

Miscellaneous Coal Companies.

At the Steven's colliery a new Guibal fan 20 feet in diameter was erected on the air shaft connected directly to the crank of the fan. all the connections to the fan are not completed at this writing.

At the Avoca colliery a new fan 12 feet in diameter was erected on the air shaft which ventilates both seams in the shaft and does away with the furnace which ventilated the bottom vein.

At the clear Spring colliery a new Guibal fan 20 feet in diameter has been erected on the air shaft taking the place of the old Dawson fan which has been abandoned. This fan increases the quantity of air considerably.

At the "William A" colliery two new shafts have been sunk from the surface to the Red Ash seam, a depth of 164 feet by William A. Connell Sons and on the west side of the Lackawanna river in Old Forge township, Lackawanna county.

The hoisting shaft is $16\frac{1}{2} \times 11$. The other shaft which is used for hoisting and lowering men and for ventilation is 27×11 feet area. A new Guibal fan 17 feet in diameter has been erected on the air shaft.

A new breaker has been built and supplied with first-class machinery for cleaning and preparing a large output of coal; the capacity of breaker is about 1,000 tons per day. It was started to prepare and ship coal in the month of May, 1890. The machinery in and around the breaker is properly fenced or boxed off for the safety of the employes.

The Babylon Coal Company, operated by Simpson, Watkins & Co., has opened up a new colliery on the west side of the Lackawanna river, opposite the town of Duryea. The openings consist of two shafts sunk to Red Ash seam, a depth of 289 feet. The hoisting shaft is 12×16 , the other shaft is used for an air shaft and for hoisting and lowering the men; it is 12×18 . A new fan has been erected on this shaft 20 feet in diameter which supplies the workings with a large quantity of air. A new breaker has been erected which is a large and commodious structure with a capacity of 1,200 tons per day. It is heated throughout with steam. It was started to prepare coal for market in the month of July, 1890. An inside rock tunnel was driven from the 5-foot to the 6-foot seam, a distance of 100 feet; sectional area 12×7 .

Jermyn & Co. have opened a new colliery close to the town of Old Forge in Lackawanna county. The openings consist of two shafts sunk from the surface to the Red Ash seam, a depth of 236 feet. A new fan 18 feet in diameter has been erected on the air shaft, which supplies the workmen with a large quantity of fresh air.

A new breaker has been built and supplied with the latest improved machinery for cleaning and preparing coal for market. Its capacity is about 800 tons per day. It started to prepare and ship coal in the month of July, 1890.

The old frame tower on coal shaft has been replaced with a substantial structure of yellow pine.

The steam plant consisting of 18 cylinder, 1 return tubular and 1 return porcupine boiler is being replaced with sterling boilers. This work is now under way, four batteries of sterling boilers being in place.

Babylon Colliery.—A tunnel has been driven from the middle to bottom split of Red Ash vein, near foot of shaft.

JERMYN AND COMPANY

Jermyn No. 2.—Slope driven from outside to the Top vein.

Jermyn No. 1.—Installed Jeanesville pump at Jermyn No. 3, 3,500 gallon capacity.

Removed four tubular boilers from Jermyn No. 3 to No. 1 boiler plant, thereby making one plant of tubular boilers instead of heretofore three tubulars and three cylinders at No. 1 and four tubulars at Jermyn No. 3.

A slope 300 feet long was driven from Clark vein to 1st Dunmore vein for ventilation and transportation.

Tunnel driven from No. 1 to Jermyn No. 3 in the Baltimore vein.

PENNSYLVANIA COAL COMPANY

The new breaker that was being built in 1903 started up work on February 1, 1904. There is being built at present a new steam plant at the breaker, Sterling boilers, capacity 1,704 horse power, to replace the 900 horse power Babcock and Wilcox boilers, these to be removed elsewhere.

ELLIOTT, McCLURE AND COMPANY

Installed rope haulage in the Clark vein. Enlarging the second opening which has resulted in a great improvement in the ventilation. The operation of small pumps and engine in No. 1 Dunmore vein by compressed air.

A new Jeanesville compound duplex pump 17x28x16x36 inch, located in the Clark vein now pumps all the water to the surface.

The cribbing in the up-cast has been replaced by 22 feet of concrete.

They have also erected four stacks 48 inches by 80 feet, furnishing them with good draft for their boilers.

DELAWARE AND HUDSON COMPANY

Greenwood No. 2.—Rope haulage road No. 1 driven 1,200 feet to
9—23—1904

JERMYN AND COMPANY

Jermyn No. 1 Colliery.—The main shaft was sunk from No. 2 Dunmore to No. 3 Dunmore, a distance of 55 feet. A "Tail Rope" engine was installed outside to haul coal up slope to outside from top vein and east middle vein. No. 3 or Nickle Plate shaft was recribbed.

Jermyn No. 2 Colliery.—A slope was driven from Marcy vein to Clark vein, a distance of 300 feet on a 12 degree pitch. A rock plane tunnel was driven from Dunmore No. 2 vein to Clark vein, a distance of 328 feet on a pitch of 17 degrees.

DELAWARE AND HUDSON COMPANY

Greenwood Colliery.—No. 2 slope in Checker vein extended 430 feet for development. New drift to New County vein opened, and surface railway constructed from mouth of same to head of No. 2 slope. Bore hole 256 feet deep put down for compressed air.

ELLIOTT, McCLURE AND COMPANY

Sibley Mine.—The shaft has been sunk 115 feet from the Clark vein cutting No. 2 and No. 3 Dunmore veins and are now at work opening No. 3, the No. 2 being developed from an inside slope. Rope haulage has been installed in the bottom split of the Clark and in No. 2 Dunmore, and are at present installing a rope haulage in the New County vein. The mountain plane in the Clark vein has been extended 750 feet. A new stable has been built in the Clark vein. The breaker has been equipped with additional Emory slate pickers; a new 50 ton Barker track scale has been placed owing to the increased capacity of railroad cars.

a brick washhouse at boiler house for the firemen, equipped with steel lockers and other improvements which make it modern in every respect.

LEHIGH VALLEY COAL COMPANY

Seneca Colliery, Outside.—The fire that developed from a smouldering condition in the old culm bank, and threatened the destruction of the breaker, was isolated by a trench cut through the bank. The Coxey shaft fan house was protected from sparks of passing engines by a corrugated iron, and the shaft is completely recribbed. 5276 feet of diamond drill test holes were completed for protection against accidents, in testing cover limits over Pittston and Marcy veins. A Williams crusher was installed for Pittston vein flushing. Inside.—A 4 inch drainage hole drilled from Marcy to red ash vein was completed. Two rock tunnels, driven through the upthrow in the red ash vein, were finished during the year.

William A and Lawrence Collieries, Outside.—An 8 inch rope haulage hole was drilled from surface to red ash vein at Babylon mine. Beginning January 1, 1907, the Lawrence breaker will be operated as a washery only, the coal being prepared at William A breaker. Inside.—A new haulage road has been driven 2,500 feet through middle split pillars to Babylon mines to minimize transportation. The road was continued in the bottom split across the Babylon tract to the westward, where a 300 foot tunnel opens up the virgin coal. This haulage road will be eventually connected with No. 10 tunnel at Campbell's Ledge, when it will be a continuous road of 16,000 feet in length.

HILLSIDE COAL AND IRON COMPANY

Consolidated Slope.—They are steadily opening on the bottom Red Ash vein at Consolidated slope, and have also just opened on the split of the Checker underlying the main Checker vein, about six feet apart. This has been done direct from the Consolidated main slope.

HUDSON COAL COMPANY

Langcliff Colliery.—No. 2 slope in Red Ash vein extended 380 feet. One 54 inch locomotive type boiler installed.

JERMYN AND COMPANY

Jermyn No. 1 Colliery.—This mine went on strike February 13 and the strike continued until August 23. On October 27 a cyclone destroyed the breaker which is now being rebuilt. During the suspension new sills and pockets were placed under the breaker.

Jermyn No. 2 Colliery.—The men at this mine went on strike February 13 and remained out until November 1, when operations were again resumed. A new rope haulage system was installed in the outside slope to the Clark and Marcy veins.

ELLIOTT, McCLURE AND COMPANY

Sibley Colliery.—On June 23 a fire broke out in the breaker about 10:45 A. M. and destroyed it, also the engine house, boiler house and supply house. A new breaker, boiler plant and other buildings are

CONDITION OF COLLIERIES AND IMPROVEMENTS

PENNSYLVANIA COAL COMPANY

At Central Colliery, an improvement has been made in the matter of access to the ash pit of the boiler house. Previously there has been but one end open, the other being walled, and the whole ventilated by a steam jet blowing in a stack. The new arrangement does away with that, and the pit is now open from both ends admitting a free passage of pure air.

An egg shaped concrete water course about a mile long, constructed through the workings of both Central and Old Forge collieries, gathers the water from these workings and delivers it to a very modern and unsurpassed pumping plant at No. 2 shaft.

The No. 2 Old Forge shaft has been idle since June and the plant and workings have been completely overhauled. The shaft is now concreted from bed-rock and raised to accommodate a grade, which permits the abandonment of the old grade crossing for mine cars on the main road, the cars now being conducted over a new steel and concrete bridge. A new steel tower has been erected to replace the old one, and also a new brick engine house and hoisting engine. At the Mountain drifts a new shaft has been sunk to the Dunmore vein tapping the advanced workings of No. 2 shaft, a 20 foot fan, electrically propelled, has been installed and encased in a brick engine and fan house, and also a fan drift, which guarantee an adequate supply of ventilation. The new shaft is used for an upcast exclusively, while the old fan shaft at No. 2 provides an additional down-cast.

I consider the Pennsylvania collieries, Old Forge and Central, to rank with the very best in my district.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

The Hallstead Colliery was closed down in September, after a conference with the Inspector, it being decided to take up the matter of some much needed improvements. Mining is suspended, but a force of men are regularly employed thus far making the changes referred to. The Pyne and Taylor collieries, which were transferred to me April 1, 1908, from the Fourth district, are in good condition. A new fan shaft is being sunk at the Pyne to supply ventilation to the Dunmore veins, which will later be developed, and a 20 foot fan will be installed thereon.

JERMYN AND COMPANY

At Jermyrn Collieries a new pump has been installed at No. 2 shaft to return the water from the washery, the silt being run into the old workings. A new washery has been completed near No. 1 breaker; here the silt is first deposited in a settling tank, and the water passes off into the creek, it being first supplied from the Clark vein in No. 3 shaft by the big pump, which delivers it to the top of the washery over one thousand feet removed from the shaft.

IMPROVEMENTS

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Taylor Colliery.—Installed one 6½ ton electric locomotive in Big vein. Rock plane from New County to Big vein. Concreted main shaft from surface to rock. Installed electric track pump on main gangway, Clark vein. Electric pump on B gangway, Clark vein, 300 gallons capacity. New concrete breaker and washery in course of erection.

Hallstead Colliery.—Two rock planes from No. 1 Dunmore to Clark vein. Installed drums, branches, ropes, etc., on one of the above planes, one being second opening. Re-opened Marcy vein tunnel, and installed fan to ventilate same. Covered steam lines, inside. Remodeled breaker, installed pickers, etc. Installed ash handling system at Feder-Dam boiler plant.

JERMYN AND COMPANY

Jermyn Nos. 1, 2 and 3 Collieries.—New slope and shaft to surface vein. New slope and air shaft to Marcy vein. New drift and air shaft to Clark vein. New fire room 2,000 horse power, also new jigs and shakers in the breaker.

NORTHERN ANTHRACITE COAL COMPANY

Murrays Colliery.—Wooden tower over shaft has been replaced by a steel structure.

JERMYN AND COMPANY

Jermyn Nos. 1, 2, 3 Colliery:

No. 1.—Barn on inside torn out and mules taken to outside barn. A new slope driven from outside to Marcy vein. An electric plant was built for the purpose of lighting inside and outside.

No. 2.—A new concrete barn was built to take the place of wooden structure. Also tail rope engine house made of concrete.

HILLSIDE COAL AND IRON COMPANY

Consolidated Colliery.—A new opening was made to the Red Ash vein from the outcrop, which affords a second opening directly to that vein.

MOOSIC COAL COMPANY

Moosic Colliery.—A new breaker, 30 feet by 48 feet by 52 feet high, was built and necessary machinery placed therein for the preparation of coal.

An 80 horsepower electric hoist was installed at Corey slope and a fireproof engine house built. A fan 15 feet in diameter, driven by a 55 horsepower motor, was installed in a fireproof fan house to properly ventilate the workings of the Corey slope.

Central Colliery.—No. 13 shaft has been abandoned as a hoisting shaft. A motor road was made from No. 13 to Laws shaft, and the coal is hoisted at Laws shaft. No 13 shaft is only used as a pumping station and for lowering and hoisting men.

A new electric pump has been installed in Laws shaft, capable of handling 1,000 gallons of water per minute.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Pyne Colliery.—A second opening and return airway, 7 by 12, was driven from the Clark to the No. 1 Dunmore vein, pitch 25 degrees, total length 78 feet. A Welch automatic overwind device, or engine stop, was installed on the hoisting engines.

Taylor Colliery.—Concrete breaker and washery completed and put in operation during the month of July.

JERMYN AND COMPANY

Jermyns Colliery.—A new wash-house was built of brick and concrete, 80 by 20 feet, to accommodate 200 men and boys, with shower bath and lockers. A supply house was built of brick and concrete, 80 by 24 feet. Made slope from outside to Clark vein, to be used as second opening, also air shaft from Clark vein to Monkey vein. Balance plane in No. 2 mine. A new tower was erected at No. 3 shaft.

ELLIOT, McCLURE AND COMPANY

Sibley Colliery.—Concrete stables were completed in No. 2 Dunmore vein, also one in No. 3 Dunmore vein. Two Lehigh Valley double jigs for the preparation of egg and stove coal were installed in the breaker. An additional air compressor is being installed. A new compound duplex Jeanesville pump, with steam cylinders 22 and 34 inches, 16 inch plunger, 36 inch stroke, is being placed in position in the Dunmore vein. Big vein is being opened by a drift north of shaft. This drift has been driven about 300 feet.

HILLSIDE COAL AND IRON COMPANY

Consolidated Colliery.—Made a new opening on the North dip for hoisting slope for Red Ash vein. Engines moved from inside to outside. Fan and fan-house, car and blacksmith shop, barns, storehouses, locomotive house, foreman's office, emergency hospital, wash-house and boiler plant, were built near slope. This was done on account of fire in surface vein under location of old buildings near breaker.

20 by 7 feet and built concrete fan drift connecting with upcast compartment of No. 4 shaft. The fan is driven by an 18 by 30 inch Hamilton Corliss engine, single. Completed reinforced concrete partition wall between the upcast and downcast compartments of No. 4 shaft, a distance of 680 feet. Commenced to build new wash house near No. 2 shaft to contain shower baths and 200 lockers.

Coal Brook Colliery.—Installed two 6.5-ton electric locomotives with drum attachment for hauling coal and a 10-foot steel Buffalo fan for ventilating No. 6 tunnel. Built an addition to the boiler house 51 by 56 feet. Installed a General Electric 1,000 K. W. generator, driven by a pair of engines, 24 by 44 by 22 inches. Installed a new engine house and a 20 by 24 inch engine for No. 1 haulage and a 21-ton locomotive for hauling coal from the mines to the breaker. No. 22 plane was driven 2,000 feet.

Powderly Colliery.—No. 1. Installed a 6½-ton electric locomotive with drum attachment for hauling coal inside. No. 9 plane was equipped with a 20 H. S. P. electric house. Powderly tunnel driven from the surface to the Clark vein, a distance of 600 feet.

Jermyn Colliery.—Installed a General Electric 25 K. W. generator, driven by a 22 by 22 inch engine, and built a brick addition to the power-house, 24 by 51 feet. Two 6.5-ton electric locomotives with drum attachment installed for mine work. Tunnel driven 200 feet from surface to Clark vein. Driving a tunnel from the surface to the Dunmore vein to be 300 feet in length when finished. It is about one-third completed.

Gravity Slope Colliery.—Completed a breaker, 92 by 114 feet with a capacity of 1,500 tons per day, to supersede the old White Oak breaker. A concreted washhouse, 16 by 50 feet, was built for Gravity slope. A wooden washhouse, 16 by 24 feet was built for No. 6 tunnel. Installed a 16-ton locomotive for hauling coal from the mines to the breaker. Completed a water tight pump room, 20 by 60 feet, and a chute 14 by 18 feet. Installed two centrifugal electrically driven pumps with a capacity of 2,500 gallons each. Completed an engine house, with 14 by 20 foot engines, for lowering coal on No. 8 plane. Installed four 300 H. P. Stirling boilers in brick house and one generator 250 K. W. at breaker, and furnished power for pumping plant and light for breaker. Completed one engine house, 20 by 24 feet, and installed a 14 by 20 foot Flory engine on No. 8 plane and No. 12 tunnel.

MINE FOREMEN'S EXAMINATIONS

The annual examination of applicants for certificates of qualification as mine foremen and assistant mine foremen was held in the Carbondale High School Building, June 23 and 24. The Board of Examiners was composed of P. J. Moore, Inspector; Richard Beers, Superintendent, Carbondale; John F. Boland, Miner, Carbondale, and David Evans, Miner, Olyphant.

The following persons passed a satisfactory examination and were granted certificates:

MINE FOREMEN

Thomas Davies, Charles F. Moore, Carbondale; Thomas J. Sullivan, Thomas H. Thomas, Patrick Cowley, Olyphant; Edison Thomas,

Considerable work has been done grading the main haulage roads in No. 2 shaft to eliminate the present grades.

Central Colliery.—For better fire protection a new fire pump was installed outside.

Rebuilt the head frame over Laws shaft.

Considerable work has been done filling in the old workings in the Red Ash veins with culm and broken rock from the breaker.

A saw mill, operated by electricity, has been built to cut the props for the colliery.

The engine and pump house at No. 13 shaft was rebuilt, making it fireproof.

A rock plane, 7 by 12 feet, on a 20 degree grade, was driven from Nigger vein to Clark vein, in Laws shaft, a distance of 470 feet.

An air shaft, 10 by 14 feet, was sunk from the surface to the Nigger vein for a second opening and ventilation.

A traveling way was driven from surface, striking the crop of the Clark vein near Laws shaft. This provides a second opening and a good traveling way from this seam.

JERMYN AND COMPANY

Jermyns Colliery.—Old revolving screens taken out and new shaking screens put in breaker.

Three pairs of compounded rollers were installed in the breaker.

HILLSIDE COAL AND IRON COMPANY

Consolidated Colliery.—Considerable work has been done rebuilding the washery pockets.

At Consolidated drift an air shaft has been sunk from the surface to the Red Ash vein to provide better ventilation and at the same time makes another second opening to the surface.

A slope has been driven from the surface into the top split of the Stark vein at Consolidated drift.

At the Red Ash slope an additional pump to pump to the surface has been installed.

The old Brown slope near Consolidated breaker has been reopened for the purpose of taking out the pillars.

MINE FOREMEN'S EXAMINATIONS

The annual examination of applicants for certificates of qualification as mine foremen and assistant mine foremen was held in the High School, Old Forge, June 6 and 7.

The Board of Examiners was composed of Augustus McDade, Inspector; R. W. Rees, Superintendent, Rendham; Morgan E. Griffiths, Miner, Taylor; John F. Hayes, Miner, Old Forge.

The following persons passed a satisfactory examination and were granted certificates:

MINE FOREMEN

Nelson N. Nichols, Thomas Farmer, Stanley Gleason, David Beacham, Scranton; Patrick L. Heneghan, Thomas Loftus, William H. Cordy, Old Forge; John T. Harris, Thomas J. Jones, Alfred Jones,

shaft to the Clark vein. A new fireproof motor barn has been built near the foot of No. 1 shaft. A new and large hospital has also been made on the inside at this place. At Coray slope a fireproof motor barn and a fireproof hospital have been placed in the Clark vein.

Central Colliery.—Overwinding devices have been placed on the engines at Laws and No. 13 shafts.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Taylor Colliery.—Installed one 1,500 gallon centrifugal pump, for the purpose of pumping water from Clark vein to surface. Tunnel driven from Rock vein to bottom split of Diamond vein. Air shaft sunk from Clark to No. 1 Dunmore vein, for the purpose of ventilating Dunmore vein. Brick and concrete washhouse with steel lockers, erected on the outside.

Halstead Colliery.—Re-opening Nos. 2 and 3 Dunmore veins. Rock tunnel made from Clark to Marcy vein. Re-cribbed Feeder Dam shaft. Slope made from surface to Marcy vein. Built new reservoir for Feeder Dam shaft, to replace old one.

JERMYN AND COMPANY

Jermyn Colliery.—Installed 3 electric pumps. Concreted No. 3 shaft and fanway.

Inside: A main haulage-road was made from Old Forge shaft No. 2 workings to Sibley shaft workings, and the coal that is being mined in Sibley shaft is hauled over this road to the foot of Old Forge No. 2 shaft. It is then hoisted to the surface, and from head of the shaft it is pulled by locomotive to Old Forge breaker, where it is prepared.

JERMYN AND COMPANY

Jermyn Colliery.—Outside: One motor generator was installed, and a new wash house was built at No. 2 shaft. Also replaced 60-pound rails on empty and loaded branches above and below the breaker with 90-pound rails.

Inside: A slope was driven from No. 2 to No. 3 Dunmore vein. Opened up No. 3 Dunmore vein at No. 3 shaft. Also installed two coal-cutting machines and an engine at No. 3 shaft.

MINE FOREMEN'S EXAMINATIONS

The annual examination of applicants for certificates of qualification as mine foremen and assistant mine foremen was held in the High School, Old Forge, June 6 and 7. The Board of Examiners was composed of Augustus McDade, Inspector, Rendham; David Lloyd, Superintendent, Scranton; Morgan E. Griffiths, Miner, Taylor; Michael Cosgrove, Miner, Old Forge.

The following persons passed a satisfactory examination and were granted certificates:

MINE FOREMEN

Michael Clunнан, George G. Williams, Patrick J. Clunнан, Edward Green, Rendham; David J. Griffiths, George Cavill, Benjamin Jones, Thomas Howells, Evan Jenkins, William T. Rogers, Arthur Whitehouse, Frank Jordan, Taylor; James J. Dixon, Olyphant; John T. Painter, Stephen F. Sick, Ralph Sidney Cordy, Thomas F. Lynch, John Nelson, Martin Lydon, Old Forge; Patrick Loughery, Joseph J. Regan, James J. Dunleavy, Charles Keith, William J. Matthews, Jr., Avoca; Elmer Jones, Plymouth; William Dick, Arthur Harrison Tucker, William Kelly, John Jennings, James Martin, Luther Titus, Frank Jennings, Moosic; John R. Mould, Kingston; Donald D. Crusser, Arthur B. Emanuel Wilkes-Barre; Thomas J. Morgan, Seth Griffiths, Emlyn Davies, Louis H. Leitner, Thomas W. Dawson, William Morgan, Harry Smith, Michael J. Rafferty, Reese Jones, Augustine McGuire, Edward J. Davis, Scranton; Frank Bacher, Duryea; James Pugh, Greenwood; James O'Hara, Minooka.

ASSISTANT MINE FOREMEN

Patrick Murphy, William R. Davis, Samuel Semenza, Old Forge; Steve Paytas, Joseph R. Paytas, Taylor; Thomas Dawson, James Perry, Duryea.

CONDITION OF COLLIERIES

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Taylor, Pyne and Holden Collieries.—Ventilation, drainage and condition as to safety, good. Pillars are being removed.

Halstead Colliery.—Ventilation, drainage and condition as to safety, fair. Pillars are being mined.

PENNSYLVANIA COAL COMPANY

Old Forge and Central Collieries.—Ventilation, drainage and condition as to safety, good. Pillars are being mined.

JERMYN AND COMPANY

Jermyn Colliery.—Ventilation, drainage and condition as to safety, good. Pillars are being mined extensively.

DELAWARE AND HUDSON COMPANY

Langcliffe Colliery.—Ventilation, drainage and condition as to safety, good. Mining pillars exclusively.

HILLSIDE COAL AND IRON COMPANY

Consolidated Colliery.—Ventilation, drainage and condition as to safety, good. Pillars are being removed.

MOOSIC COAL COMPANY

Moosic Colliery.—Ventilation, drainage and condition as to safety, good.

IMPROVEMENTS

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Taylor Colliery.—Inside: Installed one 7-ton electric locomotive.

Pyne Colliery.—Inside: Installed four new electric locomotives.

Outside: Installed recaging device at head of breaker, one Sullivan 10 by 10 portable electrically driven air compressor with Ingersol Rand jackhammers, also an electric motor drive to take the place of steam drive in breaker annex.

JERMYN AND COMPANY

Jermyn Colliery.—Inside: Installed one electric coal cutting machine in No. 3 Dunmore vein, No. 3 shaft.

DELAWARE AND HUDSON COMPANY

Langcliffe Colliery.—Inside: Installed two 800 gallon electric pumps.