

REPORT
INSPECTOR OF MINES
OF KENTUCKY
—
1907

ANNUAL REPORT
OF THE
INSPECTOR OF MINES
OF THE
STATE OF KENTUCKY
FOR THE YEAR 1907

BY
C. J. NORWOOD, Chief Inspector

ASSISTANT INSPECTORS
A. G. SPILLMAN, - - - Lexington
J. D. CAIN, - - - - - London
A. J. DOSS, - - - - - Central City

HEAD OFFICE, LEXINGTON, KENTUCKY

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LETTER OF TRANSMITTAL

HIS EXCELLENCY, AUGUSTUS E. WILLSON,
Governor of Kentucky.

SIR: I have the honor to herewith submit the report of
this office for the Calendar year 1907.

Very respectfully,

CHARLES J. NORWOOD,
Chief Inspector of Mines, etc.

MISCELLANEOUS

The constantly increasing amount of the clerical work of the office, and the need of the services of a regular clerk have been noted hitherto. At present the clerk of the Geological Survey assists the Inspector in the office work, but until a special clerk is provided, or an increase is made in the number of Assistant Inspectors, so that the Assistant resident in Lexington may take care of certain of the office duties, it will continue difficult to keep abreast of the demands in the way of correspondence and routine duties.

There should be at least two additional Assistant Inspectors, in order that the present large inspection districts may be divided and closer touch be maintained with all the mines. It is physically impossible for the present force to keep as close supervision of all the mines as should be done.

INSPECTION OF MINERS' OIL

That the law requiring that oil used for illumination in the mines shall conform to a certain standard has proved beneficial is beyond question. While it is not improbable that some clandestine oil was sold in the State, and despite the fact that in a few instances oil which had been inspected and approved at the shipping point was upon subsequent inspection at the mines found to have been adulterated, the average character of miners' oil used during the past year has been better than for many preceding years; and this has made far more healthful conditions in the mines.

The law is so drawn, however, that its enforcement is quite a burden to this office, since the numerous inspections

required materially interfere with the inspection of the mines. It would be better were the Chief Inspector empowered to delegate the inspection of miners' oil to the Coal Oil Inspectors of the various counties in which miners' oil is sold, the inspector to be allowed the same fee as is now allowed for coal oil, and strict provision being made that no such inspector shall be in any way connected with the maker or seller of the miners' oil.

It is gratifying to state that only one oil company (a Cleveland, Ohio, concern), has shown a disagreeable disposition toward this office in the matter of oil inspections. Despite any adverse criticisms or innuendos, however, the efforts of the office to enforce the law impartially and effectually will continue.

During the year 3,302 barrels of miners' oil were inspected, as follows:

By Inspector	Approved	Rejected	Total
A. G. Spillman	2,935	97	3,032
J. D. Cain	169	41	210
A. J. Doss	60	--	60
C. J. Norwood	68	--	68
	3,232	138	3,370

A considerable number of samples of oil which were received from the mines—the samples having been taken by miners and others—were examined by the Chief Inspector. In many instances the samples were condemned.

INSPECTION OF SCALES

Fewer requests for the inspection of scales were received during the year than had been anticipated. In most instances the scales were proved to be correct or but slightly out of order.

STATE GEOLOGICAL DEPARTMENT

The correspondence relating to the mineral resources of the State has been unusually large, indicating a persistent

interest in our resources despite the unsettled condition of business affairs. Many free analyses for citizens of the State have been made, but it has not been found practicable to analyze all samples that have been sent for that purpose. The work of the Geological Survey, as regards both geology and mapping, has been carried steadily forward. The details of the Survey's work are given in the biennial report on the progress of the Survey for 1906 and 1907.

GENERAL CONDITION OF THE MINES

There was a material improvement in the average condition of the mines as compared with either 1905 or 1906.

A gratifying feature of the year's record is the reduction in the number of fatal or severe injuries from falls of roof, evidencing greater care for the condition of the roof. In 1905 there were 20 deaths from roof falls; in 1906 there were 18; and in 1907 there were 11. The reduction of fatalities from such accidents was especially notable in the Southeastern District, for which, there is reason to believe, credit is directly due to the efforts of Assistant Inspector Cain.

FATALITIES FOR 1907.

In the production of 10,436,061 tons of coal, 32 lives were lost. Twenty-five of the fatalities occurred underground, three in shafts, and four on the surface. Following is a statement of the causes and of the number of deaths due to each cause:

Cause	Number Killed
Fall of roof	11
Fall of coal	1
Powder explosion	2
Premature blast	1
Caught by shot	1
Struck by rock, thrown by shot	1
Explosion of box dynamite caps	1
By cars	4
By mining machine (coal cutters)	1
Ran into live electric wire	1
Total inside mine	25

REPORT OF INSPECTOR OF MINES

The deaths in shafts were as follows:

Cause	Number Killed
Fell into shaft -----	1
Fell from cage -----	2
Total in shafts -----	3

Deaths due accidents on the surface were as follows:

Cause	Number Killed
Crushed by motor -----	1
Crushed by railroad cars -----	2
Injured by compressor; death from amputation -----	1
Total on Surface, -----	4

For each fatal accident inside the mine 417,442 tons of coal were produced, a gain of 86,459 tons over 1906, and of 130,326 tons over 1905.

For each death in mine and shaft combined, 372,716 tons were mined, a gain of 90,407 tons over 1906, and of 85,600 tons over 1905.

For each 1,000 persons employed inside there were 1.8304 deaths. This was a decrease of 0.4036 from 1906 and of 0.5036 from 1905.

The deaths underground, in shaft, and on the surface combined, were 1.8190 for each 1,000 persons employed in and out. For 1906 the deaths per 1,000 were 2.393, and for 1905 they were 2.061.

For each death from roof fall 248,733 tons of coal were raised. This was an increase of 415,481 tons over 1906, and of 546,771 tons over 1905.

The death rate from falls of roof was 0.8053 per 1,000 persons employed underground. In 1906 it was 1.386, and in 1905 it was 1.667.

II

COMMERCIAL COAL MINES

The following list shows the names of the operators and of the counties in which the mines are situated, as on March 1, 1908, and the postoffice address of each mine. The list gives the names of present operators, hence is made up according to changes that were made with respect to some of the mines toward the end of the year, while the name of the preceding operator is not given here. In some instances the principal office is not at the mine; the address of that office will be found under the name of the mine or company in the chapter headed "Notes on the Mines."

GENERAL LIST OF MINES

Name of Operator	Mine Office	County (Mine)	No. of Mines
Bell Jellico Coal Co. -----	Bell Jellico ----	Bell -----	2
Big Hill Coal Co. -----	Blanche -----	Bell -----	1
Caney Creek Coal & Coke Co. -----	Chenoa -----	Bell -----	2
Chenoa Coal Co. -----	Chenoa -----	Bell -----	1
Clear Creek Coal & Coke Co. -----	Chenoa -----	Bell -----	1
Clear Fork Coal & Coke Co. -----	Middlesboro ---	Bell -----	1
Coleman Mining Co. -----	Cary -----	Bell -----	1
Columbia Coal Co. -----	Middlesboro ---	Bell -----	1
Crawford & Co., (Black Raven) -----	Fourmile -----	Bell -----	1
East Jellico Coal Co. -----	Bell Jellico ----	Bell -----	2
Edw. Blake, Lessee Black Bear Coal Co. -----	Fourmile -----	Bell -----	1
Edgewood Coal & Coke Co. -----	Tinsley -----	Bell -----	1
Elk Coal Co -----	Tinsley -----	Bell -----	1
Excelsior Coal Mining Co. -----	Elxcelsior ----	Bell -----	1
Fern Lake Mining Co. -----	Middlesboro ---	Bell -----	1
Flatwood Coal Co. -----	Middlesboro ---	Bell -----	1
Highland Rim Coal Co. -----	Fourmile -----	Bell -----	2
J. Knuckles & Wife -----	Ferndale -----	Bell -----	1
Kelly Coal Co. -----	Chenoa -----	Bell -----	2
Luke and Drummond Coal Co. -----	Logmont -----	Bell -----	2
Poplar Hignite Coal & Coke Co. -----	Davisburg -----	Bell -----	1
Sagamore Coal Co -----	Logmont -----	Bell -----	1
Shamrock Coal Co -----	Shamrock -----	Bell -----	2

GENERAL LIST OF MINES—Continued

Name of Operator	Mine Office	County	No. of Mines
Stony Fork Coal Co. -----	Middlesboro ---	Bell -----	5
Straight Creek Coal and Coke Co.---	Straight Creek--	Bell -----	3
Straight Creek Coal Mining Co.-----	Cary -----	Bell -----	1
Turner Coal Co. -----	Middlesboro ---	Bell -----	1
Wallsend Coal & Coke Co. -----	Wallsend -----	Bell -----	2
Winona Coal & Coke Co. -----	Middlesboro ---	Bell -----	2
Geo. L. Hull -----	Rush -----	Boyd -----	1
John Wurtz, Lessee -----	Ashland -----	Boyd -----	2
Big Run Coal Co. -----	Winchester ---	Boyd -----	1
D. R. Clere -----	Coalton -----	Boyd -----	1
Imperial Coal Co -----	Jackson -----	Breathitt --	2
Aberdeen Mining & Towing Co.-----	Morgantown --	Butler -----	1
J. W. Gidcumb -----	Morgantown --	Butler -----	1
Morgantown C. & M. Co.-----	Morgan -----	Butler -----	1
Adkins Coal Co. -----	Mt. Sterling ---	Carter -----	1
Ashland Iron and Mining Co. -----	Ashland -----	Carter -----	3
Estate of N. Thayer -----	Riverton -----	Carter -----	1
Geigerville Coal Co. -----	Rush -----	Carter -----	1
Kentucky Cannel Co. -----	Riverton -----	Carter -----	1
Strait Creek Coal Co. -----	Denton -----	Carter -----	1
Empire Coal Co.-----	Empire -----	Christian --	1
George Lucas -----	Owensboro ---	Daviess ---	1
J. Lee Rudy (J. H. Rudy mines) -----	Owensboro ---	Daviess ---	1
Louis Hoback -----	Owensboro ---	Daviess ---	1
Overstreet & Rudy -----	Owensboro ---	Daviess ---	1
Owensboro Coal & Land Co. -----	Owensboro ---	Daviess ---	1
Middle Creek Coal Co. -----	Prestonsburg --	Floyd -----	1
Preston Coal Co. -----	Woods -----	Floyd -----	1
Corydon Coal Co. -----	Corydon -----	Henderson --	1
Green River Coal Co. -----	Spottsville ---	Henderson --	1
Jno. Archbold -----	Bluff City ---	Henderson --	1
Keystone Coal & Mining Co. -----	Henderson -----	Henderson --	1
Magnolia Coal & Mining Co -----	Corydon -----	Henderson --	1
Panama Coal & Coke Co. -----	Robards -----	Henderson --	1
Peoples Mining Co.-----	Henderson -----	Henderson --	1
Pittsburgh Coal Co -----	Baskett -----	Henderson --	1
Smith Mills Coal & Mining Co. -----	Smith Mills ---	Henderson --	1
Utopia Coal Co.-----	Curdsville ---	Henderson --	1
W. Hayes & Son -----	Zion -----	Henderson --	1
Carbondale Coal & Coke Co. -----	Hamby Station--	Hopkins ---	1
Chesley Coal Co. (Royal) -----	Madisonville --	Hopkins ---	1

GENERAL LIST OF MINES—Continued

Name of Operator	Mine Office	County	No. of Mines
Chesley Coal Co. (Oakhill) -----	Chesley -----	Hopkins -----	1
Crabtree Coal Mining Co.-----	Ilsley -----	Hopkins -----	1
Nebo Consolidated Coal & Coke Co.---	Nebo -----	Hopkins -----	1
Nortonville Coal Co. -----	Nortonville ---	Hopkins -----	2
Reinecke Coal Mining Co. -----	Madisonville ---	Hopkins -----	1
Rose Creek Coal Co. -----	Nebo -----	Hopkins -----	2
St. Bernard Mining Co. (Arnold) -----	Earlington -----	Hopkins -----	1
St. Bernard Mining Co. (Barnsley) -----	Barnsley -----	Hopkins -----	1
St. Bernard Mining Co. (Diamond) -----	Morton's Gap --	Hopkins -----	1
St. Bernard Mining Co. (Hecla) -----	Earlington -----	Hopkins -----	1
St. Bernard Mining Co. (No. 9) -----	Earlington -----	Hopkins -----	1
St. Bernard Mining Co. (No. 11.) -----	Earlington -----	Hopkins -----	1
St. Bernard Mining Co. (St. Charles) -----	St. Charles -----	Hopkins -----	1
Stirling Coal & Coke Co -----	Daniel Boone--	Hopkins -----	1
Victoria Coal Co. -----	Madisonville ---	Hopkins -----	1
East Kentucky Coal Co. -----	East Point ---	Johnson -----	1
Meek Coal Co. -----	Meek -----	Johnson -----	1
Northeast Coal Co. -----	Paintsville ---	Johnson -----	1
Tibballs Coal Co. -----	River -----	Johnson -----	1
Sandy River Coal Co. -----	Williamsport --	Johnson -----	1
Artemus Jellico Coal Co. -----	Artemus -----	Knox -----	1
Bennett Blue Gem Coal Co.-----	Barbourville ---	Knox -----	1
Interstate Coal Co. -----	Trosper -----	Knox -----	1
Trosper Jellico Coal Co. -----	Trosper -----	Knox -----	1
Coalport Coal Co. (Black mine) -----	Coalport -----	Knox -----	1
Cottengim & White Coal Co -----	Barbourville ---	Knox -----	1
North Jellico Coal Co. -----	Barbourville ---	Knox -----	1
Cumberland Valley Coal Co. -----	Hujel -----	Knox -----	1
Interstate Coal Co. -----	Warren -----	Knox -----	2
Hughes Jellico Coal Co. -----	Hujel -----	Knox -----	1
Charlington Coal Corporation -----	Hujel -----	Knox -----	1
J. T. Gray (Tilden Gray Mines) -----	Gray -----	Knox -----	5
Lynn Camp Coal Co. -----	Gray -----	Knox -----	2
Mathews Jellico Coal Co. -----	Hujel -----	Knox -----	1
North Jellico Coal Co. -----	Bertha -----	Knox -----	2
North Jellico Coal Co. -----	Wilton -----	Knox -----	3
North Point Jellico Coal Co. -----	Gray -----	Knox -----	1
Richland Jellico Coal Co. -----	Bailey's Switch--	Knox -----	1
Rossland Coal Co. -----	Rossland -----	Knox -----	1
Beatty & May -----	Viva -----	Laurel -----	1
C. B. & J. B. Bryant -----	London -----	Laurel -----	1

GENERAL LIST OF MINES—Continued

Name of Operator	Mine Office	County	No. of Mines
Lily Jellico Coal Co. -----	Lily -----	Laurel -----	1
New Altamont Coal Co. -----	Altamont -----	Laurel -----	1
New Laurel Coal Co. -----	Pittsburg -----	Laurel -----	1
New Victoria Coal Co. -----	Pittsburg -----	Laurel -----	1
Davidson Wagon Mine -----	Pittsburg -----	Laurel -----	1
Phenix Jellico Coal Co. -----	Altamont -----	Laurel -----	3
Pittsburg Coal Co. -----	Pittsburg -----	Laurel -----	1
Pitman Coal Co. -----	Pittsburg -----	Laurel -----	1
Star Coal Co. -----	East Bernstadt -----	Laurel -----	1
Wm. Dunavant (Curvin's) -----	Viva -----	Laurel -----	1
Peach Orchard Coal Co. -----	Peach Orchard -----	Lawrence -----	1
Torchlight Coal Co. -----	Louisa -----	Lawrence -----	2
Beattyville Block Coal Co. -----	White Ash -----	Lee -----	1
J. C. Richardson Coal Co. -----	Beattyville -----	Lee -----	1
McGuire Coal Co. -----	Beattyville -----	Lee -----	1
Phillips Coal Co. -----	White Ash -----	Lee -----	3
Alva Karnes -----	Island -----	McLean -----	1
Green River Coal & Coke Co. -----	Island -----	McLean -----	1
Green River Coal Co. -----	Livermore -----	McLean -----	1
Memphis Coal Co. -----	Island -----	McLean -----	1
Kentucky Block Cannel Coal Co. -----	Cannel City -----	Morgan -----	3
Gish Cannel Coal Co. -----	Piedmont -----	Morgan -----	1
Beech Creek Coal Co. -----	Browder -----	Muhlenberg -----	1
Bevier Coal Co. -----	Cleaton -----	Muhlenberg -----	1
Black Diamond Coal & Mining Co. -----	Drakesboro -----	Muhlenberg -----	1
Brasher Coal Co. (Woodson) -----	Greenville -----	Muhlenberg -----	1
Central Coal & Iron Co. -----	Central City -----	Muhlenberg -----	1
Crescent Coal Co. -----	Bevier -----	Muhlenberg -----	1
Dovey Coal Co. -----	Hillside -----	Muhlenberg -----	1
Elk Valley Coal Co. -----	Drakesboro -----	Muhlenberg -----	1
Gibraltar Coal Co. -----	Hillside -----	Muhlenberg -----	1
Greenville Coal Co. -----	Powderly -----	Muhlenberg -----	1
Hillside Coal Co. -----	Hillside -----	Muhlenberg -----	2
Holt Coal Co. -----	Central City -----	Muhlenberg -----	1
Lam Coal Co. -----	Bevier -----	Muhlenberg -----	1
Louisville-Atlanta Coal Co. -----	Drakesboro -----	Muhlenberg -----	1
Moody Coal Co. -----	SouthCarrollton -----	Muhlenberg -----	1
Oakland Coal Co. -----	Greenville -----	Muhlenberg -----	1
R. Morgan Coal Co. -----	Central City -----	Muhlenberg -----	1
Tade Foley (Gish No. 2) -----	SouthCarrollton -----	Muhlenberg -----	1
W. A. Wickliffe Coal Co. -----	Browder -----	Muhlenberg -----	1

GENERAL LIST OF MINES—Continued

Name of Operator	Mine Office	County	No of Mines
W. G. Duncan Coal Co. -----	Luzerne -----	Muhlenberg	3
Broadway Coal Mining Co. -----	McHenry -----	Ohio -----	1
Central Coal & Iron Co. -----	Render -----	Ohio -----	1
Fordsville Block Coal Co. -----	Fordsville -----	Ohio -----	1
Coffman Coal Co. -----	Coffman -----	Ohio -----	1
McHenry Coal Co. -----	McHenry -----	Ohio -----	2
McHenry Coal Co. -----	Echols -----	Ohio -----	1
Peacock Coal Co. -----	Reynolds -----	Ohio -----	1
Taylor Coal Co. of Kentucky -----	Taylor Mines --	Ohio -----	2
Williams Coal Co. -----	McHenry -----	Ohio -----	1
Borderland Coal Co. -----	Bordel'd, W. Va.	Pike -----	2
Big Branch Coal Co. -----	Lookout -----	Pike -----	1
Burnwell Coal & Coke Co. -----	Sprig, W. Va. --	Pike -----	1
Cabin Branch Coal Co. -----	Pikeville -----	Pike -----	1
Elkhorn Consolidated Coal & Coke Co. --	Hellier -----	Pike -----	1
Freeburn Coal & Coke Co. -----	Edgarton, W Va.	Pike -----	1
Greenough Coal & Coke Co -----	Hellier -----	Pike -----	1
Henry Clay Coal & Coke Co. -----	Lookout -----	Pike -----	2
Lowe Coal Co. -----	Mossy Bottom. --	Pike -----	1
Marrowbone Coal & Coke Co. -----	Lookout -----	Pike -----	4
Pike Consolidated Coal Co. -----	Hellier -----	Pike -----	1
Pike Collieries Co -----	Matewan, W. Va.	Pike -----	2
Thacker Coal Mining Co -----	Thacher, W. Va.	Pike -----	1
Vulcan Coal Co. -----	Vulcan, W. Va.	Pike -----	2
Wagner Coal Co. -----	Mossy Bottom. --	Pike -----	1
Alpine Coal Co. -----	Alpine -----	Pulaski ----	1
Eagle Coal Co. -----	Barrenfork ----	Pulaski ----	4
Indian Head Coal Co. -----	Parkers Lake --	Pulaski ----	1
Mahoning Coal Co. -----	Parkers Lake --	Pulaski ----	1
New Cumberland Coal Co. -----	McGuffey -----	Pulaski ----	2
Peters & Souleyret -----	Flatrock -----	Pulaski ----	1
New Livingston Coal Co. -----	Livingston -----	Rockcastle -	1
Bell Union Coal & Coke Co. -----	Carlew -----	Union -----	1
Kentucky Coal Mining Co. -----	Uniontown -----	Union -----	1
Kentucky Coal Mining Co. -----	Waverly -----	Union -----	1
Crittenden Coal Co. -----	Sturgis -----	Union -----	1
Morganfield Coal & Mining Co. -----	Morganfield ---	Union -----	1
Ohio Valley Coal & Mining Co. -----	DeKoven -----	Union -----	1
River & Rail Coal & Coke Co. -----	Uniontown -----	Union -----	1
Sullivan Coal Co. -----	Sullivan -----	Union -----	2
Thomas Coal Co. -----	Morganfield ---	Union -----	1

GENERAL LIST OF MINES—Continued

Name of Operator	Mine Office	County	No. of Mines
West Kentucky Coal Co.-----	Sturgis -----	Union -----	2
Diamond Coal Co. -----	Providence ----	Webster ----	1
Fairmont Coal Mining Co. -----	Providence ----	Webster ----	1
H. D. Hill -----	Providence ----	Webster ----	1
Providence Coal Co. -----	Providence ----	Webster ----	2
R. L. Forsythe Coal Co. -----	Providence ----	Webster ----	1
S. K. Luton -----	Providence ----	Webster ----	1
Sebree Coal Co. -----	Sebree -----	Webster ----	1
St. Bernard Mining Co. (Shamrock) ----	Earlington ----	Webster ----	1
Thos. Blackwell Coal Mining Co. -----	Clay -----	Webster ----	2
Thos. Wanless -----	Providence ----	Webster ----	1
Webster County Coal Co. -----	Providence ----	Webster ----	1
West Kentucky Coal Co. -----	Wheatcroft ----	Webster ----	3
Williams & Patterson -----	Wheatcroft ----	Webster ----	2
Anderson Coal Co. -----	Halsey -----	Whitley ----	1
Burk Hollow Coal Co. -----	Jellico, Tenn --	Whitley ----	2
Campbell Coal Mining Co. -----	Coalmont -----	Whitley ----	1
Cooke Jellico Coal Co. -----	Jellico, Tenn --	Whitley ----	1
Dowlais Blue Gem Coal Co.-----	Jellico, Tenn --	Whitley ----	1
East Tennessee Coal Co. -----	Jellico, Tenn --	Whitley ----	2
Elite Coal Co. -----	Jellico, Tenn --	Whitley ----	2
French Coal Co. -----	Halsey -----	Whitley ----	1
Imperial Jellico Coal Co. -----	Rockhold ----	Whitley ----	1
Jellico Coal Mining Co. -----	Mountain Ash -	Whitley ----	1
Jellico Mining Co. -----	Saxton -----	Whitley ----	2
Jas. Rodgers Blue Gem Coal Co. -----	Jellico, Tenn --	Whitley ----	1
Louisville Property Co. -----	Halsey -----	Whitley ----	1
Main Jellico Mtn. Coal Co. -----	Kensee -----	Whitley ----	2
Mt. Morgan Coal Co. -----	Williamsburg -	Whitley ----	2
Pleasant View Jellico Coal Co. -----	Pleasant View -	Whitley ----	2
Procter Coal Co. -----	Red Ash -----	Whitley ----	2
S. A. Wender -----	Jellico, Tenn --	Whitley ----	2
Stearns Coal Co. -----	Stearns -----	Whitley ----	2
Sunbeam Coal Co. -----	Jellico, Tenn --	Whitley ----	5
Watts Creek Jellico Coal Co. -----	Wofford -----	Whitley ----	1
Wender Blue Gem Coal Co. -----	Halsey -----	Whitley ----	2
West Jellico Coal Co. -----	Silerville -----	Whitley ----	2

III

STATISTICS OF COAL PRODUCTION

In common with those of all fields, the Kentucky mines felt the effects of the general business depression of 1907, and yet they increased their production over that of any preceding year. For the first time the output of commercial coal reached the ten million mark, the total production for 1907 being 10,436,061 short tons.

The production by districts was as follows:

WESTERN DISTRICT

County	Short Tons
Butler -----	8,388
Christian -----	61,833
Daviess -----	68,217
Hancock -----	9,338
Henderson -----	227,904
Hopkins -----	2,053,566
McLean -----	143,789
Muhlenberg -----	1,860,499
Ohio -----	660,073
Union -----	474,788
Webster -----	592,387
	6,160,782

SOUTHEASTERN DISTRICT.

County	Short Tons
Bell -----	1,319,128
Knox -----	709,579
Laurel -----	314,221
Pulaski -----	139,334
Rockcastle -----	6,524
Whitley -----	746,492

Total ----- 3,235,278

NORTHEASTERN DISTRICT.

County.	Short Tons.
Boyd -----	57,725
Breathitt -----	27,015
Carter -----	120,507
Floyd -----	17,655
Johnson -----	131,649
Lawrence -----	30,213

REPORT OF INSPECTOR OF MINES

Lee -----	69,864
Morgan -----	54,811
Pike -----	530,562

Total ----- 1,040,001

TOTAL FOR ALL DISTRICTS.

District.	Tons.
Western -----	6,160,782
Southeastern -----	3,235,278
Northeastern -----	1,040,001

Total ----- 10,436,061

The figures show a gain of 2,396,815 tons over those for 1905, and a gain of 837,532 tons over those for 1906.

All districts made gains over the preceding years, the gains in the Northeastern district being especially significant. For the first time, the output of the latter district reached the million-ton mark.

The gains made by each district were as follows:

District	Over 1905	Over 1906
Western, gain -----	1,478,725	372,291
Southeastern, gain -----	455,719	240,643
Northeastern, gain -----	462,371	224,598
Totals -----	2,396,815	837,532

The output of the Western district shows a gain of 31.58 per cent over that for 1905, and of 6.43 per cent over that for 1906.

The output of the Southeastern district shows a gain of 16.39 per cent over that for 1905, and of 8.03 per cent over that for 1906.

80.08 per cent over that for 1905, and of 27.54 per cent over

The output for the Northeastern district shows a gain of that for 1906.

DISPOSITION OF THE PRODUCT

The output in tons of the several districts was disposed of as follows:

District	Sold Locally	Used at Mine	Coked	Shipped	Total Product
Western -----	243,953	164,631	103,327	5,648,871	6,160,782
Southeastern	36,807	53,873	6,664	3,137,934	3,235,278
Northeastern	10,076	13,868	-----	1,016,057	1,040,001
Totals --	290,836	232,372	109,991	9,802,862	10,436,061

There was an increase of 2,360,135 tons in the amount of coal shipped from the mines in 1907, over that for the year 1905, and an increase of 881,064 tons over that for the year 1906.

TONNAGE SHIPPED TO OTHER STATES

The percentage of the coal shipped from the mines that went to other States was 58.40, and shows an increase of nearly 14 per cent in the last four years. The actual tonnages shipped to other States in the respective years were as follows: In 1904, 3,216,173 tons; in 1905, 3,932,656 tons; in 1906, 5,001,440 tons; in 1907, 5,725,690 tons.

The amounts shipped for home consumption were as follows: In 1904, 3,451,749 tons; in 1905, 3,510,071 tons; in 1906, 3,920,358 tons; in 1907, 4,077,172 tons.

Dealing only with the coal shipped from the mines, the percentages of the shipments which went from each district to the other States in 1907 were as follows:

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Calendar Year 1907.

District	Shipped from Mines	Tons to Other States	Per Cent to Other States
Western -----	5,648,871	3,617,417	64.03
Southeastern -----	3,137,934	1,575,607	50.21
Northeastern -----	1,016,057	532,666	52.42
Totals -----	9,802,862	5,725,690	58.40

Compared with the preceding two years, the Western district shows a decrease of 2.46 per cent from 1905 and an increase of 0.98 per cent over 1906; the Southeastern district shows an increase of 13.53 per cent over 1905 and of 4.74 per cent over 1906; and the Northwestern shows an increase of 26.91 over 1905, and 4.83 per cent over 1906.

SELLING VALUE OF PRODUCT, 1907

The total selling value at the mines of all commercial coal, bituminous and cannel for 1907 was \$11,176,445, yielding an average value of \$1.0709 per ton. The average value of the cannel alone was \$2.60 plus per ton at the mine, but ranging as high as \$3.25; that of bituminous alone was \$1.0596 per ton.

The spot value per ton of the bituminous product alone for each district was as follows:

District	Tons of Bitum- inous Product.	Total Value	Average Value
Western -----	6,160,782	\$5,853,406	\$0.9501
Southeastern -----	3,235,026	4,108,681	1.2700
Northeastern -----	966,315	1,021,878	1.0575
Totals -----	10,362,123	\$10,983,965	\$1.0596

Compared with average prices obtained in 1905, the bi-

tuminous figures show a gain of 10.45 cents per ton; compared with the average for 1906, there was a gain of 5.49 cents a ton. Compared with 1906 prices, the gains by districts were as follows: For the Western district, 5.13 cents; for the Southeastern, 6.33 cents; for the Northeastern, 4.08 cents. It may be remarked that the gain in selling price at the mine is not at all in proportion to the increases that were made in the retail prices of coal during the year.

MACHINE MINED COAL

Nearly 53.29 per cent of the output for 1907 was mined by machine; this was a small increase in the percentage as compared with 1906, but a smaller percentage than was machine mined in 1905, though the tonnage cut by machine was larger than in the latter year. The decrease in percentage as compared with 1905 was due to the opening of new mines in the Southeastern district in which machines were not used.

The tonnages of machine-cut coal produced by the several districts were as follows:

District	Cut by Machines	Per Cent
Western -----	4,394,301	71.32
Southeastern -----	880,672	27.22
Northeastern -----	286,062	27.50
Total -----	5,561,035	53.28

Compared with 1906, there was a gain of 4.78 per cent in the amount of coal cut by machine in the Western district, and a gain of 4.14 per cent in the Northeastern district; the Southeastern district shows a decrease of 6.91 per cent.

PRODUCTION OF CANNEL

The tonnage of cancell produced was as follows:

County.	Tons
Carter (1 company) -----	2,440
Johnson (2 companies) -----	19,446
Morgan (3 companies) -----	51,800
Whitley (1 company) -----	252
Total -----	73,938

The companies producing cancell were: In Carter county, the Kentucky Cannel Company. In Johnson county, the East Kentucky Coal Company and the Sandy River Coal Company. In Morgan county, the Kentucky Block Cannel Coal Company, the Watson Cannel Company, and the Gish Cannel Coal Company. In Whitley county, the Louisville Property Company.

OUTPUT BY COUNTIES FOR 1907

The tonnage reported by the respective coal companies, arranged by counties, for the year 1907 was as follows, the counties being grouped in districts:

WESTERN DISTRICT.

Butler County.	Tons.
A. A. Main & Co., Morgantown -----	3,941
Morgantown C. & M. Co., Morgantown -----	1,246
J. W. Gidcumb (Topmiller mine), Morgantown -----	3,201
Total -----	8,388
Christian County.	
Empire Coal Co., Empire -----	61,833
Terry C. & C. Co. (Development work in 1907), Hopkinsville -----	
Total -----	61,833

Daviess County.

J. Lee Rudy (J. H. Rudy mine), Owensboro -----	8,880
Geo. Lucas (Jno. Hagan mine), Owensboro -----	994
Louis Hoback, Owensboro -----	2,530
Overstreet & Rudy, R. F. D. No. 4, Owensboro -----	13,789
Owensboro Coal & Land Co., R. F. D. No. 4, Owensboro -----	39,752
Wilson, Jas., Owensboro -----	2,272
Total -----	68,217

Hancock County.

Auburn Ash Coal Co., R. F. D. No. 1, Hawsville -----	9,338
--	-------

Henderson County.

Corydon Coal Co., Corydon -----	5,177
Green River Coal Co., Spottsville -----	27,096
Keystone Mn'g. & Mfg. Co., Henderson -----	22,055
Peoples Mining Co., Henderson -----	18,936
Panama Coal & Coke Co., Robards -----	4,415
Pittsburgh Coal Co., Baskett -----	74,483
Smith Mills Coal & Mn'g. Co., Smith Mills -----	4,464
Utopia Coal Co., Curdsville (Daviess Co.) -----	16,920
Wm. Hayes & Son, Zion -----	4,835
John Archbold C. Co., Bluff City -----	42,031
Magnolia C. & Mg. Co., Corydon -----	7,492
Total -----	227,904

Hopkins County.

Carbondale C. & C. Co., Carbondale -----	35,415
Chesley C. Co. (Oak Hill Mine), Chesley -----	55,348
Chesley Coal Co. (Royal Mine), Madisonville -----	85,262
Crabtree Coal Mining Co., Ilsley -----	97,741
Nortonville C. Co., Nortonville -----	{ No. 1. 61,575 No. 2. 49,657
Nebo Consolidated C. & C. Co., Nebo -----	
Reinecke Coal Mn'g. Co., Madisonville -----	199,875
Rose Creek Coal Co. (Shaft & Slope), Nebo -----	65,774
St. Bernard Mn'g. Co., Earlington -----	1,129,985
Victoria Coal Co., Madisonville -----	152,536
The Stirling C. & C. Co. (Daniel Boone mine), Daniel Boone -----	103,346
Total -----	2,053,566

McLean County.

Alva Karnes, Island -----	6,160
Green River Coal Co., Livermore -----	4,121
Green River C. & C. Co., Island -----	87,828
Memphis Coal Co., Island -----	45,680
Total -----	143,789

Muhlenberg County.

Beech Creek Coal Co., Browder -----	44,242
Bevier Coal Co., Cleaton -----	93,687
Black Diamond Mn'g. Co., Drakesboro -----	90,131
Brasher Coal Co., etc. (Woodson mine.) Hillside -----	51,375
Central Coal & Iron Co. (Central mine.), Central City--	188,246
Crescent Coal Co., Bevier -----	233,825
Dovey Coal Co., Hillside -----	74,186
Duncan (W. G.) Coal Co., Luzerne -----	186,799
Duncan (W. G.) Coal Co., Graham -----	267,034
Elk Valley Coal Co., Drakesboro -----	77,485
Gibraltar Coal Co., Hillside -----	50,537
Greenville Coal Co. (Powderly mine), Powderly -----	82,457
Hillside Coal Co. (Hillside mine.), Greenville -----	15,714
Holt Coal Co., Central City -----	79,573
Lam Coal Co., Bevier -----	86,025
Louisville-Atlanta Coal Co., Drakesboro -----	47,413
Moody Coal Co., South Carrollton -----	9,397
Oakland Coal Co., Greenville -----	55,688
R. Morgan Coal, Coke & Mn'g. Co., Central City -----	70,058
W. A. Wickliffe Coal Co., Browder -----	53,827
Tade Foley (Gish No. 2.), South Carrollton -----	2,800
Total -----	1,860,499

Ohio County.

Broadway Coal Mining Co., McHenry -----	98,633
Central Coal & Iron Co. (Render mine), Render -----	61,013
Fordsville Block Coal Co., Fordsville -----	2,261
Coffman Coal Co., Coffman -----	17,087
McHenry Coal Co., Echols -----	71,325
McHenry Coal Co., McHenry -----	75,209
Taylor Coal Co., Taylor Mines -----	176,610
Williams Coal Co., McHenry -----	153,569
Deanfield Coal Co., Aetnaville -----	4,020
Peacock Coal Co., Reynolds Station -----	346
Total -----	660,073

Union County.

Bell Union Coal & Coke Co., Curlew -----	22,459
Crittenden Coal & Coke Co., Sturgis -----	8,816
Kentucky Coal Mining Co., Uniontown -----	48,400
Kentucky Coal Mining Co. (Waverly mine.), Waverly--	42,446
Morganfield Coal & Mining Co., Morganfield -----	27,262
Ohio Valley Coal & Mining Co., DeKoven -----	130,059
Sullivan Coal Co., Sullivan -----	15,615

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Union County—Cont'd.

River & Rail Coal & Coke Co., Uniontown -----	7,112
Thomas Coal Co., Morganfield -----	25,361
West Kentucky Coal Co. (Collieries B. & C.), Sturgis--	147,258
Total -----	474,788

Webster County.

Diamond Coal Co., R. F. D. No. 2, Providence -----	7,825
Fairmont Coal Mining Co., Providence -----	18,414
H. D. Hill (L. Wright mine), Providence -----	8,730
Providence Mining Co., Providence -----	135,420
R. L. Forsythe (Dupont mine), Providence -----	35,068
Sebree Coal Mining Co., Sebree -----	46,678
S. K. Luton, Providence -----	19,475
St. Bernard Mn'g. Co. (Shamrock mine), Earlington ---	101,884
Thos. Blackwell C. & Mn'g. Co., Clay -----	11,012
Thos. Wanless, Providence -----	12,051
Webster County Coal Co., Providence -----	60,845
West Kentucky Coal Co. (Collieries F. G. & H.), Sturgis,	112,968
Williams & Patterson (Togo mine), Wheatcroft -----	22,017
Total -----	592,387

SOUTHEASTERN DISTRICT.

Bell County.

Bell Jellico Coal Co., Bell Jellico -----	86,446
Big Hill Coal Co., Blanche -----	56,711
Caney Creek C. & C. Co., Chenoa -----	6,142
Chenoa Coal Co., Cairnes -----	12,160
Clear Creek Coal Co., Chenoa -----	9,565
Clear Fork C. & C. Co., Fonde -----	121,239
Coleman Mining Co., Cary -----	30,734
Columbia Coal Co., Middlesboro -----	93,929
Crawford & Co., lessees (Black Raven mine), Fourmile, .	51,763
East Jellico Coal Co., Bell Jellico -----	59,942
Edw. Blake, lessee (Black Bear C. Co.), Fourmile----	36,011
Elk Coal Co., Tinsley -----	26,431
Excelsior Coal Co., Excelsior -----	46,976
Fern Lake Mining Co., Middlesboro -----	24,228
Flat Wood Coal Co., Middlesboro -----	4,033
Highland Rim Mining Co. (No. 1 & No. 4 mines), Rim	73,730
Knuckles (J. C.), Ferndale -----	7,659
Kelly Coal Co., Chenoa -----	2,785
Luke & Drummond Coal Co., Logmont -----	29,008
Poplar-Hignite Coal & C. Co., Davisburg -----	437
Sagamore Coal Co., Logmont -----	66,137
Shamrock C. & C. Co., Middlesboro -----	45,831
Straight Creek C. & C. Co., Pineville -----	162,626
Straight Creek Coal Mining Co., Cary -----	40,288

Bell County—Cont'd.

St. Clair C. Co., Middlesboro -----	1,025
Stony Fork Coal Co., Middlesboro -----	72,535
Turner Coal Co., Middlesboro -----	23,523
Wallsend Coal & Coke Co., Wallsend -----	47,734
Winona Coal & Coke Co., Gravity -----	79,500
Total -----	1,319,128

Knox County.

Artemus Jellico Coal Co., Artemus -----	10,770
Bennetts Blue Gem Coal Co., Barbourville -----	4,062
Blue Gem Coal Co., Hujel -----	1,829
Coalport Coal Co., Coalport -----	43,560
Cottengim-White Coal Co., Barbourville -----	5,316
J. T. Gray (2 mines, T. Gray mine), Grays -----	20,880
J. T. Gray (Charlton mine), Grays -----	3,761
Hughes Jellico Coal Co., Hujel -----	54,649
Ingles Jellico Coal Co., Hujel -----	44,441
Brush Creek Coal Co. (Bays mine), Warren -----	3,645
Cumberland Coal Co. (Cumberland mine), Warren -----	15,000
Bell Coal Co., etc., (Trosper mine), Trosper -----	18,752
Lynn Camp Coal Co., Grays -----	16,912
Matthews Jellico Coal Co., Hujel -----	57,473
North Jellico Coal Co. (2 mines), Bertha -----	164,876
North Jellico Coal Co., Wilton -----	180,142
North Point Jellico Coal Co., Grays -----	16,324
Richland Jellico C. Co., Baileys Switch -----	1,650
Rossland C. Co., Middlesboro -----	12,756
Bennett Jellico C. Co., and Trosper C. Co., Trosper --	32,781
Total -----	709,579

Laurel County.

C. B. & J. B. Bryants (Rockwell mine), London -----	1,939
Perry Cole, Pittsburg -----	6,830
Dunavant, Wm., lessee (Crescent mines), Viva -----	8,484
Dunavant, Wm., (Old Pitman mine), Pittsburg -----	1,850
Lily Jellico Coal Co., Lily -----	4,911
New Altamont C. Co., Altamont -----	15,133
New Laurel C. Co., Pittsburg -----	40,908
New Victoria C. Co. (McNeill Bros.), Pittsburg -----	14,326
T. A. Newman, lessee (Standard mine), Viva -----	5,758
Phenix-Jellico C. Co. Altmont -----	80,509
Pitman Coal Co., Pittsburg -----	33,026
Pittsburg Coal Co., Pittsburg -----	61,744
Star Coal Co., East Bernstadt -----	38,803
Total -----	314,106

Pulaski County.

Alpine C. Co., Alpine -----	5,678
Eagle Coal Co., Barren Fork -----	61,996
Mahoning Coal Co. (Paris mine), Parkers Lake -----	3,302
New Cumberland C. Co. (Indian Head mine), Indian Head -----	17,097
New Cumberland C. Co. (New Cumberland mine), Indian Head -----	32,159
Peters & Souleyret (Cogar Creek mine), Flatrock ----	19,102
Total -----	139,334

Rockcastle County.

New Livingston Coal Co., Livingston -----	6,524
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Whitley County.

Anderson Coal Co., Halsey -----	11,453
Burk Hollow Coal Co., Jellico, Tenn. -----	7,147
Campbell Coal Mining Co., Coalmont -----	45,645
Cooke Jellico Co., R. F. D. No. 1, Jellico, Tenn.-----	26,867
Dowlais Blue Gem Coal Co., Jellico, Tenn. -----	2,329
East Tennessee Coal Co., Jellico, Tenn. -----	35,448
Elite Coal Co., Jellico, Tenn. -----	17,407
French Coal Co., Halsey -----	12,009
Imperial Jellico Coal Co., Rockhold -----	32,232
Jellico Coal Mn'g. Co., Mountain Ash -----	82,465
Jellico Mining Co. (Saxton Blue Gem mine), Saxton --	14,262
Louisville Property Co., Halsey -----	21,654
Main Jellico Mn'g. C. Co., Kensee -----	73,395
Mt. Morgan Coal Co., Williamsburg -----	49,884
Pocono Coal Co., Williamsburg -----	240
Pleasant View Jellico Coal Co., Pleasant View -----	7,804
Procter Coal Co., Red Ash-----	79,873
Stearns Coal Co., Stearns -----	157,271
Sunbeam Coal Co., Jellico, Tenn. -----	6,669
Rogers, J. C. (Blue Gem Co. Co.), Jellico, Tenn.-----	3,765
Watts Creek Jellico C. Co., Wofford -----	19,245
West Jellico Coal Co. (Strunk mine), Silerville -----	32,038
Wender, S. A. (Wender Blue Gem), Jellico, Tenn. ----	1,500
Wender Blue Gem C. Co., Halsey -----	5,890
Total -----	746,492

NORTHEASTERN DISTRICT.**Boyd County.**

Big Run Coal Co., Winchester -----	18,152
C. & H. Wurts, lessees A. I. & M. Co. Ashland No. 12--	9,119
C. & H. Wurts, lessees A. I. & M. Co., Ashland No. 8--	15,177

Boyd County—Cont'd.

D. R. Clere, Coalton	11,875
George Hull, Rush	3,402
Total	57,725

Breathitt County.

Imperial Coal Co., Jackson.	27,015
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Carter County.

Adkins Coal Co. (Meadow Branch mine), Mt. Sterling	22,555
Ashland Iron & Mining Co. (Bailey No. 1.) Ashland --	22,235
Ashland Iron & Mining Co. (Bailey No. 2.) Ashland --	914
Estate of N. Thayer (Lost Creek mine), Riverton.....	26,694
Geigerville Coal Co., Rush (Boyd Co.)	6,595
Kentucky Cannel Co. (Boghead mine), Riverton	2,900
Strait Creek Coal Co., Denton	36,906
J. H. Jacobs (Dawson Branch mine), Rush	1,708
Total	120,507

Floyd County.

Middle Creek Coal Co., Prestonsburg	1,577
Preston Coal Co., Woods	16,078
Total	17,655

Johnson County.

East Kentucky Coal Co. (Flambeau mine), East Point	12,772
J. H. Northup Coal Operation (K. B. V.), Louisa	4,150
North East Coal Co. (Acrogen mine No. 2.) Paintsville	19,413
North East C. Co. (Muddy Br. mine No. 1.), Paintsville	54,025
Meek Coal Co., Meek	15,752
Sandy River Coal Co., Williamsport	16,972
Tibbals Coal Co., River	8,565
Total	131,649

Lawrence County.

Peach Orchard Coal Co., Peach Orchard	30,213
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Lee County.

Beattyville Block Coal Co., White Ash	27,358
McGuire Coal Co., Beattyville	1,085
Phillips Coal Co., White Ash	13,692
Richardson (J. C.) Coal Co., Beattyville	27,729
Total	69,864

Morgan County.

Gish Cannel Coal Co., Piedmont -----	2,250
Kentucky Block Cannel Coal Co., Cannel City -----	52,401
J. J. Watson Cannel Co. Cannel City -----	160
Total -----	54,811

Pike County.

Borderland Coal Co., Borderland, W. Va. -----	110,333
Cabin Branch Coal Co., Pikeville -----	1,000
Elkhorn Consolidated Coal & Coke Co., Hellier -----	21,939
Freeburn Coal & Coke Co., Edgerton, W. Va. -----	82,740
Greenough Coal & Coke Co., Hellier -----	35,855
Henry Clay Coal & Coke Co., Lookout -----	25,766
Lowe Coal Co., Mossy Bottom -----	9,000
Marrowbone Coal & Coke Co., Lookout -----	10,515
Pike Consolidated Coal Co., Hellier -----	45,459
Pike Collieries Co., McCarr -----	80,918
Thacker Coal Mining Co., Thacker, W. Va. -----	42,904
Vulcan Coal Co., Vulcan, W. Va. -----	56,067
Wagner Coal Co., Mossy Bottom -----	8,066
Total -----	530,562

PRODUCTION OF COKE

The output of coke amounted to 48,398 tons, as follows:

Company	Tons of Coke	Tons of Coal Used.
St. Bernard Mining Co.-----	44,339	99,763
Ohio Valley Coal & Mining Co. -----	1,394	3,564
Straight Creek Coal & Coke Co. -----	2,665	6,664
Totals -----	48,398	109,991

The figures show a decrease of 13,123 tons as compared with the production for 1906, due chiefly to the fact that the Straight Creek ovens were idle for seven months.

NUMBER OF EMPLOYES AND DAYS WORKED

There were 17,592 persons employed at and in the mines in 1907. The number employed in each district, and the average number of 10-hour days worked were as follows:

District	Total Employees.	Employed Inside	Days Worked
Western -----	8,607	7,030	186
Southeastern -----	6,788	5,085	182
Northeastern -----	2,197	1,543	195
Totals -----	17,592	13,658	186

The number of hours that constitute a working day varies according to localities. In the Western field it is either eight or ten, while in the Eastern one it is either nine or ten. For

convenience of making comparisons all days have been reduced to ten-hour days in this statement.

The number of employes in commercial mines, according to counties was as follows:

Bell -----	2,334
Boyd -----	118
Breathitt -----	91
Butler -----	42
Carter -----	305
Christian -----	139
Daviess -----	116
Floyd -----	39
Hancock -----	31
Henderson -----	419
Hopkins -----	2,389
Johnson -----	360
Knox -----	1,425
Laurel -----	779
Lawrence -----	66
Lee -----	164
McLean -----	242
Morgan -----	157
Muhlenberg -----	2,562
Ohio -----	1,125
Pike -----	897
Pulaski -----	406
Rockcastle -----	26
Union -----	797
Webster -----	745
Whitley -----	1,818

POWDER AND ANIMALS

Returns relating to consumption of powder are only approximately correct. Some companies do not attempt to keep an accurate record, and when pick miners are employed (who furnish their ammunition themselves) they not infrequently buy more or less of their powder elsewhere than at the commissary.

The returns indicate a consumption of 210,253 or more

kegs of black powder in 1907. This is an increase of 27,603 kegs over the number reported for 1906, and yet the production of coal was increased by only 837,532 tons.

A total of 2,161 animals were employed, an increase of 227 over 1906.

The following table shows the reported number of kegs of powder used and the number of animals employed in each district:

District	Powder Kegs	Animals		
		In	Out	Total
Western -----	113,373	933	225	1,158
Southeastern -----	61,295	556	188	744
Northeastern -----	35,585	203	56	259
Totals, -----	210,253	1,692	469	2,161

· PRODUCTION OF FLUORSPAR AND BARYTES

The production of fluorspar and barytes for 1907 was gathered by Mr. F. Julius Fohs, of the State Geological Survey.

The tonnage and value of fluorspar marketed was as follows:

FLUORSPAR FOR 1907

Grade	Tons	Value
Gravel -----	6,433	\$28,851
Lump -----	1,033	5,855
Ground -----	6,030	58,727
Total -----	13,496	\$93,433

Barytes

The barytes mined during 1907 amounted to 9,435 short tons. For the year, 5,310 tons, valued at \$23,800, were marketed crude, or else ground without the State; 1,021 tons, valued at \$15,315, were marketed in the ground state. At the close of the year, 5,015 tons were held in stock. The average value per short ton, f. o. b. shipping point, was about \$4.48 for crude and \$15.00 for ground. The latter value, however, is only approximate, since the price is usually made f. o. b. point of destination.

IV

ACCIDENTS FOR 1907

For the calendar year 1907 there were 195 noteworthy accidents reported, of which 32 were fatal, 86 severe, and 77 minor. Of the fatal accidents, 25 occurred inside the mine, 3 in shafts, and 4 on the surface.

According to causes, the fatal accidents were as follows:

Inside Fatalities.

Falls of top	11
Fall of coal	1
Powder explosion	2
Premature blast	2
Caught by shot	1
Struck by rock thrown by shot	1
Explosion of box of dynamite caps	1
Caught between cars	1
Run over by cars	1
Struck by cars	1
Caught between car and rib.	1
Mining machine (coal cutters)	1
Ran into live electric wire	1
Total inside	25

In shaft.

Fell into shaft	1
Fell from cage	2
Total in shaft	3

On surface.

Crushed by motor	1
Crushed by railroad cars	2
Injured by compressor; death from amputation of arm	1
Total outside the mine	4

The amount of coal raised per fatality, the number of deaths per 1,000 persons employed, etc., have already been given. Following is a descriptive list of the fatalities:

DESCRIPTIVE LIST OF FATALITIES, 1907

Bell County.—Clear Fork Coal & Coke Co.: Ben Wright was killed August 2d by a fall of coal. Not married.

Columbia Coal Co.: Andy Talaga was injured by explosion of box of dynamite caps on September 16th and died the following day. Unmarried.

Shamrock Coal & Coke Co.: Milas Head, a driver; aged 20 years. Head was caught between rib and moving car while attempting to sprag the latter, February 7th, and died from injuries. Single.

Straight Creek Coal & Coke Co.: Andy Williams, colored, miner; 35 years. Struck on head by rock thrown by a shot of rock; killed instantly. February 28th. Wife, no children.

Same Company: Oscar Gordon, killed by fall of slate, September 16th. Age 16.

Wallsend Coal Co.: Pete Vedeski; age, 19. Killed by explosion of powder, August 30th.

Henderson County.—Peoples Mining Co.: John Barrett; age 54. Killed by fall of slate, October 21. Wife, no children.

Keystone Mg. & Mfg. Co.: Elijah Likins, killed by fall of top, April 13th. Wife, no children.

Hopkins County.—Nebo Consolidated Coal & Coke Co.: F. I. Croft, mine foreman; age, 40. Leg mashed at knee by fall of top, July 25th. Amputation necessary. Died following day. Wife and three children.

Nortonville Coal Co.: Robert Parrott, room boss; age, 35. Killed by premature shot at No. 1 mine, May 17th. Supposed to have lighted squib on wrong end. Wife and child.

Same Company: Bishop Harrell, colored; age, 32. Killed in No. 2 mine by fall of gob where he was loading coal, August 31st. "Was an experienced miner." Wife and stepson.

Reinecke Coal Mining Co.: Henry Brown, machine runner. Stood too close to machine; leg of trousers was caught by the bits of chain machine; was pulled to face of the coal and cut so severely as to result in death the same day, November 16th.

Rose Creek Coal Co.: Jessie Carr, colored; age, 26. Killed by fall of roof, February 13th. Wife and two children.

Same Company: Frank Stewart; age, 36, fell into shaft, sustaining such injuries that he died nine days thereafter. June 28th. Wife.

St. Bernard Mining Co., Arnold mine: Thos. Hawkins; age, 16. Riding with motor as switchman. Climbed to front of motor at tippie (outside of mine) and jumped off in front of it; stumbled and fell, and motor caught him and crushed him to death. Motor was moving very slowly. Occurred January 22d. "The rule was to leave the motor on one side, where a place was prepared."

Johnson County.—Northeast Coal Co., No. 1: Arthur Preston, age 13. Killed in July by falling "Kettle bottom."

Knox County.—Charlinton Coal Corporation: Edgar Black, age 15, was struck by a mine car, November 11th, and fatally injured.

Hughes Jellico Coal Co.: Theo. Patton, colored; age, 25. Injured by fall of loose slate in March and died ten days thereafter. Single.

North Point Jellico Coal Co.: Tobe Sprinkles, trapper; age, 16. Killed on May 1st. Supposed to have fallen between cars while trying to catch trip to ride to tip-house.

Lee County.—Richardson Coal Co.: E. B. Montgomery, fatally injured, April 11th, by explosion of powder. Died April 27th. A spark from lighted lamp on Montgomery's cap, or from a pipe which was in his mouth, fell into his powder jack. Wife and three children.

McLean County.—Memphis Coal Co.: Sam Frizzell, flat trimmer; age, 40. Fatally mashed by railroad cars, while at work on them, in consequence of a defective brake. October 1st. Wife and three children.

Muhlenberg County.—Gibraltar Coal Mining Co.: Stant Ball, age 25, killed in shaft by falling from ascending cage, August 29th. Wife. Following is the report of the Coroner's inquest:

INQUEST OVER THE BODY OF STANT BALL, HELD
AT BROWNSVILLE, KY., AUGUST 29, 1907.

Evidence of John Maughn—We came to the bottom to come out and the cagers told us we could go out now. We both went on the cage. Ball turned around and rang the bell once. The cage was lifted so quick it took him off his feet. He fell over head first. When the cage was lifted it jerked me down also. Then the cage stopped, somebody hollered from the bottom, "What is the matter?" I said, "I am all right. Is he hurt?" I got no answer and the cage came up to the landing. I came out.

Evidence of Walter Mullins, Coal Miner—We were hoisting coal very fast and we got the coal off the bottom. These two men, Ball and Maughn, came to the bottom to go out. They got on the cage. The rope had all slacked out. Ball gave one ring, the cage went out about half way and stopped, and Maughn said "Ring us on out." The cage went out and came on back. We just supposed everything was all right.

Jack Crabtree, bottom cager—We were hoisting coal very fast. When we got the coal all off the bottom, Ball and Maughn came to the bottom and requested to come out. We said there was the cage and they got on it and rang the bell once. Just as he rang the bell once the engineer jerked the cage up, so I ran to the bottom and asked if anybody got hurt. He said "Ring the cage on out." He rang the bell once. I did not have time to ring any more till the engineer jerked the cage up.

Evidence of Floyd Lynch—They called Mr. Miller, the bank boss, to the bottom. I was pushing a car down. Some one hollered from the top and asked how many men were on the cage. The cagers replied there were two. They said there was only one came out. Mr. Miller run his hand in the sump, found his, Ball's cap. I got in the sump and found the man. He was lying about half way through the bunting of the shaft. When I stepped in I felt him with my feet. I

raised his foot up with mine. I raised him up and handed him to Mr. Miller. We took him out. His forehead was bursted.

Evidence of Thos. Hope, engineer—The coal was coming out very fast. I try to keep up with the bell signals. I had just dumped a car of coal and about the time to put another car on I received a signal of one bell. I had my engine reversed ready to pull, gave my engine steam, and found out there was a mistake. I stopped the cage after going about ten or twelve feet. Then I received two bells. I backed down and received two more. Then I received three bells. I brought the cage to the landing. There was a man on it. I know I jerked the cage too quick. Just as quick as I found out there was a man short I went to the shaft to find out about it.

Verdict of the Coroner's Jury.

We, the jury, after examining the body of Stant Ball, find that the head is mashed and mashed through the body. The injuries were received by falling from the cage.

We, the jury, find that Stant Ball came to his death by carelessness of the engineer by hoisting the cage too quick.

EARL McCROY,
E. S. SHELTON,
J. L. STEWART,
B. W. HERRINGTON,
R. F. STEWART,
J. H. McBRIDE, Foreman,
J. H. BROWN, Cor. M. C.

W. A. Wickliffe Coal Co.: Ben Ellis fell from ascending cage February 20th and was killed. Cause unknown. Single.

Ohio County.—McHenry Coal Co., Echols mine: William Geary, trapper, age 16 $\frac{3}{4}$ years. Killed January 18th by being run over by loaded cars. Motor trip broke in two and rear cars caught him.

Same Company, McHenry mine: R. D. Maddox, flat trimmer; age, 30. Killed May 1st by being crushed by railroad cars. Was setting the brake with a stick when the latter broke, letting him fall in front of the wheels.

Pike County.—Borderland Coal Co.: Brit Tyree, age about 40. Killed in May by premature blast as result of re-lighting a partially burned out fuse. Wife and four children. (This was a case of suicidal carelessness or ignorance.)

Pike Consolidated Coal Co.: J. J. Massey; age about 34. Arm caught in cogs on compressor, December 24th, and so badly mashed as to necessitate amputation, from which he died January 26, 1908. Wife and three children.

Pulaski County.—New Cumberland Coal Co.: Chas. Denham; age about 35. Fatally injured by falling slate June 3d; died June 9th. Wife and two children.

Union County.—Southern Tidewater Coaling Co.: A. R. Golden; age, 55 years. Fatally injured by falling slate January 3d; died January 7th. Left nine children.

Webster County.—Webster County Coal Co.: John Crow, age about 30, was killed by fall of gob April 25th. After firing three shots returned to room to fire the fourth, not noticing the gob which had been loosened by the three shots. Died about an hour and a half after injury. Wife.

Same Company: Russell Payne; age about 30. Was shooting in a break-through between entry and air-course, using fuse. Had ignited his shots and waited for shots to go off. Had failed to count his shots, however, and went up the entry, passed the break-through too soon; as he passed the break-through, a shot went off and killed him. Wife.

West Kentucky Coal Co., Colliery G.: S. H. Skinner, age about 35. Ran into a live electric wire, January 18th. and killed instantly. Wife and three children.

NON-FATAL ACCIDENTS FOR 1907

According to causes, the non-fatal accidents are as follows:

Inside the Mine	Serious	Severe
Falls of top -----	18	20
Falls of coal -----	1	3
Powder explosion -----	3	6
Premature blast -----	1	--
Caught by shot -----	1	2
Burnt by smoke and dust explosion, (shoot- ing on the solid) -----	1	4
Burnt by ignited powder smoke (excessive charges) -----	--	12
Burnt by flames from windy shots -----	--	5
Returned on shot -----	1	1
Tamping shot -----	1	--
Struck by blown-through shot -----	--	2
Cars, miscellaneous -----	14	12
Caught between motor and rib -----	1	--
Collision of motors -----	--	1
Mining machine, (coal cutters) -----	--	1
Kicked by mule -----	--	4
Miscellaneous -----	2	7
Total inside -----	44	80
On Surface.		
Spragging a car -----	1	--
Thrown from car; collision -----	--	3
Run over by car -----	1	--
Cars, miscellaneous -----	3	--
Miscellaneous -----	3	6
Total outside -----	8	9

Serious non-fatal accidents include fractures, paralysis, dangerous injuries to internal organs, injuries permanently affecting the muscles (as may come from burns, cuts, lacerations), dislocations, injuries necessitating amputation, crushed bones, and hurts of similar gravity.

Severe but not serious non-fatal accidents include injuries that, while they may be very painful and cause loss of a week or more, leave no permanent effects or are not dan-

gerous. They include "mashes," "bruises," cuts, strains, etc.; that do not come within the limits of the serious class.

Slight bruises, "mashes," bumps, scratches, strains, and minor hurts that cause no cessation of work, or only for a few days (less than a week), are not recorded.

Following is a descriptive list of the serious or severe non-fatal accidents:

Bell County.—Bell Jellico Coal Co.: James Gangas, Jr., tried to pass between a mine car and the rib at a narrow place. Broken clavicle. Soon recovered. July 3d.

Black Bear Mine, operated by Edward Blake, lessee of Black Bear Coal Co.: Eight persons were severely burned, December 17th, as the result of over-charged holes in the Fifth Right heading and a cross-cut made close to the face of the heading. "Double crackers" had been fired, and the holes had been tamped with coal dust. The matter was investigated on the same day by Assistant Inspector Cain, who made the following report:

Prof. C. J. Norwood,

Chief Inspector of Mines.

Dear Sir:—

On December 17th at the noon firing hour an explosion occurred within the Black Bear mine operated by Edward Blake, lessee, in which the following persons were more or less burned: John Gooch, Sam Anderson, Leander Anderson, Emmett Pope, who were working on the Fourth Right entry and were on the entry on their way out after firing their own shots and had reached a point about 125 to 150 feet of being to the main entry; and Bass Ledford, Chas. Ledford, John Patterson, and son Grant Patterson, who worked in the Fifth Right entry and Fifth Right airway and who had reached a point on the Main entry below or to the outside of Fourth Right.

Your Assistant reached the mine at 4:00 p. m. of the day of the explosion, and after a careful investigation, lasting

through two days, presents the report of the facts in the case, together with a statement of the causes that led up to and, in his judgment, produced the explosion.

This mine had been inspected by the writer on December 9th, and for the 46 persons employed within the mine, a current of 14,040 feet of air was entering the mine at Main entry, and 3,000 feet by the second opening, the latter being used to ventilate the Fifth Right. Readings were had at all last crosscuts and read from 2,550 to 5,580 feet per minute for each entry. Four persons were on Fifth Right and Fifth Right airway, and a current of 3,000 feet of air was traveling the Main entry 30 to 50 feet of the then face of this new entry and airway. This amount was considered ample by the Inspector and in fact, except that a check curtain was needed on Fourth Right to force more air through the last rooms on the blind side, no criticism in regard to ventilation could be made. The dryness of the mine was noted between Second and Third Rights, on the Main entry for a distance of probably 150 feet, but elsewhere the mine was not in the writer's opinion so dry as to be dangerous. I wish to state that after the explosion I found the Main from First Right and the Fourth Right extremely dry.

Chas. Ledford states that they fired four shots in the face of the Fifth Right, two of them being what is known as a "double cracker" and the other two being side shots, one on each rib. At the same time they fired two shots of the "double cracker" style in a cross-cut that they were making into the Fifth Right airway. This cross-cut was 13 feet behind the face of Fifth Right, or in other words to the outside of face of entry. These shots were all fired by fuse, and from the best information that can be obtained, were tamped with drill dust or the borings of the holes. All were on the solid and of about equal depth, so must have all exploded about the same time.

At the same time that the Ledfords fired, Patterson and son, who were working the Fifth Right airway, fired three shots of the same style. This makes nine shots in all and beyond any doubt started the explosion. These nine shots

contained 15 to 20 pounds of powder. No effect of the explosion could be noted, except quantities of soot hanging to the walls of the entry in Fifth Right or down the Main, until Fourth Right was reached, where the main intake for the mine was met. From here out, as far as the First Right entry, the doors and brattices were more or less blown out or damaged. Soot was noted up the Fourth Right for over 200 feet, showing that the flames went at least that far with the air. The First Right entry door was found on fire, showing that the flame extended that far against the full current of the mine. Three kegs of powder, two with some that the shots had been fired with taken out and one not opened, were found unexploded within fifty feet of the face of where all these shots were fired. Why they were not exploded can only be explained by the theory that the explosion was not well developed until it came in contact with the strong current coming up the Main and going up Fourth Right. Then it must have gone against the air as far as its strength would allow, and then back up the Fourth Right with the air instead of back up the Main to Fifth Right against a split current of air.

The mine has been tested for firedamp, but none could be found, and in my judgment the cause of the explosion was the firing of too many shots tamped with drill dust in a close place where there were no cross-cuts yet made or rooms cut together to lessen the concussion of the shots, and therefore these shots must have made within themselves a great amount of coal dust that was likely changed into gas by the flame of the exploding powder. This, mingled with the powder smoke and more or less dust that could have been stirred up in the air from the dry places in the mine by the shots which, however small in amount, would add to the strength of the explosion, did the burning and damage to the mine. All parties seem to agree that when rescuing the burned miners the mine was remarkably free of powder smoke.

Attached to this report you will find copy of instructions that your assistant has served on the Company for the future

governing of shot-firing and style of shots to be fired, together with other instructions that if fully complied with will, in his judgment, greatly lessen the liability of a recurrence of another explosion. That the weather conditions play an important part in this class of explosions I do not have the least doubt; the abnormal number that has occurred in several States this month justifies this assertion.

Yours very respectfully,

J. D. CAIN,

Assistant Inspector of Mines.

The notice referred to in the foregoing is as follows:

December 20, 1907.

To Edward Blake, Lessee Black Bear Coal Co.,
Fourmile, Ky.

Dear Sir:

You are hereby respectfully notified that on December 19, the date of inspection, an examination of your mine, the Black Bear, showed it to be in the condition noted below:

Statements herein are framed as if made on the day of inspection.

Ventilation is defective as the result of blownout brattices and damaged doors caused by the explosion of the 17th. Do not start up First Right entry and new main until the brattices are thoroughly repaired. Should this part of the mine become dry it must be sprinkled and kept moist. Cut rooms No.1 on Second Right to new Main by a crosscut every 60 feet.

Do not start up Third Right until brattices are repaired on this entry and the current sent through the faces of the working places.

Do not resume mining on Fourth Right until the brattices are repaired, removing all curtains that are used as brattices on right of this entry and good substantial brattices put up. Remove and take outside all dust on Main and Fourth Right entries, then thoroughly sprinkle this part of

the mine and see that this part of the mine is kept moist. See following pages.

See Sections 3 and 10 of the Mining Law, a copy of which has been furnished you, which forms part of this notice.

Very respectfully,

J. D. CAIN,
Inspector of Mines.

SPECIFICATIONS.

In view of recent events the following instructions are hereby given for the manner and kind of shots that are to be fired within this mine. The double crackers must be discontinued and where crackers are used a single one charged with dynamite must be used and that fired only at the evening shooting hour. Tamping with the drill dust must cease, instead use clay or dampened gob that is free of coal dust. Good judgment must be used at firing time, care being used that not too many shots are exploded at once, under no circumstances must the heading shots be fired with a shot in the cross-cut ahead of air or with one in a room without a breakthrough. All miners are requested to remove drill dust from in front of holes that are to be fired. You will see that the legal amount of air is travelling the working places before work time.

Yours very respectfully,

J. D. CAIN,
Assistant Inspector of Mines.

Sagamore Coal Co.: Austin Mills (col.); finger crushed between car and timber, necessitating amputation. March 11th.

Same Company: Wm. Miller, badly bruised by fall of slate. November 22d.

Straight Creek Coal Mining Co.: Larkin Gilbert; breast bone broken by fall of slate. Laid up about four weeks. September 4th.

Turner Coal Co.: Chas. Simpson; April 22d. Bruised on back and hips by fall of slate. Lost one week.

Same Company: Wm. Fultz; June 26. Car wrecked,

knocking down timbers. Right leg broken below knee by fall of slate.

Wallsend Coal & Coke Co.: Joe Rice; August 30th. Burned by powder explosion. Recovered.

Straight Creek Coal & Coke Co.: Mat Mays; September 6th. Injured internally by fall of slate. Recovered.

Boyd County.—Princess Land & Mining Co.: Robert Jacobs, mine foreman; August 8th. Leg broken by fall of slate.

C. H. Wurtz, Lessee A. I. & M. Co's. No. 12 Mine: Meredy Kasse; June 13th. Back and side strained by fall of slate. Lost one week.

Same Mine: Daniel Gilbert, driver; November 19th. Three fingers mashed by mine car running over them. Lost 20 days.

C. H. Wurtz, Lessee A. I. & M. Co's. No. 8 Mine: Jas. Jiles, miner; June 28th. Two ribs broken and ankle bruised by fall of slate on the roadway in his room. Had drawn slate with wedges, then undertook to set a prop under it to break off a part, when the whole of it fell on him.

Carter County.—Adkins Coal Co.: John Holley, mine Nov 27th. Arms, neck and face hurt by fall of slate. Off about two weeks.

J. R. Bates, Bailey No. 1 Mine: Wm. Mayberry, miner; Sep. 27th. Cut about head and shoulders and hip bruised by piece of slate "rolling off a corner." Lost about 10 days.

Lost Creek Mine, E. K. Railway: Lewis Whitlock, James Whitlock and Dock Hamilton, miners; March 18th. Burned about face and body by gas from a blown-out shot.

Same Mine: Jos. Cook, working for and with his father (not on company's pay roll); October 30th. Injured about head and hips by fall of slate. "Not very serious."

Geigerville Coal Co.: Wash Sexton, miner; August 28th. Pulling on a car while four men were pushing same. Arm caught between top of car and cross-timber and dislocated.

Daviess County.—Owensboro C. & L. Co., Fern Hill Mine:

Andy Gilmore; in October. Mashed between cars on entry. Off 10 days.

Henderson County.—John Archbold Coal Co.: Patrick Murtley, miner; December 21st. Caught between cars and leg fractured below knee.

Corydon Coal Co.: Luke McClure, miner; March 9th. Leg broken by a fall of slate.

Keystone Mng. & Mfg. Co.: Calhoun Jordan; in May. fell off trestle (outside) and broke one of his legs.

Pittsburg Coal Co.: Jack Williams, miner; April 29th. Went back on shot; rib fractured and body slightly bruised.

Hopkins County.—Nebo Consolidated Coal and Coking Co.: Emmet Hibbs and Cord Tanner, timbermen; July 25. Both injured by fall of top. Hibb's left leg broken in two places. Tanner's left shoulder dislocated.

Same Company: Will Adkins; December 16th. Struck by a loaded car. Extent injury not reported. Walton Wright, foot hurt, November 25, by letting cross-over dump back on it. William Slaton, on night shift, went to sleep on track and was run into by an empty car. Wm. Jones, Dec. 9th, jumped on front end of moving car, the latter left the track and he was caught between car and rib. The extent to which these persons were injured is not reported.

Nortonville Coal Co.: John Phaup, Will Hughlett, Ed. Hughlett, H. E. Allen and Lewis Leavell, miners; April 15th. Burned by explosion of powder in powder room of No. 2 mine. No permanent disablement. Cause of explosion not definitely known.

Reinecke Coal Mining Co.: This company reported a number of injuries, some of them manifestly of a minor character, while so little is told of others that it is impossible to determine their nature.

Arthur Lowery, trapper; October 18th. Mine car broke left leg.

The following were reported as having received bruises or "mashes," which evidently were of a minor character: Milton Tuggle, left knee and ankle; Tom Carney, right

ankle; Jack Johnson, ankle; Jno. Winsted, right foot; Will Hutchinson, head bumped while on loose car going through trap door; Will Dyle, toe mashed; Col Blackwell, mashed finger; Wm. Combs, fingers slightly mashed. Others receiving injuries, the descriptions of which are too vague to indicate just what was their nature, but which perhaps were not serious, were as follows: Will Jones (outside laborer), "hurt right hand on dump-bottom gondola;" Ben Chiles, "stepped on nail;" Frank Smith, "machine fell on foot;" Chas. Niblock, "car-brake hurt his hand;" Alex. James, trip rider, "caught his foot between motor and prop car;" Sam Adams, "stepped on a nail;" Hy Johnson, "mule mashed him against car;" Will Dyle, "mule pulled machine on his foot;" Clarence Thompkins, "mule pulled car on top of him;" Will Jackson (outside laborer—sulphur picker), "in setting down trap door on shaker he mashed finger;" Feed Halson, "hit in the side by a falling prop;" Edmon Tyler, "jack fell on his foot;" Walter Nichols, "got foot under car."

St. Bernard Mining Co., Arnold Mine: (1) Walter Long, driver; February 19th. Car jumped track; foot caught between bumper and rail. Lost 18 days. (2) Flem Christian, driver; June 27th. Mule ran away and car jumped track, throwing driver against rib. Lost 12 days. (3) Will Palmer, cutter; June 7th. While "backing up," a piece of coal fell from the face and badly strained him. Lost three months.

St. Bernard Mining Co., Earlington No. 9 Mine: (1) Morris Campbell, hostler; February 7th. Got off car to open trap door; in stepping back, foot slipped and wheel ran over foot. Lost 30 days. (2) Virgil Patterson, loader; December 7th. Head and shoulders bruised by fall of slate. Off 19 days.

St. Bernard Mining Co., Earlington No. 11 Mine: (1) Albert Northington, tamper; February 2d. Loading drill caught hand and mashed it. Lost 32 days. (2) Albert Robinson, driller; February 25th. Drill struck sulphur ball and pushed drill frame down; caught finger. Off 23 days. (3) Jos. Beard, track-layer and timberman; March 5th. Chest, back, and leg bruised badly by fall of roof.

St. Bernard Mining Co., Hecla Mine: (1) Will Orndorff,

loader; February 27. Helped make a running switch; stood too close to track and three cars ran over ankle. Lost 25 days. (2) Frank Norville, driver; August 23d. Mule took wrong track, turned the car got Norville against timber, doubling him up and hurting back and shoulder. Lost 60½ days. (3) Whitt Eaves, cutter; December 12. Bruised by fall of slate at face of room. Lost 11 days.

Stirling Coal & Coke Co., Daniel Boone Mine: (1) Horace Hooks; September 7th. Failed to remove skid from under machine; skid flew up and struck his leg between hip and knee, "causing a flesh wound." (2) Henry Gray; September 21st. Both bones of left leg fractured by fall of gob.

Johnson County.—East Kentucky Coal Co.: James Ward, miner; August 13th. Ankle bruised by fall of piece of coal he was prying over at face of room. Off 3 weeks.

North East Coal Co., No. 1, Muddy Branch Mine: (1) Erna McNeer; April 3d. Tibia broken by fall of slate. Fully recovered. (2) Asa Preston, age 15 years; in July. Leg broken and forehead cut by fall of kettle bottom.

Knox County.—Bennett Coal Co.: Stratton Campbell, Levi Burns, Franch Burch and Casidy. Injured in January by "smoke explosion." The nature of injuries was not reported. On May 9th Dan Alford was injured by a fall of slate. Off 12 days.

Coalport Coal Co.: Samuel Meeks; September 20th. Bones of foot dislocated by fall of coal. Off about 6 weeks.

Cumberland Coal Co.: Wm. Reed, trip feeder; January 15th. Caught and thrown by loaded car while in motion. Leg broken.

Cumberland Valley Coal Co.: Joe Canady, miner; in April or May. Fell under car. Right forefinger mashed off.

J. T. Gray's Mine: Three accidents are reported from this mine, but reports are so vague as to results, that the seriousness of the injuries can not be stated here. The reports are: E. E. Barratt; September 10th. "Ban slate fell on him." John Owens; May 28th. "Got one leg bruised by being

too close to shot when fired, coal striking him. Not hurt bad." F. E. Carrel; June 26th. "Mashed with slate. Not hurt much."

Lynn Camp Coal Co.: James Stewart, drum-man (outside); April 2d. Right fore-finger cut off while spragging a coal car.

North Jellico Coal Co., Bertha Mines: (1) Tom Gross, loader; July 16th. Left side of nasal bone broken and deep cut over left eye, by fall of slate while he was loading out his last car for the day. (2) Jas. Warfield, machine runner; July 22d. Leg caught between side of motor and an entry timber; tendon of left knee-cap torn and some injury to muscles of thigh. Had boarded the motor to talk to motorman and was riding with his back to the timber.

North Jellico Coal Co., Wilton Mine: (1) J. D. Leforce, pipe-man; June 12th. Three ribs and both lower bones of right leg broken, contusion on his right side, and left foot bruised by fall of slate, while fitting a pipe in a room-neck. Recovered. (2, 3, 4) J. H. Walters, Pete Carter and A. C. Williams, night slate handlers; July 17th. The men were thrown from an empty mine car on Hurricane Ridge trestle by collision with a lot of empties that were standing on trestle, car they were in being pushed ahead by a trip of slate, when the motorman lost control of the train on a down-grade. Carter was severely, but not dangerously injured by a blow on the forehead. Others received bad cuts and bruises. (An outside accident.)

Laurel County.—Phenix-Jellico Coal Co., Diamond Mine: Jake Lemp; in March. Arm broken "by passing a shot in an entry." The company's report terms this accident "not serious."

Lee County.—Beattyville Block Coal Co.: (1) Robert York, miner; October 18th. Caught hold of wire rope ahead of pulley; fingers caught in block; amputation of two fingers necessary. (Outside). (2) Roberty Dougherty, miner; October 18th. Trip of cars got loose on incline. Dougherty ran to see result of accident at foot of incline. Wire rope over

the drum snapped and struck him on leg, breaking it at the ankle. (3) Ludloe Cole; in November. Injured by fall of slate. Off about two weeks.

Richardson Coal Co.: E. B. Montgomery, Raleigh Montgomery and Raleigh Hall injured by powder explosion, April 11th. E. B. Montgomery died (as already reported); others recovered. Explosion caused by spark falling into powder jack of E. B. Montgomery from lighted lamp on his cap, or from pipe which he was smoking.

Morgan County.—Kentucky Block Cannel Coal Co.: James Collins; July 5th. Bone below right knee broken by fall of slate. Was drawing pillar and went under loose slate immediately after shooting. Recovered.

Muhlenberg County.—Brasher Coal Co., Woodson Mine: (1) Leslie Staples, driver; October 10th. Jammed between car and mule and arm broken; "on account of not using sprags." (2) Oscar Majors, machine runner; October 17th. Foot mashed by jack falling on it. "Slight injury."

Crescent Coal Co.: Morton Hunter, driver; October 22d. Right leg caught by two cars coming together; patella broken.

Greenville Coal Co.: Will Coursey, driver; September 9th. Kicked by mule on shoulder and chin. Off 10 days.

R. Morgan Coal, Coke and Mining Co.:(1) R. Barnes; March 5th. Returned on a shot in his room. Bruised. (Whether this was a serious accident or not can not be told from the meager report.) (2) Kay Penrod; in May. Kicked by a mule and disabled 13 days. (H. Garret got his "arm hurt by water box" in May. Joe Ruth had an ankle hurt by a fall of coal, in July. These injuries appear to have been minor.)

Oakland Coal Co., Hillside Mine: The following report of injuries to five persons, by ignition of powder smoke, November 21st, was made by Assistant Inspector Doss:

Central City, Ky., Nov. 30, 1907.

Prof. C. J. Norwood, Chief Inspector of Mines,
Lexington, Ky.

Dear Sir:—

You will notice mention in my report of an explosion in the Old Hillside Mine of the Oakland Coal Co.

This explosion occurred on the 21st of November, about 4:00, P. M., at the time of shooting in the mine. It resulted in five persons being severely burned. They were the following: T. M. Brown, Boy Edwards, John Eaves, Josh Brown (colored), Uri Hord. Edwards injury was so severe that he died the 25th, following.

I visited the mine on the morning of the next day, and made a thorough investigation as to the nature and cause of the explosion. I found that it was the ignition of powder smoke, mostly from two shots, which had been fired in the second South Entry. A shearing, about $3\frac{1}{2}$ feet deep, had been made on the right rib of the entry, the entry being about 9 ft. wide. A hole had been drilled near the center of the entry 6 ft. deep; another hole down the left rib 9 ft. deep. Those shots were both very heavily charged, and fuses were being used to fire the shots. Both shots were lighted at the same time. The front shot, which was the 6-ft. hole, failed to knock the hole. In fact, it blew the tamping from out the hole, and of course caused a great volume of smoke. After the front shot failed it was very much harder for the shot on the left rib to do its work, and it also blew out, causing a still greater volume of smoke.

This, together with the smoke from the other shots fired in the mine, became ignited from the flash from the drill hole, and resulted in the explosion which burned the persons already mentioned.

At the time I made the investigation I found a sufficient amount of air circulating to all the working places throughout the mine. I also measured from the face of the coal where the explosion occurred to the first break-through behind, which was open, which was 62 feet.

Yours truly,

A. J. Doss.

Assistant Inspector of Mines.

W. A. Wickliffe Coal Co.: (1) Floyd Jernigan, machine runner; September 22d. Injured by fall of slate. Lost 10 days. (2, 3, 4) Charles Grant, Vernon Pogue, Sam Estes; February 8th. Burnt on hands and face by "windy shot."

Ohio County. Coffman Coal Co.: Wilton Hodge and Howard Hodge "were bruised by failing to get out of range of a shot that blew through in holing break-through;" in May. Report does not indicate whether injuries were severe or not.

McHenry Coal Co., Echols Mine: Sam Shaver, top cager, had thumb cut off (cause not stated), on September 11th.

Williams Coal Co.: Raymond Baker, driver; February 14th. Broken leg, "caused by running into an empty car."

Pike County.—Borderland Coal Co.: (1) Jake Smith, driver; March 23d. Bone in left leg broken. Mule failed to turn out at parting; pulled empty car against a load and caught Smith's leg below the cars. (2) Will Raines, brakeman on tramroad; July 15th. Run over by car of rock and both legs broken. (3) Charles Walters; September 20th. Right forearm broken by premature blast. The company reports two accidents in June, but whether they were more than minor can not be determined from the reports. They were as follows: Sherman Kirk, "slightly hurt in head by powder explosion." Person whose name is not given, on June 28th, "struck in head by a piece of flying coal; injury not serious."

Greenough Coal & Coke Co.: (1) A. L. Castle; in May. Foot slightly mashed by fall of slate. Lost a week. (2) J. M. Lyons; in May. Finger mashed by being caught between car and rail while putting on a wrecked car. Lost a week and a half. (3) Walter Curnutte, driver; October 21st. Kicked by mule. Lost 10 days.

Marrowbone Coal & Coke Co.: (1) Isaac Bartley, outside day laborer; January 5th. Left leg broken and left arm and chest bruised by fall of slate. Report states: "His duties at the time caused him to go twice a day, an hour each time, to pump out some standing water on air-course. He left his pump and went alone into the furnace entry, where he had been repeatedly warned not to go. No one saw the accident and he has been unable to explain how it happened. Recovering rapidly." (2) C. A. Ward, miner; April 6th. Ankle sprained and arm slightly bruised by fall of slate. (3) Elijah Dingus, miner; May 10th. Right arm bruised and sprained by fall of slate.

Rockcastle County.—New Livingston Coal Co.: James Anderson; in November. Wrist knocked out of place by being struck by flying coal from a shot.

Union County.—Crittenden Coal & Coke Co.: Joseph H. Drile, miner; in July. Shoulder hurt by being "struck by trip backing down." (Whether this was more than a minor injury can not be told from the report.)

Ohio Valley Coal & Mining Co.: (1) Jas. McCollum, driver; April 25th. Fell off loaded coal car, which ran over leg, bruising it badly. (2) Jas. Srimes, coal loader; May 24th. Collar bone broken and hand badly cut by fall of slate. (3) Freeman Raley, tippie-man; June 17th. Foot bruised considerably by being caught in roller while he was pushing a loaded car. Off 17 days. (4) Wm. Newcom, miner; December 31st. Was caught by shot, and face and eyes burnt, head cut, and body bruised. He had two shots to fire. Was using fuse and intended to light both holes, but in his hurry hardly thought he had lighted the last one. After the first shot went off, he waited awhile on the other, and then went back to relight it; on reaching it, it went off, with the results stated. Recovered.

Sullivan Coal Co.: Ed Hinchee, miner; August 5th. Went back too soon, in smoke, to fire second shot. After lighting squib he was too exhausted to remove squib from barrel or make his escape. Shot exploded and he was cut about the face and bruised about the breast. Recovered.

Webster County.—R. L. Forsythe's Du Pont Mine: John Vaughn, miner; October 8th. Was tamping shot, when latter exploded. "Burnt all over." Recovered.

Providence Coal Co.: (1) Horace Danscomb, driver; January 4th. Kicked by mule. Lost three weeks. (2) Lewis Browdy, driver in Slope mine; February 1st. Was on front end of trip of three loaded cars. Mule began kicking and his lamps went out. Was caught between car and roof. Three ribs broken, and slight internal injuries. (3) W. H. Mason, machine helper in Slope mine; February 3d. Foot mashed by being run over by machine in moving to face of coal. Lost about two weeks. (4) Bud Warfield, machine runner in Slope

mine; February 25th. While moving machine, wheels ran over right foot, which was mashed about the ankle. "Not serious."

Webster County Coal Co.: Francis Marlin, driver; May 16th. While attempting to board car while it was moving he missed his footing, fell in front of car, and was considerably bruised, though not seriously injured.

Whitley County.—Burk Hollow Coal Co.: (1) John Huddleston; feet and legs bruised by fall of slate, September 3d. (Report does not indicate whether or not the injury was more than minor.) (2.) Maynard Huddleston; same date. Head caught and severely hurt while he was attempting to release his brother John.

Campbell Coal Mining Co.: Douglass Charey; July 2d. Back wrenched and left leg bruised by fall of slate.

Cooke Jellico Coal Co.: R. D. Bryant; December 28th. Back bruised by fall of slate. Returned to work in January.

Louisville Property Co., Vanderpool Mine: (1) Wylie Jones, motorman; in April. Motor collided with another. Leg slightly mashed and bruised; no bones broken. Off ten days. (2) Nat Reynolds; in October. Great toe badly mashed by lump of coal while tipping care at tip-house. (3) Rufe Harrell, coupler behind electric motor; in November. Jammed between trap door and door frame, caused by motor running into trap door. Head squeezed and some scalp wounds, but reported not serious.

Main Jellico Mtn. Coal Co.: (1) John Q. Adams, laborer; in May. Rib broken and ankle mashed by fall of slate. (2) John Parker, miner; November 15th. Thumb caught between car and timber, the injury necessitating amputation.

Mt. Morgan Coal Co.: W. R. Rice; May 23d. Report is: "Slate fall. He was hurt pretty bad, but is doing well."

Pleasant View Jellico Coal Co.: Will Carpenter, driver; November 21st. Report is: "Allowing his trip of cars to run too fast and jumped track. Cut finger off at first joint."

Stearns Coal Co., Ltd.: (1) Jesse Edwards, miner; November 15th. Report is: "Explosion, probably windy shot. Face and hands slightly burned. Started to work again December

2d." (2) A. M. Spradling; injured in same accident. Report is: "Head crushed. Removed from Somerset, Ky., hospital. Doing well (December 9th) and expected to be able to work in a few days."

West Jellico Coal Co.: (1-2) Isham Strunk and Esau Wilson; July 9. Burnt by blow-out shot, but not seriously. (3) H. Ross; July 10th. Struck on hip by fall of slate, but not seriously injured. (4) Clarence Ramsey; December 15th. Riding from mines on locomotive; jumped off before engine stopped; loaded car run over on leg below knee, and amputation was necessary.

V

NOTES ON THE MINES

Following are the reports of the Assistant Inspectors, A. G. Spillman, A. J. Doss, and J. D. Cain on the mines inspected by them during the year.

NORTHEASTERN DISTRICT

REPORT OF ASSISTANT SPILLMAN

Prof. C. J. Norwood,
Chief Inspector of Mines.

Dear Sir:—

I have the honor of submitting my report for the year ending December 31, 1907. It includes reports of inspections in the Northeastern District. All the mines of which are under my supervision, and of the inspection work in the counties of Christian, Hopkins and Webster, in the Western District, the mines of those counties also being in my care.

Respectfully

A. G. SPILLMAN,
Assistant Inspector of Mines.

Boyd County**DAWSON BRANCH MINE.**

Mine office: Rush. Transportation: C. & O. Railroad.
Operated by J. H. Jacobs, Lessee.

Inspected January 12th. There was no fan or furnace for ventilation, only a fire built on the ground. I could not find a current of air entering the mine of sufficient strength to enable me to get a measurement. The air shaft was too small. This was the only inspection made of this mine during the year, as it was closed in April.

MEADOW BRANCH MINE.

P. O.: Rush.

Head office: Mt. Sterling.

Transportation: C. & O. Railway.

Owned and operated by the Adkins Coal Co. Green Strother, President; Joseph Strother, Supt.

Inspected January 12th. The ventilation and timbering were satisfactory, but the drainage was very bad indeed.

Inspected November 22d. The ventilation and drainage were defective on the Arms entry, and a door was needed on the mouth of the 1st left entry. The drainage on the main entry was miserable.

PRINCESS MINE.

Head office: Princess. Transportation: C. & O. Railway.

Operated by the Princess Land and Mining Co. until September 1st. The mine was then taken over by the Big Run Coal Co.; David S. Gay, President; J. M. Pickerell, Secy. and Treas; J. H. Drake, Supt.; J. H. Jacobs, Mine Foreman.

Inspected January 13th. All work was confined to the McKnight entry, and rooms were turned off both sides of said entry. These rooms were without ventilation, as there were no break-throughs in them. Written notice was served directing the company to make break-throughs in these rooms, and that thereafter there should be break-throughs made every 60 feet in rooms as well as entries. Drainage and timbering satisfactory.

Inspected November 23d. Ventilation, drainage and timbering were satisfactory.

CLINTON No. 8 MINE.

Head office: Ashland.

Transportation: C. & O. Railway.

Operated by C. & H. Wurts, Lessees, under Ashland Iron & Mining Co.

This mine was idle when I visited it on January 12th, and no inspection was made. The work consists in getting a few stumps in the haulway.

No 12 MINE.

Head office: Ashland. Transportation: C. & O. Railway.

Operated by C. & H. Wurts, Lessees, under Ashland Iron & Mining Co.

This mine has been operated in a desultory fashion throughout the year. There are sometimes as many as three openings with from 3 to 4 men in each opening, and natural means were depended upon for ventilation, which was fairly good. Only one inspection was made.

Breathitt County

JACKSON MINE.

Head Office: Jackson. Trans.: Lexington & Eastern Ry.

Operated by the Imperial Coal Co.; J. M. Hartley, President; Fairmont, W. Va.; H. C. Thompson, Vice-President, Winchester, Ky.; W. E. Cassidy, Sec'y & Treas.; Lexington, Ky.; H. G. Greer, General Manager, Jackson, Ky.; R. T. Davis, Mine Foreman.

Inspected February 26th. Ventilation, drainage and timbering, were satisfactory.

Inspected September 19th. The ventilation was defective in that the ventilating current did not serve all of the working places, as it should have done. Drainage satisfactory. and no lack of proper posting was observed.

Carter County

BAILEY MINES.

Mine office: Rush. Head office: Ashland.

Transportation by C. & O. Railway.

Operated by J. R. Bates, Lessee, under Ashland & Iron Mining Co.

Bailey No. 1 Mine.—This mine was on stumps all of the year, and conditions were as good as could be expected, considering the class of operations. When visited last, the mine was idle, no one was there, and no inspection was made. Two inspections were made.

Bailey No. 2 Mine.—This mine was worked out and abandoned in April. No inspection was made during the year.

BOGHEAD MINE.

Mine P. O.: Grayson. Head office: Riverton.
Transportation by Eastern Kentucky R. R., and C. & O. Ry.
Operated by the Kentucky Cannel Co., Sturgis G. Bates,
General Manager.

Operations at this mine are confined to getting coal out of several small openings, and natural means have been depended upon for ventilation. Drainage and timbering fair. Only one inspection was made.

LOST CREEK MINE.

Mine office: Willard. Main office: Riverton.
Transportation by Eastern Kentucky R. R., and C. & O. Ry.
Operated by the Estate of N. Thayer. Sturgis G. Bates,
Vice-President; Arch Morris, Supt. of Mines.

This mine was maintained in a satisfactory condition in all respects, during the year. Two inspections were made.

MORNING GLORY MINE.

Mine office: Rush. Transportation by C. & O. Railway.
Operated by the Geigerville Coal Co. William Hensley,
President; William Adkins, Secy. and Treas. This is a new
mine that shipped the first coal in February.

Inspected November 22d. The first left entry air course was choked with a fall of slate, and the brattices between the entry and air course were old and leaky. This was the only inspection made.

STRAIT CREEK MINE.

Mine office: Denton. Transportation by C. & O. Railway.
Operated by Strait Creek Coal Co. Kent Prichard,
Supt. All work is confined to drawing pillars and stumps.

Floyd County**MIDDLE CREEK MINE.**

Mine office: Prestonsburg. Transportation Big Sandy
Division of the C. & O. Railway.

Operated by the Middle Creek Coal Co. C. P. Lamprey, President, No. 739 Spitzer Building, Toledo, O.; David Halley, Secy. and Treas., Ironton, O.; Morgan Evans, General Manager, Prestonsburg, Ky.; D. E. Woodruff, Superintendent at mines.

This is a new mine and began shipping coal in October. The mine is equipped with one 15 H. P. Ironton Engine; one 150 H. P. Atlas Tubular Boiler; one 100 K. W. Morgan-Gardner Dynamo and two 5 foot undercut Morgan-Gardner Electric Mining Machines. The No. 1 coal is being worked.

Inspected December 19th. Ventilation, drainage, and timbering were satisfactory.

PRESTON MINE.

Mine P. O.: Woods. Trans. Big Sandy Div. of C. & O. Ry.

Operated by the Preston Coal Co.

Inspected June 26th. The mine was defective with respect to ventilation and drainage. A new air shaft had been sunk and a new furnace was being constructed. When these improvements are completed the ventilation will be improved.

Inspected December 19th. Ventilation, drainage and timbering were satisfactory.

Johnson County**FLAMBEAU (EAST POINT) MINE.**

Mine P. O.: East Point. Head office: Paintsville.

Transportation by Big Sandy Division of the C. & O. Ry.

Operated by the East Kentucky Coal Co. A. D. W. Smith, President, Wilkes-Barre, Pa.; H. Laviers, Supt., Paintsville, Ky.

Inspected June 26th. I could not make a thorough examination of this mine on account of the powder smoke. The

men were allowed to shoot at any time during the day. Written instructions were given the company, directing that regular hours be arranged for shooting, and to see that these instructions were rigidly enforced.

Inspected December 19th, and all conditions were found to be satisfactory.

MEEK MINE.

Mine P. O.: Meek.

Trans.. by Big Sandy Div. of the
C. & O. Ry.

Operated by the Meek Coal Co. J. N. Meek, President and General Manager. The mine is equipped with one Norwalk Compressor; one 100 H. P. Atlas Tubular Boiler; six Harrison Class L. Mining Machines.

Inspected June 22d. There were two (2) open breakthroughs between the First Right entry and air course, consequently the ventilating current did not travel within 60 feet or less of all the working places as required by law. The furnace needed repairing, the stack was too open and new grate bars were needed.

Inspected December 14th. The ventilation was very defective indeed. The furnace power was inadequate, and the doors and stoppings were in poor shape.

NORTH EAST MINES.

Head Office: Paintsville.

Operated by the North East Coal Co. A. D. W. Smith, President, Wilkes-Barre, Pa.; H. Lavers, Superintendent; Paintsville, Ky. Transportation by Big Sandy Div. of the C. & O. Railway.

No. 1 Mine.—Mr. Lavers, the Superintendent, has kindly furnished a description of the company's operations at the different mines. At this mine, the company has built 15 houses. Built new tipple to an elevation of 50 feet above the railroad tracks in which there are 105,000 feet of lumber, all of which was sawed on the ground. The tipple is constructed of 12 x 12 and 10 x 10 timbers, mortised and teneted. The

fine coal from the screens is received in bins holding from two to four railroad cars of each grade. The coal is lowered to car, a distance of 30 feet, in a drop basket on the same plan as a river tippie.

Have made four additional new openings for entries, two of which are approaches to the new tippie. The output has been increased from one hundred to four hundred tons. The mines are worked on a double entry system. Ventilation has been produced by furnace, but expect to install a fan in the near future; also electrical machinery and mine with machinery during the coming year.

Inspected June 27th. Ventilation, drainage and timbering were satisfactory.

Inspected December 20th. Ventilation was defective, in that the current **did not serve all of the working places**. Break throughs between the rooms were too narrow, in many instances, and gob was piled in front of some of them.

No. 2 Mine.—This was formerly known as the Wheeler Mine, and was operated by the Acrogan Coal Co. until the first of the year when it became the property of the North East Coal Co. Coal was mined up to the middle of February, when the mine was shut down for improvement. Entries were shot down grades lightened and tippie remodded at quite an expense to the present company. The result of this is that the mine is in a more satisfactory condition with respect to production as well as the convenience of the employees. The coal is mined by machinery, the equipment consisting of:

One 125 K. W. Goodman dynamo; one 5-ton Goodman Motor; and four Goodman Electric Mining Machines. Ventilation is by a 16-foot Crawford & McCrimmon Fan.

The mine was maintained in an excellent condition in all respects throughout the year. Two inspections were made.

No. 3 Mine.—Mr. Laviers' report of the operations at this mine is as follows:

This is an entirely new operation. Work on the con-

struction of a railroad to it was begun in May, and is completed at this time. The opening of the mine was begun on September 2d. Since that time a double approach morticed and teneted 12 x 12 and 10 x 10 tipple has been completed which required 40,000 feet of lumber all of which was sawed on the company's property, and reaches an elevation of 30 feet above the railroad tracks. The tipple is designed to make 5 grades of coal. The chutes and screens are all of iron.

Have three openings, two of which are used as an approach to the tipple. At this mine there has been nothing but development or entry work done, and the entry work will be kept going all summer with a view to a good output next fall.

Twenty-five (25) new houses have been completed, twenty-three (23) of which are four room houses with porches. The houses are framed, weather-boarded, ceiled and nicely painted. Foundations are made of paving brick. The other two are six-room houses, two story, and are framed, weather-boarded and plastered.

A new store 42 x 70 feet has been built. It is two story with basement and concrete floor under the entire building. The company has constructed a school house 24 x 40 feet of rough boarded and weather-boarded with sheathing paper between, and canvassed and papered inside. It is equipped with the most modern of American Company's seats and desks. The company employs the teacher, and the school is free to the children of the employees. The term of school will last eight months.

Eleven (11) deep water wells have been drilled, cased with galvanized iron casing and equipped with deep well pumps, thus furnishing the employees with as good water as is found anywhere.

RITTENHOUSE MINE.

Mine office: River.

Transportation by Big Sandy Div. of the C. & O. Railway.

Operated by the Rittenhouse Coal Co., until June 12th, when it was turned over by the Tibbals Coal Co. Wallace

Tibbals, President; C. E. Tibbals, Superintendent; and J. W. Smith, Mine Foreman. The mine is a slope, and is ventilated by a 10 foot Cole's fan. The equipment consists of:

One 67 K. W. Morgan-Gardner Dynamo; three Morgan-Gardner S. S. Low Vein Chain Machines; one 125 H. P. Engine; one 125 H. P. Boiler, made by the Union Boiler Works, of Erie, Pa.

The mine has been maintained in a satisfactory condition in all respects, throughout the year. Two inspections were made.

GREASY CREEK MINE.

Mine office: Williamsport. Head office: 60 Waldo Place,
Chicago.

Transportation by Big Sandy Div. of the C. & O. Railway.

Operated by the Sandy River Coal Co. F. A. Stacy, President, Chillicothe, O.; Seymour Boling, Superintendent at Mines.

Inspected June 22d. Ventilation, drainage, and timbering were satisfactory.

I visited this mine on July 25th, and December 14th, but no inspections were made, as the mine was idle on each occasion.

KENTUCKY BIG VEIN MINE.

Head office: Louisa.

Transportation by Big Sandy Division of the C. & O. Railway.

Operated by the Jay. H. Northrup Coal Operation. Jay. H. Northrup, General Manager; G. W. Bickford, Superintendent at Mines.

This mine resumed operations after being closed down for more than a year, and was operated during the months of November and December. I visited the mine on December 14th, but it was idle, no one was there and no inspection was made.

Lawrence County**PEACH ORCHARD MINES.**

Head office: Peach Orchard.

Transportation by Big Sandy Div. of the C. & O. Railway.

Operated by the Peach Orchard Coal Co. John C. Welty, President, Canton, O.; H. P. Scott, Secy. and Treas.; J. P. Small, General Manager.

This company has recently installed a new tippie, equipped with the Jeffrey Elevating Machinery and revolving screens. Also, one 24 x 30 Norwalk Compound Air Compressor. The mines are now equipped with two Norwalk Compressors, two Jeffrey Chain Machines, operated by compressed air; three G. G. Harrison Punchers and one Whitcomb Post Drill.

Annie Mine.—This mine was inspected June 21st. The ventilation, drainage, and timbering were satisfactory. This is the only inspection made of this mine during the year, as it was idle upon my next visit, and remained so the balance of the year.

Minnie Mine.—Inspected June 21st. All conditions were satisfactory.

Inspected December 13th. The volume of air entering the mine was ample for the number of persons (41) employed inside, but it was not well conducted to all of the working places. This was due to the absence of check curtains on the entries, and the failure to make break-throughs in the rooms. The drainage on the main traveling way was bad indeed. No lack of proper posting was observed.

Lee County**NORMAN MINE.**

Head office: White Ash.

Transportation by Louisville & Atlantic Railway, and also by connection with Lexington & Eastern Railway.

Operated by Beattyville Block Coal Co. J. L. Tompkins, President and General Manager.

Inspected February 27th. The mine was defective with

respect to ventilation and drainage. The ventilating current did not reach all of the working places, and there was too much of both mud and water on the main entry road.

Inspected September 18th. The conditions were satisfactory in all respects.

CONTRARY CREEK MINE.

Mine office: White Ash.

Transportation by Louisville & Atlantic Railway, and also by connection with Lexington & Eastern Railroad.

Operated by the White Ash Coal Co., until July 26th, when it was leased to the Philips Coal Co. J. P. Lyon, President and General Manager.

Inspected February 27th. The mine was defective with respect to ventilation and drainage. The volume of air entering the mine was insufficient for the number of persons employed underground and there has been no provision to send what current there was, to the working places. There was too much of both mud and water on the main entry road. Timbering was satisfactory.

Inspected September 18th. The drainage had been very much improved since my preceding inspection, and no lack of proper posting was observed, but the ventilation was not yet satisfactory.

MCGUIRE MINE.

Head office: Beattyville.

Transportation by Louisville & Atlantic Railway, and also by connection with Lexington & Eastern Railroad.

Operated by the McGuire Coal Co. Walker Jameson, President and General Manager.

I visited this mine February 28th. Work was being done in three separate openings. Four men were employed in one, and three each in the other openings. No. 1 opening was driven to daylight in three different places and No. 2 opening was driven to daylight in two different places. No inspection was made.

This mine was idle when I visited it on September 18th, and had been for some time. No inspection was made.

RICHARDSON MINE.

Head office: Beattyville.

Transportation by Louisville & Atlantic Railway, and also by connection with Lexington & Eastern Railway.

Operated by the Richardson Coal Co. J. C. Richardson. President; G. W. Gourley, Vice-President.

Inspected February 28th. There were 56 persons employed inside, and the current of air entering the mine was ample for this number, but on account of leaky brattices and curtains, the current did not travel within 60 feet or less of all the working places as required by law. The drainage was bad on the First Left entry. Timbering satisfactory.

Inspected September 18th. The mine was in an excellent condition in all respects.

Morgan County**KENTUCKY BLOCK CANNEL MINES.**

Mine office: Cannel City.

Transportation by Ohio & Kentucky and Lexington & Eastern Railways.

Operated by the Kentucky Block Cannel Coal Co. W. DeL. Walbridge, President, New York City; M. L. Conly, Superintendent. The Coal cutting machinery consists of 20 Harrison and 6 Ingersoll-Sergeant Pick Machines. Power is furnished by 2 Norwalk Compressors.

Brushy Mine.—Inspected February 25th. The face of the 6th Left entry was 110 feet ahead of the air and the atmosphere was smoky and unhealthful. There were two (2) open break-throughs between the 5th Left entry and air course and a door was needed on the Main entry between the 7th Left entry and air course. Drainage and timbering were satisfactory.

Inspected September 19th. Ventilation, drainage, and timbering were satisfactory.

No. 1 Mine.—This mine was maintained in a satisfactory condition in all respects during the year. Two inspections were made.

WATSON CANNEL MINE.

Mine office: Caney.

Transportation by Ohio & Kentucky and Lexington & Eastern Railways.

Operated by the Watson Cannel Coal Co. J. J. Watson, President and General Manager.

Inspected September 20th. The furnace power was inadequate to properly ventilate the mine. The air shaft was too small, and the furnace stack was not high enough.

This was the only inspection made during the year of this mine, as it was idle most all of the time.

WHITE OAK MINE.

Mine office: Piedmont.

Transportation by Ohio & Kentucky, and Lexington & Eastern Railways.

Operated by the White Oak Cannel Coal Co., until July 1st, when this company was succeeded by the Gish Cannel Coal Co. B. J. Blow, President, Louisville, Ky.; C. E. Hegan, Vice-President, Louisville, Ky.; S. J. Gish, General Manager, Central City, Ky.; D. J. Stamp, Mine Foreman.

Only one inspection was made during the year, as the mine was idle until after the present company took charge.

Inspected September 20th. The ventilation and timbering were satisfactory, but there was too much mud on the main entry road.

Pike County**BIG BRANCH MINE.**

Mine office: Lookout.

Transportation by Big Sandy Div. of the C. & O. Railroad.

Operated by the Big Branch Coal Co. H. C. Berry, President, Philadelphia; James H. Crumbie, Secretary, Philadelphia; J. W. Cockill, Treas. and General Manager, Lookout, Ky.; Lee Canady, Mine Foreman.

This is a new mine, work being commenced in May, in what is known as the Upper Elkhorn Coal of the Big Sandy Valley. No coal was shipped during the year. The main entry and air course have been driven in 150 yards and the

coal shows four feet in thickness and fine quality. Mr. J. W. Cockill, the General Manager, has kindly furnished a statement of operations. A four track tipple, 50 feet high has been built with a complete screening arrangement as follows:

The coal is first screened over a $1\frac{1}{4}$ inch bar screen 16 feet long, also over a $\frac{3}{4}$ inch bar screen for the smaller sizes. The larger sizes then pass over a 6 foot bar screen which can be adjusted to any desired size, and before entering the cars all coal passes over a lip screen $\frac{1}{2}$ inch mesh which makes it impossible for any slack to enter the car in loading prepared coal. A screw conveyor 41 feet long conveys the slack which passes through the lip screen to the slack car, or to a bin to be used at the boiler house. The mine is equipped with one 100 H. P. Phoenix Iron Works Boiler; one 22 x 24 Norwalk Compound Compressor; four Class "M" Harrison Pick Machines; one Air Drill. The company has installed a Jeffrey Retarding Conveyor line 941 feet long on a 27 degree pitch with a capacity of 1,500 tons per day. Also one 15 H. P. hoisting engine for conveying material to the top of the mountain. Up to the present time 14 miners houses have been completed. These houses are ceiled on the inside, and lined with paper and weather-boarded on the outside, making them very comfortable and neat looking houses. A large store-house has been built with the offices connected.

BORDERLAND MINE.

Mine office: Borderland, W. Va. Telegraph office: Nolan.

Transportation by Norfolk & Western Railroad, the coal being carried from the mine to the tipple at the railroad by aerial rope tramway.

Operated by the Borderland Coal Co. E. L. Stone, President, Roanoke, Va.; E. B. Fishburn, Secretary and Treasurer, Roanoke, Va.; L. E. Armentrout, General Manager; Mont. Williamson, is Mine Foreman.

Inspected January 16th. Sufficient air was entering the mine, but the current did not serve all of the working places on account of break-throughs not being made regularly in the rooms. Drainage and timbering were satisfactory.

Inspected November 21st. Drainage and timbering were satisfactory but the ventilation was defective.

BURNWELL MINE.

Mine office: Sprigg, W. Va.

Transportation by Norfolk & Western Railroad.

Operated by the Burnwell Coal & Coke Co.

E. Barlow, President, Mahanoy City, Pa.

G. W. Barlow, Treasurer, Mahanoy City, Pa.

E. A. Beddall, Secretary, Pottsville, Pa.

C. J. Adams, Superintendent at Mines.

John Foit is mine foreman.

This is a new mine that begun shipping coal November 15th. No inspection was made. The coal that is being worked is the Vulcan seam, and is from 54 inches, to 84 inches thick. The mine is equipped with one 200-Horse Power Ball Engine made in Erie, Pa., one 150 K. W. Westinghouse Dynamo, two 100 Horse Power each, Erie tubular boilers, one Sullivan chain breast mining machine 5 1-2 foot undercut. The coal is carried to the tippie from the mine cars by means of a Link-Belt conveyor 420 feet in length, with a guaranteed capacity of 150 tons per hour.

CABIN BRANCH MINE.

Mine office: Mossy Bottom.

Transportation, Big Sandy Division of the C. & O. Railroad.

Operated by the Cabin Branch Coal Co., Ballard Weddington, President. W. K. Steele, Secretary and Treasurer. R. L. Burgess, General Manager. This is a new mine opened recently. Coal was shipped about the 1st of December. When visited on December 20th all work was confined to driving main entry and air course.

EDGEWATER MINES.

Mine office: Hellier.

Transportation by Big Sandy Division of the C. & O. Railroad.

Operated by the Elkhorn Consolidated Coal & Coke Co. Fon Rogers, President and Treasurer, Pikeville, Ky., Doctor Alex. Irvine, Vice President, Ashland, W. Va., J. L. Morgan, Superintendent, Hellier, Ky., M. L. Goodson is mine foreman.

The Company built 8,200 feet of railroad track during the year, and they have 22 houses. The plant consists of one Norwalk Compressor, and six Class L. Harrison Pick Mining Machines.

Lower Elkhorn Mine: Mine office, Hellier. Inspected June 25th. Ventilation, drainage and timbering were satisfactory.

Inspected December 16th. Sufficient air was entering the mine for the underground employees, but the current was not well conducted to all of the working places. This was due to the absence of check curtains on the entries. Drainage and timbering were satisfactory.

Upper Elkhorn Mine: Mine office, Hellier. Inspected June 25th, and found to be in a satisfactory condition in all respects.

FREEBURN MINES.

Mine office, Edgewater, W. Va.

Telegraph Office, Dolorme, W. Va.

Transportation, Norfolk & Western Railroad.

Operated by the Freeburn Coal & Coke Co.

Frank P. Harmon, President,

James R. Gilliam, Treasurer,

W. A. Young, Secretary,

C. O. Smith, General Manager.

This Company owns and controls under lease, and in fee simple 14,000 acres of land on both sides of Peter creek. Nearly two miles of railroad has been built which enables the Company to work both the Vulcan and Thacker seams. The Vulcan seam lies 400 feet above the Norfolk & Western Railroad, and will average 62 inches in thickness, while the Thacker seam lies 680 feet above the Norfolk & Western Railroad, and will average 69 inches in thickness. The Vulcan seam is reached by an incline 750 feet long, and the coal is handled in mine cars. The Thacker seam is reached by an incline 1,200 feet

long, and the coal is brought down the mountain in 5 ton monitors. Both tipples are equipped with revolving and bottom screens making it possible to prepare 6 different grades of coal. The No. 1 plant is equipped with one 80 Horse Power Erie City tubular boiler furnishing steam to one 80 Horse Power Erie City Engine which drives the coal preparing machinery, and furnishes heat for store, offices and several houses. The Thacker mine was opened this year, but no coal will be shipped until 1908. This mine is equipped with one 28-30 Norwalk straight line two stage Compressor, two 125 Horse Power each, Erie City tubular boilers. The coal is mined in the vulcan seam by 15 Whitcomb Post Machines, and in the Thacker seam by four Harrison and two Sullivan Pick Machines. There is a parting in the Vulcan seam near the top, and these post machines are giving splendid satisfaction in cutting this parting. A cutting can be made 5 feet deep and 8 feet wide without moving the machine. This parting is cut and loaded out with the gob; the lower coal is shot and upper coal prized down, and the result is a room of clean coal. The Company has built 30 new houses during the year making in all 75 houses for the employees. Water is supplied by a deep well, being pumped into a 20,000 gallon tank reservoir. This Company has been very actively engaged in developing the property, and contemplates extending the railroad further up Peter creek to further develop the large amount of land owned by it.

No. 1 Mine.—Inspected January 15th, and all conditions were satisfactory.

Inspected November 20th. The face of the main entry was 97 feet ahead of the air, and the atmosphere was smoky and unhealthful. There was no ventilation in the rooms off 2d Left.

No. 2 Mine.—Inspected January 15th. Ventilation, drainage, and timbering were satisfactory.

Inspected November 20th. The ventilating current did not travel the working places. This was on account of the lack of break-throughs in the rooms, and of check-curtains on the entries.

No. 4 Mine.—Inspected January 15th, and all conditions were found to be satisfactory.

Inspected November 20th. There were two (2) open break-throughs between the 1st South entry and air course, and the faces of the Main South and First Left entries were more than 60 feet ahead of the air. Drainage and timbering were satisfactory.

GREENOUGH MINE.

Mine office: Hellier.

Transportation, Big Sandy Division of C. & O. Railroad.

Operated by the Greenough Coal & Coke Co.

Edward Brennen, President, Shamokin, Pa.

Fred Moser, Vice President, Shamokin, Pa.

W. P. Caldwell, Secretary, Shamokin, Pa.

E. F. Moore, Treasurer, Shamokin, Pa.

Leander Castle, Supt. at mines.

Bert Price, mine foreman.

The mine is equipped with one 20x30 Norwalk compressor, one 150 H. P. Atlas tubular boiler, eight Harrison P. G. mining machines, and two rock drills. The seam of coal being worked is known as the Upper Elkhorn, and will average 48 inches in thickness. The coal is hauled in a ton car by mules, dumped by a common goose neck dump into the upper tipple. It is then let down the mountain a distance of 500 feet by mean of six (6) ton monitors run by gravity into the lower tipple, where it is run over stationary bars making three grades of coal; lump, nut and slack. This mine was inspected twice, and found in a satisfactory condition in all respects upon each occasion.

HENRY CLAY MINE.

Mine Office: Lookout.

Transportation, Big Sandy Division C. & O. Railroad.

Operated by Henry Clay Coal & Coke Co.

E. P. Foust, President, 618 West Norwegian St., Pottsville, Pa.

C. W. Evans, General Manager, Lookout, Ky.

This company operated both the Lower and upper Elkhorn seams, but in November the Lower Elkhorn seam was abandoned. When it (the Lower Elkhorn Mine) was inspected June 24th, room 9 on the First Left entry was driven in 100 feet without a break-through, and a check curtain was needed on the entry between rooms 6 and 7. All conditions elsewhere were satisfactory.

Two inspections were made of the upper Elkhorn mine, and on each occasion it was found in a satisfactory condition in all respects.

MAJESTIC MINE.

Mine Office: Cedar, W. Va.

Transportation by Norfolk & Western Railway.

Operated by the Majestic Collieries Company.

W. A. Phillips, President and General Manager, Ashland,
W. Va.

S. W. Patterson, Vice President, Vivian, W. Va.

Morris Watts, Secretary, Eckman, W. Va.

Geo. C. Graeber, Treasurer, Shamokin, Pa.

A. B. Rawn, Superintendent, Cedar, W. Va.

This is a new mine and no coal will be shipped until 1908. Mr. Rawn the Superintendent has kindly furnished a description of the operations as follows:

This company owns 1, 468 acres of land in fee simple, and has 2,200 acres under lease. There has been 2.33 miles of railroad track built, and 4,300 feet of mine tram road. Four (4) pieces of masonry ready for the iron work to cross Tug River. There are 6, 4 room houses, 14, 3 room houses, 2, 2 room houses and 2, 8 room houses. The tipple is built for 400 ton storage and to make five grades of coal. The coal is 350 feet above the loading tracks, and is brought down the mountain to the tipple by means of monitors. The mine is equipped at present with 2, 150 H. P. each, Erie City Tubular Boilers, 1, 225 H. P. McEwen Engine, 1, 150 H. P. McEwen Engine. Ventilation of mine is at present by furnace.

MARROWBONE MINE.

Mine Office: Lookout.

Transportation, Big Sandy Division C. & O. Railroad.

Operated by Marrowbone Coal & Coke Company.

J. J. McCracken, President, Masontown, Pa.

C. J. Numan, Superintendent, at mine.

This mine was idle a good portion of the year on account of repairing the tippie. Only one inspection was made. Inspected December 16th.

The failure to keep break-throughs made regularly in the rooms, and the lack of check-curtains on the entries prohibited the ventilating current from serving all of the working places as it should have done. Drainage satisfactory, and no lack of proper timbering was observed.

PIKE COLLIERIES.

Mine Office: McCarr, Ky. Tel. Office, Matewan, W. Va.

Transportation, Norfolk & Western Railway.

Operated by Pike Collieries Co., until September. After this date it was operated by C. W. Campbell, Special Receiver. The equipment consists of two Jeffrey Generators, 100 K. W. each, "6-17A"-"2-16A" mining machines and two 10 ton Jeffrey Motors.

No. 1 Mine.—Inspected January 14th. Ventilation was very defective. The current of air entering the mine was not ample for the number of persons employed under ground, and on account of so many open break-throughs the current that did enter the mine could not travel within 60 feet or less of the working places as required by law. Rooms were driven in more than 60 feet without break-throughs.

Inspected November 19th. There was no improvement in the ventilation of the mine since my preceding inspection. Entries and rooms were driven more than the legal distance without break-throughs.

No. 2 Mine.—Inspected January 14th. The face of the 3d cross entry was 160 feet ahead of the air. Directions were given the Company to stop this entry until the air course was put up within 60 feet of the face.

Inspected November 19th. All conditions were satisfactory.

PIKE MINES.

Mine Office: Hellier.

Transportation, Big Sandy Division C. & O. Railroad.

Operated by the Pike Consolidated Coal & Coke Co.

Edwin F. Saxman, President, Philadelphia, Pa.

Chas. E. Hellier, Vice President, Boston, Mass.

H. H. Chandler, Sec. and Treas., Boston, Mass.

Roy Hayes, Superintendent at mines.

The mine is equipped with one 24x30 Norwalk Compressor, one 150 H. P. Phoenix Boiler, three Harrison P. G. Pick Machines, and two Rock Drills. The coal is hauled by mules in a ton car; run over a Philips Automatic dump into a Jeffrey retarding conveyor by means of which it is let down the mountain a distance of 400 feet to the lower tippie, when it is run over a stationary bar screen, making three grades of coal; lump, nut and slack. The conveyor has a capacity of 150 tons per hour.

Upper Elkhorn Mine.—Inspected June 24th. Ventilation, drainage, and timbering satisfactory.

Inspected December 17th. The mine was defective with respect to ventilation, in that the current did not reach all of the working places as required by law. Drainage and timbering satisfactory.

Lower Elkhorn Mine.—Inspected June 24th, and all conditions were satisfactory.

When I visited this mine on December 17th, I found it had been abandoned.

THACKER MINES.

Mine Office: Thacker, W. Va.

Transportation, Norfolk & Western Railway, the coal being brought to the tippie at the railroad by aerial rope tramway.

Operated by the Thacker Coal Mining Company.

W. H. McNulty, President and General Manager.

Inspected January 16th. Natural means were depended upon for ventilation, but an air shaft had been sunk, and a furnace was in course of construction.

Inspected November 20th. The mine was defective with respect to ventilation in that the ventilating current was not well conducted to all of the working places. Drainage and timbering satisfactory.

VULCAN COAL CO.

Mine Office, Vulcan, W. Va. Tel. Office, Dolorme, W. Va.

Transportation by Norfolk & Western Railway, the coal being brought to the tippie at the railroad by means of an aerial rope tramway.

Operated by the Vulcan Coal Co.

W. C. Stephenson, President, Roanoke, Va.

A. D. Rice, Secretary and Treasurer.

Roger Martin, General Manager.

Inspected January 15th. The mine was defective with respect to ventilation and drainage. The volume of air was not ample for the number of persons employed underground, nor did the current travel within 60 feet or less of all the working places as required by law. The drainage was bad on No. 1 and No. 2 entries. No lack of proper posting was observed.

Inspected November 21st. The condition of the mine had been very much improved since my preceding inspection. A check curtain was needed on No. 6 entry, between rooms 6 and 7 and there were two (2) open break-throughs between No. 2 entry and air course. All conditions elsewhere in the mine were satisfactory.

WESTERN DISTRICT

REPORT OF ASSISTANT SPILLMAN

Christian County

EMPIRE MINE.

Mine office: Empire.

Main office: Nashville, Tenn.

Transportation by L. & N. Railroad.

Operated by Empire Coal & Mining Co. J. D. Anderson, President, Nashville, Tenn.; W. H. Buttorff, Vice-President, Nashville, Tenn; W. T. Rutland, General Manager.

The mine is equipped with two Center Crank 16x18 Skinner Engines; one Morgan-Gardner Generator; one Milwaukee Generator; one Jeffrey Electric Drill; three Standard D, and one Low Vein Morgan-Gardner Mining Machines; two High Vein "17 A" Jeffrey Mining Machines and four Thin Vein "16 A" Jeffrey Mining Machines.

The last inspection of this mine was made May 30th. The mine was defective with respect to ventilation and drainage. The volume of air entering the mine was not ample for the number of persons (8) employed underground, and the current did not travel within 60 feet or less of all the working places as required by law. There was too much water on the entry roads. Timbering satisfactory. No other inspection was made.

Hopkins County

CARBONDALE MINE.

Mine office: Carbondale. Transportation by I. C. R. R.

Operated by Carbondale Coal & Coke Co. B. Oown, President, Paducah, Ky.; John Palmer, Supt. at mines.

This is a new mine, opened about two (2) miles North-east of the Old Carbondale mine. There are two (2) openings, each opening a drift and ventilated by furnace. Tail rope haulage has been installed. The mine has been kept in a satisfactory condition throughout the year. Only one inspection could be made

CRAETREE MINE.

Head office: Ilsley. Transportation by I. C. R. R.

Operated by Crabtree Coal Mining Co. Edward Ilsley, President; R. M. Salmon, General Manager; John Harlan, Supt. at mines.

The coal cutting machinery consists of twelve Harrison Pick Mining Machines. Power is furnished by a Norwalk

Compressor. The coal is gathered by mules inside, and brought to the outside by tail rope haulage. It is then carried to the tippie by a steam locomotive.

Inspected May 27th. The ventilating current did not serve all of the working places on the Northeast entry. Conditions elsewhere in the mine were satisfactory.

No other inspection could be made during the year.

DANIEL BOONE MINE.

Mine office: Daniel Boone. Transportation by I. C. R. R.

Operated by the Sterling Coal & Coke Co. D. F. McMullen, President; Andrew Hogg, Vice President; John P. McMullen, Treasurer; Hugh McMullen, Secretary.

The mine is equipped with one 100 K. W. Morgan-Gardner Generator; five Morgan-Gardner Mining Machines, 5½ foot undercut. Only one inspection could be made during the year, but the condition of the mine was much improved over what it was in the preceding year.

NEBO MINE.

Mine office: Nebo.

Head office: Louisville.

Transportation by L. & N. Railroad.

Operated by the Nebo Consolidated Coal & Coke Co. John C. Davidson, President; James Stirrat, Superintendent.

This is a new mine, opened in the same coal that was formerly worked by the Rose Creek Coal Co. The equipment consists of:

One 150 K. W. Generator; one 238 H. P. McEwen Engine; two 150 H. P. (each) Berger Tubular Boilers; two six feet Undercut Jeffrey Mining Machines and two 5-ton Jeffrey Electric Locomotives.

The mine is ventilated by a 12 foot Stein Fan. The coal is dumped over a Philips dump at the bottom of the slope and is brought to the tippie by a Jeffrey pan conveyor. This conveyor is driven by a 60 H. P. electric motor. The tippie is of steel, and was made by Jeffrey Mfg. Co.; has shaker screens made by the same company. The screens are driven by a 25 H. P. motor.

Inspected May 23d, and all conditions were found to be satisfactory. No other inspection was made during the year.

NORTONVILLE MINES.

Head office: Nortonville.

Operated by the Nortonville Coal Co. Frank M. Fisher, President, Hopkinsville, Ky.; John B. Trice, Vice-President, Hopkinsville, Ky.; Walter S. Elgin, General Manager, Nortonville, Ky.

No. 1 Mine.—Transportation by I. C. R. R. The coal is mined by one Jeffrey and four Goodman Electric Mining Machines. Power is furnished by 2 Goodman Generators.

Inspected May 30th. Except that the break-throughs between rooms were all too narrow, all conditions were satisfactory.

Inspected October 27th. Sufficient air was entering the mine to supply the underground employees, but it was not properly conducted to all of the working places. No lack of proper posting was observed, but the drainage throughout the mine was bad.

No. 2 Mine.—Transportation by L. & N. R. R. The coal is mined by three chain breast Goodman Mining Machines. Power is furnished from the No. 1 mine. When inspected on May 30th, all conditions were satisfactory, except on the Fifth North entry. I could not get to the face of this entry on account of the water. No other inspection could be made.

OAK HILL MINE.

Mine office: Chestley.

Head office: Madisonville.

Transportation by L. & N. R. R.

Operated by the Chesley Coal Co. J. M. Cook, President; James Abercrombie, Superintendent.

The mine is equipped with: One 100 K. W. Goodman Generator; one 100 K. W. Morgan-Gardner Generator; one Goodman and four Morgan-Gardner Chain Breast Mining Machines; one 10-ton Goodman Electric Locomotives.

When inspected on May 12th, all conditions were satisfactory except on the 12 West. The cause for complaint here was, that there was no provision made to send the air into the rooms. One inspection was all that could be made.

REINECKE MINE.

Head office: Madisonville. Transportation by L. & N. R. R.

Operated by the Reinecke Coal Mining Co. Conrad Reinecke, President, Belleville, Ill.; Fred Reinecke, General Manager, Madisonville, Ky.; Emile Brown, Superintendent at mines.

The coal cutting machinery consists of nine Jeffrey and three Goodman Chain Breast Mining Machines. Power is furnished by two Westinghouse Generators, 150 K. W. each.

Inspected January 29th. The volume of air entering the mine was ample for the number of persons employed underground, but the air was not well conducted to all of the working places. Drainage and timbering satisfactory.

Inspected July 12th. Except in some instances breakthroughs between the rooms were not wide enough, all conditions were satisfactory. This mine was inspected October 25th and again on December 30th and found to be in a satisfactory condition in all respects on each occasion.

ROSE CREEK MINE.

Mine office: Nebo.

Transportation by L. & N. R. R.

Operated by Rose Creek Coal Co. James West, President, Hopkinsville, Ky.; Wm. McMurray, Vice-President, Springfield, Tenn.; W. D. Civil, General Manager, Nebo, Ky.; Rankin Eastin, Supt. at mines.

This company operated the Slope Mine until December. It was then abandoned and all work transferred to the new shaft mine. When the Slope mine was last inspected on May 23d, all conditions were satisfactory except of the Fifth East entry. The cause for complaint here was, the ventilating current did not travel within 60 feet of all the working places, as required by law. Mr. Rankin Eastin, the superintendent, has furnished a description of the operations at the Shaft mine as follows:

The sinking of the Shaft was begun on the 15th of June, 1906, and was completed on the 15th of February, 1907. The size of the shaft is 10 by 18 feet in the clear, divided into three (3) compartments; two (2) compartments 7 by 10 feet, for the purpose of working the coal cage, one (1) air compartment 4 by 10 feet. The depth of the shaft is 295 feet from the surface to the top of the coal, timbered from top to bottom with 4 by 8 timbers; equipped with two (2) self dumping cages; one pair of first motion hoisting engines 18 by 32 inches, connected to one eight foot drum. Said cages and hoisting engines being furnished by the Heilman Machine Works, of Evansville, Ind. The mine is ventilated by one 10 foot Crawford & McCrimmon Fan, and is equipped with two Atlas Boilers, 150 H. P. each; one 175 H. P. McEwen Engine; one 125 K. W. Jeffrey Generator; one 6-ton Jeffrey Electric Locomotive; two "19 A" Jeffrey Mining Machines; three "17 A" Jeffrey Mining Machines; One Goodman Mining Machine; two Jeffrey Electric Drills.

The new tippie is constructed of 12 x 12 and 8 x 8 white oak timbers; one set of vibrating screens, roller type and driven by a 15 H. P. Willey type motor. The screens are so divided as to make four different grades of coal at one time. The coal being worked, is the No. 9 seam, and averages 5 feet in thickness. The system of mining is on the triple entry plan, said entries running east and west to property line, with cross entries running north and south. The cross entries are turned at a distance of 300 feet apart. Rooms are turned with 40 foot centers, driven in 25 feet from entries and widened to 22 and 24 feet, being driven to a depth of 275 feet. The coal is all mined by machines, no shooting on the solid allowed. The mine is kept well watered and shot firers are employed. Only one inspection was made, and all conditions were satisfactory.

ROYAL MINE.

Head office: Madisonville. Transportation by L. & N. R. R.
Operated by the Chesley Coal Co. J. M. Cook, President;
James Abercrombie, Supt.

The mine is equipped with:

One Goodman Generator; five Goodman Chain Breast

Mining Machines; one 8-ton Goodman Electric Locomotives.

Inspected January 30th, and all conditions were satisfactory.

Inspected May 29th. On account of the lack of check curtains on the entries the air did not travel the rooms as it should have done. The air-way leading from the bottom of the shaft needed retimbering. Drainage was satisfactory.

Inspected October 24th. Sufficient air was entering the mine, but the current did not reach all of the working places. Drainage was satisfactory, but the Main and Second East entries needed retimbering.

ST. BERNARD MINING Co.'s MINES.

Head office: Earlington.

Operated by the St. Bernard Mining Co. John B. Atkinson, President; Geo. C. Atkinson, Secretary and Treasurer; Frank D. Rash, General Manager.

Arnold Mine.—Transportation by L. & N. R. R. This mine has been kept in a satisfactory condition in all respects throughout the year. One inspection was made.

Barnsley Mine.—Transportation by L. & N. R. R. The mine was maintained in an excellent condition in all respects during the year. Only one inspection could be made.

Diamond Mine.—Transportation by L. & N. R. R. When last inspected, May 25th, all conditions were excellent. Only one inspection could be made.

Earlington No. 9 Mine.—Transportation by L. & N. R. R. This mine was inspected three times and found in an excellent condition upon each occasion.

Earlington No. 11 Mine.—On L. & N. R. R. When last inspected, on May 22d, all conditions were found to be excellent. Only one inspection could be made.

Hecla Mine.—When last inspected, May 24th, ventilation, drainage and timbering were satisfactory. Only one inspection could be made.

Fox Run Mines.—Mine office, St. Charles. Transportation by I. C. Ry. When inspected, May 28th, all conditions were satisfactory. Only one inspection could be made.

VICTORIA MINE.

Mine and Head office: Madisonville.

Transportation by L. & N. R. R.

Operated by the Victoria Coal Co. James R. Rash, President; George C. Atkins, Treasurer; George W. Rash, Superintendent; John Carrol, Mine Foreman.

The mine is equipped with:

One 100 K. W. Link-Belt Generator; one 125 K. W. Direct Connected Goodman Generator; eight Goodman Chain Breast Mining Machines.

Inspected January 28th. A check curtain was needed on the 16th South entry and the ventilation on the 15th South entry was defective. Conditions elsewhere were satisfactory.

Inspected July 13th. The face of No. 9 room on the 14th East entry was 75 feet ahead of the air. No other cause for complaint.

Inspected December 31st. The face of No. 29 room on the 14th East entry was 80 feet ahead of the air, and I failed to get a measurement of the air in the last break-throughs between the 16th and 17th South entries. All conditions elsewhere in the mine were satisfactory.

Webster County

BLACKWELL MINE.

Head office: Clay.

Transportation by Morganfield & Atlanta Railroad.

Operated by the Thomas Blackwell Coal & Mining Co. C. R. Blackwell, President; C. R. Clark, Superintendent.

The mine is equipped with:

One Norwalk Compressor; two Harrison Pick Machines.

Inspected August 22d. Ventilation, drainage, and timbering were satisfactory. No other inspection could be made.

DIAMOND MINE.

Mine office: Providence.

Transportation by Morganfield & Atlanta Railroad.

This is a new mine opened with a slope about 3 miles northwest of Providence. Operated by the Diamond Coal Co. R. L. Jackson, President, Dixon, Ky.; R. M. Baker, Secretary, Dickson, Ky.; S. D. Palmer, Manager, Providence, Ky.; Mack Palmer, Mine Foreman.

Inspected August 22d and found to be in a satisfactory condition, with respect to ventilation, drainage and timbering. No other inspection could be made.

FAIRMONT MINE.

Head office: Providence.

Transportation by Kentucky Valley Railroad, and by connection with the Illinois Central Railroad.

Operated by the Fairmont Coal Co. Percy D. Berry, President; George W. Beeson, Secretary; C. B. Jenkins, General Manager.

Inspected March 26th. Ventilation, drainage, and timbering were satisfactory.

Inspected August 24th. Natural means were being depended upon for ventilation, and the air was not good. A new furnace, however, was in course of construction. Sufficient attention was not given to the proper posting of rooms, and there was too much mud and water on the main entry road.

LUTON MINE.

Mine office: Providence.

Transportation by L. & N. R. R.

Operated by S. K. Luton.

Inspected March 28th. About 50 yards from the mouth of the slope, the main entry needed scaling, and retimbering. All other conditions satisfactory.

Inspected August 21st. On account of the furnace being cold I could not get a measurement of the air. Written notice was served directing that the furnace be fired regularly each

day the mine was in operation. Drainage and timbering satisfactory.

PROVIDENCE MINES.

Head office: Providence.

Operated by the Providence Coal Co. W. A. Nisbet, President; W. J. Nisbet, General Manager; Percy D. Berry, Secretary and Treasurer.

This company operates two (2) mines, known as the Slope and Shaft mines. The plant includes one Westinghouse Generator; one Morgan-Gardner and four Jeffrey Chain Breast Machines.

Slope Mine.—Transportation by Kentucky Valley Railroad, also by connection with Illinois Central and L. & N. Railroads.

Inspected March 27th. The mine was defective with respect to ventilation in that the current did not serve all of the working places. Drainage and timbering were satisfactory.

Inspected July 30th. The same cause for complaint was found with the ventilation as on the preceding inspection. At this time sufficient attention was not given to the proper posting of rooms. Drainage satisfactory.

Shaft Mine.—Mine office: Providence. Transportation by L. & N. Railroad.

This mine was inspected twice, and was maintained in a satisfactory condition during the year.

SEBREE MINE.

Head office: Sebree. Transportation by L. & N. R. R.

Operated by the Sebree Coal & Mining Co. J. B. Ramsey, President; J. R. Ramsey, Vice-President; C. H. Ramsey, Superintendent; William Doyle, Mine Foreman.

Inspected March 29th. The ventilation was defective in that the ventilating current did not travel within 60 feet or less of all the working places. Drainage satisfactory and no neglect of proper timbering was observed.

Inspected December 28th. The current of air entering the

mine was not ample for the number of persons employed underground, and what current there was, did not serve all of the working places. The air-way leading from the fan shaft was choked with falls of slate and break-throughs between rooms were too narrow.

SHAMROCK MINE.

Mine office: Providence.

Head office: Earlington.

Transportation by L. & N. R. R.

Operated by the St. Bernard Mining Co. J. B. Atkinson, President; George C. Atkinson, Secretary and Treasurer; Frank D. Rash, General Manager; Thomas Longstaff, Mine Foreman.

This mine was inspected twice and found to be in an excellent condition in all respects on each occasion.

THOMAS WANLESS MINE.

Mine office: Providence.

Inspected March 27th. This mine was broken into the old slope mine of the Providence Coal Co., and had no other means of ventilation except the air that came from this slope mine, which was heavily laden with black damp. Notice was served on Mr. Wanless to shut off this air from coming into his mine, and to build a furnace of ample power to properly ventilate the mine. Drainage and timbering satisfactory.

Inspected August 21st. There was no fire in the furnace, and consequently no ventilation. Notice was served directing that the furnace be fired each day the mine was in operation. Drainage satisfactory, and no neglect to properly post was observed.

WEBSTER COUNTY MINE.

Head office: Providence.

Transportation by L. & N. R. R.

Operated by the Webster County Coal Co. D. B. Baker, President; F. M. Baker, Superintendent.

Inspected March 25th. The mine was defective with respect to ventilation in that the ventilating current did not

travel within 60 feet or less of all the working places. Timbering was satisfactory, but there was too much mud and water on the main entry road.

Inspected August 16th. While the volume of air entering the mine was ample for the number of persons employed inside, the curtains and stoppings were old and leaky, and the air was not well conducted to all of the working places. Break-throughs were too narrow in some instances, and the drainage was bad on the First East entry.

WEST KENTUCKY MINE.

Mine office: Wheatcroft.

Head office: Sturgis.

James T. Gardener, President; W. H. Cunningham, General Manager. Transportation by I. C. Railroad.

Colliery F.—Inspected March 26th. The break-throughs between the First West and blind (entry) was only three (3) feet wide. Written notice was served on the company to make break-throughs between entries not less than eight (8) feet inside. All conditions elsewhere in the mine were satisfactory. This mine was inspected again on August 23d. The volume of air entering the mine was not sufficient for the under-ground employees, and no provision was made to send the current to the working places. Drainage and timbering satisfactory.

Colliery G.—Inspected March 26th. The drainage had been very much improved since my preceding inspection but the ventilation was still defective.

Inspected August 23d. On account of the absence of check curtains on the entries, the ventilating current did not serve all of the working places. The drainage was very much improved and no lack of proper timbering was observed.

Colliery H.—This mine was idle during the greater part of the year. The company abandoned the No. 9 seam and when I visited the mine on August 23d, No. 11 coal was being worked. There were only four persons employed inside, and

the main entry and air course had only been driven a few feet from the bottom of the shaft.

LACEY WRIGHT MINE.

Mine office: Providence.

I visited this mine March 28th. The mine was idle, and when working, only four persons were employed. No inspection was made.

Inspected August 16th. The mine was defective with respect to ventilation. The furnace power was inadequate to properly ventilate the mine. Drainage and timbering satisfactory.

REPORT OF A. J. DOSS, ASSISTANT MINE INSPECTOR

Central City, Ky., Jan. 1, 1908.

Prof. C. J. Norwood,
Chief Inspector of Mines.
Lexington, Ky.

Dear Sir:—

I herewith submit my annual report for the year 1907, with brief comments on the condition of the various mines.

Respectfully,

A. J. Doss,
Asst. Inspector of Mines.

Daviess County

OWENSBORO COAL & LAND CO.

Transportation: Electric Line to City of Owensboro. P. O.: Owensboro.

Allen Deane, Supt. and General Manager.

Inspected three times, as follows: Jan. 4th; June 24th; Oct. 21st.

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On January 4th, the condition of this mine was not very satisfactory; although greatly improved since the date of my last inspection. The notice which was given this company of the condition of the mine was extended for an additional twenty days.

On June 24th, the condition was not yet satisfactory, as the ventilation throughout the mine still continued to be poor. Several break-throughs open that should have been closed, and some of the air courses had fallen in very badly. Also, the furnace was not being properly fired.

On October 21st, conditions still remained bad, owing to some of the working places being driven more than 60 feet ahead of the air. Some bad top on 1st Right entry, and a number of the working places not sufficiently timbered.

LOUIS HOBACK.

Transportation: Wagons. P. O.: Owensboro.

Louis Hoback, owner and operator.

Inspected three times as follows: Feb. 25th; June 26th; October 22d.

This is a slope mine, operated by tail rope haulage. Only opened so as to supply coal to the city of Owensboro. When inspected Feb. 25th, ventilation was very satisfactory, but timbering was somewhat neglected. Drainage on Main entry was not as good as it should have been. Ventilation to supply the mine is created by furnace four feet wide. The shaft which is used for the air shaft has a stack about 30 feet high.

On June 24th, ventilation was very satisfactory. There was some complaint as timbers were left too far from the face of the workings. Drainage still continued to be bad at the bottom of the slope and on Main entry.

On October 22d, ventilation was not at all satisfactory, as there was a curtain needed across the Main entry near the mouth of the Main Blind. Drainage still continued to be bad. Timbering being neglected in some of the rooms.

GEORGE LUCAS.

Transportation, Wagons.

P. O.: Owensboro.

George Lucas, Owner.

Inspected three times as follows: Feb. 26th; June 26th; October 23d.

On February 26th, the condition of this mine was not at all satisfactory; due to the bad condition of the curtain which turned the air through the rooms, the air not being confined in any certain volume. Also, there were a number of break-throughs left open that should have been closed.

On June 26th, there was some complaint as to ventilation, as the air was not being properly conducted to all of the working places, owing to the curtains being in bad condition and the system in which the mine was being worked, as there were no pillars left between a number of the rooms and there was no regularity in the break-throughs.

October 23d, I found that this mine was being worked only on a very small scale, and I was advised that it would be abandoned altogether in a very short time. The pillars that had been left in the mine were being drawn and the condition of the mine was not very safe.

OVERSTREET & RUDY.

Transportation, Wagons.

P. O.: Owensboro.

J. H. Rudy, President; H. G. Overstreet, Vice-President; K. F. Rudy, Secretary and Treasurer.

This is a shaft mine, 105 feet deep. Hoist by horse power. Ventilation by furnace; air shaft 125 feet deep with 16 foot stack on top. Furnace is amply sufficient to furnish the required amount of air.

Inspected three times, as follows: February 26th; June 25th; October 21st.

On February 26th, ventilation entirely satisfactory. The only complaint to be made was on account of some timbering on Main entry to be made.

June 25th, conditions were very satisfactory. Proper amount of ventilation was circulating throughout the mine.

October 21st, I had some complaint to make as to ventilation, caused by some of the break-throughs being made too narrow. Some very bad timbers on Main entry between Main entry and air shaft.

J. LEE RUDY.

Transportation, Wagons.

P. O.: Owensboro.

J. Lee Rudy, Operator; J. Lee Rudy, Lessee of J. H. Rudy.

Shaft mine 110 feet deep. Coal hoisted by horse power.

Has two openings, one main opening and one air shaft. Ventilation is created by furnace, size 9 feet by 3 feet; air shaft 80 feet deep; height of stack at top of air shaft 10 feet.

Inspected three times as follows: February 26th; June 25th; October 22d.

On February 26th, I found drainage and timbering very poor. Proper amount of ventilation did not reach all part of the working places; caused largely by a curtain not being across Main entry between rooms Nos. 1 and 2 for the purpose of turning the air to the face of the rooms. Drainage was bad; mud and water on the entry.

On June 26th, when I visited this mine I could make no inspection because the fire in the furnace had not been burning for several days. Special attention was called to the operator to the danger from the black damp which had accumulated in the mine and directed that fire must be kept at all times when the mine was being operated. I also advised that fire be kept in the furnace for as much as a day before the men were allowed to enter the mine, as the mine had been idle for several days, and there was a great deal of black damp accumulated.

On Oct. 22d, I found a sufficient amount of air was entering the mine, but it was badly mixed with black damp. This was caused by not a sufficient amount of fire in the furnace. Drainage was also bad on Main entry; and some of the working places were not being properly timbered.

JAMES WILSON MINE.

Transportation, Wagons.

P. O.: Owensboro.

The coal is mined by pick. Ventilation created by furnace. Inspected once during the year on Oct. 23d. At this time ventilation was not satisfactory, although a sufficient amount of air was entering the mine. The complaint being that the curtain across First Right entry was in bad repair and entirely too light. Drainage bad; mud and water on the roads.

E. J. BUCKMAN.

Transportation, Wagons.

P. O.: Owensboro.

This is a gradual slope mine, the coal being hauled up the slope by mules. The slope was in very good condition when inspected, but the inner part of the mine was being worked on a poor system. Inspected on Oct. 23d. Ventilation was not properly conducted to the working places. There was no air shaft arranged and practically no way for the air to circulate. Also, there was some very bad top near the bottom of the slope.

McLean County

ALVA KARNES.

Transportation, L. & N. R. R.

P. O.: Island.

Alva Karnes, Owner and Operator.

This mine is located about one mile from the railroad and the coal is hauled on a tram road. It is a drift mine and is ventilated by furnace erected temporarily. There has been much complaint as to the condition of the mine at each inspection which I have made. Inspected twice, as follows: Feb. 21st; Mar. 19th.

On Feb. 21st, ventilation was not at all satisfactory, owing to the fallen condition of the air shaft and badly arranged temporary furnace. Timbering was also very insufficient in several parts of the mine. When inspected on March 19th, there was much complaint to the ventilation throughout the mine, as the proper amount of air scarcely reached any of the working places. Also, the curtains and break-throughs were not properly arranged. Drainage bad on Main entry, especially near the mouth of the mine.

GREEN RIVER COAL & COKE Co.

Transportation, L. & N. R. R.

P. O.: Island.

John W. Love, Prest., E. S. Randle, Sec'y and General Manager, Thos. Blades, Mine foreman.

This is a shaft mine and has three separate openings. The coal is all mined by pick, and rope haulage is in operation

here. Inspected four times. Mar. 19th; June 13th; Sept. 24th; Dec. 18th. On Mar. 19th, there was some complaint as to ventilation in this mine. They were idle on above date and the fan had been reversed, therefore, it was claimed by the company that this was the cause of the ventilation not being satisfactory. Drainage was not at all satisfactory and there was much mud and water on Entry road.

On June 13th, I found that a sufficient amount of air was entering the mine, but it did not enter some of the working places according to the requirements of law; this was largely due to some of the break-throughs not being properly closed, and also to some of them being made entirely too small. The Main air course on East side of shaft was badly choked with fallen slate. It is also in need of some timbers on Main entry on the West side as there had been some bad falls of slate on this entry.

On Sept. 24th, there was much complaint as to the ventilation as most all the curtains on the East side were in bad repair and some of them almost completely torn down. Some of the break-throughs had settled down from the top, allowing a great deal of the air to pass over them.

On Dec. 18th, the ventilation was not altogether satisfactory, which was mostly due to the curtain being torn out by heavy shooting. The trap door across Main entry was also in bad repair. Drainage bad; mud and water on entry and entry roads.

MEMPHIS COAL Co.

Transportation, L. & N. R. R.

P. O.: Island.

R. D. Rose, Prest., Hinton, W. Va., James Halstead, Manager, Island, Ky.

This is a slope mine and the coal is mined by pick, and hauled by rope system.

Inspected five times, as follows: Mar. 20th; June 14th; July 22d; Sept. 24th; Dec. 17th.

On March 20th, ventilation very satisfactory. Timbering was not being kept up in some of the rooms as it should have been. Drainage bad; mud and water on the entries.

On June 14th, ventilation satisfactory. Some complaint as to drainage; some mud and water on entries.

On July 22d, some complaint as to ventilation, due to the fan not being run properly. There was much black damp mixed with the air on the above date, and the proper amount of air was not circulating to the working places.

On Sept. 24th, ventilation satisfactory. The only complaint being that some of the curtains were in bad repair. Drainage not good on some of the entries, due to the ditches being stopped up. Timbering in the rooms was being neglected.

On Dec. 17th, conditions throughout the mine very satisfactory, with the exception of some mud and water accumulating on the entry road.

GREEN RIVER COAL CO.

Transportation, Green River.

P. O.: Livermore.

A. J. Bonofield, Prest., Tynnelton, W. Va., A. W. Burdette, V. Prest., Grafton, W. Va., J. W. Miller, Sec'y. & Treas., Jos. Gillim, Foreman.

This is a drift and being operated on a poor system. Most all of the working places are worked at random making it almost impossible to ventilate the mine properly. The only way of creating ventilation was by a temporary furnace very improperly arranged at the bottom of the air shaft which was entirely too small, and at times becomes almost completely closed up. This mine is operated on a small scale as generally there are only from six to eight men working. The coal is hauled by mules on a tram road to the river, a distance of about 400 yards.

Inspected three times, as follows: June 12th; Sept. 12th; Dec. 19th.

On June 12th, ventilation was very poor as I was unable to get a measurement of air at the intake, or at any point in the mine. This was largely due to the fact that there was not fire in the furnace and the system in which the mine is being worked.

On Sept. 12th, the mine was still in a defective condition

and the furnace was being badly neglected. General conditions were bad.

On Dec. 19th, it was still in a defective condition. It being practically impossible to ventilate it under the present system of working.

Muhlenberg County

LOUISVILLE-ATLANTA COAL CO.

Transportation, L. & N. R. R. P. O.: Drakesboro.
John Kittinger, Prest., S. A. Brashear, V. Prest., Miss Hettie
Day, Sec'y. and Treas.

This is a shaft mine and the coal is mined by electricity. Coal is from 5 to 5½ ft. thick. Haulage by mules. Inspected five times as follows: Jan. 7th; Mar. 23d; May 29th; Aug. 22d; Nov. 26th.

On Jan. 7th, ventilation satisfactory. First and second South entries were wet at the face; water coming down from the roof. Props too far back from the face in some of the rooms.

Mar. 23d, ventilation was not at all satisfactory, this being due to the fan being in bad condition. At the head of the Third East I could not find a sufficient current to enable me to take a measurement. There were, also, a number of break-throughs that should have been closed. A number of the rooms were not properly timbered.

On May 29th, ventilation throughout the mine was very satisfactory. Timbering was yet being neglected in some of the rooms. General conditions around the mines were good.

On Aug. 26th, there was some complaint as to ventilation in some parts, due to a number of break-throughs being left open that should have been filled in and a brattice had been torn down between the 3d North Entry and Blind.

On Nov. 26th, the general conditions were not very satisfactory. Ventilation was not up to the standard. This was on account of a number of curtains being in bad repair, and the lack of a good door in the place of the curtain across the mouth of the 2d West entry. The top was bad in most of the working places on the 3d North.

BLACK DIAMOND COAL & MINING CO.

(Changed to Black Diamond Mining Co. Feb. 1907.)

Transportation, L. & N. R. R.

P. O.: Drakesboro.

W. W. Bridges, Prest., T. A. Isaac, V. Prest., F. E. Jones,
Sec'y. and Treas.

This is a shaft mine 75 ft. deep. Coal is mined by electric machinery. There are seven electric machines used; six Morgan Gardner's, and one Goodman. One 150 K. W. and one 100 K. W. Generator; three boilers, two motors, ten ton each, Direct hoisting engine. The ventilation is made by fan, twelve feet in diameter; fan made by the company and runs 100 revolutions per minute. The amount of air 2,200 ft., maximum. Inspected five times, as follows: Jan. 21st; Mar. 22d; May 31st; Aug. 22d; Sept. 20th; Nov. 26th.

On Jan. 21st, volume entering the mine was sufficient, but it did not reach all the working places according to law. First South, off Fourth West was 79 ft. ahead of air. The curtain across the mouth of the entry was not sufficient to cause the air to circulate to the head of the entry. It is very necessary that a door be hung where the curtain was then stationed. The Main south entry was wet at the face.

On March 22d, there was some complaint as to ventilation as a sufficient amount was not circulating to all of the working places; due to a number of break-throughs being made entirely too small, and some of the places being more than 60 ft. ahead of air. Timbering was not what it should be; props were being left too far back from the face in a number of the rooms.

On May 31st, ventilation was not entirely satisfactory and I was unable to get a measurement of air at the head of the 5th West Entry. I instructed the company that they must keep the door closed across the Main South entry so as to cause the air to circulate through the old works.

On Aug. 22d, the mine was in a defective condition as to ventilation; due to a dam which had been built across the Main entry air course, which caused the air to become badly choked throughout the mine. A number of break-throughs

had been made entirely too narrow. I gave the company a twenty days' notice to place the mine in a safe and wholesome condition.

On Sept. 20th, I found that the ventilation had been greatly improved. At the head of the 5th East was the only point that I could not find a sufficient amount of air.

On Nov. 26th, there was still some complaint as to ventilation; due to a number of curtains being in bad repair, and the trap door across 4th West entry had been struck by a trip of cars and badly wrecked, which caused it to leak air badly. Also, the dam across the Main entry Blind had again been re-built up so near the roof that the air could not circulate properly.

W. A. WICKLIFFE COAL CO.

Transportation, L. & N. R. R.

P. O.: Browder.

W. A. Wickliffe, President; J. E. Reynolds, Sec'y. and Treas.

This is a shaft mine. Vein No. 11. Ventilation is created by Crawford & McKrimmon fan, size 12 feet in diameter. The coal is mined by electric machinery, using four Jeffry Machines. Inspected six times as follows: Jan 22d; Feb. 16th; Mar. 22d; May 29th; Aug. 21st; Nov. 25th.

On Jan. 22d, the volume of air entering the mine was sufficient, and it was conducted to the working places very satisfactorily. The only fault being that some of the curtains were in bad repair and some of the break-throughs were too narrow. Near the head of the First and Second South entries on the East side of the shaft, I measured 6,210 cu. ft. of air. Near this point an explosion occurred on the night previous to my inspection. This explosion was due to a place having been bratticed off to smother a fire which had caught there from a shot a few days before. There were two break-throughs open between the First and Second South and the place where the fire occurred was between these two break-throughs. Both break-throughs were left open and the brattice was left open on the lower side, the farthest from the face of the entry and some one entered with an open lamp, causing the explosion. This break-through farthest from the face of the

entry should have been closed up and the first entrance should have been made on the upper side nearest the face of the entry, and then the lower side broken through so the air could circulate and dispel the gas before any one was allowed to enter. After placing the brattice across the first break-through, as mentioned above, and tearing out the stopping which had been placed there to smother out the fire, I made an investigation and found no gas in such a quantity as to be dangerous.

On Feb. 26th, ventilation was very insufficient, although the proper amount of air was entering both sides of the mine. An explosion had occurred on the 8th of the month, due to a number of places being worked more than 60 ft. ahead of the air. I found on the date of my inspection that the place where the explosion occurred was 83 ft. ahead of air and the entry off which the room had been turned, was 109 ft. ahead of air. The curtains were also in bad repair and timbering was not as good as it should have been throughout the mine. The greater part of the mine was dry and dusty.

On Mar. 22d, there was still complaint as to ventilation, although the required amount of air was entering both sides of the mine, but it did not circulate to all the working places in a satisfactory manner; due to the lack of closing some of the break-throughs and not hanging the necessary curtains. This mine generates fire-damp and there has been a great deal of machine dust accumulating in the mine. I have instructed the company to remove the dust from the mine in order to avoid the danger of dust explosion.

On May 29th, the fan was running entirely too slow when I first entered the mine, but after it had been given its proper speed the air circulated to the working places very satisfactorily. The second outlet to this mine is not very satisfactorily arranged, as it was not available to the men at all times.

On Aug. 21st, the ventilation throughout the mine was satisfactory. Timbering and drainage very good, except there was some water at the head of the First North entry on the West side. The second outlet had not yet been arranged satisfactorily. I asked that the company make the necessary

changes so as to make it meet with the requirements of the law.

On Nov. 25th, ventilation entirely satisfactory. There was much bad top in a number of the rooms on the Second North. It was still insisted that the second outlet be provided.

BEECH CREEK COAL CO.

Transportation, L. & N. R. R. P. O.: Beech Creek.

Dr. G. B. Henning, Prest., L. Z. Kirkpatrick, V. Prest., A. D. Kirkpatrick, Sec'y. and Treas., William Collier, Foreman.

This company operates two mines, one known as the No. 11 vein, which is a drift mine, and the other No. 9, which is a shaft. The shaft being only 30 ft. deep. The mines are located about two and one-half miles from the L. & N. R. R., a switch being run out to the main mine. The No. 9 mine is a new mine, the first coal being shipped in June 1907. Ventilation is created for the No. 9 mine by a small basket hung in the air shaft.

The air which supplies the No. 11 mine is created by a 12 ft. fan, made by Wm. E. Cole. Its maximum capacity is 47,000 ft. per minute. The air shaft for No. 11 is 32 ft. deep. Inspected four times as follows: Jan. 12th; Mar. 21st; May 31st; Aug. 21st.

On Jan. 12th, there was some complaint as to ventilation as a number of the curtains were in very bad repair and some break-throughs had been left open which should have been closed.

On Mar. 21st, the ventilation was not entirely satisfactory as a door near the air shaft had been removed and a curtain had been hung in its place. The curtain was not sufficient to turn the air as it should; this change had been made while placing some machinery near the door in order to arrange the rope system haulage.

On May 31st, there was some complaint as to ventilation. Some break-throughs had been left open near the head of the Main entry which caused the air to pass through and not circulate to the working places as it should.

On Aug. 21st, there was still complaint as to ventilation on the second South entry as it was necessary for a

curtain to be hung on this entry, also some break-throughs were needed to be filled up through Main entry and Blind.

ELK VALLEY COAL CO.

Transportation, L. & N. R. R.

P. O.: Drakesboro.

C. W. Adams, Prest., John Kittinger, V. Prest., William Webb, Foreman.

This coal is mined by electric machines; Four Morgan & Gardner being used. Ventilation is created by fan 12 ft. in diameter, made by Crawford & McKrimmon. Shaft is 45 ft. deep and the coal is hauled by mule. Coal ranges about five and one-half feet in height.

Inspected six times as follows: Jan. 8th; Mar. 23d; April 18th; Aug. 23d; Sept. 20th; Nov. 25th.

On Jan. 8th, the ventilation was created by furnaces which did not give satisfaction, it being arranged only temporarily, therefore, I recommended that a fan be installed at the top of the air shaft so as to ventilate the mine properly.

On Mar. 23d, the mine was in a very defective condition as to ventilation and drainage, as the required amount of air did not enter the mine to supply the number of men working under the ground. A twenty days' notice was served on the company to install a fan and place the mine in a condition required by law.

On April 18th, ventilation, timbering, and drainage was entirely satisfactory. There was considerable quantity of water in the mine, but they had it under good control.

On Aug. 23d, there was some complaint as to ventilation at the head of the Main entry as there had been three break-throughs left open between the Main entry and air course when it was very necessary that two of them should have been closed. This company was operating the mine with only one outlet for the men and I instructed them that the second outlet must be arranged.

On Sept. 20th, the second outlet for this mine had not yet been arranged and a twenty days' notice was given to provide a legal second outlet.

On Nov. 25th, ventilation, timbering, and drainage very

satisfactory. The only unsatisfactory condition around the mine was that the second outlet was not yet provided. It was still insisted that it be arranged at once.

CRESCENT COAL CO.

Transportation, L. & N. R. R. P. O.: Bevier.
W. R. Cole, Prest., A. H. Robinson, V. Prest., F. P. Wright,
Sec'y.

This is a shaft mine, although there is a slope arranged for the men and mules to go in and out of the mine. The coal is cut by electric machinery. There are eight Goodman Electric machines in use in the mine. Ventilation is created by two fans, one 12 ft. fan, 100 revolutions per minute, its maximum capacity 30,000 cu. ft.; one 8 ft. Cappell fan runs 175 revolutions per minute, capacity 30,000.

Inspected three times as follows: April 17th; July 10th; Dec. 16th.

On April 17th, ventilation throughout the mine very satisfactory. The greatest trouble existing at this mine was a place on the 8th West Entry where there had been some very large falls of slate, and a great deal of black damp had gathered at this point. I asked the company that an overcast be arranged to take the heat and black damp over the entry and avoid it coming in contact with the men at the working places.

On July 10th, there was some complaint as to ventilation as a number of curtains were entirely too light. Some of the brattices were leaking very badly. The necessary changes were pointed out to the mine foreman to cause the air to circulate to the working places properly.

On Dec. 16th, ventilation was not entirely satisfactory, mostly due to the lack of a trap door across the mouth of the 11th West entry, and a number of the curtains were entirely too short. Timbering and drainage satisfactory.

LAM COAL Co.

Transportation, L. & N. R. R.

P. O.: Bevier.

Thos. E. Sumner, Pres., H. Sumner, V. Prest. and Gen. Manager, J. A. Sumner, Sec'y. and Treas.

This is a drift opening and the coal is mined at present by electric chain machines; four Goodman make. Ventilation is created by 14 ft. fan, made by Crawford & McKrimmon. Coal is hauled at present by motor, and hoisted up the incline by endless chain.

Inspected three times as follows: April 16th; Aug. 23d; Nov. 27th.

April 16th, ventilation not entirely satisfactory, due to the lack of a trap door across the mouth of the second West entry. Some of the brattices between the Main entry and air courses were open and leaking air very badly, and the fan was not being run at sufficient speed.

On Aug. 23d, ventilation, timbering, and drainage very satisfactory. I recommended that an air course be made from 1st to 2d East, which will greatly strengthen the current and will also keep the air from being baffled throughout the mine when the door is being opened and closed on the Main entry.

On Nov. 27th, there was some complaint to the ventilation on this date as the brattices between Main entry and air course were still leaking air, also, most of the curtains were too light. I again directed the company to place a door across the mouth of Second West entry.

BEVIER COAL Co.

Transportation, L. & N. R. R.

P. O.: Cleaton.

J. W. Bastin, Prest., R. S. Lyttle, Sec'y., J. C. Brown, Gen. Manager.

This is a shaft and the coal is mined by punch machines. There are 15 Harrison machines used in the mine. Ventilation is created by 12 ft. fan made by Cole, Washington, Ind., runs 100 revolutions per minute, capacity 28,000 cu. ft.

Inspected four times as follows: Jan. 16th; April 15th; June 17th; Sep. 4th.

On Jan. 16th, ventilation was not satisfactory through all parts of the mine, although the required amount of air was entering; due to the curtain that was across the Main entry just above the old Third North being in bad repair, and allowed the air to make its return to the air shaft without circulating properly. Drainage bad on Main entry and at the head of the North entries.

On Jan. 15th, ventilation was not at all satisfactory; other conditions of the mine were not as they should be, as there had been a large fall on the Main entry and much bad top being on this entry, I instructed the company to sink a new air shaft across the bottom on the opposite hill for the safety of the men in case the Main entry should become closed up.

On June 17th, there was much complaint to the ventilation as the proper amount of air was not conducted to the working places. Also, the air was badly choked at the bottom of the new shaft by a brattice which had been placed around the shaft in the Main air course. A number of places were too far ahead of air and there were some break-throughs open that should have been closed. I gave directions for the fan to be run continually, and for a door to be placed across the Main entry to turn the air to the working places on the North side of the mine.

On Sept. 4th, the air was not still satisfactory conducted to the working places; due to poor curtains and improperly closed break-throughs. I recommended that good trap doors be put across mouth of 5th and 6th cross entries, and heavy curtains inside the doors which will force the air to circulate to the head of the Main entry and to the working places.

HOLT COAL Co.

Transportation, L. & N. R. R. P. O.: Central City.
W. F. Holt, Prest., B. B. Holt, V. Prest., N. A. Holt, Secy.,
E. W. Holt, Treas.

This is a shaft mine 122 ft. deep, and the air is created by 16 ft. fan, manufactured by the Ottumna Iron Works. The coal is mined by punch machines; thirteen Sullivan coal pick machines; two Harrison; one Ingersol.

Inspected four times as follows: Jan. 15th; April 19th; July 9th; Dec. 9th.

On Jan. 15th, there was some complaint as to ventilation as the proper amount of air did not reach all the working places according to the requirements of law, although the amount entering the mine was very sufficient. There were some break-throughs which had been left open that should have been closed and a trap door was needed across the mouth of the first South entry. Drainage bad on North side of Main entry.

On April 19th, still some complaint as to ventilation, owing to the lack of some break-throughs not being made, and some being left open that should have been closed. In fact, ventilation was not at all properly conducted, causing a greater portion of the mine to be very smoky.

On July 9th, a fall of slate in room No. 3 off first South prevented the air from circulating properly to the working places, although a sufficient amount was entering the mine. On the East side of the mine the old Second South entry was closed only by a curtain and at this point most of the air intended for the East side of the mine was lost and returned to the upcast shaft. The fall of the slate was directed to be avoided by driving another place around it and the curtain be replaced with a tight break-through. Drainage getting worse, as it is bad now over the entire mine. A second outlet was directed to be provided at once.

On Dec. 9th, ventilation unsatisfactory, air not being properly conducted to the working places, and as shooting at noon is practiced the amount of smoke was very objectionable. Directions were given to stop the practice of shooting during the time of work. Also, repeated the demand for a second outlet.

CENTRAL COAL & IRON CO.; CENTRAL MINE.

Transportation, L. & N. R. R. and I. C. R. R. P. O.: Central City.

T. C. DuPont, Prest., W. D. McElhinny, V. Prest. and Gen. Manager, David Wadkins, Supt.

This is a shaft mine, shaft 185 feet deep. Coal is all mined by pick, and ventilation is created by two fans. Coal is hauled by electric motor made by the Jeffry Machine Co.

Inspected three times as follows: Jan. 17th; Aug. 31st; Dec. 30th.

On Jan. 17th, ventilation was not altogether satisfactory on the East side of the shaft, as the proper amount of air was not reaching all the working places; greatest complaint being on 13th and 14th South entries, due to the fan not being run as fast as it should have been, as the engine which runs the fan was broken. This placed the company in a position that made it impossible to run the fan any faster until a new engine could be secured. Also, some of the air courses were badly choked in places. Drainage bad on 13th and 14th South entries and a number of places were not sufficiently timbered.

On August 31st, ventilation was not yet satisfactory, greatest trouble existing on 13th and 14th South, due to the air passing through the old works and becoming badly mixed with black damp making it very unfit for persons to breathe. Also, some of the air courses were badly choked. On the west side of the mine, ventilation was not satisfactory, due to a number of break-throughs not being properly closed and some of the air courses being choked with fallen slate. The fan was not being run fast enough. Much bad top on 3d East entry. The men on this side of the mine are not provided with a second outlet, there being only the Main entry through which they can pass from the main shaft to the air shaft or to the air shaft on the East side, where the outlet is arranged. I have asked the company to arrange a means of egress at the air shaft on this side.

On Dec. 30th, the portion of the mine on the East side was in bad condition as to ventilation and drainage, namely, 13th and 14th South, and all working places on these entries. The air when it reaches this point is so badly mixed with black damp that it is very unhealthful. Drainage very bad at this point. Entry roads very wet and muddy. Ventilation on the West side was not satisfactory at all the working places. A 20 days' notice was given the company to place the mine in a safe and wholesome condition.

MOODY COAL CO.

Transportation, L. & N. R. R. P. O.: So. Carrollton.

James Moore, Secy. and Treas., William Moody, General Manager.

This is a shaft mine 286 feet deep, and the coal is mined by pick, mostly being shot off the solid.

Inspected twice, as follows: Sept. 25th; Dec. 31st.

On Sept. 25th, ventilation very satisfactory. This being the first inspection it was very plain to be seen that the mine generated fire damp. It was being operated without safety catches on the cages.

On Dec. 31st, ventilation tolerably satisfactory. This mine is very dry and dusty and generates fire damp. I gave instructions to sprinkle thoroughly and that the heavy shooting must be stopped; also, that the holes must not be drilled deeper than the chance to knock.

GIBRALTAR COAL MINING CO.

Transportation, I. C. R. R. P. O., Mercer.

R. L. Brown, Prest., Memphis, Tenn.; W. M. Kennedy, V. Prest.; Thos. Rhea, Secy. and Treas.; W. M. Billingsby, Supt.

Inspected four times as follows: Jan. 14th; May 15th; Aug. 19th; Dec. 14th.

This is a shaft mine, 60 ft. deep. Coal is mined by Morgan & Gardner electric machines, being five in number. Ventilation created by Capell fan size 6 by 4 ft.

On Jan. 14th, ventilation was very satisfactory, the only objections being on first South, due to some break-throughs being left open. The company was operating the mine without safety catches on their cages. The catches which they had placed had been broken. I directed that new catches be at once supplied.

May 15th, ventilation satisfactory throughout the mine. A great deal of water in the mine, but it was under good control. They were cautioned of the danger of breaking into the old Dovey works.

August 19th, ventilation satisfactory. Drainage bad on entry road, especially First South. They were still driving places in the direction of the old Dovey mine and I repeated the warning of the danger of breaking into the old works.

On December 14th, drainage and timbering very satisfactory; the proper amount of ventilation was circulating very satisfactory.

R. MORGAN COAL, COKE & MINING Co.

Transportation, I. C. R. R. P. O.: Central City.

R. Morgan, President and General Manager, E. B. Wells, Secretary and Treasurer, R. N. Mitchell, Superintendent.

Inspected five times as follows: January 19th; April 30th, May 14th; September 16th; December 10th.

This is a shaft mine 65 ft. deep; average height of coal 4 ft. 10 in. Coal is mined by pick and hauled by mules.

On January 19th, I found ventilation satisfactory. Drainage bad on Third South entry. North cage in bad repair. Much bad top, and I recommended that close attention be paid to timbering.

On April 30th, I made a special visit to this mine to investigate a fire that had caught a heavy shot being fired. In my judgment there was no special danger from continuing to work. Only danger being when they undertook to open up the place where the fire was, which had been bratticed off to smother out the fire.

On May 14th, there was some complaint as to ventilation, due to some falls of slate in the air course where the fire

had been previously burning, near the head of the Main entry. This caused the air to become choked very badly.

September 16th, ventilation very satisfactory, the only objection being that some curtains were in bad repair. Drainage bad on Third South and on Main entry near Second lie-way. Much bad top on Third South.

On December 10th, some complaint as to ventilation due to the fan not being run as it should. General conditions good.

DOVEY COAL CO.

Transportation, I. C. R. R.

P. O.: Central City.

Hywell Davies, President, J. C. Brooks, Secretary, W. M. Jones, Superintendent.

Shaft mine 60 ft. deep and coal is mined by pick.

Inspected five times, as follows: Jan. 19th; May 16th; June 19th; Aug. 29th; Nov. 30th.

At each inspection ventilation, timbering, and drainage very satisfactory.

GREENVILLE COAL CO.

Transportation, I. C. R. R.

P. O.: Powderly.

C. E. Martin, President, J. R. Martin, Vice President, C. M. Martin, Secretary, Treasurer and Manager, Herbert Myers, Foreman.

This is a slope mine and the coal is mined by electricity. There are six Jeffry machines in use. Ventilation by fan, size 10 ft. by $4\frac{1}{2}$ ft., made by Cole, runs 72 revolutions per minute.

Inspected four times, as follows: Jan. 11th; Apr. 4th; June 29th; Nov. 22d.

At each inspection ventilation was circulating very satisfactory. The greatest complaint being there was much bad top on the South side of the Main entry and timbering was being somewhat neglected in some of the rooms.

OAKLAND COAL Co.; OAKLAND MINES.

Transportation, I. C. R. R.

P. O.: Hillside.

J. W. Lam, Owner and Operator, Thos. Sarles, Foreman.

This is a shaft mine 70 ft. deep and the coal is mined by electric Morgan Gardner machines, being four in number. Haulage by mules. Inspected four times, as follows: Jan. 10th; April 4th; June 10th; Nov. 22d.

On Jan. 10th, there was some complaint as to ventilation, mostly due to fan not being run as it should. I instructed the company to run the fan at a greater speed and to re-choke some brake-throughs that were leaking some air. Ventilation created by Cole fan, size 5 by 15 ft.

On April 4th, some complaint as yet in a part of the mine due to some curtains in bad repair, and some break-throughs open that should have been closed.

On June 10th, there was much complaint as to ventilation as a number of the air courses had become badly choked and several curtains in very bad repair. Safety catches on the cages were in bad condition, and some of the working places were not properly timbered.

On Nov. 22d, ventilation was not adequate at this time. The air was conducted in one volume and there were 91 persons employed inside. Therefore, there should have been found at least 9,100 cu. ft. of air circulating at the different headings. This was not the case. The lack of ventilation is principally due to break-throughs being left open and the curtains being in bad repair.

Bad oil is also being used. Safety catches on the cages were out of repair, to which attention was called.

OAKLAND COAL Co.; OLD HILLSIDE MINE.

Transportation, I. C. R. R.

P. O.: Hillside.

J. W. Lam, Owner and Operator.

This is an old mine and has been idle for a number of years, being only recently put in operation, and coal is mined by pick, and hauled by mules.

Inspected twice, as follows: Aug. 30th; Nov. 22d.

On Aug. 30th, ventilation not satisfactory as it was badly choked throughout by the break-throughs being made entirely too small. Timbering was insufficient at the head of the Main entry.

On Nov. 22d, I found that an explosion of powder smoke had occurred on the previous evening. The shots that principally caused the explosion were in the Second South entry, and were on the solid and heavily charged with powder. Both shots had failed to knock the coal successfully and a great deal of smoke had accumulated which was fired by the hot flash from the drill hole. Ventilation satisfactory. But the absolute need of a second outlet was pointed out and explicit directions given that one must be provided.

HILLSIDE COAL CO.; WOODSON MINE.

Transportation, I. C. R. R. P. O.: Hillside.
William Eades and J. W. Lam, Owners and Operators.

This is a shaft mine 80 ft. deep. Coal is mined by four Morgan Gardner machines. Haulage by mules. Cole fan used, size 5 x 15 ft. Inspected four times, as follows: Jan. 10th; May 9th; May 30th; June 19th.

On Jan. 10th, there was much complaint as to ventilation, mostly existing on the North side; due to the system by which the mines was attempted to be worked. Also, there was great trouble owing to the way break-throughs had been made. Timbering was insufficient on the North entries.

On May 9th, ventilation did not conform to the requirements of law. Most of the break-throughs throughout the mine entirely too small. A number of working places were more than 60 ft. ahead of air. Air courses choked. Served twenty days' notice to put the mine in a condition to conform to the requirements of law.

On May 30th, there was still some complaint as to ventilation, but the company still failed to conform to the requirements of law, but as some effort had been made to carry out my instructions I extended the time for an additional twenty days.

On June 19th, ventilation entirely satisfactory, the only

complaint was that props were too far back from the face in a number of rooms.

BRASHER COAL CO.

Successors to Hillside Coal Co.

P. O.: Hillside.

Transportation, I. C. C. R. R.

John Brasher, Owner and Operator.

This mine was formerly known as the Woodson mine, and was changed to the Brasher Coal Co., Oct. 1, 1907. Inspected Nov. 23d.

On Nov. 23d, some complaint as to ventilation on the North side of the Main entry, and the entries were most all wet at the face.

W. G. DUNCAN COAL CO.

Transportation, I. C. R. R.

P. O.: Luzerne.

W. G. Duncan, President, C. W. Taylor, Vice President and General Manager, O. C. Roll, Foreman.

Luzerne Mine.—This is drift mine, and the coal is mined by electric Jeffry machines. The coal is hauled by electric motors. Ventilation by fans.

Inspected twice, as follows: April 19th; Sept. 17th.

On April 19th, ventilation satisfactory, except at the head of the 9th, 10th West entries; due to places being broken through to the surface, allowing a great deal of the air to escape. Drainage not good, mud and water on the entries roads.

On September 17th, there was some complaint as to ventilation as a number of the brattices were leaking air and some of the break-throughs were too narrow. The air course near the opening used for the intake was choked with dirt and gob.

Red Bird Opening.—Inspected on September 17th. This opening is the extension of the Main entry into the adjoining hill and at the time of my inspection the air that supplied this mine was created by furnace. The air was amply sufficient entering the mine, but the condition of the mine was bad, as nearly all the brattices were badly shot to pieces and some of

them almost completely torn out. Drainage bad; mud and water on entry roads.

W. G. DUNCAN COAL CO.

Transportation, I. C. R. R.

P. O.: Graham.

Graham Mine.—This mine is operated by the same company as the Luzerne Mine. William Williamson, Foreman.

The coal is mined by Jeffry machines, and also hauled by the Jerry motors, and hoisted from the mouth of the mine by endless chain to the tippie.

Inspected twice as follows: April 10th; Sept. 19th.

On April 10th, some complaint as to ventilation, as number of break-throughs had been left open, therefore, the air did not circulate within 60 ft. of all the working places. Timbering and drainage good.

On Sept. 19th, ventilation not satisfactory. First East entry was 72 ft. ahead of air and no break-throughs started. Some of the brattices between Second North and Blind were leaking air badly. The air was considerably mixed with black damp.

Skibo Mines.—Operated by same company.

Inspected April 10th; Sept. 19th.

Ventilation is created by a basket hung in the air shaft, and it has not been altogether satisfactory at my different inspections. Break-throughs were left open that should have been closed. Timbering and drainage very good.

Ohio County

McHENRY COAL CO.

(ECHOLS MINE.)

Transportation, I. C. R. R.

P. O.: Echols.

W. D. McElhinny, President and General Manager, W. B. Alexander, Superintendent.

This is a shaft mine and coal is cut by Jeffry Electric machines, and hauled by Jeffry motor.

Inspected four times as follows: Jan. 30th; May 17th; Aug. 19th; Sept. 18th.

At each of my inspections during the year I found that ventilation, timbering and drainage very satisfactory. The only complaint being that the mine was practically being operated with but one outlet, as the Main entry air course had become badly choked as to make it impossible for any one to get through, therefore, the Main entry was the only route to get to either Main shaft or the air shaft. Notice was given after my inspection of Aug. 19th forcing the company to provide a second outlet according to law.

McHENRY COAL Co.

(McHENRY MINE.)

Transportation, I. C. R. R.

P. O.: McHenry.

Same officers as the Echols Mine.

This is a slope mine, and has been worked for many years. The coal is most all mined by electric machinery, and is hauled by rope system. There are five Jeffry machines in use. Ventilation is created by 16 ft. fan made by Crawford & McKrimmon. This was only inspected once during the year for the reason that it was not in a working condition, as water had accumulated in such quantities as to flood the mine. When inspected on May 11th, there was not a sufficient amount of air circulating to all the working places. A quantity of water had accumulated around the air shaft and slate had fallen at different points in the air course, and the fan was not being run at a rate of speed to keep the black damp from accumulating. The second outlet was not satisfactorily arranged. The attention of the company was called to this and asked to make the necessary changes to remedy the deficiencies.

BROADWAY COAL MINING Co.

Transportation, I. C. R. R.

P. O.: McHenry.

W. W. Simmons, President and Treasurer, Alexander Allison, Vice President, W. E. Brown, Secretary, Geo. M. Burton, Superintendent.

This is a shaft mine 60 feet deep, and coal is mined by 15 Ingersoll Rand punch machines. Ventilation by Crawford & McKrimmon fan, 12 ft. in diameter and is run by steam. Coal is hauled by mules.

Inspected four times as follows: Jan. 30th; April 12th; July 23d; Dec. 27th.

On January 30th, ventilation satisfactory; drainage bad throughout; no safety gates at the top of the shaft, and I asked that these be placed at once.

On April 12th, ventilation not satisfactory, due to break-throughs being neglected, and some of the curtains were in bad repair. Drainage still bad, and much bad top near the head of the Main entry and Blind.

On July 23d, ventilation satisfactory except on the first and second West; a trap door was needed at the mouth of second West entry.

On Dec. 27th, ventilation satisfactory; drainage still bad, as most of the entries were wet at the face and much mud and water on the road.

CENTRAL COAL & IRON CO.

(RENDER MINE.)

Transportation, I. C. R. R.

P. O.: Render.

T. C. DuPont, President; W. D. McElhinny, Vice-President; Simon Jones, Manager.

This is a drift mine, and the coal is mined and hauled by electricity. Jeffrey Machines are used for mining the coal. Ventilation by fan, and very satisfactory at each of my inspections. Drainage bad; much mud and water accumulated on the road. Also, there is considerable amount of bad top throughout the mine.

Inspected four times as follows: January 29th; May 27th; September 23d; December 28th.

FORDSVILLE BLOCK COAL CO.

Transportation, I. C. R. R.

P. O.: Fordsville

Sam'l Gaines, Owner and Operator.

This is a drift, coal mined by picks. Operated only on a very small scale. Most of the coal being hauled in wagons. Ventilation by furnace. The mine has been closed most of the year. Working but a very few men. Inspected Aug. 12th. At this time the condition was not very good, much complaint as to ventilation, due to the curtains being in bad repair. Entry road very bad and muddy.

PEACOCK COAL CO.

Transportation, I. C. R. R.

Aetnaville.

John Kittinger, Owner and Operator.

This mine has practically closed during the year and when operated it was on a very light scale. Coal is mined by pick. Ventilation created by furnace. Mine was not kept up as it should have been, which would have caused it to be impossible to operate to any great extent. Inspected twice during the year; April 29th; August 12th. At each inspection the condition was not satisfactory. Great neglect in keeping the mine in proper repair.

DEANEFIELD COAL CO.

Transportation, I. C. R. R.

P. O.: Deaneffield.

Inspected April 29th; August 12th.

At each of my inspections, this mine was in a bad condition and the expectation was to abandon the mine in a very short time. On August 12th there were but four men working, and the pillars were being drawn, and iron was being pulled and taken out. Shortly afterwards it was abandoned.

COFFMAN COAL CO.

Transportation, Green River.

P. O.: Coffman.

Inspected four times as follows: March 18th; June 12th; September 12th; December 19th.

The name of this company changed in May, 1907, from the Green River Coal Mining Co., to the Coffman Coal Co. Inspected twice under the head of Green River Coal Mining

Co., and twice under the head of the Coffman Coal Co. This is a drift mine and the coal is mined by pick. Ventilation is created by furnace, which is amply sufficient to supply the mine with an abundance of air. At each of my inspections there has been some complaint as to ventilation and drainage.

The second outlet was not arranged satisfactory, and timbering was being neglected.

TAYLOR COAL CO.

Transportation, I. C. R. R.

P. O.: Taylor Mines.

I. P. Banard, President; M. M. Bardwell, General Manager; Geo. Smith, Superintendent.

Drift No. 1.—Inspected twice, as follows: May 20th; July 8th. The coal is mined by punch machines.

On May 20th, the mine was in bad condition as to ventilation, as there was scarcely any air at the head of the entries, or circulating through the working places. I served twenty days' notice on the company to put the mine in a condition to conform to the requirements of law.

On July 8th, the conditions did not still conform to law and immediately after my inspection it was closed for repairs.

Drift No. 2.—As in the other opening this coal is mined by punching machines and coal is hauled by electric motor.

Inspected three times, as follows: April 13th; June 14th; July 19th.

On April 13th, ventilation not satisfactory, due to neglecting to properly place doors across the Main entry to govern the current of air. The running of the motor caused the air to be very badly baffled. At each of the other inspections the conditions were very good.

WILLIAMS COAL CO.

Transportation, I. C. R. R.

P. O.: McHenry.

I. P. Barnard, President; M. M. Bardwell, General Manager; Geo. Smith, Superintendent.

This is a shaft mine, although a slope is arranged for the men to go in and out. Coal is mined by punch machines, and

hauled by electric motor. Inspected May 28th, and conditions were not very good, due to the air courses being choked and the necessity of a new air shaft being sunk, and a new fan installed on the Main West entry.

The second outlet was not arranged satisfactorily, and timbering was being neglected.

Butler County

MORGANTOWN COAL CO.

Transportation, Green River. P. O.: Morgantown.

This mine is operated on a small scale. Inspected twice, March 5th; September 9th. At each inspection, ventilation very satisfactory, only complaint being some of the curtains in bad repair, and drainage was also bad.

MAINE & MCKINNEY.

(Lessee's Aberdeen Coal Co.)

Transportation, Green River. P. O.: Morgantown.

A. A. Maine, General Manager.

This is a drift mine, coal mined by pick; coal is about 3½ ft. thick. Ventilation by furnace; air shaft 40 ft. deep; stack at top of shaft 30 ft. high. Ventilation very satisfactory, only complaint being bad curtains, and the system in which the mine is being worked.

Inspected March 5th; September 9th.

JAMES WILKERSON COAL CO.

Transportation: Green River. P. O.: Morgantown.

Ben Topmiller, General Manager.

This mine was operated only on a very small scale. Coal was hauled from the mouth of the mine, a distance of about 200 yards and then sent down an incline by a drum using a break on the drum. Coal is about three ft. thick, and there is little powder used in mining the coal.

Inspected March 3d. Ventilation reasonably good. Much bad top and timbering was being neglected.

Union County
SULLIVAN COAL CO.

Transportation, I. C. R. R. P. O.: Sullivan.

Geo. Ruhl, President; W. G. Hiller, Secretary and Treasurer; F. H. Jewell, Superintendent.

This is a drift mine, and coal is mined by the Sullivan Air Machines. Ventilation by an 8 ft. fan. Coal is hauled by mules.

Inspected three times, as follows: April 22d; July 24th; November 19th.

At each inspection there was some complaint to the ventilation, mostly due to the air courses being choked with slate. Also, the curtains were badly neglected and most of them were entirely too light. Drainage was bad; entry roads very wet and muddy.

WEST KENTUCKY COAL CO.

Colliery C.—Transportation, I. C. R. R. and Ohio River. P. O.: Sturgis.

This is a shaft mine, and the coal mined by machinery. Ventilation created by fan. When inspected March 26th, the mine was in a defective condition as to ventilation, although the required amount of air was entering the mine. They have changed the system of conducting the air and the air now circulates in one volume throughout the mine. 91 men are employed inside the mine and I did not find the required amount of air at any of the headings. On the hill side of the shaft I could not get a measurement of the air at any point. This was mostly due to a door being open which I discovered upon my return. The door was near the bottom of the shaft and allowed the air to make its return to the shaft without circulating through the working places on the hill side of the mine. On the night of the 28th, the tippie in connection with the fan house was burned, therefore, making it impossible to inspect the mine after this, during the year.

WEST KENTUCKY COAL CO.

Colliery B.—Transportation, I. C. R. R. and Ohio River.

This is a slope mine. Ventilation by fan. Coal is mined by punch machines. Inspected three times, as follows: March 26th; July 25th; November 15th.

When inspected March 26th, some complaint to ventilation, caused by a number of curtains being too light. I could get no measurement of air at a number of the headings on the right hand side of the Main entry.

On July 25th, ventilation was poor, due to break-throughs not being closed at all or not closed tightly and air courses being choked with drift and gob; curtains in bad repair, generally throughout the mine, and irregularity of firing.

On November 15th, volume of air entering this mine was amply sufficient for the number of persons working under ground, but it did not reach some of the working places according to the requirements of law.

I called the attention to the practice followed in this mine of burning bad oil.

CRITTENDEN COAL & COKE CO.

Transportation, I. C. R. R.

P. O.: Sturgis.

Ventilation created by fan. Coal is cut by electric machines, Morgan-Gardner make.

Inspected July 25th and November 15th.

At each inspection there has been some complaint to ventilation, a number of the places being worked more than 60 ft. ahead of air, and some of the break-throughs were not properly closed.

OHIO VALLEY COAL & MINING CO.

Transportation, I. C. R. R. and Ohio River. P. O.: DeKoven.

Sam'l Sturgis, General Manager; A. R. Long, Superintendent; John Whitehead, Foreman.

This is a slope mine and the coal is mined by the Har-

rison punch machines. There has been a new tippie erected here during the year, which is one of the best in this section of the coal field. Ventilation created by fan, six feet in diameter.

Inspected four times as follows: March 28th; May 23d; July 26th; November 14th.

On March 28th, the mine was in a bad condition as to ventilation, as the air shaft had caved in at the top, making it impossible to use the fan. Also, a number of places were being worked more than 60 feet ahead of air.

On May 23d, yet some complaint to ventilation, a number of places being worked more than 60 feet ahead of air, and the lack of a door across the Main slope prevented the air from circulating as it should.

On July 26th, ventilation and general conditions very satisfactory. The company had sunk a new air shaft and was using this for the intake of air.

On November 14th, ventilation satisfactory, with the exception of 5th and 6th East entries were more than 60 feet ahead of air.

BELL UNION COAL & COKE Co.

Transportation, I. C. R. R.

P. O.: Curlew.

Coal is mined by pick, and ventilation by fan.

Inspected four times as follows: March 17th; May 23d; July 26th; November 14th.

There was some complaint to ventilation at each inspection; due to curtains being neglected. It was in a very bad condition as to drainage; a great portion of the time it was completely drowned out. The company being unable to secure such pumps and pipes that would stand the copperas water for only but a short time, therefore, the water would accumulate in such quantities as to make it impossible to operate the mine.

THE THOMAS COAL Co.

Transportation, I. C. R. R.

P. O.: Morganfield.

C. C. Thomas, President, M. A. Thomas, Vice President, L. M. St. John, Secretary and Treasurer.

This is a shaft mine and ventilation is created by a 10 ft. fan, made by Crawford & McKrimmon. There is one Harrison punch machine, and all other coal is mined by pick.

Inspected six times as follows: Jan. 9th; Mar. 28th; April 23d; July 31st; Aug. 26th; Nov. 12th.

At each inspection there was much complaint as to ventilation and to the system in which the mine was being worked. An effort was made to prosecute the company for operating the mine in violation of the law, by reporting the condition of the mine, and furnishing a list of names to the County Attorney. There was but one outlet to this mine and I made effort to cause this company to sink a shaft for the purpose of arranging a second outlet.

MORGANFIELD COAL & MINING Co.

Transportation, I. C. R. R. and wagons. P. O.: Morganfield.
W. H. Lloyd, owner and operator.

This is a shaft 200 ft. deep, and ventilation by fan, made by Crawford & McKrimmon. Coal is mined by pick.

Inspected three times as follows: Mar. 28th; July 31st; Nov. 12th.

On Mar. 28th the fan was not being run sufficiently fast to properly ventilate the mine. Some break-throughs were being left open.

On each of the other inspections ventilation was satisfactory. Drainage still continued to be bad during the year. Water coming down from the roof causing the roads to be very wet and muddy.

M. J. CLEMENTS.

Receiver of the Southern Tidewater Coaling Co.
Transportation, I. C. R. R. P. O.: Uniontown.
John Wadkins, Manager.

Inspected twice while being operated by this company; Mar. 29th; July 17th.

At both inspections ventilation very satisfactory. At the latter inspection there was some bad top at the face of 1st and 2d South entries. I directed that it be well scaled and timbered. This mine changed names shortly after July 17th, and is operated now under the name of Kentucky Coal & Mining Co.

B. C. DAVIDSON & SONS.

Transportation, wagons.

P. O.: Uniontown.

B. C. Davidson & Sons, operators and owners.

Inspected twice while operated by this company. It changed names in the later part of the year to River & Rail Coal & Coke Co. It is operated on a very small scale, and ventilation was created only by steam jet. Ventilation very satisfactory, but the mine seemed to be on a natural squeeze; due to the pillars being robbed and not being sufficiently left to support the roof.

KENTUCKY COAL & MINING CO.

(Formerly Waverly Coal Co.)

Transportation, I. C. R. R.

P. O.: Waverly, General

Office, Morganfield.

This is known to be the No. 11 vein, shaft is 257 ft. deep, ventilation by fan. Coal is mined by Morgan-Gardner machine, being seven in use. Inspected three times as follows: April 23d; July 30th; November 13th.

When inspected April 23d, ventilation not satisfactory as the fan had not yet been installed, and the way of creating same was not sufficient. On July 30th, still some complaint to ventilation, as some of the curtains at the head of Main entry were leaking air very badly, and proper amount of air did not circulate on the North side of Main entry.

On Nov. 13th, yet some complaint to ventilation; owing to some break-throughs being left open that should have been closed.

Henderson County
SMITH MILLS COAL Co.

Transportation, wagons. P. O.: Smith Mills.

This is a shaft mine about 280 ft. deep. Ventilation created by fan, and coal is all mined by pick. This mine is operated on a small scale.

Inspected three times as follows: April 24th; July 15th; Oct. 10th.

At each inspection ventilation was not entirely satisfactory, as there was great neglect in closing the break-throughs. Also, there was much bad top in the mine, and timbering was being neglected.

CORYDON COAL Co.

Transportation, wagons. P. O.: Corydon.

J. E. Jones, President, J. A. Jones, Vice President, J. L. Jones, Secretary and Treasurer.

This is a shaft mine. Coal is mined by pick. Ventilation by a six foot fan. It was not in a satisfactory condition at each of my inspections, as the expectation was to abandon it in a short time. Inspected three times as follows: April 25th; July 16th; Oct. 9th.

MAGNOLIA COAL Co.

Transportation, wagons. P. O.: Corydon.

Inspected three times as follows: April 25th; July 16th; Oct. 9th.

This is a shaft, and coal is mined by pick. As there has been more than 15,000 sq. yds. excavated, orders were given for not more than ten men to be employed until such times as a second outlet could be arranged. At each inspection ventilation satisfactory, the greatest trouble that a number of curtains were used for the purpose of closing break-throughs, which was not sufficient. Some bad top here, and timbering was being neglected on Main entry.

PEOPLES MINING Co.

Transportation, wagons. P. O.: Henderson.
J. E. Slosbach, General Manager, Chas. Manion, President,
W. H. Lewis, Secretary.

This mine is operated on a small scale as it only supplies the local trade. Ventilation by fan. Coal is mostly shot on the solid, and coal is transferred by hand.

Inspected twice as follows: May 24th; Aug. 22d

Ventilation not good at each inspection, mostly due to the fan being run at too slow a speed. Timbering not up to standard, being somewhat neglected.

KEYSTONE COAL MINING & MFG. Co.

Transportation, wagons. P. O.: Henderson.
T. C. Nicholson, General Manager.

This is a shaft mine 496 ft. deep. Ventilation created by fan. Coal is mined by electric and punch machines.

Inspected three times as follows: May 25th; Aug. 27th; Oct. 8th.

On May 25th, mine was in bad condition as to ventilation and timbering as the casing between the air department and Main shaft was leaking air very badly.

On Aug. 27th, ventilation and timbering very satisfactory.

Oct. 8th, the mine was still in a very good condition. although there was much bad top throughout the mine. There is fire damp generated at the mine. The North cage was not in safe condition, and I asked the company to make the necessary repairs.

RASH, DENTON & Co.

Transportation, wagons. P. O.: Robards.

This is a shaft mine 280 ft. deep, and ventilation is created by fan. Coal is mostly shot off the solid. Ventilation had been very satisfactory at each inspection. Some bad top, but timbering was being very properly looked after.

Inspected twice, on May 25th; Oct. 12th.

WILLIAM HAYES & SONS.

Transportation, wagons.

P. O.: Zion.

William Hayes, President, Jas Hayes, V. Prest., Louis Hayes, Secy. and Treas.

This is a shaft mine. Coal is partly mined by machinery, using the Harrison punch machine. Machine is mostly used in the entries for cutting the coal. The coal is most all shot off the solid. Ventilation created by fan, ten feet in diameter, but not very well installed; maximum capacity under the circumstances being about 3,500 ft.

Inspected May 24th, and Oct. 11th.

At each inspection ventilation not entirely satisfactory, due to curtains being in bad repair and some break-throughs not being properly closed.

PITTSBURG COAL CO.

Transportation, L. H. & St. L. R. R.

P. O.: Baskett.

Alexander Blair, Owner and Operator.

This is a shaft mine; ventilation created by a 10 ft. Crawford & McKrimmon fan, 100 revolutions per minute, maximum capacity 18,700 ft. Coal is mined by the Harrison punch machine, six used in the mine. Inspected four times as follows: June 27th; July 5th; Aug. 9th; Sept. 13th.

At each inspection ventilation was not entirely satisfactory, although a sufficient was entering the mine. This was mostly due to the door on First Right entry, on North side of the shaft, being badly neglected, and the air courses being badly choked with dirt and slate. On the South side a squeeze had badly blocked the air; the only being to remedy this was to secure an air course around the squeeze.

GREEN RIVER COAL CO.

Transportation, L. H. & St. L. R. R.

P. O.: Spottsville.

Wm. Clendaniel, President and General Manager, P. Conlley, Superintendent.

This is a shaft mine; ventilation is created by fan. The

coal is mostly all shot off the solid. This mine has been closed the principal part of the year, as there has been much improvement in and around the mine. A new tippie has been erected which is one of the best in the State. It being equipped with the latest improvements.

Inspected twice as follows; June 27th; Oct. 24th.

On these dates ventilation was not satisfactory, due to a squeeze which had come throughout the old works between the fan shaft and the present working places, which caused the air to be almost completely cut off. An effort was made to drive an air course around the squeeze, but finding it impossible it became necessary for them to sink a new air shaft.

JOHN ARCHBOLD COAL CO.

Transportation, Green River.

P. O.: Bluff City.

John Archbold, General Manager.

This is a shaft mine about 45 ft. deep. Ventilation by fan. Coal is mostly shot off the solid. Inspected but once during the year on June 28th. At this time ventilation not satisfactory, due to the break-throughs being made entirely too narrow. Also, drainage very bad, entry roads being wet and muddy.

UTOPIA COAL CO.

Transportation, Green River.

P. O.: Curdsville.

Inspected June 28th; there was some complaint to ventilation on the 2d left entry; due to having only the single entry and no way for the air to make its return. Curtains all in bad repair. Drainage not up to standard.

Hancock County

FENLEY COAL CO.

Transportation, L. H. & St. L. R. R.

P. O.: Martindale.

This is a drift mine, operated on a small scale, with expectations of being abandoned at any time and was abandoned shortly after my visit to the mine. Ventilation created

by furnace. Conditions not very good. Much mud and water accumulated.

Inspected on April 27th, and Aug. 10th.

SOUTHEASTERN DISTRICT

REPORT OF ASSISTANT CAIN

Prof. C. J. Norwood,

Chief Inspector of Mines, etc.,

Dear Sir:

I have the honor to submit herewith my annual report for the year ending December 31, 1909. It consists of reports of inspections made of the mines of the Southeastern District; comprising the counties of Bell, Knox, Laurel, Rockcastle, Pulaski and Whitley, they being assigned to my care shortly after my appointment as Assistant Inspector.

Since my appointment, many more Companies have entered this field and the number of mines have nearly doubled in the last two years.

Those that were already in operation have greatly extended their underground development requiring more time for each inspection that the Inspector makes, until it has become impossible to give each mine the number of visits per year required by law.

The coming year will bring in at least four new companies in Bell, three in Knox, four in Whitley, and four in Wayne besides the one now shipping from that County.

While I regret that on account of the exceedingly large number of mines that are here to be looked after by one Inspector, precludes a most thorough and rigid supervision of them all, yet it is to be hoped that the year just ended will show a decreased ratio of accidents and fatalities.

In conclusion I wish to express to you my sincere thanks for the kind and considerate treatment that you have always extended to me, and for the good advice given me in regard to official business.

Yours very respectfully,

J. D. CAIN,

Asst. Inspector of Mines.

Bell County**BELL-JELICO COAL COMPANY.**

Main office, Bell-Jellico.

Freight and Tel. office,

Transportation, L. & N. Railroad.

Fourmile.

R. G. Yingling, President; M. G. Yingling, General Manager.

While comparatively a new operation, this company has rapidly forged to the front, being the leading shipper of the Dean coal and one of Bell County's large producers.

During the year No. 2 mine was opened, being connected to the present tippie with a separate incline. The company expects to make the No. 2 Mine their main mine.

Last inspected, Dec. 17th (Mine No. 1.)

The general condition of the mine was good, a slight deficiency of volume being noted towards the head of Left Main due to a broken brattice. The mine was well timbered and drained.

Inspected July 15th, (Mine No. 1.)

At the date of this inspection all conditions were being well maintained.

Mine No. 2.

Inspected Dec. 17th.

So far the development here consisted of main entry and main airway with the first crosscut connected. The mine had no ventilation as yet but arrangements for the installation of a powerful fan had been made whenever the mine was advanced far enough to need artificial ventilation. The mine approaches were well timbered. To date this company has not mined any coal with machinery, the coal being shot from the solid and trammed with mules.

BIG HILL COAL COMPANY.

Mine office, Blanche.

Tel. office, Pineville.

H. V. Jones, President and Gen. Manager; H. B. Hanger, Vice President, J. A. Sullivan, Secretary, Kuper Hood, Treasurer, with offices in the Union Trust Building, Cincinnati, Ohio.

During the year No. 2 Mine has been rapidly developed, little if any mining being done in No. 1 Mine. The tippie is equipped with shaker screens built by the Duncan Foundry & Machine Co., of Alton, Ills. These screens are driven by belted arrangement connected to a 20 H. P. engine. Two 200 H. P. Atlas boilers furnish the steam for the two 200 H. P. Atlas engines that are directly connected to the Goodman Generator.

Part of the coal is undercut with a low vein Goodman machine, part with a 16 A Jeffrey self-propelled machine and the balance is hand work, being shot from the solid and half solid. What water the mine makes is pumped to the outside with a Deming electric pump.

No. 2 mine is ventilated with an 8 ft. Thayer fan driven by an 8x8 engine.

Last inspected, Dec. 11th.

The 5th Left Main entry was devoid of a current towards the head of entry. This was the result of the poor condition of the curtains used on the roomnecks. A stronger current was needed at head of the main entry. Elsewhere the mine was well ventilated. On account of a slight show of gas at this mine, the first to develop in this field since the closing of the Log Mountain Coal Co's. Cannel mines, the following notice was served the Company.

"No. 5 Main Left

6 Persons."

"On account of the poor condition of room curtains no reading could be had at the last roomneck. Repair these curtains. Cut out the first overcast thereby increasing the volume at head of main entry. Every leak should be stopped on main entry airway brattices. I suggest that these cross-cuts be filled with slate and clayed. Keep all dry places on haulways well sprinkled."

"Keep on the Fire Boss and have all places examined before work time. Shot Firers should be placed on the lower levels."

"No powder should be allowed in the mine at firing time except what is to be fired. "

"You must take steps at once to provide the mine with

the second opening that the law requires or cut your inside force down to ten persons."

Yours very respectfully,

J. D. CAIN,

Asst. Inspector of Mines.

I wish merely to state that the day of this inspection there was one hundred and eighteen persons within the mine.

Inspected July 10th.

On the date of this inspection the ventilation, drainage and timbering was perfectly satisfactory. The Inspector on this visit called the Company's attention to the necessity of the second opening.

EDWARD BLAKE, LESSEE BLACK BEAR COAL CO.

Transportation, L. & N. Railroad.

P. O.: Fourmile.

Last Inspected Dec. 19th.

During the year five inspections were made of this mine which is unusually dry and somewhat dusty. The blasting is all on the solid with the result that windy shots have been of frequent occurrence. During the first part of the year a new furnace was installed; the old one being condemned by the Inspector. The new furnace supplies ample air and the mine became well moistened by the increased volume of air leaving its moisture in the mine. This condition could be noted to a marked degree when the mine was inspected July 11th, when at that time the entire mine was well saturated. An inspection of the mine was made Dec. 9th, while the mine appeared to be somewhat dry, it was not so dry as to be dangerous. On the Main Entry between third and fourth Rights for a distance of perhaps one hundred and fifty feet was less moisture than elsewhere and this point was several hundred feet from where any shots would be fired. At this visit the ventilation was satisfactory except that on fourth right entry a check curtain was needed to force the current to the faces of the rooms on the left side of the entry. As the rooms were only in a short distance, this was considered as a minor defect

but the Company's attention was called to this defect in the notice of this date.

On Dec. 17th, eight persons were more or less burned in an explosion that originated in fifth right entry. This occurred at the noon firing hour and was doubtless the result of powder smoke combined with coal dust created by the fracture of the coal while the shots were exploding combined with the discharged coal being smashed to atoms against the sides of the working places. As the Inspector arrived there during the afternoon of the day of the accident, he had exceptional opportunity to determine the causes that led up to the explosion. As a result of his investigations a special report was made under date of December 20th. (See said report in the chapter on Accidents.—C. J. N.)

Under date of December 20th (covering the inspection of December 17-19) the following notice was served the company:

"Ventilation is defective as the result of blown out brattices and damaged doors caused by the explosion of the 17th.

Do not start up first right entry and new main until the brattices are thoroughly repaired. Should this part of the mine become dry, it must be sprinkled and kept moist.

Cut rooms No. 1 on second right to new main by a cross-cut every 60 feet. Do not start up third right until brattices are repaired on this entry and the current sent through the faces of the working places.

Do not resume mining on fourth right until the brattices are repaired, removing all curtains that are used as brattices on right of this entry, and good substantial brattices put up. Remove and take outside all dust on main and fourth right entries, then thoroughly sprinkle this part of the mine and see that this part of the mine is kept moist. In view of recent events the following instructions are hereby given, for the manner and kind of shots that are to be fired within the mine. The double crackers must be discontinued and where crackers are used, a single one charged with dynamite must be used and that fired only at the evening shooting hour. Tamping with drill dust must cease, instead use clay or dampened gob that is free of coal dust.

Good judgment must be used at firing time, care being used that not too many shots are exploded at once, and under no circumstances must the heading shots be fired with a shot in the crosscut ahead of air or with one in a room without a breakthrough.

All miners are requested to remove drill dust from in front of holes that are to be fired. You will see that the legal amount of air is travelling the working places before work time."

Yours very respectfully,

J. D. CAIN,

Assistant Inspector of Mines.

THE CANEY CREEK COAL & COKE COMPANY.

Shipping Point: Chenoa.

P. O.: Davidsburg.

Transportation: L. & N. Railroad.

Officers: W. D. Reynolds, President; Thomas J. Davis, Vice-President; D. R. Morgan, Secretary and Treasurer; M. H. Beddow, General Manager.

This is a new operation, the first coal being shipped in July, 1907. This company in 1906, acquired a large lease from the Louisville Property Company's holdings just above the Chenoa Coal Company, on the left of Caney Creek. So far thirty-five good substantial tenant houses have been erected for the labor, besides a store house and other necessary mine buildings for the use of the company.

Two openings have been made in the Poplar Lick seam which is from 47 to 58 inches in thickness, carrying a fire clay parting of from 5 to 10 inches. A ten foot Crawford & McCrimmon fan driven by a 11 H. P. Foss gasoline engine ventilates the mine.

Visited June 26th.

At this time the development was so slight that an inspection notice was served. Considerable coal was however shipped from the mine the latter half of the year.

THE CHENOA COAL COMPANY.

Shipping Point: Chenoa.

P. O.: Cairnes.

Transportation: L. & N. Railroad.

The present known officials of this company are Jas. Tinley, General Manager, Tamaqua, Pa.; M. McFarlane, Superintendent, Chenoa.

This is a new operation, the first to ship from the Caney Creek field. Consists of a lease acquired from the Louisville Property Company on the left of Caney Creek, and is the first mine on this Creek. The railroad reaches this field by a loupback over the tracks that go up to the mines on Bear Creek.

Up to December the 12th, this plant was operated by the Miller interests, of Middlesboro. Since that date the present owners have had charge. The mining is done in what is known as the Mason seam, a coal that resembles the Jellico in many respects and is probably the same seam. It is found several hundred feet below the Poplar Lick seam. So far this is the only company that has developed this seam in the Clear Creek District.

A rope haulage system is being installed on the main entry to overcome what appears to be a uniform dip of four degrees to the south. Thirty houses have been provided for the labor, a store and other mine buildings for the use of the company and more houses for the labor will be erected the coming year.

Inspected June 26th. The ventilation was with an 8 foot fan and fairly well maintained. The timbering of the main and first left entries were not satisfactory and the company was notified to retimber them. The face of the main entry was showing good top and indications were that the mine would soon develop a fairly good roof.

CLEAR CREEK COAL COMPANY.

Shipping Point: Chenoa.

P. O.: Chenoa.

Transportation: L. & N. Railroad.

Officers are A. C. Carr, President and General Manager; P. T. Colgan, Secretary and Treasurer; J. W. Dean, Superintendent.

This is one of the new operations coming in during the year; the first coal being shipped in July, 1907. Mines located

on Bear Creek about a mile above the old site of the Log Mountain Coal Company's Cannel mines. Since the first shipment the mine has been rapidly developed and considerable coal has been shipped from the mine.

Twenty-five dwellings, a commissary, and other necessary buildings have been erected and plans for a large number to be built the coming year have been made. The present opening is in the Poplar Lick seam. The ventilation is with a furnace, the current being divided into three splits.

Inspected June 25th.

The ventilation was ample, the currents being kept well to the faces. Timbering had been stopped too soon on the main entry approach in the judgment of the inspector and the company was directed to extend the timbers farther inside the mine.

CLEAR CREEK COAL & COKE COMPANY.

Transportation: Southern Railway. P. O.: Fonde.

Officers are J. D. Templin, President; G. P. Morrison, General Manager; Peter Derr, Superintendent.

During the year this company has steadily increased its production of coal until it has become one of Bell County's largest producers.

An electric haulage has been installed, consisting of two 150 H. P. boilers, one 238 H. P. McEwen engine, driving a 150 K. W. Jeffrey Generator; one 13 ton Jeffrey haulage motor; an American Blower 11 feet in diameter, driven by a 25 H. P. motor, ventilates the mine. Seventy houses for the labor have been built besides the necessary company buildings.

Inspected May 28th.

The general condition of the mine was good but breakthroughs between rooms were not always made as the law requires. At the time of this inspection the company's attention was called to the fact that the furnace then in use would soon become inadequate for the proper ventilation of so large a mine do not install a fan. Later in the year the

American Blower was installed along with the electric haulage.

COLUMBIA COAL COMPANY.

Trans.: Southern and L. & N. Railroads. P. O.: Middlesboro.

Officers are E. R. Vowels, President; John Wells, General Manager.

Good conditions prevailed at this mine all during the year. A larger pumping plant was installed along with an 8 foot Thayer fan.

Last inspection, November 11th.

At the date of this inspection all conditions were being well maintained.

Inspected, June 6th.

As the result of this inspection the following notice was served the company, the inspector deeming such notice justified after a thorough inspection: "This mine is in excellent condition in all respects."

COLEMAN MINING COMPANY.

Express and Tel. office: Pineville.

P. O.: Cary.

Transportation: L. & N. Railroad.

Officers: D. Scanlin, President; Geo. Land, Vice-President; G. T. Rider, Secy. and Treas.; C. R. Coleman, General Manager.

About the first of the year a compressed air plant was installed consisting of one 80 H. P. and one 100 H. P. boilers; a 15 machine Norwalk Compressor, 4 Ingersoll and 2 Harrison Punchers, along with an Ingersoll Rock Drill for drilling the rock entries. A Riley 3½ inch pump has so far kept the mine free of any water.

The mine is of the slope style, the hoisting being done with a 40 H. P. hoisting engine. The coal is separated in different grades by an Erlington Shaker Screen driven by a 10 H. P. engine. The company is preparing to install Electric haulage. Inspected July 10th. Ventilation was poorly maintained on the second right and towards the head of the main. The proper brattices and hanging of room doors had been

neglected. Elsewhere about the mine the current was ample and to its proper place.

CRAWFORD & COMPANY.

Lessee Black Raven Coal Co.

Transportation: L. & N. Railroad. P. O.: Fourmile.

On June 1st, The Black Raven Coal Company leased their plant to Crawford & Company, W. B. Crawford, General Manager.

The mining is done by electric mining machines and the coal is hauled to the outside by a 10 ton Jeffrey Motor. The company is using seven Jeffrey Chain Breast and one Goodman Longwall Machines. A 20 H. P. portable air compressor driven by electricity is used to drive the air drill for the rock headings.

Last inspected, December 10th.

All conditions were being well maintained. The entries had recently been thoroughly scaled and cleaned up, giving the mine a much desired appearance.

Inspected, July 10th.

The mine was in better condition than at any of the other previous visits. The left side of the mine between the 6th and 7th lefts had been worked longwall, this had closed and an airway was being made inside of this to connect up the ventilation. Elsewhere the current was ample and was traveling the proper route.

A marked increase in moisture was noted at this inspection, due to the improved condition of the ventilation.

EAST-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Tinsley.

Shipping Point: Fourmile.

Officers: A. G. Corbett, President, Clarion, Pa.; John C. Berlin, Vice-President, Knox, Pa.; I. M. Shannon, Treasurer, Clarion, Pa.; R. G. Yingling, Secretary, Pittsburg, Pa.; S. Taylor Sheaffer, General Manager.

This is a new operation that shipped their first coal

during the last days of the year 1906. Since that time the mines have been rapidly developed, it being the intention of the company to make this one of Kentucky's largest mines. The plant consists of two Drifts opened in the Dean seam of coal, Correl Gap of the Greasy Creek water shed of the Brush Creek Mountain. The seam runs from $6\frac{1}{2}$ to 7 feet in thickness.

The coal from the Drift known as No. 1 which is being developed to the Southeast, is mined with Punchers of the Harrison type, and that from Drift No. 2 which is being developed to the Northwest, is mined by hand, but later on the company expect to install electric machines here.

The hauling is done with Jeffrey Electric Locomotives. A 6 ton cable gathering locomotive being used for inside work, and an 8 ton one for concentration and tram road use.

The incline plane is situated 4500 feet from the mine opening and is 1375 feet long. It is equipped with the figure 8 sheave arrangement and has been handling five, two tons capacity mine cars at a time and can handle more to the trip. Tipple is equipped with Shaker Screens of a daily capacity of 2000 tons which are driven by an electric motor. The coal is dumped over a Phillips Cross over dump and the mine cars are then conveyed up an electric incline to a level to allow them to gravitate to the foot of the incline proper.

The power house is equipped with three 60 H. P. and one 150 H. P. boilers. It also contains a 16x16 Norwalk Compressor to which is being added one of the largest sizes, and a 16x16 McEwen Automatic engine directly connected to a 100 K. W. 250 volts Thomas-Ryan generator.

Last inspected December 17th.

Good mining conditions were found to prevail at both of the mines.

Inspected July 15th.

At the date of this inspection no defects of ventilation, drainage or timbering could be noted.

EDGEWOOD COAL & COKE COMPANY.

Main Office: Middlesboro.

P. O.: Shamrock.

Transportation: L. & N. Railroad.

Officers: J. R. Manring, President; H. A. Rogers, General Manager.

This company first opened the Jack Rock seam, but abandoned it before any shipments were made and went on up and opened the Poplar Lick seam. This delayed shipments until September 1907 when some little coal was shipped.

The coal is let off the mountain by monitors over an incline 2,465 feet down to the tippie. This operation is on the left side of Stony Fork Creek and adjoins the Shamrock Coal & Coke Co. on the east.

Last inspected, November 20th.

Six persons were at work in entry and airway. Progress was being made to get the furnace in operation. Until this is done and a regular fire maintained in the furnace, this mine will not be in good condition.

Inspected September 16th.

No room work had yet been attempted, the main entry being hardly far enough in to start the first cross entries.

ELK COAL COMPANY.

Transportation: L. & N. Railroad.

P. O.: Tinsley.

Shipping Point: Fourmile.

This operation was started in 1906, by the Bennett-Wilder Coal Co. About January 1, 1907, they sold to other parties before any coal was shipped. Later the Elk Coal Co., P. E. Bennett, President; F. D. Woods, General Manager, began shipping coal. The property is situated in the Greasy Creek Field adjoining the East-Jellico Coal Co., on the south and east. The Dean vein is the one now being worked and is something over 7 ft. in thickness and has a good top.

Ventilation is with furnace and was ample when inspected on July 15th. It has been impossible to reach the mine again when at work. In November a visit was made but the furnace was cold and no inspection was made.

EXCELSIOR COAL COMPANY.

Transportation: L. & N. Railroad.

P. O.: Excelsior.

Officers: A. I. Miller, Secretary and Treasurer; J. R. Mil-

ler, President; W. H. Bramlett, Vice-President; Clyde Miller, General Manager.

Last inspected December 13th.

Thirty persons were on back work robbing out the mine. Ventilation was being well maintained considering the sort of work yet to be done and the worked out open condition of the mine.

Drainage was very unsatisfactory and the company was notified to better this at once.

Inspected June 4th.

At the date of this inspection conditions were being fairly well maintained.

FERNLAKE COAL COMPANY.

Trans.: Southern and L. & N. Railroads. P. O.: Middlesboro.

This property is now under the control of the Nicholson interests with E. P. Nicholson, General Manager.

The mine which had been idle since the early part of 1906, resumed shipments in May, 1907, under the present management.

A large store, many tenant houses and other outside improvements have been made during the year.

Last inspected, November 19th.

While ample air was travelling the main entry and returning to the furnace through the airway along the entry, no effort had been made to ventilate the short cross entries or send the current through the working places on these cross entries. The entries needed a good scaling. Some water was noted in the dips of the main entry.

Inspected June 5th.

Ventilation very defective towards head of the main entry. The mine had only been started up a short time and had not yet been thoroughly overhauled. Efforts were being made to pump the water out of the low places and improve the ventilation.

FLATWOODS COAL COMPANY.

Trans.: Southern and L. & N. Railroads. P. O.: Middlesboro.

This company is at work opposite the Winona Coal Co. Wm. Marsee is the Owner and General Manager.

For several years some coal has been mined here, chiefly for the purpose of supplying the brickyard. The seam is likely the Winona, but not quite so thick.

Last inspected, November 11th.

Nine persons were working within the mine the day of this visit. 3060 cubic feet of air per minute was found at the last break-through at head of the only entry that was working. This was fairly satisfactory for the number of persons within the mine.

Inspected September 16th.

Conditions were found to be fairly well maintained on the date of this inspection.

HIGHLAND RIM MINING CO.

Trans.: L. & N. R. R. Shipping Point: Fourmile. P. O.: Rim.

Officers: W. T. Murrey, President and General Manager, Chattanooga, Tenn.; Wm. Heath, Superintendent.

The company operated their No. 4 (Moss) and the No. 1 (Durell) mines the entire year, but no mining was done at their No. 3 to speak of. In the latter part of the year the company decided to consolidate all their mines into one tippie and an entire new tippie house tracks, etc., have been made between No. 4 and No. 1 mines for this purpose.

New openings with this plan in view have already been made to the different mines.

This arrangement will necessitate motor haulage which will be installed this coming spring.

The mining at all the mines is done with compressed air, furnished by an Ingersoll compressor, driving 8 Ingersoll, 2 Harrison and 2 Sullivan punches.

Mine No. 4.—Last inspected December 10th.

The drainage of this mine was excellent. On second left a bad piece of entry top was noted between room 16 and 18, that needed timbering at once. The brattices on first left had fallen in bad shape in a few instances, making the current deficient towards the head of this entry.

Inspected, July 11th.

At the date of this inspection the general condition of the mine was good, the only defect noted was the need of a check curtain to drive the current closer to the faces of some rooms on first left.

Mine No. 1.—Last inspected December 10th.

The ventilation showed some improvement over the previous inspection, but room break-throughs were not always being made between the rooms every 60 feet or less as the law directs, therefore some rooms were without any current whatever at their faces. The top appeared to be growing better.

Inspected July 12th.

At the date of this inspection good drainage and timbering conditions were noted, but the ventilation was badly neglected and managed. Better ventilation will be had when the new opening of this mine is completed.

J. C. KNUCKLES & WIFE.

Transportation, L. & N. Railroad. P. O.: Ferndale.

This mine which is situated near Ferndale was the first part of the year a wagon mine. Later it was connected to an outside haulway over to the railroad where a tippie was erected so the coal could be dumped and screened direct from the mine cars into the railroad cars.

The seam is very much like that at Pineville. No slate was taken in the entries in the first mine opened, the coal being pushed to the outside in small mine cars. During the summer a new opening was made of such height that mules can haul the cars within the mine. Both the old and the new openings have furnaces for ventilation, the new mine being provided with a fair furnace but the first furnace that was put up at the old mine was of very little value as a ventilation proposition.

Last inspected Dec 3d.

Conditions had been fairly well maintained; the new furnace was being completed.

Inspected June 23d. At this inspection instructions were given so the new mine would have proper ventilation.

Inspected April 1. Mine was depending on natural means

for ventilation, the furnace being worthless. None of the working places was far in from the outside so that conditions were not so bad as it would seem.

LUKE DRUMMOND COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Logmont.

Officers, Geo. Luke, President; Hugh Drummond, General Manager.

Since the Company first started mining here, three different veins have been opened. The first work was in the seam being worked by the Sagamore Coal Co. Some little local trouble was encountered and then the "Stray" seam above was developed and named the "Mathew Mine." This is an excellent coal but so far has carried a troublesome top to hold in the narrow work. The Company has been to some expense to keep the airways first made open. Later a better understanding of the nature of this top was had and now not so much trouble is experienced to keep the returns open.

During 1906 the Lower Hignite seam which is several hundred feet above the Stray seam was developed to some little extent, the Company mining this to some extent all during 1907.

Mining at both the mines is with compressed air, the company using a Narwork 22x24 compressor that furnishes air for 8 Harrison punching machines. Late in the year a 10 ft. Crawford & McCrimmon fan was installed at the "Mathew" mine; this was a much needed improvement.

Inspected May 29th.

The general condition of the "Mathew" mine was bad in every respect. A very emphatic notice was served the Company as a result of this inspection. Later the mines were inspected by Assistant Inspector A. G. Spillman. Later the fan was installed.

KELLY COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Chenoa.

Officers, Dr. J. W. Kelly, President, Big Stone Gap, Va., J. W. Alley, General Manager.

This is the upper operation on Bear Creek, adjoining the

Clear Creek Coal Company on the west. The first coal was shipped in September of this year out of two openings of the Poplar Lick seam. The seam is here 52 inches thick carrying a fire clay parting of about five inches. Ventilation for the present is with furnaces. During the year thirty homes for miners were erected and many more are in course of construction. The mines were visited in June but no Inspection notice served as at that time the entries were in but a short distance.

POPLAR-HIGNITE COAL & COKE COMPANY.

Transportation, L. & N. Railroad. P. O.: Davidsburg.
Shipping Point Chenoa.

Officers, Dr. E. L. Straub, President, Minersville, Pa.; D. W. Evans, General Manager.

This is the last of the Caney Creek operations and is situated around the head of the Creek above the Caney Creek Coal Co. The Company shipping a few cars of coal in December of the present year. The mine is in the Poplar Lick seam. A large number of houses have been built during the summer and fall. The mine was visited early in the summer but at that time no coal had been found in the entry.

SAGAMORE COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Logmont.

A. M. Chamberlain, General Manager.

This mine is ventilated with a fan run by a gasoline engine of not H. P. enough to run the fan to its full capacity; while the ventilation has been found fair with the fan running as it is, it would be much improved with a stronger engine and one that the Inspector would find running every visit. Twice during the year the fan was not running on account of this engine when the Inspector first arrived on the works.

Last inspected Nov. 15th.

After starting up the fan the volume was found sufficient for the number of persons working within the mine. Several working places were a greater distance ahead of air than could be allowed. The timbering of the entries had been practically

completed and the mine was free of water except around the left entry side tracks where altogether too much water was being allowed to stand.

Inspected July 3d.

At date of this inspection the mine showed a steady improvement in general conditions. There was a short distance on second right that was yet to timber, but all the really dangerous places had been well timbered.

Inspected Jan. 1st.

While at this time the mine was in a reasonably safe condition, some timbering was yet to be done and the Company was instructed to keep on the double shift until this was completed. Ventilation had been improved.

SHAMROCK COAL & COKE COMPANY.

Transportation, L. & N. Railroad.

P. O.: Shamrock.

Main Office, Middlesboro.

The Company has opened a new mine in a seam above the Jackrock Mine and are doing most of their development at this new mine. This new coal shows a large amount of peacock colored coal of the finest quality. An incline with self dumping monitors brings this mine's coal to the chute of No. 2 mine, where larger monitors carry both mines' output down another incline to the tipple in the valley. The year's work in No. 1 or the "Jackrock" Mine was mostly done on pillars and in unfinished rooms from entries driven in 1906.

No. 2 Mine.

Last inspected Nov. 20th.

All conditions were being well maintained, the furnace supplies ample air for the miners working here.

Inspected June 5th.

At the date of this inspection the inside development was limited. Conditions were found satisfactory.

Mine No. 1.

Last inspected Nov. 20th.

On date of this inspection 31 persons were working within this mine, the greater part on pillars. 11484 cubic feet of

air was entering the mine each minute and the current was well conducted through the working places. This mine has an unusually good top and splendid drainage.

Inspected June 5th.

Twenty-eight persons mostly on pillar work. Conditions found good.

STRAIGHT CREEK COAL & COKE COMPANY.

Transportation, L. & N. Railroad. P. O.: Pineville.

Officers, Theodore Harris, President; Samuel H. Stone, Secretary and Treasurer; M. S. Barker, Vice President and General Manager; J. S. Cheyney, Superintendent; Job Jones, Mine Superintendent.

The Company has a complete mining machinery plant which consists of a large boiler house with a battery of two, 150 H. P. Atlas, another of two, 200 H. P. Stirling, the Stirling battery being equipped with Green's Stokers; Cookson's Feedwater Heater being used.

A concrete floored engine house contains one Chandler & Tyler engine belted to a Western D. C. Generator used wholly for lighting purposes, one Skinner engine direct connected to a Western D. C. Generator, 150 K. W. 250 Volts, one Buckeye engine 17.5x21 directly connected to a Westinghouse Generator 200 KW 250 Volts, one Ingersoll-Rand Compressor, 24x30, or 500 H. P.

The electric part of the plant runs five Baldwin-Westinghouse Mine locomotives, two of six, and three of four tons weight, the two fans at No. 2 mine, one at No. 3 mine and the fan at the Harris ridge or No. 4 mine, the shaker screens at both tipples and a large sized sawmill.

The mining is done with 17 H. 4, 2 F. 4 and 1 C. 4 Ingersoll-Rand punching machines. A Clayton electrically driven air compressor of 25 H. P. supplies power for the mining at No. 3 mine; this compressor being installed within the mine.

The system of mining here is what is called the panel room and pillar style, worked in blocks of about 1,000 feet when a new main cuts off the old panel and allows it to be robbed out and the track equipment moved forward: It

appears to have many advantages over long cross entry systems.

The mines were last inspected Dec. 4th.

At mine No. 2 some of the entries needed scaling, other conditions being good. This is the first and only criticism that the Inspector had to make of this or any of the mines of this Company during the year. It is but simple justice to remark on the high standard of excellence maintained by the Company in their mining conditions.

Inspected June 27th.

At the date of this Inspection the No. 2 and No. 3 mines were in excellent condition, the Harris Ridge mine had not then been opened up.

STRAIGHT CREEK COAL MINING COMPANY.

Transportation, L. & N. Railroad.

P. O.: Cary.

Officers, M. J. Moss, President; Robt. Van Bebers, Vice President; W. B. King, Treasurer; White Moss, Secretary and General Manager.

This company was incorporated in August, 1905 and commenced shipping in February, 1906. The Company's coal lands consist of a lease of 800 acres and 1,100 acres in fee simple adjoining the lease and is situated on the left fork of Straight Creek about three miles from Pineville.

The seam now being developed is the Pineville seam which is here some distance above tippie height. At present a short incline is used to lower the mine cars down to the tippie but with the installation of the electric haulage that the Company is arranging to install it is expected to bring the coal out from farther up the branch and have tippie haulage. It is the intention of the Company to mine out the entire tract from the present tippie but it may be necessary to connect the present tippie to the opposite of the valley.

The output small at first has been steadily increased until this company has become one of Bell County's large producers. The Company has erected a large number of model tenant buildings for their labor and are building many more.

Last inspected Dec. 5th.

Some time before this inspection the Company had in-

stalled a 10 ft. Fayer fan. Ample air was entering the mine but the poor condition of some of the brattices rendered the current deficient on the third and fourth right entries. The mine was well timbered and the drainage was exceptionally good.

Inspected July 10th.

As a result of this inspection the furnace was condemned and the Company requested to install a fan without any unnecessary delay. Other conditions fairly well maintained.

STONY FORK COAL MINING COMPANY.

Transportation, L. & N. Railroad.
Main Office Middlesboro.

P. O.: Ralston.

Officers, John Ralston, President; H. M. Ralston, Vice President; Chas. E. Ralston, Secretary and Treasurer.

During the year the Company mined from all five of their openings. They are so situated that their respective outputs are trammed to one tippie. The coal from No. 1, 2, and 3 mines is mostly machine mined, that from No. 4 and 5 mines are as yet hand work.

The mining machinery equipment consists of one Ingersoll-Rand air compressor of 150 H. P. They run six Ingersoll mining machines. A small 25 H. P. Hoisting engine driven by compressed air hauls the coal out of No. 4 mine. The coal is screened and graded over shaker screens.

Last inspected Nov. 5th.

The required mining conditions were being well maintained at all the mines, the labor being judiciously divided among the different openings and not too many crowded into any one mine.

Inspected May 29th.

Good mining conditions were found existing on day of this inspection. The Company was grading the approach for their No. 5 mine.

TURNER COAL COMPANY.

Transportation, Sou. and L. & N. R. R. P. O.: Middlesboro.
Wm. Turner, President and General Manager.

The natural conditions are against this mine being easily drained, the top is very bad in places and requires careful timbering to keep the mine safe. The ventilation has not been all that could be desired not enough attention being given to keep the air currents near enough to the faces of working places.

Last inspected, Nov. 18th.

At date of this Inspection, little if any betterment of conditions could be noted, in some respects the mine had been allowed to go back.

No arrangement had been made to send any part of the current to the persons working on first left entry. The mine was very wet and muddy, some broken timbers were noted along the main entry. The Gasoline Pump had been moved and placed in the intake beyond first left. This was ordered moved at once to the return outside of any labor. Gasoline in more or less quantities was allowed to remain around the pump. In the written notice served the Company the defects of this mine were fully covered along with directions where to place the pump on the return, also certain precautionary measures to regard when using Gasoline within the mine, an article that, in the Inspector's judgment, should only be allowed used within a mine except under prescribed regulations.

Inspected June 5th.

Ventilation was only fairly well maintained. The mine was very wet and muddy.

WALLSEND COAL & COKE Co.

Transportation, L. & N. Railroad.

P. O.: Wallsend.

Officers, C. J. Warnock, President; H. B. Hanger, Vice-President; Harry P. Jones, Treasurer; J. A. Sullivan, Secretary.

The company this year confined their mining to the two mines of the Pineville seam. The No. 1 mine has been fairly well maintained in its mining condition during the year. About the close of the year 1906, the general defective condition of the No. 3 mine forced the Inspector to serve a warning notice to the company to at once remedy the defects found

within the mine. This work was done by the Company mostly in this year, time being extended to allow the return main airways to be enlarged.

The mining at No. 3 mine is with electric mining machines, the mining equipment consisting of 2 Goodman Generators of 135 and 160 KW 250 Volts one Goodman breast, one Goodman Longwall, one Morgan-Gardner Longwall and four Jeffrey breast mining machines. The haulage is with motors. The mines are opposite each other, the seam is about track level so short slopes are used to hoist the coal to the same tittle.

Last inspected Dec. 12th. (Mine No. 3).

At this date the left cross entries were deficient in volume. Some of the entries needed scaling.

Inspected June 3.

At the time of this inspection, this mine was in a satisfactory condition.

Inspected Jan. 2d and Feb. 5th.

These inspections were made to see that the instructions given in a previous warning notice were being carried out.

No. 1 mine was inspected June 28th and Dec. 12th. At both of these dates this mine was found in good condition.

WINONA COAL COMPANY.

Transportation, Southern and L. & N. P. O.: Middlesboro. Railroad.

Officers, J. L. Manring, President; P. L. Colgan, General Manager; Reno Short, Superintendent.

Last inspected Oct. 22d.

The ventilation was now all that could be desired, a 10 ft. Thayer fan having been installed some time previous to the date of this visit. The drainage had been overhauled, all low places on main entry raised to grade and a general improved appearance was in evidence all about the mine.

Inspected June 6th.

On date of this inspection the ventilation was very defective, so much so that a written notice condemning the furnace with instructions to provide the mine with a fan was served. The main entry was very wet and muddy in places.

Knox County**ARTEMUS-JELICO COAL COMPANY.**

Transportation, L. & N. Railroad. P. O.: Artemus.

Officers, Geo. Huettel, President; T. J. Baker, Vice President; M. V. Wells, Secretary.

The remaining coal that is yet to mine out consists of the pillars and stumps of several entries, the room work being about completed.

Last inspected Nov. 26th.

From twelve to twenty persons were working out the back work and the places were well timbered. The mine had recently been retimbered along the entries and haulways. Drainage was now satisfactory. The ventilation was natural, several openings out to the outside made the air wholesome.

Inspected July 18th.

Mine idle at this date on account of shortage of railroad cars. The entries needed sealing and retimbering in places, A better drainage was requested.

BENNETT BLUE GEM COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Barbourville.

Operated by various lessees and contractors through Dr. Sam. Bennett.

The mine was idle the day of inspection, July 22d; from May 6th to July 1st the mine was closed.

Nothing had been done for the betterment of the mine since the previous visit. Some few persons were working in a crop entry near the furnace. This mine along with many Blue Gem mines are worked a few weeks by one party and then another contractor assumes charge so it is a very hard matter to get needed improvements done. One visit these mines will have enough labor to require the Inspector, the next contractor will cut the force to four or five persons and be out of the jurisdiction of the Inspector. However it may be said of this class of mines that while they seldom conform to the mining law, conditions are frequently wholesome. The timbering and drainage where the labor was at work was satisfactory.

BRUSH CREEK COAL COMPANY.

Transportation, Cumberland Railroad. P. O.: Warren.

Officers, W. R. Hughes, President; Wm. Jones, General Manager.

This is a new operation in the Dean seam about one mile below Warren and on the left side of Brush Creek. The first coal was shipped in September.

Inspected Nov. 25th.

The day of this inspection 12 persons working within the mine mostly in narrow work. The furnace had not yet been completed, a basket being used to create some circulation. The ventilation was not good and the Company was notified to finish the furnace and build a suitable air-stack. The top here shows indications of being better than usually is found in the Dean seam.

BENNETT-JELICO COAL COMPANY.

Transportation, Cumberland R. R. P. O.: Trosper.

Officers, Sam Bennett, President; Phil. Frances, General Manager.

This is a machine mining operation, the Company using a Sullivan Compressor with one Ingersoll and five Sullivan punching machines. While some of the mine is still worked on the retreating longwall system some rooms are being worked up where the top will stand well enough for this style work.

In July Mr. Frances resigned as Manager and Mr. Thos. Bennett succeeded him. In October the mine was leased to F. A. Woods, J. Williams and others and the firm name changed to the Trosper Coal Company.

Inspected July 24th.

All mining conditions were being well maintained.

BENNETT COAL COMPANY.

Cumberland R. R.

P. O.: Trosper.

Dr. Sam Bennett, President; Thos. Bennett, Superintendent.

Mining here is with compressed air, a Sullivan com-

pressor running three Sullivan, two Harrison and one Ingersoll mining machines of the puncher style.

About the first of October, Dr. Bennett leased this plant to a company that has since operated the place under the name of the Evans-Jellico Coal Company.

Inspected July 24th.

The mine was well drained, but the entries needed timbering where the rooms were broken off; the roomnecks being somewhat wide, caused a large space to be left unprotected. While the ventilation was sufficient for what persons were working the day of this visit, the ventilation could be greatly improved by having suitable grate bars in the furnace.

COTTENGIM-WHITE BLUE GEM COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Barbourville.

This mine was visited July 22nd when it was found idle on account of lack of railroad cars. The drainage and timbering has been improved to some extent. Nothing determined as to ventilation, but it could not be much as from appearances, natural means were largely depended upon. An electric mining machine was used for a while for mining the coal, the power being leased from the Lighting Company.

CUMBERLAND VALLEY COAL CO. (OLD BRIAR HILL MINE.)

(This mine was operated the later half of the year as the Blue Gem Coal Co., Thos. May, Lessee.)

The officers of the Cumberland Valley Company were: H. Camp, President; Paul Kennedy, General Manager.

Late last year the above company leased the Briar Hill property and installed an Ingersoll compressor and 4 Harrison P. G. mining machines. They commenced shipping in the early part of this year and continued to operate until July the first when Mr. May leased from them.

Inspected July 16th.

At the date of this inspection, the mine was practically devoid of air. The intake was not strong enough to turn the anemometer. The mine needed a new furnace and some brattices and doors. A stringent notice was served the company as to the condition of the mine.

CUMBERLAND COAL CO. JOHN MATHEWS COAL CO., LESSEE.
Transportation: Cumberland R. R. P. O.: Warren.

The first of the year, the company installed machinery at this mine consisting of a battery of boilers, one Sullivan compressor and six Sullivan punching machines. The coal is hauled from the mine entrance around the hillside, a distance of over one mile to the top of the incline where the mine cars are lowered to the tippie by an incline. This hauling is done with a seven ton Porter steam locomotive.

On April 1, this company leased the property to Mr. John Mathews, labor troubles soon followed and the mine was closed or practically closed for several weeks.

Inspected July 23rd.

At the time of this visit, the mine was just resuming, and was not in a satisfactory condition in any respect. Some trouble with the pumps letting the water stand on the entries and partings, the timbering was deficient in every room examined by the inspector, many of the brattices were not airtight, allowing a great part of the current, none too large at the beginning, to leak back to the furnace without traveling the working places. Many of the pillars were not left the proper thickness between the rooms for safety. Only a few persons were working within the mines the day of the inspection and they were mostly day men repairing the mine.

COALPORT COAL COMPANY.

Trans.: by the company's road to Artemus. P. O.: Coalport,
A. C. Blowers, President and General Manager.

A small machine plant, consisting of one Norwalk compressor and three Ingersoll punchers has been installed here. A trailrope system hauls the empty mine cars from the tippie to the foot of the incline, the loads running there by gravity.

THE CHARLINGTON COAL CORPORATION.

Transportation: L. & N. Railroad. P. O.: Hujel.
C. S. Charlinton, President and General Manager.

Successors of the Ingles Coal Company, the transfer being made June 1st.

Inspected, July 16th.

The ventilation and timbering was found in good condition, but the mine was partly drowned out on account of a delay in receiving the new pump. I was assured by the company that the water would be taken out of the mine on the arrival of the pump.

TILDEN GRAY.

Transportation: L. & N. Railroad.

P. O.: Grays.

Mr. Gray operated five separate openings this year, one at the town of Grays, known as the "Possum Trot" mine and four at the Charlton mine near, and to the right of the L. & N. tunnel, something like two miles below Rossland. The Charlton mines are all connected to one tippie and are in the Jellico seam.

Mr. Gray has installed a compressed air plant at these mines, consisting of one Norwalk Compressor and six Ingersoll punching machines.

The Charlton Mines were inspected August 25th.

Only a small territory had been developed at any of the mines. No. 3 and No. 4 mines being hardly started. No. 1 mine was in a satisfactory condition. The main airway of No. 2 had recently fallen in and the entire current was cut off from the working places. The labor was requested by the inspector not to work within this mine until this was remedied.

Possum Trot Mine.—Inspected August 26th.

A few months will finish what mining that can be done at this place. Some little coal yet remains next to the North-Jellico Coal Co.'s line and the pillars and stumps of the mine. Mining conditions were being well maintained.

HUGHES-JELICO COAL COMPANY.

Transportation: L. & N. Railroad.

P. O.: Hujel.

W. R. Hughes, Proprietor.

Last inspected, November 13th.

Some improvement had been made in the ventilation since the July visit of the inspector. Lack of proper curtains on

the first right, off the Butt entry, rendered this part of the mine without sufficient volume. The haulways and sidetracks needed a general scaling, many loose pieces of slate being noted.

Inspected, July 18th.

The ventilation was unsatisfactory at the date of this inspection, there was not the legal number of feet of air for the number of persons now working. Necessary instructions were served the company, how to increase the volume. The timbering and drainage were in good condition.

HUGHES-FARMER COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Grays.

This firm was composed of W. R. Hughes and L. W. Farmer of Barbourville. (Before the year expired they sold out to The S. F. Rock Coal Company, S. F. Rock, Manager.)

The mine which is in the Jellico seam is situated on the left side of Lynn Camp Creek, about a mile from the main line of the railroad at Rossland. The first coal was shipped in March of the present year.

Inspected Aug. 27th.

The mine was found in most excellent condition.

LYNN CAMP COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Grays.

Officers: A. Berhalter, President, Danville, Ill.; J. Q. Tylor, Secretary and Treasurer; A. B. Palmer, General Manager; John Burns, Superintendent.

During the year a compressed air plant was installed for mining the coal in the upper seam. This consists of a 22x20x-24 Norwalk Compressor and ten "M" Improved Harrison mining machines.

Very little if any mining was done this year in the mine opened in the Jellico seam.

Inspected August 27th.

The mining conditions were being well maintained.

MATHEWS-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Hujel.

John L. Mathews, President and General Manager.

Inspected, July 16th.

The ventilation was satisfactory, drainage good. The working places were securely timbered but there was indications of a heavy squeeze on some of the right entries.

NORTH-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. Mine office: Wilton.

Main office: Louisville.

Bertha mines: C. V. Div. L. & N. P. O.: Bertha.

Wilton mines: Knoxville Div. L. & N. R. R. P. O.: Wilton.

Tel. offices: Grays, Woodbine and Bertha. Frt. offices: Grays and Woodbine.

Officers: J. B. Speed, President; F. M. Sackett, Vice-President; W. A. Jones, Secretary and Treasurer; C. S. Neild, General Manager.

This company is the largest producer of coal of any of the companies operating in the Southeastern District, their daily output being about seventeen hundred tons for the days worked.

The company opened up Bertha mines in 1888, and have operated these mines continuously since that time. Development of the Wilton mines was begun in 1901. Olive Hill and Cannel Ridge workings, in ridges adjacent to each other and located between Wilton and Bertha mines have been developed in the last three or four years. The coal taken from these operations being shipped from Bertha.

All hauling and gathering of coal is performed by electric power; fourteen electric locomotives being employed for these purposes.

Heretofore a direct current has been used, but in order to centralize and augment the power, they are installing a plant at Wilton with auxiliaries at Cannel Ridge and Bertha which will furnish an alternating current, having a voltage of 2300.

Mining at Bertha, Cannel Ridge and Olive Hill is all done with air punching machines. At Wilton, both electric and air powers are used.

Besides the store, office, tippie, power and boiler houses, shops, barns and other necessary buildings, there are 187 dwellings at Wilton. These are arranged with streets between and with a view to adding to the beauty of the natural landscape. At Bertha mines there are 136 dwellings besides the store, office, tippie power and boiler houses. The company operates a sawmill at both Wilton and Bertha, where all their buildings and mine timbers are sawed. In addition to the saw mills, the company operated a planing mill at Wilton for dressing its own building lumber.

At Wilton, the company has the following machinery: One Harrisburg reciprocating engine of 360 H. P. connected to one General Electric direct current Generator of 220 volts capacity; one Curtis Turbine Generator, 150 K. W. 200 H. P.; one Curtis Turbine Generator, 75 K. W. 100 H. P.; two Curtis Turbine Generators, 100 K. W. 150 H. P. each, furnishing an alternating current of 2300 volts.

Two motor generator sets, 60 L. W. 85 H. P. each, stationed at Cannel Ridge, midway between Wilton and Bertha, and constituting part of the plant for supplying alternating current.

One Norwalk air compressor, 200 H. P., supplying power for the air mining machines in use at Wilton and Olive Hill mines.

Six Morgan-Gardner and six Jeffrey chain breast electric mining machines; three Sullivan Longwall electric mining machines and fifteen Harrison air punchers.

At Bertha there are two Norwalk air compressors, 150 H. P. each, supplying power for the air mining machines in use at Bertha and Cannel Ridge mines; one Ball engine, 150 H. P. connected to a General Electric generator, 100 K. W., 250 volts; fifteen Harrison, five Sullivan and two Ingersoll-Sargent air punchers.

Wilton Mine.—Last inspected, September 6th.

The company had just installed a powerful double bladed

fan and was making the seventh left opening across the creek intake. This was reversing the current from the way that it had been traveling, thereby requiring the brattices and room curtains to be changed to the other side of all the left cross entries. This change had not been entirely made before reversing the current and as a result the ventilation was not yet satisfactory on some of the cross entries. A large force of brattice men were making the necessary changes. The timbering and drainage of the mine was well conducted.

Inspected, January 4th.

At the date of this inspection, the ventilation was deficient in volume, but well conducted through the working places. More fan power was requested by the inspector. Other conditions were well maintained.

Harrison Ridge Mine.—Inspected September 7th.

This mine lies about one mile to the right or in a southern direction from the Wilton mine, the coal being hauled to Wilton by motors. The mine was opened the first of this year, the ventilation for the present is by furnace and was ample for the number of persons working within this mine. No rooms were working, the work being all narrow or yardage work. The mine was in good condition.

Olive Hill Mine.—Last inspected, September 7th.

At the date of this inspection, the main entry had been driven through the hill towards Cannel Ridge workings and motors were taking the coal through to Bertha. The mine was not in good condition as regards the ventilation, the instructions of the inspector were given how to properly ventilate the mine without any doors on the haulageway.

Inspected, January 4th.

At the time of this visit, the mine was being operated from the Wilton side, a temporary tippie being made on a spur of the Wilton road. A furnace supplied the labor with ample air. Nothing but entry and airways were working at the time of this visit.

Cannel Ridge Mines.—These consist of the No. 1 mine, which with No. 6, will be the principal mines, and Nos. 2, 3, 4 and 5 mines which are simply butt entries opened on parallel

lines 400 feet apart, and are each ventilated with a furnace, the longest one of them will not exceed 800 feet; these mines were all in very good condition, only one or two minor defects in ventilation being noted.

Inspected, January 5th.

At this inspection, these mines were all in good condition.

Bertha Mine.—Last inspected, September 10th.

The ventilation was deficient on the eleventh and twelfth right entries. Instructions were given to shorten the route that the air was traveling and to install a fan where the thirteenth right, went outside. The other parts of the mine had sufficient air. The mine was well timbered and drained.

Inspected, January 6th.

The thirteenth right was not yet to the outside; the ventilation was bad on this entry, elsewhere ample air was found.

NORTHPOINT-JELICO COAL COMPANY.

Transportation: L. & N. Railroad.

P. O.: Grays.

Operated by Mrs. S. M. Grays.

Inspected, August 26th.

This opening is all worked out, but the pillars and stumps. Later, an opening will be made to the left of the present one to mine the coal in a ridge that extends around to the left. A new incline will be made to this opening.

The brattices had not been looked after closely and as a result the greater portion of the current was not reaching the working places.

The entries were very wet and muddy in many places.

RICHLAND BLUE GEM COAL COMPANY.

Transportation: L. & N. Railroad.

Bailey's Switch.

Operated by J. W. Bailey.

As the name indicates, this is a Blue Gem mine, the coal being mined by compressed air plant, consisting of a Norwalk compressor and two Sullivan mining machines.

Inspected, July 22nd.

At this time, ten persons were working within the mine, all the first left entry. The ventilation was bad, but little effort being made to keep the current close to the face of the working places. The drainage and timbering was good.

ROSSLAND COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Grays.

John Howard, President and General Manager, Middlesboro.

The old Rossland mine has been finished and abandoned by the company. Their new mine is on the spur track going up to the Lynn Camp Coal Co. The seam is the Jellico, but has more of a parting than the old mine.

Inspected, August 27th.

The mine was in first class condition.

POWERS COAL COMPANY.

Transportation: Cumberland R. R. P. O.: Trospen.

Phil. Frances, President and General Manager.

This is the new mine opened in the old Coalport Coal Company's property, nearly opposite the Bennett-Jellico Coal Company. Shipping commenced some time in the month of July. It is the intention of the company to drive through the old Coalport Coal Co.'s works and reach some solid coal.

Visited, July 24th.

Only three persons were working and the mine was in but a little way. No inspection notice was served.

Laurel County

PERRY COLE. (PEACOCK MINE.)

Transportation: L. & N. Railroad. P. O.: Pittsburg.

The remaining pillars and stumps of this mine were taken out in October.

Last inspected, September 20th.

At the date of this visit, there were only a few weeks work left in the mine. Ventilation was fairly well maintained. Drainage was very bad.

Inspected, March 6th.

The ventilation was not satisfactory; the brattices on the main entry were of a flimsy nature. The mine was well timbered and the drainage was reasonably good.

C. W. CURVIN.

Transportation: L. & N. Railroad.

P. O.: Viva.

Mr. Curvin operated the mine some, the first part of the year, but closed down during the summer. Later Mr. William Donavant leased the mine and after changing the tippie to another part of the property, commenced shipping coal in October.

Inspected, March 14th.

With the exception of two open breakthroughs near the head of the second right entry, the mine was well ventilated. Drainage on the haulways was bad. Good timbering conditions prevailed.

More urgent work in another part of the territory prevented the inspector from visiting this mine since Mr. Donavant commenced operations.

WM. DUNAVANT. (OLD PITMAN.)

Transportation: L. & N. Railroad.

P. O.: Pittsburg.

What little coal remaining in this mine was taken out in the early part of the year, then the equipment was moved away.

Inspected, January 9th.

At the date of this inspection, good mining conditions were prevailing. There was but little coal left within the mine to be taken out.

M. V. DAVIDSON. (WAGON MINE.)

P. O.: Pittsburg.

For several years small wagon mines have been in existence on the old Laurel Coal Company's land on both sides of the railroad. This mine is situated on the west side of the tracks and not far from the old Laurel Coal Company's former tippie. Some few acres of crop coal had been left by the old company and this is one of the many mines that are opened up and sometimes worked out before the inspector hears of them.

Inspected, October 11th.

A new furnace had been lately installed and ample air was entering the mine for the 11 persons found working the day of the inspection. The airway was some distance behind the entry, but was rapidly being worked up abreast of the entry. Timbering and drainage was well cared for.

LILY-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Lily.

Very little coal has been mined at these mines this year. The mines were visited, but at the date of the visit only some test entry work was being done. Arrangements are being made to strip a large amount of coal the coming year. Some of the machinery has been installed for this purpose.

NEW ALTAMONT COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: East Bernstadt.

Operated by Messrs. Almy & Pritchard.

Last inspected, September 2nd. (Grant Foreman.)

The mine was in a very unsatisfactory condition in almost every respect at the time of this inspection. Water had been allowed to accumulate in the airways between the intake and the furnace, this was notable between the first and third left entries. In overhauling the furnace the wall under the back end of the grate bars had not been replaced, rendering the furnace of little value. Proper instructions were given, how to better the condition of the furnace and to pump the water out of the airways. Tonnage was all that was being looked after.

Inspected March 13th. (Webb Foreman.)

The mine was fairly well ventilated and drained at the time of this inspection.

NEW LAUREL COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Pittsburg.

Officers: W. A. Pugh, President; W. W. Bastion, General Manager.

Last inspection, September 18th.

At the date of this inspection some improvement could be noted in regard to the ventilation, but a trap door was needed on the new Fagan entry. The absence of this door rendered the Owens and Fagan entries deficient in volume. The haulways and entries were very wet, the pumping and drainage being far from satisfactory. The slate roof in the entries was cutting badly and required the closest attention to avoid accidents.

Inspected, March 11th.

The working paces were being better drained, but the haulways were very wet and muddy. Defective curtains on the roomnecks of the Cain entry made this part of the mine deficient in ventilation, elsewhere the current was fairly well maintained.

NEW STAR COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: East Bernstadt.

Officers: Jonathan McNeil, President; Samuel Bastion, General Manager.

Last inspected, September 24th.

During the summer a new furnace was made to this mine that improved the ventilation to a great extent. At the time of this inspection ample air was traveling the airways as far as the brattices were up, but the brattices were behind, as many as three crosscuts or roomnecks being without them at the head of the second left.

The grave defect of this mine is that proper efforts were not being made to have the entire current traveling as close to the faces of the working places as it should be. In building the new furnace the back wall under the grate bars had been left out; this was requested closed up by the inspector as by doing so, the volume of air made by the furnace would be greatly increased with the same coal consumption.

Inspected, March 19th.

The ventilation and drainage was very bad at this time. The pumping plant was not working satisfactory and the water had the furnace out of commission.

NEW VICTORIA COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Pittsburg
Operated by Robt. McNiel.

This is a new operation, opened up in the last part of 1906, being situated nearly opposite the New Laurel Coal Company's tippie. While the boundary of coal here to obtain is limited, there are several years mining on a small scale here to be done.

Last inspected, September 17th.

A new furnace had recently been installed and the ventilation was all that could be desired. The drainage and timbering had been well looked after. The mine was in splendid shape in all respects.

Inspected, March 11th.

The mine was well ventilated and other conditions well maintained.

PITTSBURG COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Pittsburg
Officers: R. M. Jackson, President and General Manager.

Another compressor of the Norwalk make, a duplicate of the one already in service was installed during the year. This company does all their mining with compressed air. Two Sullivan and twelve Harrison punchers being used.

The mining conditions have been well maintained within the mine during the year.

Last inspected, September 19th.

At the date of this inspection, the drainage was not quite as good as usual, ventilation was satisfactory. Good timbering of the haulways and rooms was noted.

Inspected, January 10th.

Ventilation was well maintained all over the mine. Drainage good, except for a short distance on second right entry, where the water was over the tracks. The company had a plank walk along the side to assist the miners in getting across until such a time as the swag could be raised.

PHENIX-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. - P. O.: Altamont.

Officers: Edward Greiwe, President, Cincinnati, Ohio; L. B. Dierkes, Treasurer; Sam. Bastin, Superintendent.

This company operates the following mines: The Nelson, Manchester, Diamond Nos. 1 and 2, and the Standard. During the year the Standard was leased to Beatty & May.

The Nelson, Manchester and Standard, have no machine equipment, the mining being by hand work. The coal at these mines being trammed by mules. At the Diamond Mines machinery being used both in mining and hauling. No. 1 mine, the haulage is with motors, at No. 2, a tailrope being used from the main sidetrack, mules being employed between the side track and the working places.

The mining equipment consists of one Goodman electric cutter and eight Ingersoll and fourteen Harrison air punchers, two Norwalk compressors, three electric mine locomotives and a generator complete the equipment here in use.

Nelson Mine.—Last inspected, September 24th.

At this date the mine was about worked out but a new opening was being made to the right of the present one. Nothing remained of the present mine but a few pillars and the main entry stumps. Ventilation was very well maintained. Some water was standing on the main entry.

Inspected, March 13th.

Ventilation deficient on both the second and third left entries. Poor brattices and sorry curtains was the cause of this condition. Drainage and timbering satisfactory.

Standard Mine.—Inspected, September 25th.

The lessees had been overhauling the mine, but there was a great deal of bratticing yet to do. The furnace needed some repairing and the main airway was choked with ashes near the furnace. The mine was fairly well timbered and drained.

Manchester Mine.—Some little coal was mined during the year. The mine was visited twice during the year but

both times the number of persons working within the mine was less than the number that is required for an inspection.

Diamond No. 2 Mine.—Last inspected, September 25th.

A larger fan had been installed and the general condition of the mine was better. The airways had not all been made larger as requested in the previous inspection. There was not enough volume on fourth left. Elsewhere the ventilation was good.

Inspected, April 6th.

The ventilation was such that a stringent notice was served the company to at once better matters or steps would have to be taken to close the mine.

Diamond No. 1 Mine.—Last inspected, September 25th.

The ventilation and drainage had been brought up to the legal requirements. Some scaling and timbering was needed on the main motor haulway, between the first sidetrack and the outside.

Inspected March 15th.

The left cross entries needed cutting, together with an airway near the working places; this would shorten the route the air was traveling several thousand feet. Some water was allowed to accumulate on the main haulage entry.

PITMAN COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Pittsburg.

Officers: W. A. Pugh, President; J. L. Caldwell, General Manager.

Last inspected, September 20th.

At the date of this inspection, the ventilation was defective, the main airway was partially choked near the fan, the cutoff airway from third left had not yet been completed. The roadways were very wet and muddy. Inspected Jan. 11th.

The mine was very wet and muddy and very little ventilation was to be found on the extreme left side of the mine.

S. W. ROCKWELL MINE.

Transportation: Wagon.

P. O.: Pittsburg.

This mine changed hands twice during the year. Mr. James Bryant being the present owner. The mine was visited twice during the year but the inspector was informed that the present owners would not employ the number of persons that would bring the mine under the mine law.

Pulaski County

ALPINE COAL COMPANY.

Transportation, Cincinnati Southern R. R. P. O.: Alpine.

O. Hurlburt, Receiver, Chattanooga, Tenn.

This company continued to operate under the receiver until July 1st, when the mine was closed down for the year.

Inspected, April 28th.

At the time of this visit, eight persons were at work within the mine, all of them being on the 6th left entry. Some effort was being made to drive a water drain outside from this entry and to install a new furnace. The ventilation was very poor towards the head of the entry, the haulways were wet and very muddy in places. The main entry needed timbering for quite a distance.

Visited, August 20th.

As a result of this visit, it was learned that the mine had closed down July 1st.

EAGLE COAL COMPANY.

Shipping Point: Flat Rock. P. O.: Barren Fork.

Transportation: Cin. Southern R. R.

W. L. Carter, General Manager.

This company has opened two new mines something like a mile and a half down the Barren Fork Creek, below their No. 7 mine, a narrow gauge tram track runs from No. 7 down the Creek to the mines. An 18 ton steam locomotive hauls the mine cars to the foot of the incline.

Last inspected, August 19th.

The general condition of the mines was good. A slight defect in ventilation was found in the Klondyke mine towards the head of an entry, called Gold Standard.

Inspected, May 1st.

At the date of this inspection, all the mines were well ventilated. Drainage was not well arranged at the Klondyke mine and altogether too much water was allowed to stand over from the night shift in the Carroll mine.

The Klondyke mine was inspected March 23rd on the request of the company and their miners. It seemed that the labor was somewhat in fear of the safety in one part of this mine. An inspection satisfied all concerned, that the mine was safe if properly worked. The ventilation was not well maintained in the extreme right entries.

INDIAN HEAD COAL COMPANY.

Transportation: Cin. Southern R. R. P. O.: Indian Head.

Officers: C. T. Cory, President; P. E. Rich, Secretary and Treasurer; H. L. Cory, General Manager.

On June 1st, this company leased their property to the New Cumberland Coal Company. That company operated the mine only a short time, then closed down the Indian Head mine until an inside haulway could be made from the New Cumberland Mine No. 2 through the hill into this property. This had not been completed at the close of the year.

Inspected, April 30th.

At the date of this inspection, the mine was in an excellent condition in all respects. The mine was visited again in August, but as the mine was to remain closed for some time no inspection was made.

NEW CUMBERLAND COAL COMPANY.

Transportation: Cin. Southern R. R. P. O.: Indian Head.

Officers: H. B. Lindsay, President and General Manager; Chas. H. Smith, Vice-President; Robert S. Young, Secretary and Treasurer.

The ventilation and drainage of this company's No. 1 mine has not been satisfactory at any time during the year. In 1906 an indictment was made against this company over the condition of this mine. Since then some improvement could be noted, but until the old furnace is done away with

and a fan or new furnace made at some better place than where the present furnace is, no material betterment of ventilation can be expected. On account of a strike of the miners November 1, the mine was closed and remained closed during the balance of the year. The necessary improvement of the condition of the mine was promised at the last inspection, but the year closed without anything being done along these lines.

During the year, some contractors delivered coal from a small tract of land to the right of the No. 2 mine, this coal being brought out through this company's No. 2 mine and ventilated with the company's furnace at No. 2 mine and the coal delivered to this company in mine cars at the tipple, the Inspection Notices of this work were served on the New Cumberland Coal Co.

Last inspected, August 19th.

The ventilation was defective in not reaching the faces of all the working places, this was very much so on all the lefts, but the 5th. It was slightly deficient in volume for the number of persons found within the mine. The drainage on fifth left was very bad on the entry. As to the inspection of No. 2 mine, the part being worked by the company was perfectly satisfactory, but very little air was found where the contractors were working.

Inspected, April 30th.

The No. 2 mine was in good condition, but No. 1 mine was deficient in volume. A new means of ventilation was promised the inspector at once. Nothing was ever done towards fulfilling this promise that ever could be learned of by the inspector. At the August inspection, a new Superintendent informed the inspector that new fans were bought for the mine.

PETERS & SOULEYRET.

Transportation: Cin. Southern R. R. P. O.: Flat Rock.

This firm is composed of Richard Peters and Harvey Souleyret, operating under lease from the Cogers Creek Coal Co.

Last inspected, August 20th.

At the date of this inspection, the mine was in good condition in all respects.

Inspected, April 30th.

Ventilation had been allowed to become deficient, both the intake and the return was choked to some extent. Drainage was bad on the main entry.

P. P. WALKER, LESSEE MAHONING COAL CO.

Transportation: Cin. Southern R. R. P. O.: Parkers Lake.

Very little, if any, coal was mined at this mine, during the year. The mine was visited in April and in August and Mr. Walker reported the mine idle and it remained so until the close of the year.

Rockcastle County

NEW LIVINGSTON COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Livingston.

Officers: W. R. Cook, President; J. T. Johnson, Vice-President; W. McC. Johnson, General Manager.

The mining and haulage is with electrical power. Two motors gather and haul the coal to the tippie and two Jeffrey breast mining machines cut the coal.

Last inspection, September 27th.

The ventilation now was satisfactory. Nothing had however been done towards rendering the main entry safe. A written notice was served, firmly insisting that this be done forthwith.

Inspected, August 23rd.

A short time before this visit, the fan had been moved to the right side of the main entry; the necessary changes in doors and brattices had not been properly made. Instructions were left with the mine fareman, how to do this work. The company's attention was called to the cutting of the slate in the entries by the action of the air and that it would be necessary to scale and do some timbering.

Whitley County**ANDERSON COAL COMPANY.**

Transportation: L. & N. Railroad. P. O.: Halsey.

Officers: M. O. French, President; F. E. Holliday, Vice-President; A. B. French, Superintendent; S. M. French, Secretary.

This is one of the Louisville Property's mines that they have leased to this company. The mining is with electrical mining machinery consisting of two Goodman breast mining machines. The haulage is done with a Goodman electric mine locomotive. A 125 H. P. McEwen engine connected to a Goodman 75 K. W. 275 volts supplies the power.

Last inspected, October 25th.

Some defects in ventilation was noted, the second right airway was choked with a fall of slate near the main entry; this was being cleaned up by the company, during the inspection. The mine was properly drained and timbered.

Inspected, May 27th.

While twelve thousand feet of air was entering the mine per minute, none was being conducted to the working places. The mine was very smoky and unwholesome. Instructions were furnished the company, how to properly ventilate the mine.

BURK HOLLOW COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Jellico.

Officers: S. B. Snyder, President; T. T. Pace, Vice-President and Treasurer; Frank Snyder, Secretary; G. W. Smith, General Manager.

The mine was visited May 23d, when it was learned that the company was closed, making changes of tipple and railroad tracks. New inclines were also being made to both the Jellico and the Blue Gem Mines. The company was installing the following machinery: One 150 H. P. boiler; one Erie engine, 125 H. P. connected to a Goodman 100 K. W., 250 volts generator and two Morgan Gardner breast mining machines.

No mining has been done since the first of April, but the company was endeavoring to be in shape to resume by July 1st.

Inspected, September 4th. (Blue Gem Mine.)

It was found that the furnace was inadequate for properly ventilating the mine and was condemned. A fan was requested installed without any unnecessary delay.

Inspected, October 19th.

The fan had been installed and the ventilation was good. The Jellico mine was closed pending the arrival of a fan for that mine.

The Jellico mine had been inspected along with the Blue Gem in September. The mine was very wet and in a very defective condition in regard to ventilation; the company was requested to get a fan for this mine and to drain it before placing any more labor in the mine.

CAPT. BALL COAL COMPANY.

Transportation: Wagon.

P. O.: Jellico.

Operated by Jas. Rogers.

Inspected, May 25th.

A squeeze had come on the main entry and the inspector found this part of the mine in a dangerous condition. The ventilation was natural; the mine was unwholesome for lack of pure air. A warning notice was served requiring the mine to be ventilated as provided by law and for the mine to be better drained and the main entry retimbered.

Inspected, July 9th.

Some timbering had been done, but more was needed. At that time what appeared to the inspector to be reasonable effort, had been made to provide the mine with a furnace, therefore an extension of time was granted by the inspector in which to complete the instructions given in the warning notice.

Last inspected, October 19th.

Conditions were not satisfactory. In the judgment of the inspector, reasonable efforts had not been made by this company to comply with the Mining Law of the State. The matter was later placed in the hands of the Commonwealth Attor-

ney at Williamsburgh, who sought an indictment, but the Grand Jury for some reason did not return one.

CAMPBELL COAL MINING COMPANY.

Transportation: L. & N. Railroad. P. O.: Coalmont.

R. O. Campbell, President, Atlanta, Ga.; Jas. Carmack, Mining Superintendent.

During the year, the company graded a new spur from the main line of the L. & N. Railroad, around to the north side of their property. A new opening was made that is intended to be the principal mine in the future. This was connected to the new tipple by an outside haulage to the top of the new incline.

The company does all their mining with machinery and have installed a fifteen machine Norwalk compressor, running four Ingersoll and eleven Harrison punching machines. The machine plant is located at the foot of the old incline and will likely not be moved to the new works.

Last inspected, October 9th.

Both the mines were in excellent condition in all respects.

Inspected, April 18th.

Only No. 1 mine was inspected; No. 2 was not then in existence. Condition of the mine was found to be very good.

COOKE-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O. Jellico.

Officers: E. S. Helburn, President; W. E. Cooke, Vice-President; L. S. Helburn, Secretary.

Last inspected, October 31st.

At date of this inspection the mine was in a perfectly satisfactory condition.

Inspected, May 21st.

Some improvement could be said of the drainage, but the best the furnace would do was only 4000 feet per minute. The mine contained 49 persons the day of this inspection. The company's attention was called to the poor furnace arrangement at the last inspection made the year previous, but nothing had been done to comply with the instructions

then given by the inspector. Breakthroughs between rooms were not being made as required by the Mining Law. A strongly worded notice was served the company to at once better the condition of the mine.

DOWLAIS BLUE GEM COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Jellico.

Officers, W. E. Davis, President; G. E. Moore, Secretary; J. L. Drake, General Manager.

Very little mining had been done until September when the Inspector found five persons in a new opening; they were driving a fan way out to the left crop and preparing to install a fan.

Inspected Oct. 11th.

Efforts were being made to complete the second opening to the new mine where a fan was to be installed. The old works were closed down pending the installation of the fan for both openings were to be ventilated with the fan at the new mine. The mine was fairly drained but was devoid of air.

EAST TENNESSEE COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Jellico.

Officers, E. J. Davis, President; W. E. Davis, General Manager; F. C. Richmond, Secretary.

At the new Blue Gem mine the mining and haulage is with electric power. The plant consists of a 150 H. P. Atlas boiler, one McEwen engine 260 H. P. connected to a Goodman generator 150 K. W. 250 Volts that supplies the power for one four ton Goodman mine Locomotive, one Goodman Long wall mining machine and the fan. Some mining is yet being done in the old Jellico openings, a tail rope haulage system being used at one of the openings from the main side track to the top of the incline; at the other opening, mules continue to bring the mine cars to the drum.

New Blue Gem Mine.—Last inspected, October 18th.

Last inspected Oct. 18th.

The mine was in good condition in all respects.

Inspected May 15th.

Satisfactory conditions prevailed.

Middle Ridge Mine.—Last inspected October 18th.

The outside end of the main side track at the rope haulage side was in a dangerous condition and needed timbering. Elsewhere good mining conditions were being maintained.

Inspected May 15th.

The stump men on third main were not fully protected by large timbers ahead of them.

ELITE COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Jellico.

Officers, Lewis M. Scott, President; John Stone, General Manager; E. B. Barton, Secretary.

A compressed air plant was installed in the closing months of 1906, consisting of one Atlas boiler, 150 H. P., one Norwalk compressor, 16x16 and two P. G. Harrison punching machines. The fan at the new mine is also driven by air power. The old mine was worked out during the last month of the present year. The new opening is to the left and here are installed the mining machines.

Last inspected Oct. 31st.

The new mine was in an excellent condition. The old mine was practically worked out.

Inspected May 21st.

At this date both the old and the new mines were inspected. The old mine had a few more pillars and stumps yet to take out and was in a satisfactory condition. The new mine was in fair condition except that the main entry was wet and muddy.

FRENCH COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Halsey.

Frank French, General Manager.

Last inspected Oct. 31st.

The company had improved the general condition of the mine but the current was not being sent through the rooms on the left side of the second right entry. Some of the entry

doors were in bad shape, especially was this the fact with the one East main. The company's attention had been called to the condition of this door at the previous inspection. On second left tow sacks were being used for room curtains instead of regular curtain cloth; this entry was deficient of the proper amount of current from this cause.

Inspected May 21st.

The ventilation would have been ample if properly conducted: There was little if any current near any of the working places. Instructions were given for the proper ventilation of the mine.

IMPERIAL-JELICO COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Rockhold.

Officers, J. W. Siler, President; W. C. Hoskins, General Manager; John Morgan, Superintendent.

Mining machinery installed: 1, 238 H. P. McEwen engine connected to a Goodman generator 150 KW 275 Volts furnishing power for one 5 ton Goodman mine locomotive that hauls the mine cars from the inside side tracks to the drum and three Goodman breast mining machines. The mine has a 7 ft. fan driven by an electric motor.

Last inspected Nov. 8th.

The instructions served the company Oct. 16 had been carried out with good results. The scaling and timbering was completed, the fan had been moved to the place requested by the Inspector with the result that the intake had been increased from barely 6,000 to 41,000 feet per minute. There was yet some little bratticing to do on the left off the fourth main left entry. An additional 20 days was granted the company by the Inspector in which to complete all specifications given in the warning notice of Oct. 16.

Inspected October 15th.

The ventilation was very defective so much so that many of the working places was devoid of any current and parts of the mine was in a very unwholesome condition; the entries needed scaling and timbering, several dangerous places was noted by the Inspector.

After a most thorough inspection it was found impossible

to properly ventilate the mine and leave the fan where it was situated. A detailed list of specifications was furnished the company and a twenty days warning notice served the company in which to render this mine safe and wholesome.

Inspected April 16th.

At the date of this inspection the mine was deficient in ventilation and the currents badly conducted. The X entry was very wet and muddy. In the notice served the company of this inspection instructions were given how to better the ventilation.

JELICO MINING COMPANY.

Transportation, L. & N. Railroad.

P. O.: Saxton.

M. L. George, President and General Manager.

This company has operated in both the Jellico and Blue Gem seams. During the last month of the year the Jellico mine was completely worked out. The Blue Gem mine will now be where all the mining will be done. This is a machine mine, the company having installed a small electric plant at the time the mine was first developed, consisting of 2 Jeffrey breast and one Morgan-Gardner long wall mining machines. The power is transmitted from the company's saw-mill plant.

Last inspected Oct. 11th.

While the mine had a good fan, the mine foreman was depending on natural means for ventilation. The fan was requested to be placed in service and the current controlled. The second left entry was defective, no means of sending the current around the faces of the rooms on the entry was in evidence. There should have been a check curtain on this entry and break-throughs cut between the rooms. The drainage and timbering of the mine was good.

Inspected April 29th.

The Jellico mine was in a satisfactory condition; nothing remained of this mine but the main entry stumps.

The company was not cutting break-throughs and sending the current through them as it should be sent. Timbering of rooms excellent.

JELICO COAL MINING COMPANY.

Transportation, L. & N. Railroad. P. O.: Mt. Ash.

Officers, Arthur Groves, President; W. T. Lewis, General Manager; W. J. Everett, Secretary and Treasurer.

The mining is done with compressed air, 4 Sullivan, 2 Ingersoll and 17 Harrison punching machines being in service. The haulage is with Electric mine locomotives from the inside side tracks to the drum.

Last inspected Sept. 5th.

The mine was in a satisfactory condition.

Inspected April 23d.

The ventilation was deficient toward the head of third main entry and on the entire side known as the Brace side of mine. Drainage good except on the haulage track from the Brace side where water had recently gathered over the rails.

Inspected July 8th.

The drainage and timbering was satisfactory; the condition of the ventilation was such that a warning notice was served the company with a set of instructions attached.

Inspected August 12th.

All instructions had been completed except the installation of an additional fan; this had been ordered by the company but had not arrived. An extension of time was granted in which to install the fan (which was installed shortly after this visit).

LOUISVILLE PROPERTY COMPANY.

Transportation: L. & N. Railroad. P. O.: Halsey.

J. W. Stilwell, Manager; J. A. McBrayer, Mine Supt.

In the early part of the year an electric haulage plant was added to the mining equipment consisting of a 250 H. P. Goodman engine connected to a generator of the same make of 100 K. W. 250 Volts for furnishing the power to 2 Mine locomotives of the Goodman make, one of 7 tons and the other of 3½ tons, the rackrail device being used on the heavy grades. The mining is with compressed air, 14 Harrison punchers being in service.

Last inspected Oct. 25th.

The mine was in very good condition in all respects.

Inspected May 27th.

At the date of this visit the mine was in good condition. Several Butt entries had been opened around the head of the creek and the motor track extended to them; later these were stopped and the development here confined to driving a tunnel through the mountain with a view of operating some mines down along Mudd Creek.

MT. MORGAN COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Williamsburg.

Officers, F. B. Mahan, President; W. T. Underwood, Vice President; S. E. Mahan, Secretary and Treasurer; M. H. Maurey, General Manager.

The company employs compressed air for mining the coal 2 Norwalk 15 machine compressors furnishing power for 26 Harrison punchers. The boiler house contains a battery of two Atlas 60 H. P. and 2 Erie boilers of the H. P. The mine cars are hauled from the mouth of the mines to the drum a distance of over one mile by a 16 ton Porter steam locomotive.

Last inspected Oct. 3d.

The company was operating some in the old mine to the right of the main works; the furnace needed a stack that would be high enough to control the current.

The main mine was in a satisfactory condition.

Inspected April 17th.

Nothing but the main mine working and conditions were being well maintained.

MAIN MT. JELLICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Kensee.

Officers: T. C. DuPont, President; Hywel Davies, Vice President; J. H. Barker, Superintendent.

Oldside Mine.—Last inspected Oct. 24th.

N. 9 right entry was deficient in volume. The 20th straight entry was defective in manner of ventilation; break-throughs should have been made between rooms on right of this entry and the current taken up the entry and back

through these rooms. The trapdoor on main entry was old and shattered. Drainage and timbering was fairly well maintained.

Inspected May 16th.

The mine was in very good condition in all respects.

Newsider Mine.—Last inspected Oct. 24th.

Timbering and drainage good. The ventilation was ample for the few persons here employed.

Inspected May 16th.

Ventilation deficient. The furnace was poorly constructed.

PROCTER COAL COMPANY.

P. O.: Red Ash.

H. T. Finley, President; John Burns, Mine Supt.

The mining properties of this company consist of the Proctor, Grinstead, and No. 5 a new opening to the right of the Proctor and the Indian Mountain mines across the State line in Tennessee.

The greater part of the mining at the Proctor and Grinstead this year was confined to the robbing out of pillars and stumps from the old workings of these mines. The new development was mostly in the new No. 5 mine.

— Last inspected October 23d.

Good mining conditions were found at all three of these mines; the No. 5 mine was in excellent condition.

Inspected May 17th.

The Grinstead mine was idle and no inspection was made. The Proctor and No. 5 was in good condition in all respects.

THE PLEASANT VIEW-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Pleasant View.

The mining operations of this company consist of an opening in the Jellico seam known as the Davidson mine and a small opening in the Blue Gem seam where some mining is done in the winter and early spring.

PHENIX-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Altamont.

Officers: Edward Greiwe, President, Cincinnati, Ohio; L. B. Dierkes, Treasurer; Sam. Bastin, Superintendent.

This company operates the following mines: The Nelson, Manchester, Diamond Nos. 1 and 2, and the Standard. During the year the Standard was leased to Beatty & May.

The Nelson, Manchester and Standard, have no machine equipment, the mining being by hand work. The coal at these mines being trammed by mules. At the Diamond Mines machinery being used both in mining and hauling. No. 1 mine, the haulage is with motors, at No. 2, a tailrope being used from the main sidetrack, mules being employed between the side track and the working places.

The mining equipment consists of one Goodman electric cutter and eight Ingersoll and fourteen Harrison air punchers, two Norwalk compressors, three electric mine locomotives and a generator complete the equipment here in use.

Nelson Mine.—Last inspected, September 24th.

At this date the mine was about worked out but a new opening was being made to the right of the present one. Nothing remained of the present mine but a few pillars and the main entry stumps. Ventilation was very well maintained. Some water was standing on the main entry.

Inspected, March 13th.

Ventilation deficient on both the second and third left entries. Poor brattices and sorry curtains was the cause of this condition. Drainage and timbering satisfactory.

Standard Mine.—Inspected, September 25th.

The lessees had been overhauling the mine, but there was a great deal of bratticing yet to do. The furnace needed some repairing and the main airway was choked with ashes near the furnace. The mine was fairly well timbered and drained.

Manchester Mine.—Some little coal was mined during the year. The mine was visited twice during the year but

both times the number of persons working within the mine was less than the number that is required for an inspection.

Diamond No. 2 Mine.—Last inspected, September 25th.

A larger fan had been installed and the general condition of the mine was better. The airways had not all been made larger as requested in the previous inspection. There was not enough volume on fourth left. Elsewhere the ventilation was good.

Inspected, April 6th.

The ventilation was such that a stringent notice was served the company to at once better matters or steps would have to be taken to close the mine.

Diamond No. 1 Mine.—Last inspected, September 25th.

The ventilation and drainage had been brought up to the legal requirements. Some scaling and timbering was needed on the main motor haulway, between the first sidetrack and the outside.

Inspected March 15th.

The left cross entries needed cutting, together with an airway near the working places; this would shorten the route the air was traveling several thousand feet. Some water was allowed to accumulate on the main haulage entry.

PITMAN COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Pittsburg.

Officers: W. A. Pugh, President; J. L. Caldwell, General Manager.

Last inspected, September 20th.

At the date of this inspection, the ventilation was defective, the main airway was partially choked near the fan, the cutoff airway from third left had not yet been completed. The roadways were very wet and muddy. Inspected Jan. 11th.

The mine was very wet and muddy and very little ventilation was to be found on the extreme left side of the mine.

S. W. ROCKWELL MINE.

Transportation: Wagon.

P. O.: Pittsburg.

This mine changed hands twice during the year. Mr. James Bryant being the present owner. The mine was visited twice during the year but the inspector was informed that the present owners would not employ the number of persons that would bring the mine under the mine law.

Pulaski County

ALPINE COAL COMPANY.

Transportation, Cincinnati Southern R. R. P. O.: Alpine.

O. Hurlburt, Receiver, Chattanooga, Tenn.

This company continued to operate under the receiver until July 1st, when the mine was closed down for the year.

Inspected, April 28th.

At the time of this visit, eight persons were at work within the mine, all of them being on the 6th left entry. Some effort was being made to drive a water drain outside from this entry and to install a new furnace. The ventilation was very poor towards the head of the entry, the haulways were wet and very muddy in places. The main entry needed timbering for quite a distance.

Visited, August 20th.

As a result of this visit, it was learned that the mine had closed down July 1st.

EAGLE COAL COMPANY.

Shipping Point: Flat Rock. P. O.: Barren Fork.

Transportation: Cin. Southern R. R.

W. L. Carter, General Manager.

This company has opened two new mines something like a mile and a half down the Barren Fork Creek, below their No. 7 mine, a narrow gauge tram track runs from No. 7 down the Creek to the mines. An 18 ton steam locomotive hauls the mine cars to the foot of the incline.

Last inspected, August 19th.

The general condition of the mines was good. A slight defect in ventilation was found in the Klondyke mine towards the head of an entry, called Gold Standard.

Inspected, May 1st.

At the date of this inspection, all the mines were well ventilated. Drainage was not well arranged at the Klondyke mine and altogether too much water was allowed to stand over from the night shift in the Carroll mine.

The Klondyke mine was inspected March 23rd on the request of the company and their miners. It seemed that the labor was somewhat in fear of the safety in one part of this mine. An inspection satisfied all concerned, that the mine was safe if properly worked. The ventilation was not well maintained in the extreme right entries.

INDIAN HEAD COAL COMPANY.

Transportation: Cin. Southern R. R. P. O.: Indian Head.

Officers: C. T. Cory, President; P. E. Rich, Secretary and Treasurer; H. L. Cory, General Manager.

On June 1st, this company leased their property to the New Cumberland Coal Company. That company operated the mine only a short time, then closed down the Indian Head mine until an inside haulway could be made from the New Cumberland Mine No. 2 through the hill into this property. This had not been completed at the close of the year.

Inspected, April 30th.

At the date of this inspection, the mine was in an excellent condition in all respects. The mine was visited again in August, but as the mine was to remain closed for some time no inspection was made.

NEW CUMBERLAND COAL COMPANY.

Transportation: Cin. Southern R. R. P. O.: Indian Head.

Officers: H. B. Lindsay, President and General Manager; Chas. H. Smith, Vice-President; Robert S. Young, Secretary and Treasurer.

The ventilation and drainage of this company's No. 1 mine has not been satisfactory at any time during the year. In 1906 an indictment was made against this company over the condition of this mine. Since then some improvement could be noted, but until the old furnace is done away with

and a fan or new furnace made at some better place than where the present furnace is, no material betterment of ventilation can be expected. On account of a strike of the miners November 1, the mine was closed and remained closed during the balance of the year. The necessary improvement of the condition of the mine was promised at the last inspection, but the year closed without anything being done along these lines.

During the year, some contractors delivered coal from a small tract of land to the right of the No. 2 mine, this coal being brought out through this company's No. 2 mine and ventilated with the company's furnace at No. 2 mine and the coal delivered to this company in mine cars at the tippie, the Inspection Notices of this work were served on the New Cumberland Coal Co.

Last inspected, August 19th.

The ventilation was defective in not reaching the faces of all the working places, this was very much so on all the lefts, but the 5th. It was slightly deficient in volume for the number of persons found within the mine. The drainage on fifth left was very bad on the entry. As to the inspection of No. 2 mine, the part being worked by the company was perfectly satisfactory, but very little air was found where the contractors were working.

Inspected, April 30th.

The No. 2 mine was in good condition, but No. 1 mine was deficient in volume. A new means of ventilation was promised the inspector at once. Nothing was ever done towards fulfilling this promise that ever could be learned of by the inspector. At the August inspection, a new Superintendent informed the inspector that new fans were bought for the mine.

PETERS & SOULEYRET.

Transportation: Cin. Southern R. R. P. O.: Flat Rock.

This firm is composed of Richard Peters and Harvey Souleyret, operating under lease from the Cogers Creek Coal Co.

Last inspected, August 20th.

At the date of this inspection, the mine was in good condition in all respects.

Inspected, April 30th.

Ventilation had been allowed to become deficient, both the intake and the return was choked to some extent. Drainage was bad on the main entry.

P. P. WALKER, LESSEE MAHONING COAL CO.

Transportation: Cin. Southern R. R. P. O.: Parkers Lake.

Very little, if any, coal was mined at this mine, during the year. The mine was visited in April and in August and Mr. Walker reported the mine idle and it remained so until the close of the year.

Rockcastle County

NEW LIVINGSTON COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Livingston.

Officers: W. R. Cook, President; J. T. Johnson, Vice-President; W. McC. Johnson, General Manager.

The mining and haulage is with electrical power. Two motors gather and haul the coal to the tippie and two Jeffrey breast mining machines cut the coal.

Last inspection, September 27th.

The ventilation now was satisfactory. Nothing had however been done towards rendering the main entry safe. A written notice was served, firmly insisting that this be done forthwith.

Inspected, August 23rd.

A short time before this visit, the fan had been moved to the right side of the main entry; the necessary changes in doors and brattices had not been properly made. Instructions were left with the mine fareman, how to do this work. The company's attention was called to the cutting of the slate in the entries by the action of the air and that it would be necessary to scale and do some timbering.

Whitley County**ANDERSON COAL COMPANY.**

Transportation: L. & N. Railroad. P. O.: Halsey.

Officers: M. O. French, President; F. E. Holliday, Vice-President; A. B. French, Superintendent; S. M. French, Secretary.

This is one of the Louisville Property's mines that they have leased to this company. The mining is with electrical mining machinery consisting of two Goodman breast mining machines. The haulage is done with a Goodman electric mine locomotive. A 125 H. P. McEwen engine connected to a Goodman 75 K. W. 275 volts supplies the power.

Last inspected, October 25th.

Some defects in ventilation was noted, the second right airway was choked with a fall of slate near the main entry; this was being cleaned up by the company, during the inspection. The mine was properly drained and timbered.

Inspected, May 27th.

While twelve thousand feet of air was entering the mine per minute, none was being conducted to the working places. The mine was very smoky and unwholesome. Instructions were furnished the company, how to properly ventilate the mine.

BURK HOLLOW COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Jellico.

Officers: S. B. Snyder, President; T. T. Pace, Vice-President and Treasurer; Frank Snyder, Secretary; G. W. Smith, General Manager.

The mine was visited May 23d, when it was learned that the company was closed, making changes of tippie and railroad tracks. New inclines were also being made to both the Jellico and the Blue Gem Mines. The company was installing the following machinery: One 150 H. P. boiler; one Erie engine, 125 H. P. connected to a Goodman 100 K. W., 250 volts generator and two Morgan Gardner breast mining machines.

No mining has been done since the first of April, but the company was endeavoring to be in shape to resume by July 1st.

Inspected, September 4th. (Blue Gem Mine.)

It was found that the furnace was inadequate for properly ventilating the mine and was condemned. A fan was requested installed without any unnecessary delay.

Inspected, October 19th.

The fan had been installed and the ventilation was good. The Jellico mine was closed pending the arrival of a fan for that mine.

The Jellico mine had been inspected along with the Blue Gem in September. The mine was very wet and in a very defective condition in regard to ventilation; the company was requested to get a fan for this mine and to drain it before placing any more labor in the mine.

CAPT. BALL COAL COMPANY.

Transportation: Wagon.

P. O.: Jellico.

Operated by Jas. Rogers.

Inspected, May 25th.

A squeeze had come on the main entry and the inspector found this part of the mine in a dangerous condition. The ventilation was natural; the mine was unwholesome for lack of pure air. A warning notice was served requiring the mine to be ventilated as provided by law and for the mine to be better drained and the main entry retimbered.

Inspected, July 9th.

Some timbering had been done, but more was needed. At that time what appeared to the inspector to be reasonable effort, had been made to provide the mine with a furnace, therefore an extension of time was granted by the inspector in which to complete the instructions given in the warning notice.

Last inspected, October 19th.

Conditions were not satisfactory. In the judgment of the inspector, reasonable efforts had not been made by this company to comply with the Mining Law of the State. The matter was later placed in the hands of the Commonwealth Attor-

ney at Williamsburgh, who sought an indictment, but the Grand Jury for some reason did not return one.

CAMPBELL COAL MINING COMPANY.

Transportation: L. & N. Railroad. P. O.: Coalmont.

R. O. Campbell, President, Atlanta, Ga.; Jas. Carmack, Mining Superintendent.

During the year, the company graded a new spur from the main line of the L. & N. Railroad, around to the north side of their property. A new opening was made that is intended to be the principal mine in the future. This was connected to the new tippie by an outside haulage to the top of the new incline.

The company does all their mining with machinery and have installed a fifteen machine Norwalk compressor, running four Ingersoll and eleven Harrison punching machines. The machine plant is located at the foot of the old incline and will likely not be moved to the new works.

Last inspected, October 9th.

Both the mines were in excellent condition in all respects.

Inspected, April 18th.

Only No. 1 mine was inspected; No. 2 was not then in existence. Condition of the mine was found to be very good.

COOKE-JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O. Jellico.

Officers: E. S. Helburn, President; W. E. Cooke, Vice-President; L. S. Helburn, Secretary.

Last inspected, October 31st.

At date of this inspection the mine was in a perfectly satisfactory condition.

Inspected, May 21st.

Some improvement could be said of the drainage, but the best the furnace would do was only 4000 feet per minute. The mine contained 49 persons the day of this inspection. The company's attention was called to the poor furnace arrangement at the last inspection made the year previous. but nothing had been done to comply with the instructions

then given by the inspector. Breakthroughs between rooms were not being made as required by the Mining Law. A strongly worded notice was served the company to at once better the condition of the mine.

DOWLAIS BLUE GEM COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Jellico.

Officers, W. E. Davis, President; G. E. Moore, Secretary; J. L. Drake, General Manager.

Very little mining had been done until September when the Inspector found five persons in a new opening; they were driving a fan way out to the left crop and preparing to install a fan.

Inspected Oct. 11th.

Efforts were being made to complete the second opening to the new mine where a fan was to be installed. The old works were closed down pending the installation of the fan for both openings were to be ventilated with the fan at the new mine. The mine was fairly drained but was devoid of air.

EAST TENNESSEE COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Jellico.

Officers, E. J. Davis, President; W. E. Davis, General Manager; F. C. Richmond, Secretary.

At the new Blue Gem mine the mining and haulage is with electric power. The plant consists of a 150 H. P. Atlas boiler, one McEwen engine 260 H. P. connected to a Goodman generator 150 K. W. 250 Volts that supplies the power for one four ton Goodman mine Locomotive, one Goodman Long wall mining machine and the fan. Some mining is yet being done in the old Jellico openings, a tail rope haulage system being used at one of the openings from the main side track to the top of the incline; at the other opening, mules continue to bring the mine cars to the drum.

New Blue Gem Mine.—Last inspected, October 18th.

Last inspected Oct. 18th.

The mine was in good condition in all respects.

Inspected May 15th.

Satisfactory conditions prevailed.

Middle Ridge Mine.—Last inspected October 18th.

The outside end of the main side track at the rope haulage side was in a dangerous condition and needed timbering. Elsewhere good mining conditions were being maintained.

Inspected May 15th.

The stump men on third main were not fully protected by large timbers ahead of them.

ELITE COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Jellico.

Officers, Lewis M. Scott, President; John Stone, General Manager; E. B. Barton, Secretary.

A compressed air plant was installed in the closing months of 1906, consisting of one Atlas boiler, 150 H. P., one Norwalk compressor, 16x16 and two P. G. Harrison punching machines. The fan at the new mine is also driven by air power. The old mine was worked out during the last month of the present year. The new opening is to the left and here are installed the mining machines.

Last inspected Oct. 31st.

The new mine was in an excellent condition. The old mine was practically worked out.

Inspected May 21st.

At this date both the old and the new mines were inspected. The old mine had a few more pillars and stumps yet to take out and was in a satisfactory condition. The new mine was in fair condition except that the main entry was wet and muddy.

FRENCH COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Halsey.

Frank French, General Manager.

Last inspected Oct. 31st.

The company had improved the general condition of the mine but the current was not being sent through the rooms on the left side of the second right entry. Some of the entry

doors were in bad shape, especially was this the fact with the one East main. The company's attention had been called to the condition of this door at the previous inspection. On second left tow sacks were being used for room curtains instead of regular curtain cloth; this entry was deficient of the proper amount of current from this cause.

Inspected May 21st.

The ventilation would have been ample if properly conducted: There was little if any current near any of the working places. Instructions were given for the proper ventilation of the mine.

IMPERIAL-JELICO COAL COMPANY.

Transportation, L. & N. Railroad. P. O.: Rockhold.

Officers, J. W. Siler, President; W. C. Hoskins, General Manager; John Morgan, Superintendent.

Mining machinery installed: 1, 238 H. P. McEwen engine connected to a Goodman generator 150 KW 275 Volts furnishing power for one 5 ton Goodman mine locomotive that hauls the mine cars from the inside side tracks to the drum and three Goodman breast mining machines. The mine has a 7 ft. fan driven by an electric motor.

Last inspected Nov. 8th.

The instructions served the company Oct. 16 had been carried out with good results. The scaling and timbering was completed, the fan had been moved to the place requested by the Inspector with the result that the intake had been increased from barely 6,000 to 41,000 feet per minute. There was yet some little bratticing to do on the left off the fourth main left entry. An additional 20 days was granted the company by the Inspector in which to complete all specifications given in the warning notice of Oct. 16.

Inspected October 15th.

The ventilation was very defective so much so that many of the working places was devoid of any current and parts of the mine was in a very unwholesome condition; the entries needed scaling and timbering, several dangerous places was noted by the Inspector.

After a most thorough inspection it was found impossible

to properly ventilate the mine and leave the fan where it was situated. A detailed list of specifications was furnished the company and a twenty days warning notice served the company in which to render this mine safe and wholesome.

Inspected April 16th.

At the date of this inspection the mine was deficient in ventilation and the currents badly conducted. The X entry was very wet and muddy. In the notice served the company of this inspection instructions were given how to better the ventilation.

JELICO MINING COMPANY.

Transportation, L. & N. Railroad.

P. O.: Saxton.

M. L. George, President and General Manager.

This company has operated in both the Jellico and Blue Gem seams. During the last month of the year the Jellico mine was completely worked out. The Blue Gem mine will now be where all the mining will be done. This is a machine mine, the company having installed a small electric plant at the time the mine was first developed, consisting of 2 Jeffrey breast and one Morgan-Gardner long wall mining machines. The power is transmitted from the company's saw-mill plant.

Last inspected Oct. 11th.

While the mine had a good fan, the mine foreman was depending on natural means for ventilation. The fan was requested to be placed in service and the current controlled. The second left entry was defective, no means of sending the current around the faces of the rooms on the entry was in evidence. There should have been a check curtain on this entry and break-throughs cut between the rooms. The drainage and timbering of the mine was good.

Inspected April 29th.

The Jellico mine was in a satisfactory condition; nothing remained of this mine but the main entry stumps.

The company was not cutting break-throughs and sending the current through them as it should be sent. Timbering of rooms excellent.

JELlico COAL MINING COMPANY.

Transportation, L. & N. Railroad. P. O.: Mt. Ash.

Officers, Arthur Groves, President; W. T. Lewis, General Manager; W. J. Everett, Secretary and Treasurer.

The mining is done with compressed air, 4 Sullivan, 2 Ingersoll and 17 Harrison punching machines being in service. The haulage is with Electric mine locomotives from the inside side tracks to the drum.

Last inspected Sept. 5th.

The mine was in a satisfactory condition.

Inspected April 23d.

The ventilation was deficient toward the head of third main entry and on the entire side known as the Brace side of mine. Drainage good except on the haulage track from the Brace side where water had recently gathered over the rails.

Inspected July 8th.

The drainage and timbering was satisfactory; the condition of the ventilation was such that a warning notice was served the company with a set of instructions attached.

Inspected August 12th.

All instructions had been completed except the installation of an additional fan; this had been ordered by the company but had not arrived. An extension of time was granted in which to install the fan (which was installed shortly after this visit).

LOUISVILLE PROPERTY COMPANY.

Transportation: L. & N. Railroad. P. O.: Halsey.

J. W. Stilwell, Manager; J. A. McBrayer, Mine Supt.

In the early part of the year an electric haulage plant was added to the mining equipment consisting of a 250 H. P. Goodman engine connected to a generator of the same make of 100 K. W. 250 Volts for furnishing the power to 2 Mine locomotives of the Goodman make, one of 7 tons and the other of 3½ tons, the rackrail device being used on the heavy grades. The mining is with compressed air, 14 Harrison punchers being in service.

Last inspected Oct. 25th.

The mine was in very good condition in all respects.

Inspected May 27th.

At the date of this visit the mine was in good condition. Several Butt entries had been opened around the head of the creek and the motor track extended to them; later these were stopped and the development here confined to driving a tunnel through the mountain with a view of operating some mines down along Mudd Creek.

MT. MORGAN COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Williamsburg.

Officers, F. B. Mahan, President; W. T. Underwood, Vice President; S. E. Mahan, Secretary and Treasurer; M. H. Maurey, General Manager.

The company employs compressed air for mining the coal 2 Norwalk 15 machine compressors furnishing power for 26 Harrison punchers. The boiler house contains a battery of two Atlas 60 H. P. and 2 Erie boilers of the H. P. The mine cars are hauled from the mouth of the mines to the drum a distance of over one mile by a 16 ton Porter steam locomotive.

Last inspected Oct. 3d.

The company was operating some in the old mine to the right of the main works; the furnace needed a stack that would be high enough to control the current.

The main mine was in a satisfactory condition.

Inspected April 17th.

Nothing but the main mine working and conditions were being well maintained.

MAIN MT. JELICO COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Kensee.

Officers: T. C. DuPont, President; Hywel Davies, Vice President; J. H. Barker, Superintendent.

Oldside Mine.—Last inspected Oct. 24th.

N. 9 right entry was deficient in volume. The 20th straight entry was defective in manner of ventilation; breakthroughs should have been made between rooms on right of this entry and the current taken up the entry and back

through these rooms. The trapdoor on main entry was old and shattered. Drainage and timbering was fairly well maintained.

Inspected May 16th.

The mine was in very good condition in all respects.

Newside Mine.—Last inspected Oct. 24th.

Timbering and drainage good. The ventilation was ample for the few persons here employed.

Inspected May 16th.

Ventilation deficient. The furnace was poorly constructed.

PROCTER COAL COMPANY.

P. O.: Red Ash.

H. T. Finley, President; John Burns, Mine Supt.

The mining properties of this company consist of the Proctor, Grinstead, and No. 5 a new opening to the right of the Proctor and the Indian Mountain mines across the State line in Tennessee.

The greater part of the mining at the Proctor and Grinstead this year was confined to the robbing out of pillars and stumps from the old workings of these mines. The new development was mostly in the new No. 5 mine.

— Last inspected October 23d.

Good mining conditions were found at all three of these mines; the No. 5 mine was in excellent condition.

Inspected May 17th.

The Grinstead mine was idle and no inspection was made. The Proctor and No. 5 was in good condition in all respects.

THE PLEASANT VIEW-JELICO COAL COMPANY.

Transportation: L. & N. Railroad.

P. O.: Pleasant View.

The mining operations of this company consist of an opening in the Jellico seam known as the Davidson mine and a small opening in the Blue Gem seam where some mining is done in the winter and early spring.

Davidson Mine.—Last inspected Oct. 17th.

There was a very dangerous piece of rock top on main entry just outside of the entry door that was ordered taken down at once by the Inspector. The ventilation ~~was~~ now satisfactory.

Inspected April 22d.

The ventilation was by natural means and was very unwholesome. A warning notice was served requiring a furnace installed.

Inspected May 11th.

The instructions of the Inspector had been obeyed and a furnace provided for the mine. The ventilation was ample.

Inspected August 12th.

Ventilation, drainage and timbering satisfactory.

Blue Gem Mine.—Last inspected Oct. 17th.

The drainage was bad for the first two hundred feet in the main entry. Two open break-throughs was noted near head of second right entry. Four persons were working within the mine the day of this visit which was the most found workings at any of the previous visits. The mine is ventilated with a furnace and furnishes ample air for the few persons that work within the mine.

SUNBEAM COAL COMPANY.

Transportation: L. & N. Railroad. P. O.: Jellico.

This is a small Blue Gem mine to the right of the Dowlais Blue Gem mines.

Last inspected Oct. 11th.

The ventilation was poor, the furnace was out of repair. The second right entry was too far ahead of air. No second opening had yet been made to the mine.

Inspected April 22d.

Three open break-throughs were noted on second left entry, some water was on the main entry track. Timbering good.

STEARNS COAL COMPANY.

Transportation: Cincinnati Southern R. R. P. O.: Stearns.

Officers: J. S. Stearns, Chairman; W. T. Culver, Secretary; R. L. Stearns, Treasurer; J. E. Butler, Manager.

The mining at No. 4 mine is with compressed air, an Ingersoll Electrical driven compressor supplying the power for the six Ingersoll punching machines. The power for the mine is sent over a wire from the mills at Stearns. This wire carries an alternating current of 2,300 volts, which is reduced to 275 volts at the mines.

The mines operated by this company during the year were the No. 1 south mine, the No. 1 north, the No. 2, 3 and 4. No. 3 and 4 mines are near Worley the others are near Bartells. Their No. 10 mine in Wayne County began to ship coal in the last part of December.

The company has opened four more mines in Wayne County that will ship soon as the Ky. & Tenn. R. R. reaches them.

The mines are troubled with frequent windy shots that loosen the doors and brattices and require constant vigilance to maintain the air currents close to the working places. While no serious accident occurred here during the year, constant watchfulness will be necessary to protect the miners as long as this coal is allowed to be shot from the solid.

No. 1, North Main Mine.—Last inspected Sept. 13th.

The ventilation had been brought up to an ample amount by repairs on the furnace and brattices.

Inspected August 15th.

The condition of the ventilation was very bad. A warning notice was served the company to render this mine safe and wholesome. The mine had lately changed from machine mining to shooting on solid. Many of the brattices and some of the doors were badly shattered by windy shots. The furnace needed more height and water was in main airway return.

Inspected May 3d.

At the date of this visit the mining was by machines; the ventilation was ample and the mine was in good condition.

No. 1 South Main Mine.—Last inspected August 15th.

Conditions were being fairly well maintained, some little water was noted at head of second right entry, elsewhere conditions were good.

Inspected May 3d.

The room curtains on second left were leaking badly and the air was deficient at that point on that account. Elsewhere the ventilation was satisfactory. The mine was damp and free from dust.

No. 2 Mine.—Last inspected August 15th.

The mine was in good condition in all respects.

Inspected May 3d.

At the date of this inspection good mining conditions prevailed.

No. 3 Mine.—Last inspected August 16th.

Conditions at this mine were well maintained.

Inspected May 2d.

Ventilation, drainage and timbering satisfactory.

No. 4 Mine.—Last inspected August 16th.

While the current was ample it was poorly conducted through the working places. The brattices found in this mine are of poor workmanship and of little use for ventilating purposes. Defective timbering was noted in the rooms of the second left entry.

Inspected May 2d.

At the date of this inspection the ventilation was poor on right and the entry was ahead of the air.

WATTS CREEK JELICO COAL COMPANY.

Transportation: L. & N. Railroad.

P. O.: Wofford.

Isaac L. March, President; C. J. Tobias, General. Mgr.

Last inspected Oct. 10th.

The mine was found in an excellent condition in all respects.

Inspected April 18th.

At the date of this visit the mine was in very good condition.

WENDER BLUE GEM COAL COMPANY.

Transportation: L. & N. Railroad.

P. O.: Halsey.

The company installed a small electric machine plant in the early part of the year consisting of one Erie 125 H. P. engine connected to a Morgan Gardner generator 75 KW 250 Volts. This drives a five foot fan in the Blue Gem mine where a Morgan Gardner breast and a long wall machine of the same make cuts the coal. Later the machines were placed in the Jellico seam which was opened during the year and was ventilated with a furnace at the last Inspection.

Inspected May 21st.

Only the Blue Gem mine was inspected, the Jellico not being then opened up. All conditions were satisfactory.

Last inspected Oct. 30th.

The Blue Gem mine was in very good condition. But little mining was being done at this mine, the greater part of the labor being in the new opening in the Jellico seam. This mine consisted of one entry with rooms on both sides. Those on the airway side were poorly ventilated. Lack of curtains on the room-necks was noted. The ventilation was with a furnace that was not regularly fired. Conditions were unsatisfactory in nearly all respects.

S. A. WENDER BLUE GEM COAL COMPANY.

Wagon Mine.

P. O.: Jellico.

The mine was closed the first part of the year while some mining machinery was installed consisting of an Erie engine of 35 H. P. connected to a Morris & Fairbanks generator of 25 K. W. 250 volts running on Morgan-Gardner Long-wall mining machine; this was installed in the Jellico seam at the time of the inspection. This opening is near the top of the mountain and was only just opened in a short distance.

Inspected Oct. 19th.

The Blue Gem mine was inspected only a short distance when the Lessee was met coming out. He informed the In-

spector that sufficient labor to bring the mine under the mine law would not be employed so the mine was not further inspected. The timbering was satisfactory as far as inspected. The Lessee and three miners was all the persons working in the mine.

WEST-JELICO COAL COMPANY.

Transportation: Cin. Sou. R. R. P. O.: Strunks.

Officers W. E. Delaney, President; R. T. McKeen, Vice President; C. H. Keeton, Secretary and Treasurer; J. C. Walker, Manager.

Inspected May 4th.

The mine was idle the day of this inspection and little could be determined as to the state of the ventilation when the mine was at work. The labor was crowded into No. 2 opening the days the mine worked.

Last inspected August 14th.

Both No. 1 and 2 mines were working. The condition of No. 1 was only fair; the mine had only lately resumed work and some repairs on the entry brattices and curtains had not yet been made.

No. 2 mine was very defective as to ventilation; both the volume and manner of conducting the air was deficient. That part of the works on main straight entry beyond the trap door was so unwholesome that it was requested stopped until better ventilation was installed.

The furnace was out of repair and was situated in an unfavorable spot to produce good results. A fan was requested installed.