#### STARK'S COLLIERY.

This colliery is located in Lackawanna township; it is one-half of a mile south of the Lackawanna river; the opening to the coal is a shaft; it is 108 feet deep

to the Lackawanna river; the opening to the coal is a shaft; it is 108 feet deep to what is called the Powder Mill vein; it is 12 feet wide by 164 feet long; it is operated by the Pennsylvania coal company. William Law is general mine superintendent, Alexander Laird is mining boss, and F. J. Boone is outside foreman. Description.—There is a double breaker connected to the shaft by a trestling 100 feet long; they mine and prepare about 350 tons of coal per day; they employ 64 miners, 33 laborers, 13 drivers, 5 door-boys and 8 company men in the mine; 29 slate packers, 3 head and plate men, 1 driver, 17 company men, 5 mechanics and 1 boss outside, in all 179 men and boys; this mine is operated inside by a plane 500 feet long and a slope 1,000 feet long; they are working the Powder Mill vein; average thickness, 8 feet: they work headings 10, air-ways Powder Mill vein; average thickness, 8 feet; they work headings 10, air-ways 15 and chambers 30 feet wide; they leave pillars from 16 to 25 feet wide to sustain the roof; they leave cross-entrances from 18 to 30 feet apart for the purpose of ventilation; the roof is slate and rock; the mine is in a good working con-

Ventilation.—Ventilation is produced by the action of the atmosphere, and assisted by steam when necessary; the intakes are located in the main shaft and Powder Mill tunnel in winter, and in the Dawson shaft in summer; the main shaft contains an area of 192 feet, Powder Mill tunnel 80 feet and Dawson shaft 192 feet; the mines are ventilated right the reverse in summer from what they are in winter; the amount of fresh air is 31,200 cubic feet per minute; the main doors on headings and air-ways are hung so that they will close of their own accord; they have attendants at main doors; the air is circulated to the face of the workings in two splits; the amount of ventilation has been measured and

reported according to law; ventilation is good.

Machinery.—They use 3 steam engines for hoisting and pumping, 80-horse power, and 1 breaker engine, 300-horse power; they have a metal speaking tube in the shaft; they have a safety carriage, with all the modern improvements. They have flanges of sufficient strength and dimensions for safety, and an adequate brake on the hoisting drums; the ropes, links, chains and connections are in good condition; the boilers have been cleaned and examined and reported in good condition, according to law; they have a steam gauge to indicate the pressure of steam pressure of steam.

Remarks.—They have furnished a map of mine; they are connected with the Dawson shaft, which can be used as a second opening; they have no house for men to wash or change their clothes in; the mining boss seems to be a practical and competent man; there are no boys working in the mine under 12 years of age; the engineers seem to be experienced, competent and sober men; they do not allow any persons to ride on loaded cars on the slope or in the shaft; they do not allow more than 10 men to ride on the safety carriage at one time; the parties having charge know their duty in case of death or serious accident; the shaft landing care protected by serious actions the breaker machinery is the shaft landings are protected by safety gates; the breaker machinery is fenced and boxed off so that operatives are safe.

#### SPRING BROOK COLLIERY.

This colliery is located in Lackawanna township and situated on Spring Brook oreck, 1,500 feet south of the Lackawanna river; it was operated by the Glenwood coal company, now in bankruptcy. George Filer is general mine superintendent, John Micklow is mining boss and Josiah Carryl is outside foreman.

Description.—The opening to the coal consists of two tunnels, namely, Nos. 1 and 2; No. 1 is located close to the breaker and on the north side of Spring Brook crocks and No. 2 is located one helf of a mile south coart of breaker and on the

creek, and No. 2 is located one-half of a mile south-east of breaker and on the south side of Spring Brook creek; they mine and prepare 300 tons of coal per day when working; they employ 45 miners, 40 laborers, 8 drivers, 3 door-boys and 5 company men in the mines; 30 slate pickers, 6 head and plate men, 3 drivers, 5 company men, 4 mechanics and 2 bosses outside; in all 151 men and boys; they are working the Spring Brook vein of coal; average thickness six feet. They work headings and air-ways 15 and chambers 25 feet wide; they leave pillars from 10 to 15 feet wide to sustain the roof, and cross-entrances 60 feet apart for the purpose of ventilation; the roof is good rock; the mines are in a good

working condition.

Ventilation is produced by furnaces; the intake is located at the mouth of the tunnels; area 75 feet; the outcasts are located in furnace air shafts; area 60 feet; the main doors are hung so as to close of their own accord; they have attendants at main doors: the amount of ventilation has been measured and

reported; ventilation is good.

Machinery.—They use one breaker engine of 35-horse power and two hoisting engines on the planes outside of 45-horse power each; the boilers have been cleaned and examined and reported in good condition; they have a steam-gauge to indicate the pressure of steam; the breaker machinery is boxed and fenced

off so that operatives are safe; they require no machinery around the tunnels.

Remarks.—They have furnished a map of the mines; the furnace air shaft can be used as a second opening; they have a house for men to wash and change in; the mining boss seems to be a practical and competent man; there are no boys working in the mines under twelve years of age; the engineers seem to be experienced, competent and sober men; the parties having charge know their duty in case of death or serious accident.

#### OAK HILL COLLIERY.

This colliery is located in Lackawanna township, and situated on the east bank of the Lackawanna river, on the Lebigh and Susquehanna division of the Central railroad of New Jersey; it is operated by the Glenwood coal company. Geo. Filer is general mine superintendent, Timothy Parfery is mining boss and David

Stearns is outside foreman.

Stearns is outside foreman.

Description.—The opening to the coal consists of three tunnels, namely, Nos. 1, 2 and 3; there is a breaker connected with these mines; they mine and prepare 200 tons of coal per day; they employ 30 miners, 25 laborers, 6 drivers, 4 door-boys and 4 company men in the mines; 25 slate pickers, 4 head and plate men, 4 drivers, 3 company men, 4 mechanics and 2 bosses outside; in all 111 men and boys; they are working the old vein; average thickness six feet; they work headings and air-ways 15 and chambers 25 feet wide; they leave pillars from 10 to 12 feet wide to sustain the roof, and cross-entrances sixty feet apart for the nursess of ventilation; the roof is good rock; the mines are in a good

the purpose of ventilation; the roof is good rock; the mines are in a good working condition.

Ventilation is produced by means of furnaces; the intake is located at mouth of tunnels, area from 50 to 60 feet; the outcast is located in furnace air shaft, area 75 feet; the amount of pure air is 13,200 cubic feet per minute; the main area 75 feet; the amount of pure air is 13,200 cubic feet per minute; the main the purpose of their own accordance at the purpose at the purpose of their own accordance at the purpose at the purpose of their own accordance at the purpose of the purpose of the purpose of their own accordance at the purpose of the purp doors are hung so as to close of their own accord; they have attendants at the main doors; the air is circulated to the face of the workings in one volume in each tunnel; the amount of ventilation has been measured and reported. ven-

tilation is good.

Muchinery.—They use one steam engine at the breaker of 25-horse power; the boilers have been cleaned and examined and reported in good condition; they have a steam-gauge to indicate the pressure of steam; the breaker machinery is loxed and fenced off so that operatives are safe; they require no machinery

around the tunnels.

Remarks.—They have furnished a map of the mines; they have a second opening; they have a house for men to wash and change in; there is some standing water in the mine; the mining boss seems to be a practical and competent man; there are no boys working in the mine under twelve years of age; the engineer seems to be an experienced, competent and sober man; the parties having charge know their duty in case of death or serious accident.

# CARBON HILL COLLIERY.

This colliery is located in Old Forge township, and situated on the west bank of the Lackawanna river, on the Lackawanna and Bloomsburg railroad; it was operated by the Glenwood coal company, now in bankruptcy. George Filer is angle of inclination is 9° 35′. The slope was driven part of the way through coal, at a cost of \$364, but there were 28¾ yards of rock to cut, from nought up to eight feet, which cost \$283 33, and 77 yards driven through sandstone, which cost \$3,080. The whole cost for sinking the slope was only \$3,952 33. They have a pair of engines, 13-inch cylinder and 18-inch stroke; estimated horse power, 50; the size of their drum is six feet diameter, which has an approved brake attached to it. There is no second opening to the slope, but they are driving for one toward No. 1 drift, and expect to make a connection soon.

## OTHER NEW OPENINGS AND CONNECTIONS.

The Delaware, Lackawanna and Western railroad company have made connections between the Hampton shaft and the Oxford shaft, at Hyde Park, and between Tripp's slope and the Brisbin shaft, in the Third ward, Scranton. They have also sunk an air shaft, at Hyde Park, into the workings of the Oxford shaft, and connects also with the Hampton shaft workings. A fan is to be placed at this air shaft which will assist in ventilating both collieries named.

The Pennsylvania coal company have completed a new slope at No. 1 tunnel, in Pittston township, which is intended for hoisting coal. They have also made a second opening for No. 4 slope, in Jenkins township, which is to be used also for ventilation; and the workings of old No. 10 shaft in the 14-foot seam, have been connected with the new No. 10 shaft, in Pittston. No. 2 shaft, Dunmore, was sunk to the lower seam.

The Delaware and Hudson canal company have made a connection, in the 14 foot seam, between Marvine and Leggetts Creek shafts, Providence; and at No. 1 shaft, Carbondale, an air shaft has been sunk, and two more air shafts at No. 3 shaft, and still another at the Coal Brook colliery. These air shafts are only poor-make shifts, unless mechanical means are used to produce ventilation. There are too many of them in Carbondale. What is needed there is a system of air courses inside of the collieries.

At the Filer colliery, Winton, a drift has been driven from a ravine into the workings, for a traveling way for the men to go to and from their work. A new drift has been opened at the Greenwood colliery for mining coal, and the same company have made an additional opening for coal at the Sibly colliery, in Old Forge township. An opening has been made at the Green Ridge slope for ventilation. The above are all the openings and connections made in the district during the year, so far as I am informed.

# IDLE AND ABANDONDED COLLIERIES.

The Archbald shaft, Lackawanna township, and Oxford shaft, Hyde Park, owned by the Delaware, Lackawanna and Western railroad company, were idle all through the year; the last work done at the Hyde Park shaft was done in February, and the Scranton coal company's drifts at Bellevue were idle. Bellevue slope and shaft worked only 22½ days.

No. 1 shaft, Pittston township, owned by Pennsylvania coal company, was idle; No. 2 and No. 3 shafts were abandoned as hoisting shafts, and are now used as pumping shafts.

The Marvine shaft, Providence; Powderly slope, Carbondale township, and Breaker, Forrest and Jefferson tunnels, Carbondale City, all owned by the Delaware and Hudson canal company, were idle.

The following collieries have also been idle: Rolling Mill colliery, Scranton, consisting of a slope, tunnel and drift; the Ontario colliery, Pleasant Valley, and the Heidelberg colliery, Pleasant Valley. Spring Brook No. 1

and No. 2 drifts, Lackawanna township, and Carbon Hill slope, Old Forgetownship, were abandoned by the Glenwood coal company, in September, 1876, on account of the poor quality of the coal.

# EXPERIMENTS ON FANS AND FURNACE.

I have not had time to experiment but little on account of multiplicity of other duties; but Benjamin Hughes, Esq., general mine superintendent for the Delaware, Lackawanna and Western railroad company, together with Thomas D. Davies, Esq., his assistant, and others, have made some very interesting tests on fan and furnace ventilation, which are too good to pass by unnoticed. One of the tests was made with the water gauge on the fan at Pyne shaft. The fan is 12 ft. diameter, 4 ft. face and has two circular inlets 6 ft. each, and was run at two and a half revolutions to engine's one. The area, where the velocity of the air was taken, is 105 ft. From the tests made, we have the following table:

Tests made on Fan at Pyne Shaft, Lackawanna Township, Pa.

Revolu- tions of engine.	Revolutions of fan.	Velocity of the air per minute.	Water- gauge.	cubic feet per	Amount of air exhausted per revolu- tion of the fan.	Horse power.
40	100	760	.6	79,800	798	7.5
45	1121/	835	.8	87,675	779	11.0
50	125	950	. 9	99,750	798	14.1
55	1371/2	1,016	1.0	106,680	776	16.8
60	150	1,108	1.1	116,340	775	20.1
68	170	1,255	1.2	131,775	775	24.9

After the above tests were completed the doors at the head of the shaft and slope were thrown open, making two inlets; the fan was run at the speed of the last test, and gave 141,750 cubic feet per minute. This is an exceedingly favorable showing, and if all our mine managers would devote part of their time in testing their ventilators in this manner they would be richly rewarded in the valuable information and experience gained, which must result in great good to themselves, to their employers and to the miners.

Another series of tests were made on the fan at Taylor shaft, Lackawanna township. The dimensions of this fan are as follows: Diameter, 14 ft.; face,  $4\frac{1}{2}$  ft.; area of section where the ventilation was measured, 92 ft.; and fan running two revolutions to engine's one. In this case we have the following table:

Tests made on Fan at Taylor Shaft, Lackawanna Township, Pa.

Revolu- tions of engine.	Revolu- tions of fan.	Velocity of the air per minute.	Water- gauge.	Amount of ventilation in cubic feet per minute.	Amount of air exhausted per revolu- tion of the fan.	Horse power.
40	80	725	.4	66,700	833.75	4.20
45	90	775	.6	71,300	792.02	6.74
<b>50</b>	100	862	.8	79,304	793.	9.99~
55	110	917	.85	84,364	766.94	11.29
60	120	1,012	1.1	93, 104	775.86	16.14
70	140	1,175	1,4	108, 100	772.14	23.84

The result of the test made on the power of the furnace at the Dodge shaft, Lackawanna township, by the same gentlemen, is equally creditable to them as the above. The furnace is a double one, with grate surface of 48 square feet for each, or a combined surface area of 96 square feet; the

Of the smaller companies and operators, I have two to report who have replaced furnaces with fans during the year. Messrs. Jones, Simpson & Co., have put in a twelve feet diameter fan at the Pierce colliery, in Archbald borough, and Messrs. William Connell & Co. have replaced their furnace with a fourteen feet diameter fan, which commenced running October 28, 1879. The Butler Coal Company have replaced a six feet diameter Patterson fan with a sixteen feet Guibal fan, and the little one has been removed to the Twin shaft, Pittston Coal Company, and the Hillside Coal and Iron Company have removed their fan from the Powder Mill shaft, in which the coal is exhausted, to a new air shaft sunk for the Spring Brook tunnel.

All the miscellaneous collieries are in a satisfactory condition at present, excepting the following: Jermyn's shaft and slope, Jermyn borough; Eaton colliery, Archbald borough; Filer colliery, Winton borough; Greenwood colliery, Lackawanna township; Hillside colliery, Pleasant Valley borough; Columbia mines, Pittston township, and the Beaver mines, Pittston borough. The first three named, the Greenwood, and the two last named, are the only very bad ones, and each of these must receive particular attention during the current year. The larger number of the collieries of the small operators, are in very good condition as to ventilation.

Taking the whole of my district, I think that it can be safely said, that the progress made during the year in bringing the condition of the collieries up to what it should be, is highly encouraging and satisfactory, and the work accomplished can be taken, no doubt, as an assurance that what is still wanting, will be done in due time.

## Prosecutions for Violations of Law.

It is one of the most unpleasant duties of the position of an inspector, that he feels compelled, in certain instances, to enter criminal proceedings against mine bosses or workingmen, for violations of law. I have often felt that I would prefer to suffer the penalty myself than do this, if I could escape my oath-bound duty by doing so. Whenever I have been forced to prosecute, I have done it "with malice towards none and charity towards all," and have never asked the courts to inflict any but a nominal punishment. But I have been sorely grieved at the course pursued by the operators, superintendents, and workingmen, in defense of the unfortunate parties prosecuted. I do not complain at their availing themselves of all legal and honorable means in defense of the accused, but when they assail the motive of the inspector, and attribute his action to a feeling of spite and a desire for revenge, in retaliation for some real or imaginary wrong they may be conscious of having perpetrated against him, they make the cross a very heavy one to bear. I cannot account for this, only as a verification of the old maxim, that "The guilty fleeth when no one pursueth him." But it grieves me that any one, who claims an intimate acquaintance with me, can imagine it possible for me to be capable of indulging in a low and mean desire for retaliation and revenge; for I thank God that

diameter by three and a half feet face. Everything about this colliery is first-class.

#### Hillside Shaft.

A plane has been extended six hundred and fifty feet long and a slope three hundred feet.

## Spring Brook Mines.

A self-acting plane six hundred and fifty feet long is in course of construction, and a slope three hundred and fifty feet long finished.

# Pennsylvania Coal Company.

Are sinking a new shaft at Lackawanna, Old Forge township. It is down forty-five feet below the surface. They are also pumping out the water in the *Carbon Hill shaft*, preparatory to working the coal out of that property.

## Dunn Colliery.

Is a new one, located in Old Forge township, about one thousand five hundred feet south of the Sibley shaft. It is owned by the Pennsylvania Anthracite Coal Company. There is a slope sunk to the coal, and are now sinking a shaft, which is down about fifty feet. There is also a new breaker in course of construction. Capacity, about six hundred tons per day.

#### Greenwood Colliery.

Shaft No. 1 is now down to the coal, and they are driving towards second opening. They have erected a new boiler, engine, and head house, and put in place new boilers and machinery. They have also built a new fan, four-teen feet diameter by four feet face.

#### National Mines.

The shaft has been finished and sunk to No. 5 seam of coal, which the company commenced in 1881. The second opening is not complete yet.

## Pine Brook Shatt.

The second opening and air-shaft, fourteen feet circular, that was commenced in 1881, has been finished, and the company have erected over it a double or two fans on one shaft. They are seventeen and a half feet in diameter by four feet face. These fans are fastened on the same shaft, about eight feet apart. They are the first of this pattern erected in this district, and they give a larger volume of air than any others in it. The style and drawings of this fan are fully described in Mr. G. M. Williams' report of last year, page 148 to 151.

## Lucas Shaft.

This is a new shaft, located at Green Ridge, city of Scranton—is owned and operated by the Lucas Coal Company, Limited. They are now working the G or big seam of coal. The shaft is 10×30 feet; depth one hundred and fifty feet to coal. The breaker is one of the largest in the val-

# COLLIERY IMPROVEMENTS FOR 1863.

#### Everhart Mines.

## P. BLEWITT:

DEAR SIR: We have made the following improvements at this colliery since we took possession in April, 1883: Sunk slope opposite breaker two hundred and sixty-eight feet to basin of Marcy seam; opened tunnel near plane at breaker (is in about fifty feet) to same seam coal, five feet thick bottom part, with four feet fire-clay parting, and four feet top coal above; put in three new boilers at old slope, also put one new hoisting engine at the slope near breaker; built and bought forty new mine cars; erected trestle work one hundred and fifty feet long over main track to slope near office; have driven through fault on north side, find a good vein of clean coal eight feet thick, opened airway and traveling road to same.

ALLEN & POOLE, Operators.

#### Fairmount Shaft.

Have sunk main shaft 16'×13' to the bottom or Red Ash seam two hundred and twenty-feet, and have commenced second opening shaft 8'×10', which was partly sunk in 1882; have put in a new safety-carriage, making two in main shaft; also got one-and-one-fourth-inch new wire rope in place of old one-and-one-eighth-inch.

A. Morris & Co.

#### Florence Shaft.

This has been finished, and it is in good working condition.

#### Stetler Shaft.

There has been a new slope finished in the mines, also the air-currents have been changed, making an improvement in ventilation.

#### Spring Brook Mines.

There has been a new breaker built at this mine, with a capacity for preparing and shipping six (600) hundred tons of coal per day.

#### Dunn Colliery.

Has been completed and is in good working condition.

## Greenwood Colliery.

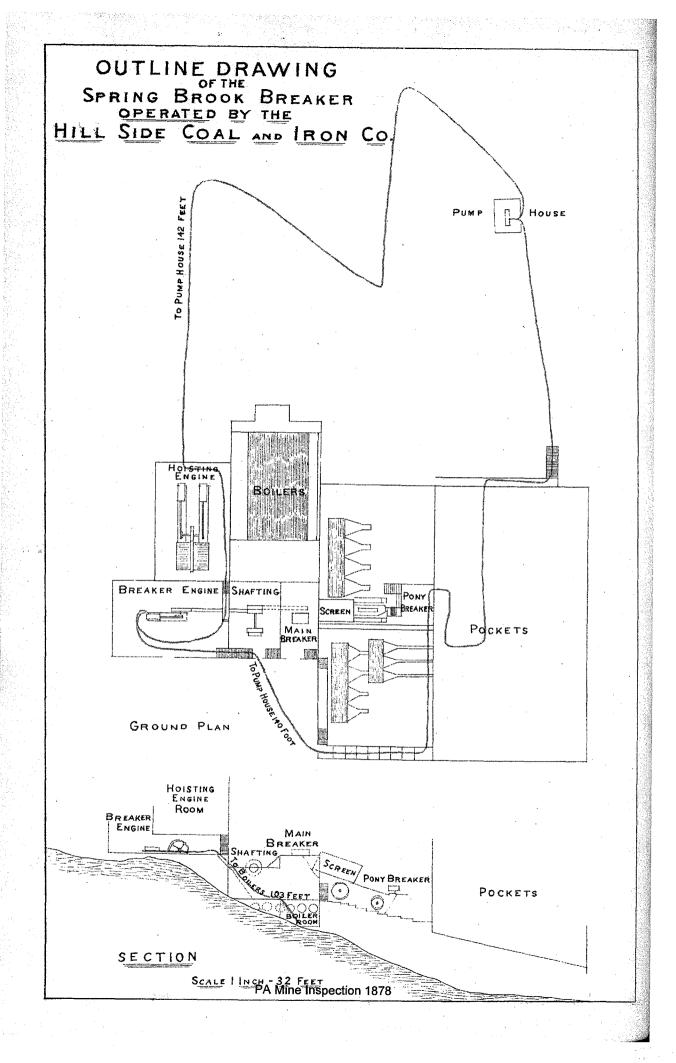
All the improvements are completed in No. 1 shaft, and are now sinking a slope on the north-west side of shaft.

## Sibley Colliery.

Has been improved by putting in an additional steam-pump and four more steam boilers.

#### National Mines.

There has been a connection made between the shaft and slope, which is used for a second opening.



# Spring Brook Coal Company, Limited.

A hoisting shaft to the top lift of Red Ash has been sunk: depth, 75 feet; 192 square feet sectional area.

Also a ventilating shaft: Depth, 75 feet; 100 square feet sectional area.

A haulage tunnel 205 feet long, 84 feet sectional area, from the top split of Red Ash to the bottom split of same, and a breaker of 600 tons per day capacity are the improvements reported by this company for the year 1896.

Remarks upon Fatal Accidents from October 29 to December 31, 1896.

During this period two persons lost their lives in the mines of this district, one by falling under a trip of loaded mine cars, the other by a fall of fire clay in face of chamber. The following is a description of these accidents:

On December 9th an accident occurred in the Continental mine, Delaware, Lackawanna and Western Railroad Company, which resulted in the instant death of a Welsh "runner" named David Phillips, 19 years of age.

He was running a trip of four loaded cars from the foot of No. 9 plane to the foot of a slope and was riding on the bumper between the first and second cars, when he fell, meeting instant death. General rule 47 of the Anthracite Mine Law of 1891 reads in part as follows: "Where cars are run on gravity roads by brakes or sprags, the runner shall ride only on the rear end of the last car, etc., etc." Had this important rule been observed, the accident would not have occurred.

On December 23 an accident occurred in the Tripp slope, Diamond mines, Delaware, Lackawanna and Western Railroad Company, which resulted in the instant death of a Welsh miner named Edward Lewis, 34 years of age.

In this mine the two benches of coal which make up the vein are separated by a layer of fire clay two feet six inches in thickness. The bottom bench, which is three feet six inches thick, is mined first, and in order to make height, the fire clay bench is taken down. Upon investigating this accident. I found that Edward Lewis had fired a blast in this fire clay which did not bring it down. The laborer and himself afterwards endeavored to pull it down with drills, and failing to do so the miner concluded it was safe to work under, but no sooner had he reached the "face," the fire clay fell, killing him instantly.

old workings of Greenwood No. 1 in No. 8 drift. Rope haulage road No. 2 driven 300 feet to its limit. No. 2 slope, Checker vein extended 900 feet.

Spring Brook.—No. 2 slope Red Ash vein driven 300 feet to limit of workable coal. No. 1 plane Red Ash vein extended 350 feet.

#### ELLIOTT McCLURE AND COMPANY

Sibley Colliery.—The new breaker, boiler house and shaft have been completed, and the lower Dummore veins are in course of development.

#### O'BOYLE-FOY ANTHRACITE COAL COMPANY

O'Boyle-Foys Colliery.—This colliery is developing rapidly and promises to be one of the largest producers in the basin during the life of the property. At present a tail-rope system is being installed.

I have had no call to investigate accidents at this colliery, which speaks well for the management, as the vein being mined has a very bad roof.

## DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Hallstead Colliery.—Two new, very strong auxiliary dams will be built of concrete, on the rock planes, driven from the Red Ash to the Marcy vein.

#### RELIANCE COAL COMPANY

Reliance Colliery.—The second opening for the Clark vein in this mine has been secured after much difficulty. At present the Clark vein and shaft are filled with water, which is overflowing into the Twin shaft workings at the Marcy vein. This water comes from the Pennsylvania Pittston vein.

A new boiler plant is in course of construction.

## HUDSON COAL COMPANY

Spring Brook Colliery.—The operations at this mine are confined to second mining almost exclusively, which is being done with care. Langeliff Colliery.—No. 2 slope in the Red Ash vein is now completed, having been driven a distance of 800 feet. The mines are principally a pillar proposition, and are in fair condition.

## JERMYN AND COMPANY

Jermyn and Company.—The coal that was being prepared at No. 2 breaker is now conducted underground and prepared at No 1 breaker; a new washery has been erected at No. 2 on the site of the old breaker recently destroyed by fire. The estimated capacity of this washery is not less than 700 tons per day.

I consider these mines in a very satisfactory condition when the fact that there are over two hundred numbers robbing is taken into consideration. Every suggestion of the Inspector is carried out faithfully by a corps of competent officials with a superintendent who is constantly trying to improve matters.

## ELLIOTT McCLURE AND COMPANY

The Sibley Mine has made an excellent record during the year. The two upper veins are being robbed and every precaution is employed to protect the workmen. The lower veins have been developed to a point where they supply a generous proportion of the total output.

Ventilation and drainage are good.

## CONNELL ANTHRACITE MINING COMPANY

Connells Colliery made a very good showing for the year. A manway was constructed from the shaft through the workings to the surface. This was very much needed, as it keeps the employes from the haulage road, and does away with the man holes. Ventilation and drainage good.

## HILLSIDE COAL AND IRON COMPANY

The Consolidated Colliery has added another feeder in the addition of Cotters slope, a new opening driven to the surface vein for the purpose of robbing pillars. Considerable second mining is also being done in the shaft and slope workings. Ventilation and drainage good.

## HUDSON COAL COMPANY

Suring-Brook and Langcliff are old collieries. The second mining at Spring-Brook will be nearly completed during the coming year. At Langcliff the territory is very large and the workings very old. Occasionally squeezes occur, which are handled in a very safe and practical way. Ventilation and drainage good.

# NORTHERN ANTHRACITE COAL COMPANY

Murrays Colliery is being continually improved as to roads, drainage and ventilation. No fatal accident has occurred at this colliery during my three years of office, although the Sullivan county collieries have a very bad falling roof to the B or principal vein. This speaks volumes for both officials and employes.

# O'BOYLE-FOY ANTHRACITE COAL COMPANY

O'Boyle-Foys Colliery. The management exercises the greatest care and no fatal accident has occurred at this colliery during the past three years. About three miles of tail and main rope have been installed for transportation. Ventilation and drainage good.

## AUSTIN COAL COMPANY

Austin Colliery is reduced to second mining almost exclusively. I do not recall a fatal accident inside for the past three years. However, there were two very unfortunate accidents outside during the