constructed in three parts, the middle part being wedge-shape and all three sections of jack being held together by a chain. In operation, the bottom section of jack is placed on a piece of timber $6 \times 8$, the middle or wedge-shape section being placed on the bottom section, the top section then placed with a cap piece and wedged. Through the middle, or wedge-shape section, is a bolt, the one end of bolt having a nut countersunk in the jack. On the narrow end of this section of jack is a strap piece which can be turned to a position overlapping the top and bottom sections of jack, thus keeping the middle section of jack in place. After wedges are tightened on top of jack, the bolt in middle section is tightened, which operation pulls the three sections of jack in line.

To remove the jack, the strap piece is turned horizontally and the small side of middle piece of jack is tapped with a long-handled hammer, the roof weight driving the wedge section out.

For the experiment with the jacks, a face was started 125 feet in length in the Upper Sewickley seam, which coal in the point selected ranges from 26 to 34 inches in thickness, and the coal from this face loaded out with a Jeffrey Chain Conveyor.

When this face is in position for cutting there are five rows of jacks parallel with the face, one of which is a single line of jacks, 4 feet from the face to the center of jack, which position of jacks is governed by the clearance necessary along face for the operation of cutting machine.

The other lines of jacks are in sets of twos; that is, a bar and sill, $6^{\prime \prime} \times 8^{\prime \prime} \times 6^{\prime}$ long, with a jack placed at each end. The centers of these jacks are, respectively, $8^{\prime} 6^{\prime \prime}, 12^{\prime} 6^{\prime \prime}, 14^{\prime} 6^{\prime \prime}$ and $18^{\prime} 6^{\prime \prime}$ from the face. All jacks are spaced $6^{\prime}$ apart along the face.

After face is cut and as coal is being loaded out in sections to the back of cut, single jacks are placed in shearings made by hand
picks for this purpose 4 feet from the position of new face. When all coal is removed, they then have a new single row of jacks placed 4 feet from the new face and the old single line of jacks are removed. Conveyor is then moved ahead until it is against the new line of jacks 4 feet from new face. In the space vacated by conveyor a double row of jacks is placed with caps and sills. After these are in place along the entire face they are in a position to remove the double row of jacks next to gob, which removal again brings the roof break to within 20 feet of the new face.

The removal of the two back rows of jacks, by which the new roof break is secured, is done in the following manner:

Beginning at the loading end of face, the outby jack in the first set of two is removed, the outby in the second set of two is removed, then the inby jack of the firstset, then the outby jack in the third set, the inby jack of the second set, the outby jack of the fourth set, the inby jack of the third set, and so along the entire face. In some cases where the roof was badly fractured or had a bad appearance, safety props of timber were placed under this bad roof when removing the break row of jacks.

In starting the experiment, 2 -inch plank was used as sill and cap pieces over the break row of jacks, but it was found that these were insufficient in size and in some cases the weight of the overburden pushed the jack with its 2 -inch sill into the bottom until two-thirds of the jack was buried, and it was necessary to ditch into the bottom to remove these jacks. It was finally found that a timber $6 \times 8$ inches was necessary. It was also found that even using the $6 \times 8$ timbers, the bottom would heave between the sets in the row next to the fall and several times it was necessary to lift bottom to remove these jacks.

Two different structures of the over-burden in the 125 feet in this face gave two different conditions. The roof over the inside half of the face did not break, but bent down so that after an advancement of about 100 feet the roof and bottom were together, the outside half fractured, and the roof broke against the jacks as the break row was removed. Two lines of 2 -foot cribs were carried along the loading entry, as was also two lines of 2 -foot cribs carried about 20 feet from solid coal on the back end of face. This back end was kept open for an escape way and as a return for the air.

So far as the control of the roof was concerned, back of the face these jacks gave perfect satisfaction, but it was found that the cost was again excessive, due to the fact that the cap pieces and sills had to be of a good grade of sawed timber, and it was necessary to replace them after they had served for three or four cuts, because of the fact that they would become crushed from the
weight imposed by the over-burden and were therefore of no further service.

It is necessary that the jacks employed be considerably less in height than the thickness of the seam for two reasons:

First-In order that they could accommodate any abnormally low section of coal due to rolls, etc.
Second-In order to have sufficient space under and above the jack for the placing of timber necessary to take care of the settlement of the roof.



Langham collapsible mine post jack

## PANEL LONGWALL OPERATIONS AT MINE No. 17 THE CONSOLIDATION COAL COMPANY

Assuming that the face is ready to cut, the first step is to cut the face. The machine begins cutting and probably cuts too high up in the coal, and it is then necessary to screw up the adjusting screw on the skid so as to throw the point of the cutter bar down. This works out all right where the coal is 2.3 feet to 2.4 feet high, but when it happens about the center, or toward the rear of the face, it is impossible to adjust the machine, because there is not the necessary height to raise up; if the machine is raised up, the top of the machine rubs the roof and wedges the machine. The runner must then let the jack down again, consequently leaving down more coal. The next trip down the face the same difficulty may be encountered, and it is necessary to stop to dig up the bottom left by the machine, so that the machine can get through.

Often small rolls are encountered on the pavement, or sometimes a small hollow comes in it; these conditions tend to cause the machine to leave some coal down, also decreasing the height of the place.

After the face is cut it is then shot down. These shot holes are drilled immediately after the face is cleaned up, because there is more room to do it before the conveyor is moved over. Twelve to fourteen holes are employed, depending on whether the coal sticks to the roof or whether it comes away easily. If the coal sticks badly, the men must place the holes closer; if it is free from the roof, the holes are placed from 6 to 8 feet apart; sometimes they can be placed as far as 10 feet apart.

From the center back to the rear end the coal sticks badly, and most of the time a good part of this coal must be trimmed off the roof by the use of picks.

Sometimes the machine cuts down too deep, cutting out rock among the coal cuttings. On account of the cramped space and the necessity of working on the gob side of the conveyor when removing the roof jacks in the break rows, the men cannot throw this dirty coal in the gob, and must load it out as dirt.

On account of the second left aircourse of old No. 6 Mine, which has fallen (this being termination of the face), the men must dig off enough coal to allow the machine to turn on this end. This procedure takes up considerable of the time of one man and holds down the average tons per loader on the face. While one man is making room on the rear end, the other men are loading along the face.

The men work along nicely in the spots that are 2.3 feet and 2.4 feet high, but as soon as they encounter the spots that are lower, the loading slows up.

The coal is loaded out in spots along the face, and as soon as the men are in to the back of the cut, the new row of face jacks are set as the coal is removed in the shearings made by hand picks.

After all the coal has been loaded, the shot holes for the next cut are drilled. Then the row of jacks next the conveyor on the inby side are removed. Sometimes some rock comes down when the men remove these jacks. They must then load this rock out for the same reason that they load out the dirty machine cuttings. While the holes are being drilled and the jacks removed to shift over the conveyor, preparations are made on the entry to move down the front end of the conveyor. Timbers are removed and replaced where necessary. The cribbing and rails on which the loading end of conveyor is moved down are put in place. The conveyor is then pulled to its new position by the use of prop pullers.

After the conveyor has been moved to its new position, the cribs are built on the front and rear ends of face. Some timbers are placed on the entry in advance of the conveyor, and any necessary timbering that is needed around the loading end is put in place. The next step is to set four break row sets consisting of $6^{\prime \prime} \times 8^{\prime \prime} \times 6^{\prime \prime}$ long in the position where the conveyor was moved from before removing any of the back break row. These break row sets have a roof jack under each end and the roof jacks are set on a 6x8-inch block $21 / 2$ feet long.

After setting up these four sets, the men begin to remove the jacks and timbers in the break row next to the fall in the following manner:

> Inside jack on first set. Inside jack on second set. Outside jack on first set. Inside jack on third set. Outside jack on second set, and so on.

The men always use safety props when the roof is fractured, or has a bad appearance, when removing these break rows. Often the place is so low that they cannot use large blocks. They must then use whatever fits between the roof and the floor. Sometimes they use a piece of $4 \times 6$, sometimes $2 \times 8$, and sometimes $5 \times 6$. The larger the blocks and bars that can be used in the break rows, the better success is had. When $2^{\prime \prime} \times 8$ " or small blocks are used for foot blocks, the jacks sink in the bottom and create "Stickers," also reducing the height the men should have to work in when removing this break row.

Even when using the large foot blocks, the bottom heaves between the sets in the row next to the fall, and several times the men have had to lift the bottom in order to get in to remove these jacks.

In setting the sets in the break row, care should be taken to set the jacks with the latch that holds them in place in such a manner that will be the easiest to get at when removing this row when the time comes. The men begin at the loading end and take the jacks out as they go back. They set the jacks with the latch facing toward the rear end of the face. In removing these jacks from the rear end of face toward the loading end, the jacks should be set with the latch facing the loading end of conveyor. When the jacks are set in this manner they have found it is safer to remove them.

The new break row that is being put in where the conveyor was moved from should be kept well ahead of the jacks that are being taken out in the row next to the fall.

# RECLAMATION OF BIG VEIN COAL AT THE SONNY MINE OF THE GEORGE'S CREEK COAL MINING COMPANY, LONACONING, MD. 

By<br>Louis F. Gerdetz<br>Engineer in Charge of Operations.

Three years have passed since the appearance of my first article in the Second Annual Report of the Maryland Bureau of Mines, covering the calendar year 1924, in which I briefly described the past history of the old Jackson Mines, the methods of working, the physical conditions as far as they were in evidence at that time, and the present-day development of the new mines and the efforts being made in the reclamation of the abandoned coal.

During this three-year period over 600,000 tons of the oncefamous George's Creek Big Vein coal have been mined and shipped from this mine. A total of over 800,000 tons of this coal has been reclaimed thus far since the inception of this project from a property which prior to this for over 15 years was considered exhausted.

For a clearer understanding of the subject and for the information of those who have not read my previous article, the following short explanation and introduction is in order.

The coal mining region in the George's Creek (Cumberland) basin is one of the oldest in this country. The principal seam of coal, which by far overshadows any other in the field, is the "Pittsburgh Seam," locally termed "Big Vein." It is one of the best low volatile bituminous coals in the country. The seam underlays an area of approximately 18,000 acres. It is from 8 to 14 feet in thickness and exceptionally clean and free from impurities.

The early mining operations in this seam in 1842 yielded about 1700 tons, and the peak of production in the field was reached in 1902, when $4,350,000$ tons of coal were mined and shipped-mostly Big Vein.

A majority of the operations in the Big Vein in the southwestern part of the field were suspended about 1905, when the seam was considered exhausted. Some outcrop coal was mined even at a later date. Therefore, the seam yielded only a limited tonnage, principally from mines concentrated around Frostburg, Md.

During the war and post-war activities several old mines in the field were reopened and activities concentrated mostly on the outcrop coal. At present there are several operations in the field which are engaged in the reclamation of the abandoned coal from former operations.

It is estimated by the writer that upward of $150,000,000$ tons of coal were abandoned by various operations in this seam in the field.

The area underlain with the Big Vein at the Jackson Mines is approximately 1100 acres. The height of the coal is approximately 10 feet. Mining on the property, according to the information obtainable, commenced about 1850. The system of mining employed was room-and-pillar, the system of mining then prevailing in the field.

In the early day operations only the breast coal (about 7 feet in thickness) was mined, leaving the bottom coal and top coal in place. The mining of bottom coal in conjunction with breast coal in the Jackson Mines was introduced about 1887. In early mining operations pillars were left in place undisturbed; the robbing of pillars in conjunction with the first mining was introduced in the Jackson Mines about 1880. It was about that time that the robbing of barrier and room pillars, principally the former, was started and executed in the area covered by an earlier mining.

Present-day operations for the reclamation of the abandoned coal was inaugurated with the completion of the present layouts and railroad facilities at the Sonny Mine in 1924.

At the time of writing this paper the development of the mine has penetrated deep into the workings of the old Jackson Mine. With this new development a history of the successive progress in coal mining covering a period of about forty years is spread before our eyes.

The old mine can be taken to represent a book which in its own language relates the evolution of the early coal mining in America. Various evidences of the prevailing mode of mining, numerous implements, equipment, etc., pertaining to that period are being constantly unearthed.

It is to this successive evolution of early coal mining, evidences of which this mine offers in such abundance, that I wish to call the attention of the reader in particular, for after all the old mine in George's Creek represents and must needs be closely linked with the history of mining of the entire coal industry. In a measure, from this small but, in its day, highly important field, miners and operators alike migrated to the newer, more promising coal fields of the country, carrying with them and spreading the gospel of good and evil in coal mining as practiced and acquired in the old field.

When, due to reckless management, the untimely end of the famous seam was in sight, some of the miners and most of the operators left the field. The miners left their homes and the field reluctantly, disappointed that the once prevailing belief of their
fathers, "the Big Vein will never be exhausted," did not hold. The operators unconcernedly left "an empty shell" when the seam at last failed to respond to the motto, "Get the coal as cheap as you know how and never mind the future." Some of the men who had not lost faith, however, remained and they are still mining the "Big Vein," and will mine it-crippled as it has been left by the departed host-for many years to come. For today there is more of the Big Vein left in the hills and valleys of the George's Creek region than ever before mined.

The earliest map of the Jackson Mines in existence is a tracing prepared by an unknown author, showing the development of the mine as of 1861. The map covers an area of approximately 100 acres of the property. It shows the system of mining with pillars of coal left in place undisturbed. No evidence of a second mining is shown on the map. (See Drawing No. 1.)

The next map in existence is that of the Jackson Mines showing the development as of 1885 . This map already shows evidences of second mining, and the areas left in white are supposed to have been entirely exhausted. However, it shows plainly that the introduction of second mining was an afterthought, as this operation is being carried far behind that of the first. (See Drawing No. 2.)

The third map (Parrott's), which has recently been discovered and brought to my attention, shows the Jackson Mines as of 1890 and quite advanced. The second mining has in this short period of five years practically exhausted the development of 1885; it has caught up and is carried on in conjunction with that of the first. (See Drawing No. 3.)

The new development of the reclamation project at the mine, while bound by reasons of necessity to follow the outlines of the old layouts, does not lend itself exactly to the successive stages of development of the old mines. It has, therefore, at this early date, already crossed in some places into the old workings as represented by the map of 1890. (See Drawings Nos. 4 and 5.) In other words, the mining at this time is being carried on over a territory as represented by all three maps in existence. It is this occurrence which permits us to observe the progress in efficiency of mining at this old mine covering a period of nearly forty years.

Our present development has disclosed the fact that the workmanship and mining engineering were at their highest efficiency during the early stages of the mine. Entries as shown on the map of 1861 were found to correspond to a foot in actual survey. The width and spacing of rooms were found to correspond to certain adopted standards and to have been driven in straight lines to points of destination which left the pillars uniform in thickness, with sides trimmed to perfection. It is reported that the miners at that time were using the shadows made by a candle to keep the



DRAWING NO. 3


ribs straight. The wooden rail tracks were found to be properly aligned, placed a uniform distance from the ribs and imbedded in substantial ties, etc.

In contrast to this exactness and superior workmanship, the layouts of later mining bear unmistakable evidences that the management, and consequently the workmanship, was well on the road to a decline. The difference in workmanship and engineering was immediately noticeable. Due to lack of proper surveys, the rooms were driven out of line, leaving pillars of irregular size. The rooms were wider and the spacing not uniform. The second mining was performed in a haphazard manner, greatly resembling that which was carried out by the same management on room and barrier pillars of the Jackson No. 1 Mine. This I have fully described in my first article of three years ago.

It is necessary to emphasize here that, while the maps of 1885 and 1890 plainly indicate areas "mined out," it is exactly in those areas that the present reclamation mining is being carried out.

Drawings Nos. 6 and 7 are sections along the lines of two of our present headings (Sonny No. 2), and show the bottom and pillar coal as found intact. Those sections are typical of all of our present development, with slight variations. Drawing No. 6 shows a section along the fourth Left Heading located to the east of old "New Mine," and Drawing No. 7 that along our first Right, west of old "New Mine." (See Map of 1890.)


DRAWINGS NOS. 6 AND 7

Due to the fact that falls have occurred throughout the old workings, and since those tightly fill the excavations, it is impossible to establish the presence of pillars in a certain territory unless such is explored by entries and crosscuts in advance of main mining operations. Those entries are usually driven parallel and a certain distance above the old branch headings.

It has been established by investigation and actual experience that pillars were quite well robbed along the lines of old headings; however, the robbing line and the number of pillars that were so affected is unknown. Consequently, it is a constant problem with us to rightly guess how far above those old branch headings our own branch entries shall be placed in order to, first, not miss the pillars if placed too closely, and, second, to avoid mining to the dip if placed too far above the old headings, our entries encountered pillars of coal which may extend way down to the old headings. It shall be understood that our mining progresses on the full raise of the seam and due to heavy grades and the wetness of the mine; also for other reasons more fully explained hereafter, this is of great importance.

Drawing No. 7 illustrates this point clearly. First Right entry has been started quite close to the old heading line, which in this case was indistinct, and had to be driven through falls for several hundred feet before it encountered the pillars as shown. In this case this was verified by a crosscut driven about 125 feet above this entry and parallel to it, which established the presence of the missing pillars, but still did not determine how far down those pillars extended.

Since entry driving through falls is one of our most costly operations, it is evident that great care must be exercised to accomplish the desired results with as few entries as possible. Due, however, to the haphazard practices of the second mining, it at times becomes necessary, as in the case of the First Right Heading, to drive additional crosscuts to establish the presence of pillars; also to drive entries through falls along the supposed line of a pillar in order to reach it if such has not shown up on a cross entry.

Being aware of the fact that in such broken mining entry work must be reduced to a minimum, it was decided, at the very inception of the operations, to employ in the reclamation of this coal the system of mining based on a compulsory 100 per cent. recovery. This work was fully described and illustrated in the Second Annual Report (1924), and it is only necessary to mention here that after our branch entries were driven to destination and the pillar line was established, entries parallel to pillars were driven therefrom every second or third pillar. After those entries reached the destination, independent working faces across the pillar line were established. Those faces consisted usually of two, three and in some
cases of four pillars, and the intervening number of old rooms, which then were mined on the advance (on the raise), and in some cases on the retreat (to the dip) to their destination. This mode of mining not only reclaimed the coal from the pillars, but also recovered all bottom and that portion of the top coal which had fallen and laid on top of the bottoms in large lumps in the intervening rooms. Track and mine cars were used along the faces.

With the advance of our operations into the area of later-date mining, the effects of second mining became more and more noticeable and troublesome. The pillars became more irregular; some of them were partly missing, some split and cut up. On many occasions a face starting with, say, three pillars and two intervening rooms, found itself a short distance farther with only two pillars and the additional line of fall due to the missing pillar. Such occurrences not only reduced the expected tonnage from a face by practically one-third, but increased the cost of labor due to the additional length of the fall. Mining on such a face, however, had to continue until the missing pillar was again picked up and the face brought to its destination.

The principal difficulties in such cases were due to the fact that height and spacing of roof supports for the passage of cars along the faces had to be maintained in the same manner as if they were under normal conditions with all the pillars present. This necessitated the handling and gobbing of excess waste. Subsequently this mode of mining has been employed in such areas where pillars were proven beyond any reasonable doubt. In doubtful or lean area, entries were driven alongside of or on the supposed line of each pillar. The pillars or stumps were then brought back openended.

Such practice of mining necessitates, of course, an excessive amount of entry work through falls; again, if not faithfully followed, an unavoidable loss of some stumps or pillars. It also prevents the reclamation of bottom and roof coal in the old rooms and area where pillars were robbed.

At present it is contemplated to employ conveyors along the faces to control the subsidence of the roof by special steel props and supports. (See Drawings Nos. 8 and 9.) The elimination of cars from the faces will permit the choice of an arbitrary height of the roof when mining through falls with practically no waste material to handle. The conveyors will also permit a reduced spacing of roof supports, which in turn will greatly facilitate the work. (See Drawings Nos. 8 and 9.)


DRAWING NO. 8


DRAWING NO. 9
The plan calls for independent faces of about 150 feet in length. Face conveyors will discharge coal into conveyors on wall entries to cars on cross-entries, all maintained through gob. This plan will practically obviate the driving and maintenance of entries in advance of main mining operations and eliminate the handling of waste material from those entries, which in our case is of considerable magnitude.

With the elimination of entries in advance of main mining operations, the prospecting for pillars will terminate and the area of the old mines considered as solid. This will also free us from the neces-
sity of being compelled to adjust our development plans to the old layouts, as has been the case heretofore. Assured of at least 24 inches of bottom coal, the pillars and stumps will be mined in the order as they may appear at the face.

The extraction of coal from pillars in our mining is usually carried to the "smooth" of the seam, leaving about 18 inches of top coal in place undisturbed as roof protection against which to timber. We are compelled to do this for the reason that the cohesion of the superimposed strata immediately overlaying the seam is lost, due to falls on both sides of the pillar; in fact, on four sides of each pillar or stump, if one considers the robbed portions due to second mining and crosscuts which were driven through pillars in first mining. In areas where the coal of the seam is extending to the sand-rock formation, or where conditions are more favorable, all the coal from pillars is being recovered.

The reclamation of coal in the area so far exhausted by the new development is approximately 6850 net tons per acre, or equivalent to a 100 per cent. extraction in a 4 -foot seam. The year of 1925 leads in reclamation with 7400 net tons per acre. It is assumed that with the introduction of conveyors and mining entirely on 100 per cent. recovery system, the yield of the old mine will approximate between 9000 and 10,000 net tons per acre for the balance of the acreage where bottoms were left in place.

Drawing No. 4 shows the present development of the mine with area exhausted as of January 1st, 1928, and pillars marked as they were found. Solid block markings represent pillars intact, broken markings those of areas affected by second mining. The lines in dashes represent the layouts of the old mines, while those in solid our present development.

Drawing No. 5 is the survey map of the mine as of January 1st, 1928. It shows in blocks the area exhausted each consecutive year; also the preliminary development by entries.

## CONCLUSION

The experiences and facts gained due to the reclamation of the abandoned coal at this mine, which in the early days of the industry was considered among the largest producers in the region, is worthy of the attention of every sincere mining man and engineer. Its story is analogous to the entire field and industry at large.

From maps representing the old mines one can readily see that the original plan or layout of the Jackson No. 1 Mine was conceived probably as early as 1850, and the early workmanship and management under which it was executed, considering the early period of the industry, the limited knowledge of mining, the inadequate and crude equipment at their disposal, etc., constitutes, in my opinion, a remarkable achievement for that particular period.

That subsequently during a period of nearly 60 years the successive managements were unable to change the plans of the layouts or improve conditions in regards to the mining of the coal is equally remarkable in the reversed sense of meaning.

The point which I desire to stress in this article is this: The originators of this venture, to mine coal from this seam, selected for this purpose a system of mining best known to them at that time, whereby they were content to extract in miner-like fashion of that period a certain amount of coal and to leave the balance in good shape for a later generation to recover. It was expected that in the meantime this later generation was to acquire a more comprehensive knowledge of mining, which should have enabled it to recover 100 per cent. of coal from any seam, and consequently the balance of coal from this operation which was left undisturbed by the first mining.

The later-day managements, having had in the meantime at their disposal advantages of experience and universal progress, not only failed utterly to improve upon the original system of mining, but succeeded in debauching it to such an extent as to waste over one-half of the product of the seam. This waste was caused by the untimely introduction into the original system of mining of the so-called "second mining," which in this case was executed in a most ruinous manner. By this deplorable act the reclamation of the abandoned coal in its entirety was made a doubtful, extremely hazardous and more costly operation.

The introduction of the second mining in the Big Vein in this field yielded only a very limited increase in recovery per acre. It, however, caused a devastation. It was the principal cause in the decline of intelligent mining management in this field.

The tragedy which befell the Big Vein seam of the George's Creek field was only a local calamity; to a certain extent it can be remedied. It is, however, of great significance in that it represents on a small scale an exact replica of that which befell and which still holds in its grip the entire coal industry of this country.

What are the $150,000,000$ tons of Big Vein coal lost during a period of 50 years due to incompetent management in comparison to the tremendous tonnage being wasted annually in the industry due to the same causes?

Ever since its inception the coal industry of this country has steadfastly clung to a mode of mining of which only one-half can be admittedly considered a system (having at least a positive and definite purpose in view), and of which the other half constitutes an uncertain, unreliable branch which, due to those characteristics, destroys the purpose and accomplishments of the first, and thereby places the combined mode of mining in disrepute; in fact, below the efficiency of its prototype of 80 years ago.

It is commonly known that over 95 per cent. of operations in the industry employ the room and pillar mode of mining, or its modification, for the recovery of coal. It is common knowledge that the loss in these operations varies from 15 per cent. to as high as 60 per cent. of the seam. The average loss can then be assumed to amount to 33 per cent. of the seam, or about 50 per cent. of the entire production.

However, not all of this coal shall be considered as a total loss. There are a few operations which employ the room and pillar mode of mining, but confine their activities to the first mining only and leave the coal in pillars intact. There is no doubt in my mind that at some later date this coal will be recovered in its entirety. Usually it will be found that those operations are financially more successful, more intelligently conducted and, what is more important, the rate of avoidable accidents and fatalities is far below that of other operations of the industry. While it is not to be recommended as a desirable mode of mining, especially at this age of progress, it is at least a system which does not leave devastation in its wake.

The most damaging and least efficient operations are those in which the so-called second mining or the robbing of pillars has been made a common practice. The abandoned coal of most of such operations is beyond further recovery. It constitutes a real and total loss.

Those operations maintain also the highest rate of avoidable accidents and fatalities which, by several hundred per cent., surpass those of countries mining coal on systems of complete recovery in one operation only; also those of this country where operations are confined to first mining.

Why, then, is this waste of Nature's resources and national wealth permitted to continue at this day of evident progress in a country which boasts of its high standard of efficiency?

Does the mining waste of the coal industry justify such assumption?

Does the high rate of avoidable accidents in this industry point to a high standard of efficiency? This I do not believe.

While authorities in this country have not as yet awakened to the fact that natural resources constitute national wealth, and therefore should be preserved and claimed in accordance with the principles of efficiency and common sense, and while it is evident that even if they were concerned they could not at this time impose upon an industry accustomed to disregard and depreciate its own product systems of mining which could eliminate this waste, yet ways shall be found to curb this evil if necessary by other means than depend on the industry itself to improve in that direction.


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