be experienced, competent and sober men; the parties having charge know their duty in case of death or serious accident ; the shaft landing is protected by a vertical safety-gate.

NATIONAL ANTHRACITE COLLIERY.

This colliery is located in the city of Scranton, and located about 1,000 feet south-east of the Lackawanna river. It is operated by the W. V. R. R. and C. Co. Wm. Connell is general superintendent, John Humphrey is mining boss and Robert Penman is outside foreman.

Description.—The opening to the coal consists of four tunnels; there is a breaker connected with these mines; they mine and prepare about 800 tons of coal per day; they employ 73 miners 40 laborers, 30 drivers, 5 door-boys and 18 company men in the mines; 45 slate pickers, 6 head and plate men, 5 drivers, 20 company men, 4 mechanics and 2 bosses outside; in all 248 men and boys; they are working the No. 2 and 8 veins; No. 3 vein is commonly called and known as the Clarke vein; average thickness of No. 2 is 8 and No. 3 vein is 9 feet; they work headings and air-ways, from 12 to 15 and chambers 25 feet wide; they leave pillars 15 feet wide to sustain the roof; they leave cross-entrances 60 feet apart for the purpose of ventilation; the roof is rock; the mines are in a good work-

ing condition. Ventilation is produced by furnaces; the in-takes are located at mouth of tunnels, area about 96 feet; the out-casts are located in furnace air-shaft, area about 96 feet; the amount of pure air is 21,800 cubic feet per minute; the main doors are hung so as to close of their own accord; they have attendants at main doors; they have double doors on main traveled roads, and an extra one in case of an accident to any of the others; the amount of ventilation has been measured and reported; ventilation is good. Machinery.—They use 1 breaker engine of 25-horse power, and 2 hoisting en-

gines, each 30-horse power; there is no machinery required at the tunnels.

Remarks.—They have furnished a map of mines; they have a second opening for each tunnel; they have a house for men to wash and change in; the mining boss seems to be a practical and competent man; he has a fire boss to assist him; there are no boys working in the mine under 12 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; the breaker machinery is boxed and fenced off so that operatives are safe.

MEADOW BROOK COLLIERY.

This colliery is located in the city of Scranton, and situated about 1,000 feet east of the Lackawanna river: it is operated by William Connell & Co.; Thomas L. Jones is mining boss, and William Humphrey is outside foreman.

Description.—The openings consist of 4 tunnels, namely, Nos. 1, 3, 4 and 6; there is a double breaker connected with these mines; they mine and prepare about 480 tons of coal per day; they employ 70 miners, 74 laborers, 20 drivers, 8 door-boys and 13 company men in the mines; 60 slate pickers, 8 Lead and plate men, 2 drivers, 17 company men, 6 mechanics and 3 bosses outside—in all 281 men and 20 states and 20 sources and 2 bosses outside—in all 281 men and boys: they are working No. 5 vein in Nos. 1, 3 and 6 tunnels, and No. 3 vein in No. 4 tunnel: they work headings and air ways from 12 to 15, and chambers about 25 feet wide; they leave pillars about 15 feet wide to sustain the roof; they leave cross-sutrances about 60 feet apart for the purpose of ventilation ; the roof is hard rock ; the mines are in a good working condition.

Ventilation is produced by means of furnaces; the intakes are located at mouth of tunnel, areas from 72 to 90 fect; the upcasts are located in furnace air shafts, areas from 72 to 90 feet; the amount of pure fresh air is 64.800 cubic feet per minute; the main doors are hung so that they will close of their ovn accord; they have attendants at main doors; they have double doors on m in travelled roads, and an extra one in case any of the others get broken; the amount of ventilation has been measured and reported according to law; venti'ation is good.

Machinery.—They use no machinery at the tunnels, but at the breaker they use one breaker engine, 45-horse power, and 2 locomotives, 20-horse power each, to haul coal from the drifts to the breaker to get prepared; the boilers have been cleaned and examined and reported in good condition; they have a steam gauge to indicate the pressure of steam.

to indicate the pressure of steam. Remarks — They have furnished a map of mines; they have second openings for each tunnel; they have a house for men to wash and change in; the mining boss seems to be a practical and competent man; he has persons to assist him; there are no boys working in the mines under 12 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; the breaker machinery is fenced and boxed off so that operatives are safe. They use one locomotive of 20-horse power to run coal from the mines to the breaker.

LOCAL COAL SALE MINES IN THE 12TH WARD OF THE CITY OF SCRANTON.

One of these mines is operated by Gardner, Clark & Co.; the opening to the coal consists of a tunnel and a "slope which they are just sinking;" there is a small breaker connected with these mines which has a capacity of cleaning and preparing 80 tons of coal per day. The other is operated by John Gibson & Co.; they work at these two mines 40 men and boys; this vein is called the Rolling Mill vein; average thickness, 5 feet; the roof is good hard rock; the mines are not systematically worked.

SCRANTON COAL COMPANY'S MINE.

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This mine is located in Lackawanna township and situated on the west bank of the Lackawanna river; the slope is 550 feet long to the first lift, then a level of 270 feet, and then 450 feet long to the bottom; it is 7 feet high by 16 feet wide; it is operated by the Delaware, Lackawanna and Western railroad company. Richard M. Hackett is mining boss and John A. Mears is outside foreman.

Description.—There is a breaker connected with this mine 600 feet away; they mine and prepare about 450 tons of coal per day; they employ 59 miners, 59 laborers, 29 drivers, 8 door-boys and 22 company men in the mine; 56 slate pickers, 10 head and plate men, 5 drivers, 20 company men, 6 mechanics and 2 bosses outside; in all 276 men and boys; they are working the "G" or Big vein; average thickness 13 feet; they work headings 12, airways 18 and chambers about 30 feet wide; they leave pillars from 15 to 21 feet wide to sustain the roof; they leave cross-entrances about 60 feet apart for the purpose of ventilation; the roof is good slate; the mine is in good working condition.

Ventilation is produced by means of a furnace located 1,500 feet from the main opening; the intake is located at mouth of drift north of breaker, area 42 feet; the outcast is located in Furnace air shaft, area 36 feet; the amount of fresh air is 24,000 cubic feet per minute; there is noxious, poisonous and inflammable gas evolved in the mine; the mine is examined every morning before men go to work and every evening to see that the nain doors are all closed; the main doors are hung so that they will close of their own accord; they have attendants at main doors; they have double doors on main traveled roads and an extra one in case of an accident to any of the others: the amount of ventilation has been measured and reported; ventilation is good.

and reported; ventilation is good. Machinery.—They use one hoisting engine of 80-horse power, one hoisting engine inside of 60-horse power, two steam pumps of 25 and 18-horse power each; one breaker engine of 95-horse power in breaker engine room; they have a metal epeaking tube in the mines; they have an adequate brake and flanges of sufficient strength for safety attached to their hoisting drum; the boilers have been cleansed and examined and reported in good condition; they have a steam-gauge to indicate the pressure of steam.

Remarks.—They have furnished a map of the mine; they have a second opening 700 feet from main opening; they have no house for men to wash or change in; the mining boss seems to be a practical and competent man; there are no ally towards this fund, sincere thanks. Your committee met, in the course of its investigation, some very pitiful cases, and we consider this one of the most worthy objects that has ever been advocated by any journal. The sum realized is magnificent. Hoping the prayers of these widows and orphans, from whose doors the wolf will be kept by this fund, will reward you, we are, with thanks for the honor conferred upon us,

Yours respectfully,

EZRA H. RIPPLE, H. M. EDWARDS, P. J. RUANE, Committee.

The Delaware and Hudson Canal Company distributed gratuitously to the bereaved families of Marvine shaft disaster, the following amounts:

To	Mrs.	Patrick McNu	ilty.				•		•		•	•	•	٠	•	\$1,000
To	Mrs.	John Elizabe	$\operatorname{th}\mathbf{\tilde{Y}}$	ou	ng				•				•			800
To	Mrs.	Cormac Mary	McG	łui	ire	, , .							•			500
To	Mrs.	Patrick Mary	Cav	an	ag	'n,										1,000.
To	Mrs.	Catharine Mu	rphy	7.	•	ĺ.								,		500
To	Mrs.	Mary Carden.										•				1,000
To	Mrs.	John Shaffer,											-		•	500
					•											1

They also paid \$500 for burial expenses.

Meadow Brook Shaft Fire and Accident.

· On December 20th, 1886, an accident occurred in Meadow Brook shaft, instantly killing John Rogers and seriously injuring John O'Hara, John Nee and Anthony Dougherty, who were working filling, building walls and pointing the cross-cuts with mortar. At about five o'clock on the afternoon of December 20th, John Rogers, assistant mine foreman, John O'Hara, driver boss, and John Nee, Anthony Dougherty and Michael O'Gallagher, laborers, started to fill a crosscut. Rogers and O'Hara, after they set the men to work, went back from the cross-cut about twenty feet and sat down along the rib. As soon as they had done so a fall of roof was precipitated on them, instantly killing John Rogers and seriously injuring O'Hara, Nee and Dougherty, and slightly injuring O'Gallagher. Where they were working, in Stokes counter gangway, was heated from its proximity to the fire, which caused an expansion of the roof to a certain extent. closing up the cross-cuts. This caused a current of cool air to flow through, which had a tendency to contract the rock roof, which, in my opinion, was the cause of the fall and accident.

Attached hereto is a tracing showing the location of the fire and fall which caused the accident. Also a description of the mode of operations to distinguish the fire.