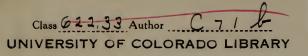


# THIRTEENTH ANNUAL REPORT of the STATE INSPECTOR OF COAL MINES COLORADO 1925



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# THIRTEENTH ANNUAL REPORT

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# STATE INSPECTOR OF COAL MINES

1925



Denver, Colorado Eames Brothers, Printers 1926

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# CANCELLED CANCELLED CANCELLED CANCELLED CANCELLED DIRECTORY OF ADVERTISERS

Name of Company	City and State	Page
Alexander Car Replacer Mfg. Co., The	Scranton, Pa.	
Allen & Garcia Co		
Allis-Chalmers Mfg. Co		
Anderson Harrington Coal Co., The		
Barnett Fuel Co		
Bristol Co., The		
Brown-Fayro Co., The	• ,	
Card Iron Works Co., The E. C.		
Carroll Chain Co., The		
Cincinnati Electric Tool Co., The		
Clason Map Co., The		
Colorado & Utah Coal Co., The	•	
Crested Butte Anthracite Mining Co., The		
Denver Metal & Machinery Co., The		
Duncan Foundry & Machine Works		
Du Pont de Nemours & Co., E. I	· · · ·	
Empire Coal Mining Co., The		
Fraker Coal Co., The		
Hayden Bros. Coal Corp		
Hendrie & Bolthoff		
Hercules Powder Co		
Horne Machinery Co., E. C.	•	
Hullhorst Micro Tool Co., The		
Justrite Mfg. Co	0,	
Leetonia Tool Co., The		
Link-Belt Co	Chicago, Ill	17
McMurtry Mfg. Co., The	Denver, Colo	14
McNeil Coal Co., The	Denver, Colo.	66
McPhee & McGinnity Co	Denver, Colo	66
Machinery Sales Co., The	Denver, Colo	18
Mine & Smelter Supply Co., The	Denver, Colo.	
Mine Safety Appliances Co	Pittsburgh, Pa	89
Moffat Coal Co., The	Denver, Colo	
Morse Bros. Machinery & Supply Co., The	eDenver, Colo	
National Carbide Sales Corp		
National Fuel Co	Denver, Colo	
National Fuse & Powder Co., The		
Oakdale Coal Co., The		
Royal Fuel Co., The		
Sunnyside Coal Mining Co., The		
Trinchera Timber Co., The		
Union Carbide Sales Co	· · · ·	
Victor-American Fuel Co., The		
Vulcan Iron Works Co., The		
Westinghouse Electric & Mfg. Co., The		
Westinghouse Electric & Mig. Co., The	Denver, Colo	

### PERSONNEL OF COAL MINE INSPECTION DEPARTMENT

12 2 2

JAMES DALRYMPLE, Chief Inspector	Denver, Colo.
W. M. LAURIE, Deputy Inspector	Trinidad, Colo.
HUGO H. MACHIN, Deputy Inspector	Aguilar, Colo.
GEORGE C. DALRYMPLE, Deputy Inspector	Walsenburg, Colo.
JAMES W. GRAHAM, Deputy Inspector	Lafayette, Colo.
HENRY P. KING, Deputy Inspector	Denver, Colo.
ADA R. TIBBITS, Chief Clerk	Denver, Colo.
MAX M. GREENWALD, Assistant Clerk	Denver, Colo.

### FIELD FORCE AND DISTRICTS

- W. M. LAURIE, 512 Ash St., Trinidad, Colo......District No. 1 All mines in Las Animas County, except those listed in District No. 2.
- HUGO H. MACHIN, Box 334, Aguilar, Colo......District No. 2
  Includes the following mines in Huerfano County: Bunker Hill, Hezron, Ideal, Leader No. 1, Leader No. 2, Lester, Cameron, Pryor, Ravenwood, Torrid, Round Oaks, Sweet, and the following mines in Las Animas County: Berwind, Brodhead, Cass, Congo, Delagua, Empire, Greenville, Hastings, Jewel, Crestone, Ludlow, Mutual, Pine Fuel, Rapson, Southwestern, Tabasco, Vickers, Wellington, and Royal.
- GEORGE C. DALRYMPLE, Box 645, Walsenburg, Colo...District No. 3 Includes the following mines in Huerfano County: Ojo, Oakdale, Gordon, Sunnyside, Black Hills, Vesta, Maitland, Pictou, Walsen-Robinson, Fern, Alamo, Calumet No. 1, Toltec, Caddell, Calumet No. 2, and Kebler No. 2, and all mines in Fremont County.
- JAMES W. GRAHAM, Box 373, Lafayette, Colo......District No. 4 Includes mines in the following counties: Adams, Boulder, El Paso, Jackson, Garfield, Gunnison, Mesa, Montrose, Ouray, Pitkin, and Rio Blanco.
- HENRY P. KING, 1155 Downing St., Denver, Colo......District No. 5 Includes mines in the following counties: Archuleta, Elbert, Jefferson, La Plata, Moffat, Montezuma, Routt and Weld.

### LETTER OF TRANSMITTAL

Denver, Colorado, April 1, 1926.

To His Excellency,

CLARENCE J. MORLEY,

Governor of Colorado.

Sir: Herewith I have the honor to submit to you, in accordance with Section 27 of an Act entitled "Coal Mining Laws," the Thirteenth Annual Report of this Department.

The period covered began January 1 and ended December 31, 1925.

Respectfully,

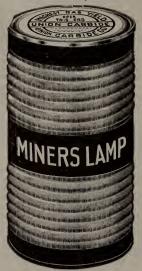
JAMES DALRYMPLE,

State Inspector of Coal Mines.

# UNION CARBIDE For Miners Lamps World's Best Quality----Highest Gas Yield

The product of the originators and developers of the Carbide and Acetylene industry.

Uniform, sustained quality assured by more than a quarter of a century of experience in selecting raw materlals, and in perfecting laboratory practice and works processes.



The constant, dependable quality compels recognition of the economies which go with it.

Union Carbide will keep for years in the original package without deterioration.

#### UNION CARBIDE PACKED IN BLUE AND GRAY DRUMS CAPACITY 100 LBS.

### Our remarkable nation-wide service and distributing system makes Union Carbide quickly available everywhere

Miners Lamp Union Carbide is specially prepared for miners' use.

Because of its high gas yield, lamps require less Carbide per charge.

Uniform in size, and carefully screened; this eliminates waste and produces uniform generation of gas.

Due to the great purity of Union Carbide and its gas, the flame is of maximum illuminating power, and constant in size.

Our excellent approved package—the Blue and Gray Drum is in keeping with our determination to faithfully protect the interests of the operator and the miner in the matter of Carbide quality, from the time the Carbide is packed at the works until it is consumed by the miner.

We have Union Carbide Warehouses in 175 cities.

# UNION CARBIDE Maximum Quality and Exceptional Service

have been developed to maintain the many money-saving and efficiency producing advantages realized by Operators and Miners through the use of Carbide lamps.

## **Carbide Lamp Advantages**

Low Cost of lamp.

Remarkably low cost of upkeep.

Long life of lamp.

Light in weight—Does not handicap miner.

Lamp very compact — No burdensome entanglements. Because of the widely diffused light, miner can easily observe conditions relating to the personal safety of himself and fellow miners. A wonderful aid to mine foremen in getting efficient and economical results.

The Carbide Lamp is easily understood and easily cared for by every miner.

Miner can always assume the posture—standing, bending or kneeling—which will enable him to work with greatest comfort, and light is always directed just where he needs it.

Greater volume of light than from any other type of mine lamp.

Minimizes number of accidents resulting from poor lights.

Working places can be more easily and thoroughly inspected, and dangerous roof, wall and floor conditions detected with greater certainty. No eye strain when Carbide lamps are used. Eyestrain means loss of general efficiency.

Carbide Lamp can always be used as convenient Hand Lamp, or can be hung up.

Size of flame and volume of light easily regulated.

Carbide Lamps, used in and about mines, have accomplished more for the comfort and convenience of miners than any other development, invention or device of the twentieth century. Union Carbide Gas light is more nearly like the natural light of the sun than any other light known to man. The miner can accomplish more and better work, with greater ease, comfort and safety, than would otherwise be possible.

Our Blue and Gray Drum is, throughout the world, recognized as a symbol denoting:

Best Grade Carbide Highest Gas Value Union Carbide Sales Peoples Gas Bldg., Chicago, III. Union View York, N. Y. Chicago, III.

# COALS of QUALITY

Lignite-

Puritan--Weld County District Monarch--Louisville District

# **Bituminous**-

Thor--Trinidad District Royal--Walsenburg District

Our Puritan Mine is the largest producer of domestic lignite coal in the state of Colorado. Our Monarch Mine is the largest producer in the Louisville District (Colorado).

For the months of October and November, 1925, the Puritan tonnage ranked second while for the months of December, 1925, and January, 1926, the Puritan Mine produced more coal than any other mine in the state of Colorado.

### NATIONAL FUEL COMPANY PRODUCERS AND SHIPPERS

511-520 Colorado Bldg.

Denver, Colo.

### The Fastest, Most Accurate and Cheapest Method of Undercutting Commutator Mica

HULLHORST Mica Undercutter Undercuts in 1 10 the time and reduces labor cost 90%



Portable Mica Undercutter No. 6; rigid steel shaft. Operates on light circuit. Undercuts commutators up to 28" in dia. Gladly shipped on trial. Price, with 110volt Universal motor, 9/32" cutters, and carrying case, \$44.00.

The Hullhorst Micro Tool Co.



Safe--Durable--Strong

No. 407 Lamp

With wire feed and  $2\frac{1}{2}$ " reflector. A sturdy lamp that will always give good results.

No. 747 Lamp



Polygon feed lamp with 4" nickel reflector. Gives penetrating light excellent for inspectors and shift bosses.

Ask for CATALOG showing all models

Commutator mica is undercut accurately to a uniform depth, with the Hullhorst—it helps to obtain the best service from armatures. With this tool a job is completed in 1/10 the time usually required by obsolete methods, and the labor cost is reduced 90%.

We manufacture undercutting tools exclusively, for undercutting all sizes of commutators, including two Undercutters used in coal mines. You may have our descriptive catalog — write for it.

### Dept. 5, Toledo, Ohio

For operators as well as miners *Justrite* lamps have been made of the best material and workmanship in order that the highest efficiency and best service could be maintained. *Justrite* lamps throw a strong, penetrating light which keeps the miner's efficiency to a high standard and increases his production—naturally the mine output. These are important facts for the operator.



The upright "Victor" lamp for miners who prefer the vertical construction. A strong durable lamp.

JUSTRITE MANUFACTURING CO.

2064-2081 SOUTHPORT AVE. CHICAGO, U. S. A.

# Carroll Feed Chains For Use on Coal Mining Machines

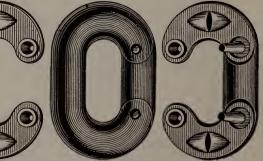
The successful operation of undercutting machines depends in no small measure upon the stamina and reliability of the Feed Chains.

Your confidence in Carroll Chains will not be misplaced. Built Right ----Serve Well.

Trial orders solicited

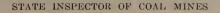
Commercial Chain Crane & Sling Chains Coupling Links & Chains Power Shovel Chain

"Carroll Quality" Products FEED CHAIN REPAIR LINKS



Drop forged from high grade steel and heattreated in the same manner as the chain.

The Carroll Chain Co. COLUMBUS, OHIO





# 2 minutes to a shot hole!

That's going some! But it is easy with "The Cincinnati" Portable Electric Coal Drill. Holes 2<sup>1</sup>/<sub>2</sub>" in diameter, 8 ft. deep, are daily drilled with it in 2 minutes or less. Handled by one or two men. Durably constructed throughout. Write for Bulletin 113 and

full information regarding our trial offer.

THE CINCINNATI ELECTRICAL TOOL CO. Madison and Edwards Roads CINCINNATI, OHIO



Sent

on

trial

# HAYDEN Routt County--Oak Creek District

# "The Coal That Cauliflowers"

COAL

What does this mean--and why does Hayden Coal "cauliflower" as it burns?

- This question is on everyone's lips and we will answer it.
- The unusual **hardness** of Hayden Coal is doubtless accountable for the fact that it opens up like a cauliflower as it burns--burning red hot to the very core and yet **holding together** and forming a natural radiator for the heat.

### Highest Analysis Of Any Coal From Routt County

--and also the only shaft mined coal in Routt County. Coming from a shaft 350 feet deep it is singularly clean and free from "crop" or surface coal. The exceptionally high analysis (furnished on request) --the extreme hardness and unusual cleanliness-and the fact that this coal "cauliflowers"--are the reasons why Hayden Coal

### **Burns Hotter---Lasts Longer**

A Test Will Prove It

Hayden Bros. Coal Corp. Tramway Bldg., Denver C. W. Brown, General Manager

# The Moffat Coal Co.

# Highest Grade Domestic and Steam Coal

Mines at Oak Hills, Routt County



### **GENERAL OFFICE**

Phone Champa 44

504 Gas & Electric Bldg.

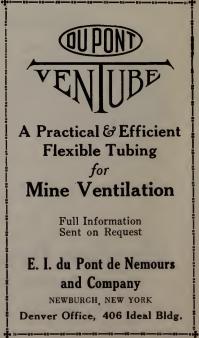
Denver, Colo.

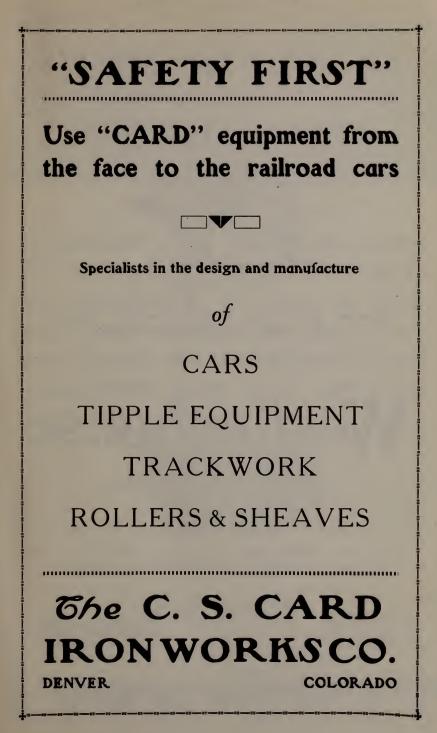
### McMURTRY LIQUID KARBON

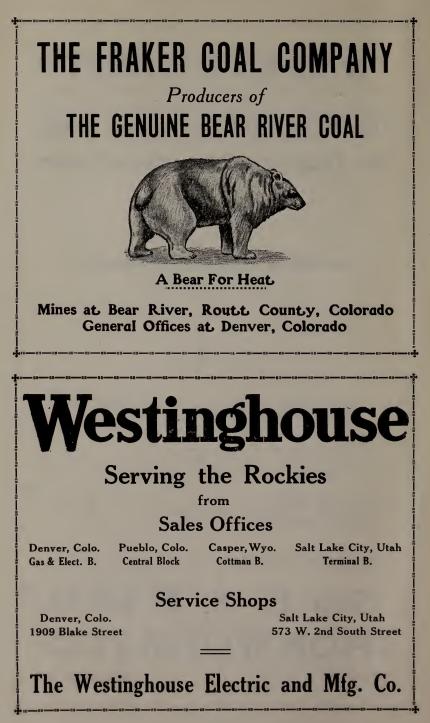
A Durable and Protective Coating for the Preservation of Iron and Steel in mine buildings, etc.

Manufactured by











The Link-Belt Tipple of the Spring Canyon Coal Company, Spring Canyon, Utah.

Whether your problem is one of coal preparation in tipple or washery; or one of low cost conveying from the face let Link-Belt experienced engineers help you solve it.

Coal Tipples Coal Washeries Loading Booms Picking Tables Vibrating Screens Face Conveyors Spiral Separators Electric Hoists Locomotive Cranes Crawler Cranes



Screens (various kinds) Retarding Conveyors Car Dumps, Car Hauls Crushers Manierre Box Car Loaders Conveyors of every type Chains, Wheels, Buckets Silent Chain Drives Roller Chain Drives Portable Loaders

One of several types of Face Conveyors designed by Link-Belt Company. This type is being used by Gunn-Quealy Coal Co., Sweetwater, Wyoming.

### 2550A LINK-BELT COMPANY Leading manufacturers of Elevating, Conveying and Power Transmission Machinery. PHILADELPHIA CHICAGO INDIANAPOLIS 2045 Hunting Park Ave. 300 W. Pershing Road 200 S. Belmont Ave. 520 Boston Bidg. - - - Denver, Colorado



### DUNCAN Foundry and Machine Works Alton, Illinois

Manufacturers of

Mine cars, roller bearing, self oiling and plain wheels, axles, self dumping cages, etc.

### The Machinery Sales Company 611-612 Cooper Bldg. Denver, Colorado

**OFFERS** 

USED AND REBUILT MACHINERY

For

Mines, Mills, Quarries, Power Plants

Guaranteed to Render the Same Service as When New Ask for Prices on

Steam Boilers Steam Engines Steam Hoists Pumps of All Kinds Pipe, Rail, Etc. Electric Motors Electric Generators Electric Hoists Box Car Loaders Conveyors Air Compressors Machine Shop Tools Woodworking Mchy. Cutting Machines Drills, Punches

Send for Stock List No. 90

We do All Kinds of Repair Work

# ප්රාව COLORADO & UTAH COAL COMPANY

Miners & Shippers HARRIS ROUTT COUNTY COLORADO C-O-A-L

First National Bank Bldg.

Denver



20

### STATEMENT SHOWING RECEIPTS AND DISBURSEMENTS FROM JANUARY 1, TO DECEMBER 31, 1925

#### RECEIPTS

Tax collected on coal mined	38,069.04
From sales of copies of the Coal Mining Laws	692.65
Refunds and sales of old instruments	17.01
Advertising in Annual Report	520.00
Balance brought forward from 1924	7,159.73
-	

#### Total.....\$46,458.43

#### DISBURSEMENTS

Salaries of entire Department	\$22,788.98	
Expense, Chief and Deputy Inspectors	. 5,083.30	
Fatal accident investigators, per diem and expenses	. 188.44	
Mileage books (R. K. Transportation).	. 1,170.00	
Automobile, supplies and repairs	. 3,314.05	
Board of Examiners, per diem and expenses	. 1,093.28	
Printing	. 1,442.97	
Postage	. 505.30	
Stationary supplies	. 261.02	
Telephone service	. 118.96	
Telegraph service	. 35.11	
Instruments	. 190.95	
Express	. 5.15	
Miscellaneous	. 316.48	
Total		\$36,513.99
Surplus December 31, 1925		\$ 9,944.44

#### FIELD EQUIPMENT

One Buick Coach
Four Ford Coupes
Seven Anemometers
One Psychrometer
One Geophone

Five Speedometers One Carbon Monoxide Gas Detector Six Keohler Safety Lamps One Aneroid Barometer

# SUMMARY OF THE COAL PRODUCTION OF COLORADO, 1925

*Number of miner excented	0.00
*Number of mines operated Number of new and old mines opened	283 36
Number of mines closed, 30; abandoned, 3; total	
Tons of sub-bituminous coal produced	
Tons of semi-bituminous coal produced	
Tons of bituminous coal produced	
Tons of semi-anthracite coal produced	
Tons of anthracite coal produced	
Total number of tons of coal produced	
Decrease, 1925	
Tons of run of mine coal produced	
Tons of lump coal produced	
Tons of nut coal produced	
Tons of pea coal produced	• •
Tons of slack coal produced	3,037,046
Percentage of slack produced	
Tons or coal mined by hand	
Tons of coal mined by machine	
Kind and number of machines used: Compressed air, 119; Elec-	
tric, 306; total	425
Tons of coal mined for shipment	
Tons of coal shipped out of the state	
Tons of coal sold to local trade and used by employes	668,216
Tons of coal used at the mines for steam and heat	
Tons of coal made into coke	
Tons of coke made	
Number of days coke ovens were operated	
Number of coke ovens used	
Number of men employed at coke ovens	201
Number of miners employed: Pick, 4,485; Machine, 3,761; total	
Number of men employed in and about mines (average) Number of employes foreign born	$\substack{12,228\\5,203}$
Number of employes speaking English	11,901
Average number of days worked (man-days) Daily production per miner	
Annual production per miner	1.266.11
Number and type of safety lamps used; Flame, 917; Electric,	_,
Annual production per miner. Annual production per miner. Number and type of safety lamps used; Flame, 917; Electric, 9,041; total	9,958
Number of carbide lamps used †Number of pounds of carbide used (approximately)	$\begin{array}{r} 5,424 \\ 196,799 \end{array}$
Number of pounds of permissible powder used Number of pounds of black powder used	926,127
Number of pounds of black powder used	1,408,213
Number of pounds of dynamite powder used Number of men killed: Underground, 52; surface, 5; total	46,677
Number of men injurea'	1,914
Number of men killed per thousand employed	$\frac{4.66}{156.36}$
Number of tons of coal produced for each life lost	183,165
Number of men injured per thousand employed Number of tons of coal produced for each life lost Number of tons of coal produced for each non-fatal accident	5,460
Number of men killed per million tons of coal produced	5.46
Number of men injured per million tons of coal produced Number of men employed per fatal accident	$     \begin{array}{r}       183.13 \\       214.5     \end{array} $
Number of men employed per non-fatal accident	6.4
Number of widows left	35
Number of children left fatherless	96
Cost of development work in mines during 1925: 120 mines re- porting	\$ 674,641.00
Number of days lost account of car shortage: 39 mines reporting	406
Number of tons of coal lost through labor shortage: 24 mines re-	
porting	84,400

\*NOTE: The yearly reports of five of the above 283 mines were filed too late to embody their combined production of 304 tons in the tables of this Annual Report. However, they are included in the Mine Directory or Table No. 1.

†NOTE: A number of mines did not report the carbide used as same was furnished by employes.

### Thirteenth Annual Report OF THE State Inspector of Coal Mines 1925

#### INTRODUCTION

The year 1925 shows 238 coal companies and individual operators reporting the output of 283 mines totaling 10,440,387 tons of coal, a decrease of 60,701 tons as compared with 1924. The average number of men employed in and about the mines was 12,228, or 475 men less than in the preceding year. Number of man-days worked was 186.6, an increase of 5.1 more days than in 1924. Out of the 283 mines recorded, 159 have no railroad connections although several of them ship coal a distance of 50 miles by trucks, the balance of them supply local trade only. Most of these mines are idle during the spring and summer.

Fifty-seven lives were lost in and around the coal mines of Colorado in 1925. Thirteen more than in 1924. Thirty-seven of them happened at the working face. Fourteen of them happened on haulage ways. Eleven on mechanical and three on animal haulages. In former reports the location of fatal accidents have only been given in the write-up on individual accidents; on account of the great increase in our fatal accidents this year over 1924, the location of accidents for 1923, 1924 and 1925 is given so that the management may know where to increase and improve supervision so that fatalities may be kept down to the minimum reached in 1916, and again in 1924. In 1916, 3.35 lives were lost per 1,000 employed, and in 1924, 3.48, and this year it will run 4.66 lives lost per 1,000 employed. In 1923, 66 lives were lost. 52 of them happened at the face. In 1925, 57 lives were lost, 37 of them happened at the face, so that in 1923, 79 per cent of all fatal accidents were at the face; in 1924, 75 per cent at the face. in 1925, 65 per cent at the face; and 14 lives were lost on haulage ways.

The death rate of 4.66 is an increase of 33.9 per cent as compared with the preceding year. The non-fatal accidents numbered 1912 or 61 more men injured than in 1924, and an increase of 7.3 per cent over the year before. The number killed per million tons of coal produced was 5.466 men and the number injured 183.13 men. There was an explosion at the Gordon mine in which three men lost their lives and a serious fire at the Empire mine in which no lives were lost, but considerable damage done to the property.

To reduce the accidents at the face. I would recommend that whenever the mine is so large that every working face cannot be visited by the mine foreman four times during the shift of eight hours, twice before dinner, and twice after dinner, that such mines be partitioned into districts and a first class, or an assistant first class certified man be put in charge of each district so that the number of daily visits above given can be made.

The question of reducing haulage accidents is a very difficult one, and can only be remedied by the management through improving haulage ways, keeping equipment in good working condition, seeing that all the requirements of the law are enforced, that those employed are reasonably competent to do the work intended, and whenever an accident is caused by defective work or equipment, remedy the cause at once. The increase in accidents is no doubt the result of the turn over in labor as a result of the reduction in wages, when many of the most competent workers left the state to seek employment in other states where no reduction in wages had taken place; this applies especially to the haulage accidents as most of the drivers, roperiders, and motor men are young men who have been raised around the coal mines since boyhood, their places have been filled in many cases by inexperienced men from the country and cities.

Age of	Number of	Years of	Number of
Deceased	Accidents	Experience	Accidents
16 to 21 years 22 to 25 years	36	0 to 1 year 1 to 2 years	4 3
26 to 30 years	$\begin{array}{c c} & 7 \\ 12 \\ 10 \end{array}$	3 to 5 years	13
31 to 35 years		6 to 10 years	11
36 to 40 years		11 to 15 years	8
41 to 45 years	757	16 to 20 years	6
46 to 50 years		21 to 25 years	4
51 and over		26 and over	5
Not given Total	$\frac{\dot{0}}{57}$	Not given	$\frac{3}{57}$

The increased rate of fatal and non-fatal accidents is not encouraging, especially considering the great efforts that are being made by many companies to impress safety rules on their mine employes and the installing of safety appliances to aid in the protection of life. However, many of the fatal accidents occurred in small mines where the law is not complied with, two men were killed in mines of which we had no record, and, strange as it may seem, so far have been unable to get in touch with the owners or operators of them. Both mines are far away from a railroad and the letters addressed are either returned undelivered. or not answered. Presumedly these mines take out coal only when needed by consumers nearby. A third man was killed by a small gas explosion at the face of a rock tunnel that is being driven at Camp Genter to develop an anthracite mine. As the coal has just been exposed, this property is not classed among the producing mines.

Since the present law was put into effect in 1913, the department has not been able to enforce it equally among the large and small mines. The law was intended to apply to all mines equally, but as the funds of the department were limited, the expense entailed to cover all mines by regular inspections was out of the

question, being scattered over a wide territory, and many operating only intermittently, it was impossible to reach them as demanded by the law. Therefore, a bill was passed by the last legislature increasing the coal tax from  $\frac{1}{3}$  of one cent to  $\frac{4}{10}$  per ton, giving the department more funds to make more frequent inspections and enforcing the law. Before the department made any effort to put into effect the enforcing of the law equally, a series of meetings were held at various mining centers where the operators of these small mines would find it convenient to attend. The rules to be enforced were thoroughly explained and three months time given the operators to comply. A storm of protests from most of the operators affected and also consumers of the districts in which these mines are located, flooded the Governor and this Department. Few could see the necessity of safety measures and rather than comply, closed down their mines, or are operating them in defiance of the law, and suits were started restraining this Department from closing them down as was the intention, and in a few instances carried out. After several trials were held, one judge ruled that the law was not applicable to all coal mines and the Department is carrying the case to the Supreme Court for a final decision. However, as a result of the agitations, sixty-two fans have been bought and are installed, or will be shortly. The greatest objection to complying with the law was that demanding a certified official to manage the mines. The solution to this question lies in the operator himself qualifying by becoming a certified mine official. Consequently the past year has been rather strenuous and a costly affair for the Department.

Many permanent improvements were made at the mines, such as installing 1,181 more electric lamps, many new fan houses were built, engines, gas and electrically driven, as well as cutting machines, pumps, compressors, coal crushers, rock dusting machines, air drills, wagon scales, portable conveyors, hoists, puncher machines, shakers and screening plants were installed, several new tipples built, and other improvements made. Several companies built dwellings to house their employes more comfortably. Despite the fact that the coal business was bad in 1925, the progressive spirit of the operators was not disheartened, but continues to build and bid for a greater future.

Naturally there were no new mines developed excepting one in Weld county by the Lincoln Coal Co. This company is sinking a vertical shaft 276 feet deep to the top of a ten-foot seam of subbituminous coal. The mine is located on the Union Pacific R. R. line, about three miles northeast of Erie. It is being equipped with a hoist having a 1,500-ton daily capacity. The management expects to produce coal by May 1, 1926.

The printing bills of this Department have been steadily mounting in the last two years, and in order to lessen the expense, it was decided to solicit advertising for the printing of the Annual Report. While this is not a new innovation, the idea was obtained from an Annual Report published by the Mine Inspector of Alabama, and was put into effect by us two years ago, but only sufficient advertising matter was obtained to pay part of the cost. This year the matter was turned over to an advertising agent who agreed to get sufficient advertisement to pay for the entire cost of printing. It is too bad that we feel compelled to do so as it obscures the intent of the report, which should be strictly a compilation of the coal statistics of Colorado. However, I take this opportunity to request all readers of the Report to give the advertisements consideration when in need of the wares made known here, also to thank the advertisers for their favor and hope that their expenditure will not prove fruitless. See page 3, Directory of Advertisers.

While it is not the custom to mention in the Annual Report anything not happening in the year covered by it, I deem it necessary to say in this report a few words considered of real importance concerning two explosions that took place in January, 1926, one in the Bear Canon mine, and the other in the Harvey Gap mine, and which cost seven lives. Both of them happened in non-gaseous mines, naked lights were used exclusively in both mines for general purposes. These occurrences so disastrous to human life point out to us very plainly the great possibilities of a non-gaseous mine becoming gaseous instantly. Are we going to benefit by those sad experiences by classifying all coal mines gaseous?

In conclusion I wish to thank the operators for their co-operation with this Department in the effort to make the mines as safe and sanitary as possible, the field and office officials for giving faithful observance to their dutics.

Total Inspections made in 1925	. 802
*Total Mines Inspected	. 334
Number of Fatal Accidents Investigated by Inspectors	5
and Special Investigators	
Number of Inquests Attended by Inspectors and Special	1
Investigators	. 38
Scale Inspections	. 12
Complaints Investigated	. 23
Prosecutions	. 9
Miles Traveled by Auto	45,629
Railroad Scrip Used	\$1,170.00

### Respectfully submitted,

### (Signed) JAMES DALRYMPLE,

State Inspector of Coal Mines.

<sup>\*</sup>The above summary shows 334 mines inspected, while the operators reported 283 producing mines. This discrepency is accounted for by the operators reporting such mines as Oakdale No. 1 and No. 2, and Pinnacle No. 1 and No. 2 as one mine. Also a number of small mines that are inspected when found operating, but who fail to report and cannot be traced as they change hands so often no one seems to be responsible for them.

### TABLE No. 1

# DIRECTORY OF COAL MINES IN STATE OF COLORADO FOR THE YEAR ENDED DECEMBER 31, 1925

Name of Company	Name of Mine	County	Name of Manager or General Su- perintendent	Post Offico	Name of SuperIntendent	Mine Post Office Address	Railroad to Mine	Geological Name or Number of Coal Bed Worked	Average Thickness Feel In	
Crane & Roblitson Uox Coal Co	Crane	Archulela Archulela. Boulder Roulder Boulder	Leroy R. Crane. T. L. Cox. Geo. T. Pearl. Geo. T. Pearl. Geo. T. Peart.	Ignacio Pagosa Springs Denver Denver	Leroy H. Crane T. L. Cox Thomas Gibby. David Allen I. C. Williams	Bayfield. Pagosa Springs Superior Lafayette Louisville	None	Lower Industrial Lower Lafayette. Lower Louisville.		
Rocky Mountain Fuel Co Rocky Mountain Fuel Co Rocky Mountain Fuel Co National Fuel Co Rig Four Conl & Coke Co	Slandard. Gorhain. Vulcan Monarch No. 2	Boulder Boulder Boulder Boulder Boulder	Geo. T. Peart Geo. T. Feart Geo. T. Peart Samuel Tescher Eph Neabil	Denver	Geo Sworingen Thomas Hilton Charles lüllington Henry lüchards Richard Husband	Lafayelte Gorbain Lafayelte Hroomfield Loutsville	C. B. & Q. C. & S. C. B. & Q. C. & S. C. & S. C. & S.	Laramic Formation	5 10 9 5 10 6	
Ajax Coal Mining Co Roulder Coal Mining Co Crown Fuel Co Domenico & Sons. Inc Head Brothers.	Capitol Black Diamond Crown Paramount (Chalip.) Nonparell	Boulder Boulder Boulder Boulder Boulder	Charles Liley. H. H. Parker. W W Cowdery. S Domenico.	Louisville Boulder Denver Denver	Clintles Liley Tom Tisone George Cowdery S Domenico	Louisville Roulder Gorlian Louisville	C & S		· · · · · · · · · · · · · · · · · · ·	90
Cracker Jack Coal Co Roulder Black Hawk Coal Co Davies Coal Co Hed Ash Coal Co Cambro Mining Co	Cracker Jack Houlder 10ack Hawk Lewis. Red Asb	Boulder Boulder Boulder Boulder Boulder	J. A. Williams C. M. Goddard T. L. Davles D. H. Davles J. M. Salvage	Roulder	J. M. Schullz	Roulder. Gorbam	None	Laramie Formation	5	10
Matchless Fuel Co. Juanita Coal & Coke Co. Green Valley Coal Co. Paonia Farmers Coal Co. Wade Coal Co. States Hall Coal Co.	Matchless King Green Valley. Paonia. Red Canon Sinles	Boulder and Della and Della and Della Della	J. S. Bowle. M. R. J. Campbell. M. Edward Cox. W. L. Wade M.	Cedaredge Cedaredge Paobia	A. R. Bowle. H. J. Campboll Kaward Cox W. I. Wade.	Cedaredge Cedaredge Cedaredge Cedaredge	D. & R. G. W. None None None	Mesa Verde Formalion Mesa Verde Formalion Rollins No.1		1 60 <b>*1</b> 93
A. W. Itall & Son	Red Mountain	Della	A W. Hall P. I. Clipp	Codaredge Codaredge Paonla Hotebkiss Paonla Austin	C. E. Hall P. L. Clipp E. A. Elizzinimony Milice Miligan Frank Converse J. C. Bowerman	Cedaredge Cedaredge Pronia Hotehkiss Paonia	None. None. None. None.	Mean Verde Formation	······································	
Winton Cool Co Hickard Hodges Rowland Owens & Sons McMillin Bros	Winton Gelwick Owens Rotlins	Delta	M. W. Bennell	Paonia Hotelikiss Delta Hotelikiss	Richard Hodges Rowland Owens Harry McMillo	Paonis Hotchkiss Delta	None	King and a second secon		
Hurnitall Fuel Co Lee & Son Wright Barker Pikes Peak Fuel Co Keystone Mining Co	Bornitali Mascot . Wrighi. Pikeview. Keysloue.	Ellari Ellari Elberi El Paso El Paso.	Henry Thomas	Matheson Matheson Matheson, Colorado Springs Colorado Springs.	R. P. Ferguson Dan Lee	Matheson Matheson Matheson Pikevlew Colorado Springs Colorado Springs	None None D. & R. G. W. C. R. 1. & P. A. T. & S. F., C. R. 1.& F.	Fox 1111 Larante Formation	8 to 12 3 10 6	фланц фланци фобанци
Danville Coal Co	City Cont Mines	El Paso El Paso El Paso El Paso El Paso	W. D. Tudor	Colorado Springs Colorado Springs Colorado Springs Colorado Springs Uolorado Springs Uniorado Springs	Edwin Howells	Colorado Springs Colorado Springs Colorado Springs Colorado Springs	None	<ul> <li>Monocology</li> <li>Monocology</li></ul>	6 to 20	6
Golden Dawn Coal Co	Golden Dawn Rush	El Paso El Paso El Paso El Paso El l'aso Fremont.	R. P. Irvine	Manifoli Volorado Springs	G. L. McCurdy Fred Sevelk E. S. Thus T. F. Elliott J. D. Cribbs	Rush	None None None None	Larable Caron	<b>3</b> 10 <b>4 1</b>	 б
Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co	Rockvale, Premoni Emerald Chandlet	Fremont Fremont Fremont Fremont	D. A. Stout. D. A. Stout. D. A. Stout. D. A. Stout. B. W. Snotkrass	Pueblo	J. D. Cribbs	Rockvate. Florenco Cation City Florence Chaudler Pussilita	Λ. T. & S. F.           D. & IL G. W.           Λ. T. & S. F.           Δ. T. & S. F.	Laramie, Canon . Laramie Formation		
Victor-American Fuel Co Canon-Rellance Coal Co	Radiaul Canon	Fremont Fremont Fremont Fremont Fremont	H, H. Pinkney	Denver	P. M. Mosler Davo Dairyinple Tom Orecchio James Rocchio	Canon City Canon City Coal Creek	A. T. & S. F	Laramle Formallon Wolf Park Laramle Formallon	4 10 6 	
Cowan Coal Co Itiuff Springs Coal Co Sunshine Coal Co Canon District Coal Co Itiack Hawk Coal Co	Bluff Springs No. 1 Bluff Springs No. 2 Bluff Springs No. 3 Florence Canon Mohawk	Fremont . Fremont . Fremont . Fremont .	Joseph Cowan	Florence Florence Enterne Cause Cause City	P. Westmatter Foster Ranson James Dellsa M D. Somerville 4 J J. Wolferspenge	Florence	A T. & S F. None D & R. G W. None	Rockvale	3	* 4
Canon United Coal Co Canon Coal Association Itoyal Gorge Coal Co Canon Quality Coal Co Sam Petry	Brewster Royal Gorge, South Magnel Willie North Magnel	Fremont Fremont Fremont Fremont Fremont	C. A. Linkins	Canon City Canon City Cauon City Rockvale Florence	Mozart Lewis J. A. Moschelti Stanley Pavalsky J. Zoniloe	Canon City	None	Rockvale Magnel Rockvale Magnel	2 10 3 	
Gilson Asphaltum Co. James F Estes South Canon Mine Leasing Co Italiman Coal Co	Carbouera	Garfield Garfield Garfield Garfield	L. C. Sprague & Richard Prendergast & Chas Rauman &	Mack Rifle	Homer D Ford James F, Bales Richard Prendergast Chas Rauman W. S Spuring	Mack Rifle Glenwood Springs Rifle Rifle	l'infah None			G
liracken & Cozza Ohkraul Mining Co Zullo & Perko Calumel Fuel Co Colorado Fuel & Iron Co	Harvey Gap. (Italcraul	Garfield Garfield Garfield Gunulson Gunulson	F. N. Cameron. D. A. Stoul	New Castle	Dan Bracken Frault Deboy Jon Perko Rohert Williams, Jr., - W. J. Tyson	New Caello Glenwood Springs. I Glenwood Springs Somerset Crosted Butte.		Mesa Verde Laramle Cretaceous.	······································	в В
Colorado Fuel & Iron Co. Crested Butte Coal Co Crested Butte Anthracite M. Co Ross Coal Co Nocky Mountain Fuel Co	Elk Mountain Fulkley No 2 Smith Anthracite Horace. Alpine	Gunnison Gunnison Gunnison Gunnison Gunnisoo	D. A. Slout J. M. Page, <i>P</i> J. M. Page, <i>P</i> C. L. Ross <i>P</i> Geo, T. Peart	Pueblo Denver Denver Crested Butte Denver	W. J. Tyson	Crested Bulte Crested Bulte Crested Bulte Crested Bulte Baldwin	D, & R, G, W D, & R, G, W,, D, & R, G, W,, D, & R, G, W,, D, & R, G, W,, O, & R, G, W,,	Laramie Cretaceous. Laramie Cretaceous. Baldwin, Lower		6
Oliver Fuel & Coal Products Co Olito Creek Coal Mining Co Baldwin Fuel Co Bonner Bros, Coal Co Carbon Creek Coal Co	Ohlo Creek Ohlo Creek Ratdwin Star Comer Carbon Creek	Gunnison Gunnison Gunnison Gunnison Gunnison	C. L. Oltver	Excelsion Sorings, Mo Gunnison Denver Gunnison	Charles T Hub W. S. Clark Wm. J. Iwvill. Geo D. Brown. Wm. Waugh	Somerset Gunnison Baldwin Gunnison Gunnison	D. & R. G. W D. & R. G. W D. & R. G. W None		······································	1
Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co	Robinson-Walsen 1 & 2 Cameron Lester Dical Pictou	Huerfano Huerfano Huerfano Huerfano	D. A. Stoul D. A. Stout D. A. Stout D. A. Stout D. A. Stout	Pueblo Pueblo Pueblo Pueblo Fueblo	W. S. Getchell S. S. Temple A. Samples M. M. Watson W. S. Getchell	Farr Lester Ideal Fletou	D. & R. G. W., C. & S., C. & S. D & R. G. W. D, & R. G. W.	Laramie Formalion Laramie Formalion Laramie-Walsen Robinson Laramie Formalion	4 to 6	····· 6
Colorado Puel & Iron Co. Calumet Fuel Co Calumet Fuel Co Alamo Coal Co Oakdale Coal Co	Kobler No 2 Calumet No 1 Calumet No 2 Alumo. Oakdale.	Huerfano Huerfano Huerfano Huerfano Huerfano	P. A. Slout F. N. Cameron J. M. Charles J. M. Charles S. S. Murphy,	Pueblo Salt Lake City, Ulan Salt Lake City, Ulan Alamo	E. O. Willson Robert Turner Jas. R. Cameron J. M. Calderhead James Hamilton Thomas Johns	Tloga Delcarbon Alamo Oakview. Walsenburg	D. & R. G. W D. & R. G. W D. & R. G. W D. & R. G. W. D & R. G. W.	Laramic Formation Walsen Cameron Lower Vermejo Lower Vermejo Walsen		
Callente Coal Co Callente Coal Co Aziec Coal Mining Co Sunnyside Coul M. Co Union Coal & Coke Co	Invenwood Mediland Tottee. Sunnyside Pryor.	Huerfano Hoerfano Huerfano Huerfano	S. M. Thompson M S. M. Thompson M George Fruth M. J. F. McDermott M. W. E. Bowen	Ravenwood Maliland Denver Denver	8 M. Thompson S. M. Thompson S. U. Smith R. F. Bell W. II Donovan	Ravenwood	C. & S D. & R. O. W D. & R. G. W D. & R. G. W., C. & S D. & R. G. W., C. & S	Cameron-Robinson	2' 8" to 3 	8
Gordos Coal Co Vesta Minés, Inc. Furity Coal Co Black Canon Coal & Fuel Co Torrid Coal Co Fruth & Stone	Gordon Vesta	Huerfano Huerfano Huerfano Huerfano Huerfano Huerfano	John II. Dick It. If Mitchell John M. McGovern & E. Wilson Geo. Fruth	Walkenburg . Denver	It. P. Poli	Gordon	D, & R, G, W,	Cameron Mammoth Cataeron-Robinson	4 3 	6
Fruth & Stone Caddell & Son. Sleve Matlivi & Sona No Ash Coal Co Thos Brown Coal Co	Leader No. 1 Leader No. 2 Hezron Buttker Hill .	Huerfano Huerfano Huerfano Huerfano	Goo. Fruth Goo. Fruth Slevo Maltivi -	Denver Denver Pryor Rapson House	Archie Topping T. J. Stone R. M. Uaddell Steve Mattivi T. McPhall Thos. Brown	Rouse Rouse Pryor, Rapson Rouse Walsouburg,	None	Upper Rugby Lower Rugby Cameron Lower Rugby		10
Vola Coal Co Riack Hills Coal Co North Park Coal Co O. D. Eno Leyden Coal Co	Cochara Canon Dlack Hills Muore No 1 Marr	Huerfano Ruerfano Jackson Jackson Jefferson	It. W. Moore, Jr F.	Lester Tlogo Coalmont Walden Denver.	E. R. Caddell Poler Fern Wm. J. Allicen O. D. Eno John Nelsh	Lester Tioga Coalinom Walden Leyden, via Golden	None L. N. P. & W.	Cameron	55	6 
Christensen Coal Co Glendale Mining Co Calumot Fuel Co American Smelling & Ref. Co Sun hine Coal Co Durange Coal Co	Christensen Glendale Perins Peak Sant Juan Sonshine, New Porter (1) granger	La Plain	It P McElveuny -	Littleton	Thomas Barclay, V. Prodsham William Watson R. E. H. Pomeroy Those G. Picree Joe Murphy,	Littleton Morrison. Perins Durango Durango Durango	Nome	Mesa Verde Formation Mesa Verde Formation, Mesa Verde Formation,		6
Baudhn & Co O K Coal ICo. Triangle Coal Co Champion Coal M Co Plue Wiver Coal Co	O K. Triangle (Graves). Champion Ping River	La Plata La Plata La Plata La Plata	John Baudino	Durango Durango Denver Bayfield	Anton Raudino. James Jakino. II. M. Graves. Leo McConntick J. II. Haldeman	Durango Durango Durango Durango Ray field.	None None None None None	Mesa Verde Formation Mesa Verde Formation Mesa Verde Formation	6 10 8 .	6
Prank Tipolsch Karl Hauert. B. V. Gadberry Ittack Diamond Foai Co. Minute Coal Co. Joseph Montague	G & G (Peacock) Illack Diamond	La Plata	Prink Foley, a	Hesperus. Mancos Durango Burango Bayfield	Frank Thotseh	Hesperus Mancos Durango Durango Bayllold	None None None None	Mesa Verde Formation Mesa Votde Formation Mesa Verde Formation		****
Thomas Petty. Colorado Fuel & fron Co Colorado Fuel & fron Co Colorado Fuel & fron Co Colorado Fuel & fron Co	Mortey . Mortey . Prederick. Her wind . Toller	La Pluta., Las Antinas Las Antinas Las Antinas Las Antinas		Durango . Pueblo	Joseph Montague Thomas Petty Chas Clounters	Durango Morley Vatlez, Rerwind., Berwind.	None A T A S P P A W, P & S C & S	Laranto Formation Larante Formation Berwind		6
Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Victor-American Fuel Co Royal Fuel Co	Sopris	Las Animas Las Animas Las Animas	D A. Slout D A. Stout It, W. Snodgrass V Samuel Tescher. V	Pueblo	C. A. Kalser ====================================	Soprim Primero Di fagua Agullar	C & S C & S . D & R G W C & W. C & S. E. C & S C & S	Laramic Formation Laramic Formation Raton Formation	5 3 6 5	6
American Smelling & Ref. Co Temple Ford Co Emple Coal M. Co. Bear Canon Coal Co Bear Canon Coal Co	Honcarbo Urodhead No 9 Empire Hear Canon No 3 Hear Canon No 5	Las Animas Las Animas Las Animas Las Animas	Samuel Tescher II. II. Itubh F It Wood J W. Shile Chan Heauchat, Sr. Chan Heauchat, Sr.	Denver Uokedale Trinidad Denver Trinidad Trinidad	Eph Wagstaff C R Garrett	Cokedale Brodhend Agultar Vallormo	C, & S., D, & R. G, W D, & R. G, W C & S., D, & R. G. W C & S., D, & R. G. W C, & S., D, & R. G. W C, & S., D, & R. G. W	Honcarlio Hrodhead	5 5 4 6	ц ц
Dick Coal Co Huerfano Coal Co Jewel Colliertes Corp Jewel Colliertes Corp Prairie Canon Coal Co	Dix	Las Animas Las Animas Las Animas Las Animas	Jan H. Dick. S. S. Morphy Geo. B. Dick Geo. It. Dick V. D. Woodward	Walsenburg Denvor Walsenburg Walsenburg Trinidad	P. G. Miller Frank Melfermott W A Merritt W A Merritt A, 1 Woodward	Itoneacho Ludlow	D. & R. G. W. C. & S C. & S C. & S C. & S C. & S C. & S	Cass. Hostings-Herwind	1 to 6	3.0
Rocky Mountain Fuel Co., Rocky Mountain Fuel Co. Sinulcy Mine Co. Vickers Coal Co. Rapson Coal M. Co.	Forlow No. 9 Southwestern Stanley Vickors Rauson	Las Animas Las Animas Las Animas Las Animas	Geo T, Peart Geo T Feart C O Stanley F R Wood W W. Curlls	Denver Denver Trinidad Trinidad Colurado Springs	Geo Fortune W L. Morkan William Cox . O C. Caok	Aguillaí Boncarlio Bugby Rapson	C & S C & S D & It, G, W D & It G, W, C, & S, D & R G, W, C, & S	Middle Forbes Lawer Robinson Primero Robinson Robinson		6
Three Pines Coal Co Crider Hills Coal & Coke Co Jeffryes Puel Co Wellington Mining Co Santa Fe Coal Co T P Davis, Leaser =	Three Pines Greenville Jeffryes Wellington Sauta Fe	LAS Anîmas LAS Anîmas LAS Anîmas LAS Anîmas	Earl Cobb D M Harrington A G Jeffryes R Wt Caddell E F A. Williams	For) Smith, Ark Denver Trinklad Pryor Denvor	Thus Foster, Joe Mitbelli A. G. Jeffryes E. It Caddell Geo, Dulley	Ludlow Trinidad Pryor Trinidad	C & S C & S Note- None- A, T & S, F	Poper Series Berwind a Trinidad Cameron Uoal Beda No 4 and 6		***
Trinidad Coal Co Who Irons, Jr Rome Evel & Supply Co Ralbert Coal Co Wilton Coal Co	Engle Haldy Mt Banner Joerger Pritchard	- Las Animas Las Animas	D. A. Stout	Pueblo Tribilad Tribilad Tribilad Tribilad Tribilad	T. P. Davie, Leaser G.o. H. Halkb Wm Irons Jr. M. C. Broyles Robert Halbert J. H. Wilton	Trinidad Trinidad Trinidad Trinidad	D. & R. G. W None None None None	Laramle Formation	6 9 7 2 8	6
Filme Fuel Co Roaglin Coal Co Shew Coal Co Bhew Coal Co Bhew Coal Co	l'awcett L'ichford Riew Latrview	Las Animas Las Animas Las Animas Las Animas Las Animas		Aguilar Tribitat Tribitat Tribitat Tribitat	J H Wilton H Faweet Bert HoagRo Mine closed F. J Shew	Aguilar Trialdad Trialdad	None None None None None	Lower Series		6

Sunshine Coal Co Si Durango Coal Co N Baedino & Co M	analdne. (ow Parter (Durango) (orping Stat	La Plata La Plata La Plata	tolin Baudino	Durango Durango	R. E. I. Phereoy	Durango Durango Durango Durango Durango	W.G.S. Noné R. 11/8 None None	Mesa Verde Formation Mesa Verde Formation Mesa Verde Formation	. 6 . 5	6
Triangle Coal Co. T Phampion Coal M Co Pipe River Poal Co. Pi Example River Poal Co. Pi	Inmpion Ine Itiver	La Piata	tl M. Graves / W C Perguson, / Herman Schultz, /	Durango.	11 M Graves	Durango Durango Hayiteld Hesperus Mancos	None	Mesa Verde Formation Mesa Verde Formation Mesa Verde Formation		6
It V. Gadberry O Black Diamond Coal Co. III Minulo Coal Co. Mi Joseph Montague	& G (Pencock) =    ack Diamond	La Plata, La Plata,	Frank Foleyk	Baylleblan	It. V. Gadberry	Hesperus Durango Durango Hayikeld Durango	None . None . Noas	Mesa Verde Formation	12	10
Colorado Fuel & Iron Co Ma Colorado Fuel & Iron Co Fr Colorado Fuel & Iron Co Br Colorado Fuel & Iron Co Br	orley	Las Animas Las Animas Las Animas Las Animas Las Animas	D. A. Sloul, D. A. Stout D. A. Stout D. A. Stout	Pueblo	Chas. th uniform X. M. Riddle. C. A. Kalser. C. A. Kalser.	Morley Valdez Berwind	ΑΤΡΑΝΥ. ΓΑΨ. ΓΑΝ. ΓΑΝ. ΓΑΝ. ΓΑΝ. ΓΑΝ.	Laranie Formation Berwind Heaving	tu i 5 	6666
Colorado Puel & Iron Co Pe Colorado Puel & Iron Co So Colorado Puel & Iron Co Pr Victor-American Fuel Co De Boyal Evol Co me	ojirla rimoto	Las Antonas Las Antonas Las Antonas Las Antonas	D A. Stout D A. Slout R. W. Snodgrass V Samuel Tescher P	Puchlo	J. Deldono F. T. Baker . Jas Struffiers	Sopris Primero Delagua Agullar	C & S., D & R G W C & W C & S. E C & S. E C & S. D. & R G. W	Laramic Formation Laranic Formation Raton Formation Laramic Walsen	а л б 	6 6 6 F
American Smelling & Ref. Co. Bo Temple Fuel Co	ancarbo rodhead No 9.,	Las Anlinas Las Anlinas Las Anlinas Las Anlinas	H. H. Hubb	Cokedale Trinklad Denver Trinklad	C. R. Garrott	Cokedale Brodhead Agullar	D, & R, G, W C & S., D, & R, G, W U & S C, & S., D, & R, G, W C, & S., D, & R, G, W C, & S., D, & R, G, W	Boncarlio		
Dich Coal Co	lx udłow realon	Las Animas Las Animas Las Animas Las Animas	Jas B. Dick S. S. Murphy Geo B. Dick Geo, B. Dick	Walsenburg Denver Walsenburg Walsenburg	P. G. Miller Frank McDermott W. A. Merritt W. A. Merritt	Roncarbo Ludlow Agullar		Cass Hastings-Berwind Upper Series		 G G
Rocky Mountain Fuel Co. Fo Rocky Mountain Fuel Co. So Stanley Mine Co	anley	Las Animas Las Animas Las Animas Las Animas	Geo T, Peart Geo T, Pearl C O, Stauley F F R, Wood	Denver	Geo Fortune W. L. Morgan. William Dox	Forbes Agullar Boncarbo Rugby Rapson	C & S	Middle Forbes Lower Robinson Primero Robinson Robinson	8	
Three Pines Conl Co	nree Pines.	Las Animas Las Animas Las Animas Las Animas	Earl Cobb. D. M. Harrington.	Fort Smith, Ark Denver Trinitad	Thos Foster	Vallorso	C. & S	Upper Series Berwind Trinidad Cameron Conl Beds No 4 and 6	3 to 4 	
T. P. Davis, Leaser	nghe i i idy Mt	Las Animas Las Animas Las Animas	D A. Stout.	Pueblo	T P. Davis, Leasor Geo H Inigh. Win Irons, Jr M C. Broyles Sobert fialbert		D. & R. G. W	Laramle Formation		6
Wilton Coal Co. Pri Prine Fuel Co Pa Boaglio 120al Co. Pi Shew Coal 120 She	lletard weett ekford	Las Animas Las Animas Las Animas Las Animas Las Animas		Trinidad Agollar,	1 II. Willton	Trinidad.	None	Lower Serles		6 6 6
Standard Fuel the Sid Andy Collier. Co Camby Hawkins Mo Dennis & Malone Ve	andari mgo orris	Las Animas Jas Animas Las Animas		Trinidad Agultar Trinidad Trinidad	Mine closed Andy Collier Caulty Hawkins Jas Malone C C, Wacholi	Trinidad	None None None None D.& IL, G.W.		······································	6
Palisade Coal & Supply Co Midwest Coal Co Mil B Gearbart Ga W 11 Stokes Sto	illsade Idwest	Mesa. Mesa Mesa	H. G. Koch J. S. Cheyney	Palisade Palisade	D T Lloyd N Richard# B. Gearhart W. D. Stokes C. C. Hicks	Pallsade	D, & R, G W D, & R, G W None	Midwest Book Cliff	34 io 5	
Riverside t'oal Co Riverside t'oal Co Riverside Sic O K McLendon Sic Hidden Treasure Minlog Co Hid Anchar Coal t'o An	ove Canyon. dden Treasure. nchor No. 2.	Mesa Mesa	Geo II. Gariltz - D. W. Lynch	Fruita Grand Junction. Salt Lake City, Ulah	John McDowell O. K. Melaendon Geo, H. Garlitz W. S. Morrow Fellx Palmetto	Pallsade		Pallsade Mosa Verdo Formalion	······································	6
Liberty Coal & Merc Co Ne Wm. McGinley Mc Thomas Coal Co Th Service Coal Co. Set	earing Ginley rvice	Mesa Mesa Mesa Mesa	A. J. Dittiluger	Grand Junction	L. H. Edwards W. S. Traynor C. F. Thomas, Jr H. J. Allen H. T. Williams,	Fruita Grand Junetion Grand Junetion Grand Junetion Grand Junetion	None Note Note Note Note	Pallsado, Pallsado, Pallsado	5	6 8
Crescent Coal Co Cre J B Hunter	onler htway. cans	Mesa	D. E. Evans	Fruita	T J. Welsh J. B Huntor Andy Nyland A. A. Evans	Grand Junction Fruita Grand Junction	None	Book Cliff Mesa Verde Formation Physicle	5 5 5 5	6
Langley & Wolf Ba Knez Coal Co., Kn Wisconsin Coal M Co	akor Bez Allihan Hom	Moffat	Joe Knez. A. G. Wallthan Lee H. Pattlson	Cralg Lay. Axial	Mine closed Joe Knez A. G. Wallihan A. W. Kendali C. H. Richards		None	Mesa Verde Formation		
Brant Coal Co C. L. Kerns	ant. Ise	Moffat	Roy Freeman	Craig and an and an and an and an	E. E. Whitlock. Leater J. Brant Mine closed. Roy Freeman. Fr. & Conway	Hamilton, Craig Craig	None	Mesa Verde-Mønnefer. Mesa Verde Formation		
Gró, S. Spencer	encer	Montezuma, Montezuma Montezuma Montrose Montrose	· · · · · · · · · · · · · · · · · · ·	Mancos Cortex . Montrose	Mine closed Mine closed Edgar Read Tour Phillips doin 11 Drott	Mancos Mancos Cortes Montrose Nuclo	None	Mesa Verde Formation	3	6
Chus, A. Rice & Son Ple Gus Winkler	easant Valley Issouri	Montroso Montroso Montrose Montrose Ouray	John C Blahe K.	Nucla Nucla Naturija	Mine closed	Nucla . Nucla . Nucla	None. None. None. None.	A S A S A S A S A S A S A S A S A S A S	6 6 6 6 6 6 6 6 6 6 6 6 6 6	6
W. C. Pace. Mil J. R. Marcketti — Ma Rapini & Hughes Ph	arlon	Ouray Pitkin Pitkin	Wm Hughes	Colona. Carboulale Carboudale	P. E. Swyhari W. C. Pace J. R. Marchetti Wm. Hughes	Carbondale	NODC.	Placita		- G
Smith & Long Lic Thos. D. Foreman Nin Robert McKee Mc	on Canon ine Mile	Rio Bianco.	A. D. Smith	Meeker	R C Graham A. D. Smith. Thomas D Foreman Robert McKee F. G. Jarrelt	Meeker	None I I	Phnacie.		6
Victor-American Fuel Co. Pli Victor-American Fuel Co Wa Colorado & Unah Coal Co Ha	anacle	Routt	B. W. Snodgrass. B. W. Snodgrass. B. A. Harris.	Denver Denver Mt Harris	P. G. Jarroti D. D. Davis D. E. Davis Harry Malloi John T. Sidle	Mt Harris	D, & S, L,	Pinnacle	10 10 12 9 to 14 8	a species de
McNell Coal Co	acGregor umpa	houti	A. M. McNell Jos. Slimpson	Denver Milnor Denver	J. W. McCune J. J. Nelsh Jos. Shapson Albert E. Oliver, J. T. Mills	Mac Gregor	D. & S. L	Mesa Verde Formation Wolf Creek. Wolf Creek. Mesa Verde Formation	12 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
Seven Points Coal Co Sev American Coal & Power Co Ro Amos Coal Co Me	ven Points outt Pinnacle eCrosky	Routi and Itoutt and Itoutt and Routt and Routt and		Oak Creek Hear River Mac Gregor	E. R. Harris B. Griffen Geo Flannigan C. C. Amos David D. Linn		None	Pinnacle Pinnacle Pinnacle Mesa Verile Formation	· ····· ··· ··· ··· ··· ··· ··· ··· ··	
Ground Hog Coal Co. Hlock Coal Co. Monger & Gray	ock		E. H. Zimmerman M.	Steamboat Springs Steamboat Springs	John Arthur Joseph Mathews James Andrews W. R. Gray Tom Chergo	Steamboat Springs.	D. & S. L	Pinnacle		2 1 6
W. R. Keek Keek Re- L. J. Gray Gri Rocky Mountain Fuel Co	s k ny dumbine ant	Weld	Geo. T. Peart	Norwood Norwood Deuver Deuver Denver	S. J. Rovers W. H. Keck L. J. Gray . P. L. Peart J. J. Thomas	Norwood	None None C B & Q U. P.	Lower Columbine		
Nationat Fuel Co. Pu Clayton Coal Co. Cla Boulder Valley Coal Co. Bo Consolidated Coal & Coke Co Ba	ayton oulder Valley	Weld Weld	Samuel Tescher Dro. Morrison B Nesbit Carson W. Smith .)	Denver Denver Denver Denver	Evan Jones Geo. Mathews Wm. Burt Wm. Andrew A. W. Padfield	Dacono	U. P	Lower Frederich Laramie Cretaceous	5 to 6 10 9 	
W. E. RUBBELL Coal Commun. Ru Shamrock float flo. Sh aBell Mining Co Eu sColorado Dev & Leasing Co. Ev	URBOLL amrock ureka. Vann. v	Weld Weld Weld,	W E. Russell P II Powers R M Head	Denver Brie Denver, Frederich	dohn R. McNell Ed. Walker Thomaa Morgan Elmer Ellia Felix Tisone	Frederick	U, P	Laramle Formalion	10 6 5 7 7	
White House Coal Co White Ash Coal Co *Sweet & Wickwir *Carbon Coal Co Ca	onroe	Weld Weld Weld Huerfano La Piala		Erle La Salle Walsenburg Durango	W P. Roym Geo. M. Woothey Geo. Totten, Frod J. Sweet Not Stated	icrie La Salle. Walsenburg. Durango	None C. & S. D. & R. G. W	Cameron Laratnio Formation		6 3 3
*Corcoran Coal Co Co *Jones & Trachis Do	orcoran onglass Creek		R. C. Graham	Grand Junction Rangeley	Joe Shain	tirand Junction. Rangeley		Stean Verde Formation		6 

Mines designated by \* were filed too late to be listed in their proper places a The Evans mine operated by the Colorado Dev & Leasing Co has been taken over by the Liley Coal & Land Co. s The Eureka mine operated by the Bell Mining Co, is now leased to Fred Hunsiker, s The Fairview mine is now operated by Shew & Schemiez.

### TABLE No. 3

# VENTILATING EQUIPMENT OF COAL MINES IN STATE OF COLORADO FOR YEAR ENDING DECEMBER 31, 1925

	Kind of Opening				Nu	mber							
Name of Operator	Name of Mine	Shaft Depth	Length	lope State	Drift Lungth	Gancoun or Noil-Gascous A		Type afoty Used	Meibod of Vep- tilation	Name of Fan	Diameter Feat	Revolutions Per Minute	KIND of Power Used
Ajax Coal M Co	Capitol Alamo Allitude Routt-Pinnacle.	219 40	2500 2000 300	17° 5° 17°	1700	Gascous Gascous Non-Gascous Non-Gascous	2 8 1 2	225 	Fan Fan Fan Fan	Buffalo Vulcan. Not Stated Not Stated	6	70 103 60	
American Smelting & Ref. Co. American Smelling & Itef. Co. Amor Coal Co	San Juan Honcartio			6° 1°	\$200 5200 300	Non-Gascous Gascous Non-Gascous	2 7 1	8-U 3-0-0	Fun Fans (2) Fan	Jeffrey-S. Jeffrey-II. S	10	180 144 410 343	Electric Electric
Arthur Coal Co Arthur Coal Co Aztec Coal M. Co	Anchor No. 2 Arthur Toltre	4.49.49.49. 4.4. 19 		12° 6° 10%	900 300	Non-Gascous Non-Gascous Gancous		130	Fan Furbace Fan Fan	Siroceo	4.8x 3	330	Not Stated
Balason Coal Co Baldwin Fuel Co Barker, Wright Baudino & Co Bear Danon Coal Ce.	Babson Baldwin Star Wright Morning-Star Hear Canon-No. 3	Strip 100	Pit		1600	Non-Gascous Non-Gascous Gascous	1	1997 - 19 19 - 19 19 - 19 19 - 19 19 - 19 19 19 19 19 19 19 19 19 19 19 19 19 1	Fan Fan Fan	Buffalo Not Stated Jeffrey	41/2	175	
Bear Canon Coal Co Bell Mining Co Bennett Coal Co	ticar Canon No. 6 Eureka Bonett	100		a	21100 604	Gancous Non-Gascous Non-Gascous	21	125	Fan Fan Natural	Jeffrey Cole	6 3x 8	440 665 80	Electric Steam
Big Four Coal & Loke Co Black Canon Coal & Fuel Co Black Diamond Coal Co	Centennial Caddell . Black Djamond	266	{ 1600 } { 2000 }	Б %		Gascous Non-Gascous	0 2 1	\$0	Fan Fan Fan	Crawford & McCrimmon Not Slated Home-made	12 10		Electric
Black Hawk Coal Co Black Hills Coal Co Block Foal Co Bluff Springs Coal Co	Mohawk Black Hills Block	Not	800 200 Stated 400	10°	5011	Gaseous Non-Gaseous Non-Gaseous Non-Gaseous	1 1 1	16	Fan Fan Fan Fan	National, Under Construction Not Stated Strocco	4 % 4 10 ×	260 160 125 900	
Bonglio Coal Co. Potner Bros Coal Co. Boulder Black Hawk Coal Co. Boulder Coal Mining Co.	Pickford lionner. Boulder Black Hawk Black Diamond	20	120 204		165	Non-Gascous Non-Gascous Non-Gascous Non-Gascous	1 1 1	An grant or	Fan Natural Natural Fan	Not Stated	2' 6"		
Boulder Valley Coal Co Bracken & Cozza Brani Coal Co Brown, Thos. Coal Co	Bouider Valley Harvey Gap Brant Round Oak	317 No.	Report 240 300	Filed 5%	• ••••	Gameous Non-Uaseous Non-Gaseous	2 	200	Natural NoI Stated		4i		Gasoline Engine
Brown, 1103, Coal Co Burnitall Fuel Co Burro Creek Cosl M. Co Butcher Knife Coal Co.	Burnitall			5°	380	Non-Gascous Non-Gascous	1		Fan Fan	Nullonal	5 	450	n mes a factoriada antigene a
Caddell & Son Callenle Coal Co. Callente Coal Co	Ravenwood		5000	3 34 9	1900	Non-Gaseous Gaseous Gaseous	1 5 3	1.611 6-8	Fan Fans (2) Fan	Not Stated	12 5 5 <sup>1</sup> / <sub>2</sub>	60 690 266 377	Electric Electric
Calumet Fuel Co	Calumet No. 1 Calumet No. 2 Perins Deak	· · ·	3600 5000 2200 <b>46</b> 00	6 % 10 % 10 *	1235 2 - 4	Gascous Gascous Gascous Nun-Gascous	3 5 4	21.0	Fan Fan Natural	Jeffrey	4x_8 12	105 190 83	i Electric
Cambro Mining Co	Cambro Brewster		300 1200 750	16° 9° 10°	2270	Non-Gaseous Gaacous Non-Gaseous	i 1		Fan Fan	Not Stated	10 5	150	
Canon Quality Coal Co Canon-Reliance Coal Co Canon-United Coal Co Carbon Creek Coal Co	South Magnet Canon Jack O'Lantern Cartion Creek	1084	350  180		4 4 44 4	Gaseous Non-Gaseous Non-Gaseous Non-Gaseous	2 2 1 1		Fan Fan Fan Natural	American. Jeffrey., Buffalo	3* 4* 6 3	1200 300 400	
Cedar Hill Coal & Coke Co Champion Coal M. Co Chergo Tom Christensen Coal Co.	Greenville Champlon Chergo.		500 150 500	2 % 14 °		Non-Gascous Gaseous Non-Gascous Non-Gascous	1 1 1		Fan Fan Fan	Not Stated Home-made Robinson Sturlevani	5x 3	136 390 500	Gasoline Engine Gasoline Engine Gasoline Engine
Clayton Coal Co Collier, Andy. Colorado Dev. & Leasing Co Colorado Puel & Iron Co	Clayton Congo Evans Coal Creek	325	700	2 1/2 0	••••	Gaseous Non-Gaseous Non-Gaseous Gaseous	i  1 249	*	Fan Not Slateil Fan	Jeffrey	12 	90 500	Blectric
Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co	Rockväle Fremont	400 300 402	1000 )	i~	· · · · · · · · · · · · · · · · · · ·	Gascous Non-Gascous Non-Gascous	249 173 ( 6 1	291	Fan Fan	C. F. & I. Gulbal.	12 10 21	156 200 72 80	Electric Electric Steam and Electric Steam
Colorado Puel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co	Emerald Crested Butte Elk Mountain *Kobinson No, 1	· • • • • • •	26/10 6900 2240 71/10	750 99 78		Non-Gaseou» Gaseous Gaseous Gaseous	2 5 2 4		Fan Fan Fan Fan	Sturtevant. Capelle Capelle Capelle	3x 8 12 5 13x 9	160 120 150 170	Electric Steam Steam Electric
Calerado Fuel & tron Co Colorado Fuel & tron Co Colorado Fuel & Iron Co. Colorado Fuel & Iron Co	*Robinson No. 2		5500 45011 80140 6409	675 50		Gaseous Gaseous Gaseous Gaseous	6266	- 30 - 200 - (	Fan Fan Fan Fan	Capelle Capelle Jeffrey Jeffrey	13× 9 13× 9 5 5	$170 \\ 170 \\ 392 \\ 450$	Steam and Electric Steam and Electric Electric Electric
Colorado Fuel & Iron Co Colorado Fuel & Iron Co. Colorado Fuel & Iron Co	Ideal	*	2900 5000 3600 (		2400	Gascous Gascous Non-Gascous	5 3 4	200 ( 170 {	Fan	C. F & 1.	10	124 270 130	Steam and Electric
Celorado Fuel & Iron Co Colorado Fuel & Iron Co Celorado Fuel & Iron Co	Morley	,	5800	20 %	13000	Савсоця Саясоця Саясоця	7 20 8		Fans (3) Fan Fan	2 Sirocco and 1 C. F. & 1 Capelle C. F. & 1.	4x 6 2' H"x 8 6x20 9x11 6x12	490 350 58 207 180	Steam and Electric Steam and Electric Steam and Electric
Celorado Fuel & Iron Co Celorado Fuel & Iron Co. Colorado Fuel & Iron Co.	Toller Tabasco	353	6300 1 7920	0.60	5810	Gascous Gascous Gascous	4 9 12	178 179	Fan Fan Fans (2)	Jeffrey P. F. & 1	6x12 6x12	520 234 217 (	Steam and Electric Steam and Electric Steam and Electric
Colorado Fuel & fren Co	Primero	···· ·	2 5500 N. 7490 E. 7550 2100	}	-	Gазсоня Nott-Gавсоня	8	136	Pans (2) Fan	C. F & 1	6x12 5 12	140 { 170 } 460 } 70	Steam
Colorndo & Utali Coal Co Consolidated Coal & Coke Co Converse, Frank Coriey, W. D.	Harris Baum Converse Corley	260	4000 ' 		1000	Non-Gaseous Non-Gaseous Non-Gaseous Non-Gaseous	2 3 		Fan Fan Fan Fan	Ottumwa Crawford & McCrimmon National Not Stated		130 75  100	Steam and Electric Steam None Electric
Corley, W. D. Cortez Coal Co Cottonwood Coal Co	Franceville		2 10 100 900	257 22% 15°	1000	Non-Gascous Non-Gascous Non-Gascous Non-Gascous	1		Natural Fan Natural Not Sinted	American	4	120	Gasoline Engine
Cowan Coal Co	Bluff Springs No. 1 Cox		300 300 300	12* 20*		Non-Gaseous Non-Gaseous			Fun Fan to be ln. Natural	Baffalo		580	Whim Electric
Crested Butte Anthracite M. Co. Crested Butte Coal Co	Crescent	270	3100	···· ···· ··· ··· ··· ··· ··· ··· ···	2004	Non-Gaseous Non-Gaseous Non-Gaseous Non-Gaseous	1 		Natural Fan Fan Fan	Waddle Nallonal Washington	16 6 10	48 50 110	Steam and Electric
Danville Coal Co	Cunningham Danville . Lewis Engle	<sup>11</sup> 84	1 25 700	214		Non-Gascous Non-Gascous Non-Gascous Non-Gascous			Natural Fan Natural Fan	Not Stated	10.	60	Not Stated
De Gratfenreid, J. R Dennis & Malene Dick Coal Co	De Graffentied		359 280	6°	280 2000	Non-Gascous Non-Gascous Non-Gascous	1	***	Natural Natural Fan	Stille	5		Electric
Domenico & Sons Double Dick Coal Co Drennan Coal Co Drott, John H	Champion (Paramount) Double Dick Dreunan	234 60	1400			Non-Gaseous Non-Gaseous Non-Gaseous	1  1		Fan Fan Naiural Fan	Situeco. Silne	6 3 	120 700	Steam and Electric Electric
Durango Coal Co. Electric Coal Co. Empire Coal M. Co. Eno Coal Co	New Porter (Durango) Black Dlamoud Emplre Matr	Not	Stated 200 6000	8 m -		Non-Gascous Non-Gascous Gascous Non-Gascous	1 1 4 not	130	Fan Fan Fan Naturnt	Home-made. Home-made. Jeffrey	4' 8" 4 5	210 400 400	Gasoline Engine
Estes, James F. Farmer-Mutual Coal Co. Fitzstminons, E. A. Foremati, Thos. D.	Bates . Farmor-Mutual Berry Nino Mile	99. 999	2110 490	28° 18°	950 400	Noti-Gaseous		· · · · ·	Fan Faii Naiorai Naturai	Not Stated	3 4	180	Gasoline Engine None
Franklin Coal Co. Franklin Coal Co. Freeman, Roy	Boar Hiver Witherbee, Fierman, and according	215	1600 	255	12011 600	Non-Gaseous Non-Gaseous Non-Gaseous	2	· · · · · ·	Fan Fan Natural Fan	Ajnx	10	110	"Steam Sleam
Fruth & Stone Fruth & Stone Gadherey, It. V	Peacock (G & G )	Not	Stated	6°	500	Non-Gaseous Non-Gaseous Non-Gaseous	V ALO IV .+ 1 1	*	Fan Fan	Jeffrey American	318" 4 314"	500 175 280	Gasoline Engine Gasoline Engine Gasoline Engine
Gearliarí, B Glison Asphaltum Co Glendade Mining Co	Garfield =    Carbouera Glendale (Sharon)	210	2000	770	2300   2560	Non-Gaseous Non-Gaseous Gaseous	1 2 1		Fan Fan Fan	Disc Jeffrey Buffalo	-1 6 3	400 170 500	Not Stated Gasoline Engine
Gordon Coal Co Grapd Junction Mining & F. Co Grand Junction Mining & F. Co	Golden Dawn Gordon	318	180	30^ 1 ½ °	1700	Non-Gaseous Gascous Gascous Non-Gascous	3 2 1	100	Fan Fan Fan	Allingion-Curtiss	3' 4* 6 12 12	800 210 30 125	Steam and Electric Steam and Electric Electric
Gray, L. J Green Valley Cest Co. Griffiths, Coal Co.	Green Valley		159 800 800	7 7		Non-Gascous Non-Gascous Non-Gascous	1	. 11	Noj Sjaleđ Fan Fan	Stroco Contílo	3	450	Electric Steam Electric
Halbert Coal Co Hall, A. W. & Son Happy Cabon Ceal Co	Ground Hog Joergée Hed Mount In Happy Cation		100 185	45%	600 1000	Non-Gaseous Non-Gaseous Non-Gaseous Non-Gaseous		1	Naturai Pan Natural j Pan j	Cole Sturtevant	215	250	
Haueri, Karl filawkins, Canby Hayden liros, Coal Corp	Hart Valley View Martis . Hayden No 3 = Nannarell	360	Report	Flied 4%	700	Non-Gascous Non-Gascous Non-Gascous	2		Fan Natur d Fan	Dise Joffrey	43% 	250	= Gasoline Engline Stram
Rublen Treasure M. Co Rodges, R	Nanparell 111dden Treamure Gelwleic Banner	No.	Report   3011 :	Piled 11*		Non-Gascous Non-Gascous Non-Gascous			Fan Not Staled Fan	Gardon City	3	625	Gasoline Engine
L'orfano Coal Co Hunter, J. R.	Ladlow Hunter	Not	Stated	••••	3500	Non-Gascous	3	150	Pans (2)	Crawford McCulmmon & Sline	21 	85 } 700	Gasoline Engine Electric
lroua, Win Jr. Jetfryca Fuel Co Jewel Collictica Co	Independent . Baldy (Sherman) Joffryes . Ucceston	201 10 AA 14	1800 1200 1300	+1 , 		Хон-Паясоця Хон-Слэсоця Хон-Савсоця Саясоця	a	1	lôn to be li Ean io be li Ean Ean	Buffalo	2 6	460	Gasoline Engine Electric
Juanita Coal & Coke Co Kock, W. H. Kern, C. L.	King Keck Wise	No	4500 Iteport	6 % % Filed	160	Non-Gameous Non-Gameous	1		Fan Natural	Vulean	(x16	150	Bleetrie
Krez Coal Co Latighty & Wolf	Krystano Knoz Baker Mpscol		3000 325 400 3118	25 -		NOB-GREEOUS Non-Greeous Non-Greeous Non-Greeous			Pan Pan Natural Pan	Nine-made	1 × 8 3 × 3	130 	Canoline Varia
Levden Coal Co. Liberty Coal & More Co. Liberty Coal & Sons	Le ydr 5 No - 3 Nearing Mutual (Dry Creck)	792	311K 900	100	300	Non-Gascous Non-Gascous Non-Gascous			Fan Fan Fan	Not Stated Itel/pson	5 R 3	160	Gasoline Engine Gasoline Engine
Matchless Fuel Co Matthyl Steve & Sons Meeker Coal Co	Marton Matchle's Bunker Hitt Obtland Midwest		2110 200 81	1*	200	Non-Gameous Non-Gameous Non-Gameous Non-Gameous		. 1	Not Stated Not Stated Fan Fan	liuffalo Not Stated Guibpi	8 8 9		Gasoline Engine Siram Nican
Mugan, Mike Mitale Coal Co. Moffat Co. 1 Co	Midwesi Kurizville Minnle Oak Illis No. 1	Noi	Stated 700 900	3%	7000	Non-Clineous Non-Clineous	÷ 	175 1	dan Natural Fan	8)rocco	( <sup>1</sup> / <sub>2</sub>	320	Not Stated
Moffai Cont Co Moliger & Gray Mortague Joseph	Oak IIIIs No. 2 Monget Bayer Cree Mul Diving	No.	iteport 300	FID	\$80b 1 500 1	Non-Gancous Non-Gancous	6	175 1	Fan Vot Stated	Jeffrey 	10	120	Electric Gasoline Englue
			11111	.0					<sup>3</sup> BB	llome made			AND ADD ADD ADD ADD ADD ADD ADD ADD ADD

Meeker Coal Co Midwest Coal Co	(Itdland Midwest		8 t 	35	2000	Non-Gascous Gascous	1	45	Fan Fan
Mingan, Mike Minnle Coal Co Moffat Coal Co.	Kurtzyllle Minnie Oak Hilts No. 1 Oak Hills No. 2 Monger	Not	Stated 700 900		7000 8580 500	Non-Gaseous	1 6 6	175 175	Natural Fan Fan Not Stated
Montague, 408 ph Mt. Evans Fuel Co Mutual Coat Co McCurily Coal Co	Reaver Creek Mt. Dvans Mulual Hush McGuley	No 172 72			570	Non-Gaseous Garenus Non-Gaseous Nun-Gaseous	1	125	Fan Fan Natural Fan
McGintey, Wm McKee, Robert McLendon, O. K McMillin Brow McNell Coal Co	McKee Stove Canyon Rollins MacGregor	Not	Stated 500	11/2*	320	Non-Gaseous Non-Gaseous Non-Gaseous	1		Fan Natural Fan
Nultonal Fuel Co Nullonal Fuel Co	Monarch No 2	283	1000	1%		Non-Gaseous Non-Gaseous	12	•••••	Fan Fan
National Fuel Co Naturita Stores Co	Purltan	t10 Not	Stated	• • • •		Non-Gascous	1	400	Fune (3) Fan
New Grand Mesa Cool Co No Ash Cool Co North Magnet Cool Co	Winger No Ash North Magnet	97	700 750 269	7°		Non-Gascous Non-Gascous	1		Fan Naturaf Fan
North Park Coal Co Nytand, Andy Oakdafe Coal Co Oberding, W. J	Moore No. 1 Midway Oakdate Oberding		3000	16° 7°	2000 647 3500 200	Non-Gaseous Non-Gaseous Gaseous Non-Gaseous	4	100	Fan Fon Fans (2) Natural
Oblo Creek Coal Co Ohkraut Muthik Co O K Coal Co Oliver Fuel & Coal Products Co	Olito Creek		:	5% 1	2000 575 1000 300 1	Non-Gaseous Non-Gaseous Non-Gaseous Gaseous	1	20	Fan Natural Fan Fan
Owens, Rowland & Sons Pace, W. C	1 Owens Miller . Pallsade	55 55 64 5.4 - 195 6.4 - 45	500		3311	Non-Gaseous Non-Gaseous		te agaits	Natural Natural Fan
Paonia-Farmers Coal Co Petry, Sam Petry, Thos M	Paonia Willie Little Porter			3 % 20	200	Non-Gascous Non-Gascous Non-Gascous	1	* *******	Fan Fan Natural
Pikes Peak Fuel Co Pine Fuel Co	Pikeview Fawcett Pine River Regal No 1 (Wolf Creek) Prairie Canon	174	- - 	39° 1 14 %	650 500 300 1400	Non-Gaseous Non-Gaseous Non-Gaseous Non-Gaseous Non-Gaseous	1 1 1	834 8 946467 9446 944 94 94 94 94 94	Fan Fan Fan Fan Fan
Purlly Coal Co Rapini & Buglies Rapyon Coal M. Co. Rauman Coal Co Red Ash Coal Co	Reffance . Placita Rapson Rauman Red Ash	1 10 x 30 10 x 10 x 10 x 10 x	2800	10 %	2500 2500	Gascous Gascous Cascous Non-Gascous Non-Gascous	6 t 2 1 t	80 24 75	Fan Fan Fan Fan Natural
Reed & Aldreid	Montezuma Pleasant Valley McLearn Little Bear Riverside	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	t 10	Non-Gaseous Non-Gaseous Non-Gaseous Non-fraseous Non-fraseous	 1 1		Natural Natural Fan Natural Fan
Rocchio Coal Co Rocky Mountain Puel Co Rocky Mountain Fuel Co	Rocchio (Walden) Industrial Simpson Acme		531	11/20		Non-Gascous Non-Gascous Non-Gascous Gascous	1 21 1 51 4	4 4444 0. 800.49 0. 400.99 6	Fan Fan Fan Fan Fan
Rocky Mountain Fuel Co	Corham Vulcan Alpine	t \$3	500	30	4 - 11 - 1 14 - 1	Non-Gascous Gascous Non-Gascous	1	D + 1 + + 0 - 4	
Rocky Mountain Fuel Co	Forbes No. 3		· · · · · · ·	1° 6 to 10°	4300 3000	GASCOUS GASCOUS	21 C1 C1	80 50	Fan Fans (2)
Rocky Mountain Fuel Co Rocky Mountain Fuel Co Rocky Mountain Fuel Co Rocky Mountain Fuel Co Royal Ettel Co	Columbine	300 185 	350	35%	3000	Gaseous Non-Gaseous Non-Gaseous Gaseous	51 C1 C1 C1 C2	400	Fans (2) Fan Fan Fan Fans (2)
Royat Gorge Coal Co Royers, S. J. Rugaell, W. E. Coal Co. Santa Fe Coal Co.	Royal Gorge. Royers Russell Sania Fe Service.	220	175	430	3000	Non-Gaseous Non-Gaseous Non-Gaseous Non-Gaseous Non-Gaseous	1	······································	Fan Naturat Fan Fan Fan
Stew Coal Co Shawrock Coal Co Stew Coal Co	Seven Points Shamrock	100 Not	T00 Stated	17°	450	Non-Gascous Non-Gascous Non-Gascous	1	d di sa distrito norotan durgino tago com	Fan Natural Natural
Smith & Long	Lion Canon South Canon Spencer Standard Standard	Not No.	4200 Stated Report 250	Flled	**************************************	Non-Gaseous Non-Gaseous Non-Gaseous	1	44 40 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Fan Fan Not Stated Natural
States-Hall Coat Co	Stater Stoken Sunnyaide		435 1700 1000	12*	800	Non-Gaseous Non-Gaseous Non-Gaseous	1	t 35	Fan Fan Fan
Sunshine Coal Co	Sunnyside Bluff Springs No. 3 Sunshine Kennedy.	40 Not	300 Stated	1% 	\$200	Non-Gaseous	1 t	·····	Nalural Fan
Temple Fuel Co	Brodhead No. 9 Thomas Three Pines Tipolsch Torrid.	· · · · · · · · · · · · · · · · · · ·	10000 700 1400	9 % **	200 1300 500	Non-Gascous Non-Gascous Non-Gascous Non-Gascous Non-Gascous		2	Fan Natural Fau Natural Fan
Triangle Coal Co	Triangle. Baldy Mountain		350 C 2000 K 1800		300	Non-Gascous Non-Gascous	ï	5.00 ( 10 ( 10 ( 10 ( 10 ( 10 ( 10 ( 10 (	Natural Natural
Union Coal & Coke Co	Pryor	47	K 1800 R 1100	} ** 1%	1000	Non-Gascous Non-Gascous Gascous	6	100	Fans (3) Natural
Venta Mines, Inc	Vosta Cuchara Canon Brookside Vickers	No.	1teport 1800 2000	Filed		Non-Gaseous Non-Gaseous	1	32	Fan Fan
Victor-American Fuel Co Victor-American Fuel Co	Chandler	462	9000			Gascous Non-Gascous	6	350	Fan Fan
Victor-American Fuel Co	Fibnacle		3300	3 1/2 %	\$ 4200 ] 3300 }	Non-Gascous Non-Gascous	16		Fans (2) Fans(2)
Victor-American Fuel Co Wade Coat Co. Wellington Coal Co	Wailge Red Canon Wellington		1 1041 2 3156 400 500	Slope 9* 16%		Gascous Non-Gascous Non-Gascous	4	125	Fan Natural Natural
White Ash Coal Co White House Coal Co Whitlock, 15 19	White Ash Monroe Whitlock	100 	300 125	23 %		Non-Gascous Non-Gascous Non-Gascous	1		Fan Natural
Williams Coal Co Wilton Coal Co Winkley, Gue	Williams Pritchard Missouri			2 %	125 1500 180	Non-Gascous Non-Gascous Non-Gascous	1	····· •	Fan Fan Natural
Winton Coal Co. Wisconsin Coal M Co Yampa Colligries Co	Winton Watliban Yampa		1000	= =: 5°	1250	Non-Gascous Non-Gascous	1		Pan Natural Fan
A A gaseous mine is one get	Earneal	aptities	aufficient t	o he detects		Non-Gaseous			Natural
*Operated as one mine titeport covers both mines follows for a shoft 75	llave same openings. The	part ca				approved salory	temp.		
4No. 1, 10600; No. 2, 4050; No 1Formerly operated by Nick 1 Table No. 2 omitted.	legglo.		1						

Not Staled	2414	600 320	Steam
Sirocco Jeffrey	6 10	140	
Home made Crawford & McCrimmon Conifio	16 	" 200 98	Gasoline Engine Steam Gasoline Engine
Not Stated		250	Gasoline Engine
Crawford & McCrimmon Crawford & McCrimmon	15	70	Electrio "Sicam
Buffalo	16	71	Electric
Jeffrey, Cole & American. Not Stated		176] 90} 235] 600 400	Steam and Electric Casoline Engine Electric
Not-Stated Not-Staled Jackson		200 200 750 160 I	Electric Sleam Gasoline Engline Electric
·····	} 9	110 (	
Robinson Jeffrey	5 	125 350 440	Gasoline Engine
Silne	· · · · · · · · · · · · · · · · · · ·	225	Electric
Robinson Sturievant	4 3	300 230	Gasoline Englos Electric
Buffato	5x 8 4½ 3	200	Gasoline Engine
American Garden City	5 5	350 210	
Stine	8 5 10	t10 200 85	Electric Electric Electric
Jettrey	4	300	Electric Electric
Not Stated		0- 10-0-0-00 10-0-0-0-0-	Electric
Conifio	3	350	Gasoline Engine
Vot Staled	43 <u>/</u> 16 12 13 14	110 120 100 120	Steam and Electric Steam and Electric Steam and Electric Steam and Electric
Tifford	4' 6" x13 11' 5" x 6' 5" 5' 4" x 3' 6"	60 90 120	Electric Steam
Julbal & Buckeye	14 13' 6"	100	Electric Electric
Sirocco & Jeffrey		370 300	Electric
Sine	118	75 125 205 J 250 J	Electric Electric Steam Steam and Electric
iturtevant	6		Sleam
Blower	3' 6"	110 300	Steam and Electric Electric Gasoline Engine
	5	1200	Gasoline Engine Steam and Electric
fot Stated.	4	533	Steam
	12		Steam
turtevant.	4	P127-02	Etectric
	3 6 1/5 5	400 150	Electric Correlies Trades
effrey.	4x10	475	Gasoline Engine
effrey	5	380 180	Electric Electric Electric
18 11	******	******	***** * ****** ****** ***
Vulcan & Jeffrey	{ б 9 б	110 100 200	
ot Stated	10	80	Steatto
effrey en enternete es	3	120	Electric
apelle Irocco. Capelle Crawford & McCrimmon	7x15 635 16 18	120 145 124 } 71 {	Electric Electric Electric
tine	{ 12 7	85 95 310	Steam Steam
A	·	2434 45 4 444	Blectric
And Stated	5x13	10	and the second s
uffalo	\$ 21.6*	1500	Gasoline Engine
uffalo	1' 6"	1200	
uffalo	10	80	Steam

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MINING MACHINES AND EXPLOSIVES USED AT COAL MINES IN THE STATE OF COLORADO FOR YEAR ENDED DECEMBER 31 1925

	5	Permissible BeyisolqxB	6,100 42,737 2,025	34,794	22,000	$1,035 \\ 750$	800 100
	Explosives Used (Pounds)	Dynamite	10	1 537	250	135	50 300
	Explos (Pc	Віяск Ромдег	5,625 1,250 500	2,550 2,450 1,375	3,225 3,355 3500 3500	$\begin{array}{c} 5,000\\ 35,575\\ 14,000\\ 350\end{array}$	$^{1,000}_{1,250}_{2,800}$
	<sup>S</sup> O	Ţotal	$\begin{array}{c} 40,127\\ 109,763\\ 6,465\\ 1,577\\ 25,968\end{array}$	$\begin{array}{c} 202,717\\ 1,010\\ 1,272\\ 1,272\\ 66,436\\ \end{array}$	7,3043 7,397 4,7435 2,9069 76,765	$15,745 \\ 150 \\ 150 \\ 101,106 \\ 13,456 \\ 639$	4,057 164 636 5,114
	Coal Mined by (Short Tons)	элілэяМ	40,127 44,230	149,662	1,795 34,371	$\begin{array}{c} 15,745\\ 76,106\\ 11,811\end{array}$	3,878
., 1925	0 -	busH	$\begin{array}{c} 65,533\\ 6,465\\ 1,517\\ 25,968\end{array}$	$53,055 \\1,010 \\1,272 \\1,272 \\4,901$	$ \begin{array}{c} 3,043\\ 7,397\\ 535\\ 4,749\\ 1,111\\ 42,394 \end{array} $	$\begin{array}{c} 25,000\\ 1,645\\ 639\end{array}$	179 164 636
ER 31,	ing	No. Operated by Electricity	6	00 I IO		00	
DECEMBER	Mining Machines	No. Operated by Compressed bir	~			3 10	
DEC		Name of Mine	Capitol Alamo Altitude Routt-Pinnacle San Juan	Boncarbo McCroskey Anchor No. 2 Arthur Toltec	Babson. Baldwin Star. Wright. Morning-Star. Bear Canon No. 3 Bear Canon No. 6	Eureka. Bennett. Centennial Caddell Black Diamond.	Mohawk Black Hills Block Bluff Springs No. 2
		Name of Operator	Ajax Coal M. Co Alamo Coal Co Altiude Coal Co American Coal & Power Co American Smelting & Ref. Co	American Smelting & Ref. Co Amos Coal Co Archor Coal Co Arthur Coal Co Arthur Coal M. Co	Babson Coal Co Baldwin Fuel Co. Bartker, Wright Baudino & Co Bear Canon Coal Co Bear Canon Coal Co	Bell Mining Co	Black Hawk Coal Co Black Hills Coal Co Block Coal Co Bluff Springs Coal Co

### STATE INSPECTOR OF COAL MINES

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TABLE No. 4-Continued

MINING MACHINES AND EXPLOSIVES USED AT COAL MINES IN THE STATE OF COLORADO FOR YEAR ENDED

	DEC	DECEMBER	R 31,	, 1925					
		Mining Machines	ng ines		Coal Mined by (Short Tons)		Expl (I	Explosives Used (Pounds)	çq
Name of Operator	Name of Mine	Vo. Operated by Compressed Air	Vo. Operated Vibity	busH	θπiπ5sΜ	IstoT	Black Black	9jimsny(I	Pęrmissible Berpissives
Boaglio Coal Co Bonner Bros. Coal Co Bounder Black Hawk Coal Co Boulder Coal M. Co Boulder Valley Coal Co	Pickford Bonner Bounder Black Hawk Black Diamond Boulder Valley	ы. 10	0.02	577 835 100	27,142 205,795	$\begin{array}{c} 577\\ 577\\ 835\\ 1,084\\ 27,142\\ 205,795\end{array}$	$1,250 \\ 1,250 \\ 12,500 \\ 40,225$	400 142	982
Bracken & Cozza. Brant Coal Co. Brown, Thos., Coal Co. Brown, Thos., Coal Co. Burnitall Puel Co.	Harvey Gap Brant Bround Oak Tyler			$1,099 \\ 1,099 \\ 1,002 \\ 803 \\ 450 \\$		1,0992411,002803450	$1,875 \\ 500 \\ 50$	25 100	t 200
Butcher Knife Coal Co Caddell & Son Caliente Coal Co Caliente Coal Co Caliente Coal Co Calumet Fuel Co	Butcher Knife Hezron Ravenwood Maitland Somerset		00 61 63	$\begin{array}{c} 2,337\\ 2,791\\ 25,913\\ 25,913\\ 163,393\end{array}$	$\begin{array}{c} 51,917\\ 51,917\\ 40,740\\ 26,404 \end{array}$	2,337 2,731 77,830 40,956 189,797	1.250	20 5,500	$\begin{array}{c} 300\\ 8,100\\ 5,250\\ 32,000\end{array}$
Calumet Fuel Co Calumet Fuel Co Calumet Fuel Co Calumet Fuel Co Cambro Mining Co Canon Coal Association	Calumet No. 1 Calumet No. 2 Perins Peak Cambro Brewster		0 4 2 1	$\begin{array}{c} 12,079\\ 2,755\\ 2,883\\ \ldots\\ \ldots\\$	176,79469,28739,6163,4153,415	$\begin{array}{c} 188,873\\72,042\\42,499\\3,415\end{array}$	125 100		41,100 7,750 4,895 20
Canon District Coal Co Canon Quality Coal Co Canon Reliance Coal Co Canon United Coal Co	Florence District South Magnet Canon Jack O' Lantern		0071	3,804	$\begin{array}{c} 6,587\\ 2,226\\ 65,164\end{array}$	6,587 2,226 65,164 3,804	$1,250 \\ 3,750$	750 500 100	$\begin{smallmatrix}&25\\200\\11,900\end{smallmatrix}$

Touton Cuastr Coal Co	Corbon Croals			9.9.9		332	9.50	50	
carpoint treen void con- cedar Hill Coal & Coke Co. Champion Coal M. Co. Chergo, Tom. Christensen Coal Co.	Carbonille Champion Chergo Christensen	1		7,258 1,786 282	2,773	1,2557 1,786 2,282 2,773	2,075	300	1,400
Clayton Coal Co Collier, Andy Colorado Dev. & Leasing Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co	Clayton	110	13 11 51	$10,000\\197\\137,800\\37,860$	250,683 22,685 30,682	$\begin{array}{c} 260,683\\ 197\\ 22,685\\ 137,800\\ 68,542 \end{array}$	$\frac{111,400}{12,600}$	400	10,388 6,852
Colorado Fuel & Iron Co. Colorado Fuel & Iron Co. Colorado Fuel & Iron Co. Colorado Fuel & Iron Co. Colorado Fuel & Iron Co.	Fremont Nonac Dimenald Crosted Butte Blk Mountain	\:\:\:	1 1 33 53	33,568 4,310 3,723 92,428 39,472	24,704 20,309 3,509	24,272 24,212 7,232 92,428 39,472	4,857 18 775		6,336 25 359 3,612 5,162
Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co	Walsen & Robinson 1 & 2 Cameron Cameron Ideal Pietou		∞ တ က မ	212,792 57,125 138,065 136,105 27,795	269,682 184,487 40,926 51,344	$\begin{array}{c} 482.474\\ 241.612\\ 178.991\\ 136.105\\ 79.139\end{array}$	8,536		52.833 21.641 33,641 37,940 37,940
Colorado Fuel & Iron Co. Colorado Fuel & Iron Co. Colorado Fuel & Iron Co. Colorado Fuel & Iron Co. Colorado Fuel & Iron Co.	Kebler No. 2 Morley Frederick Berwind Toller	1-111	9010044	$\begin{array}{c} 13,340\\ 318,915\\ 290,873\\ 134,983\\ 118,016\end{array}$	53,102 36,662 40,470 65,566 61,636	$\begin{array}{c} 66,442\\ 355,577\\ 331,343\\ 200,549\\ 179,652 \end{array}$	22,363		924 6,728 44,777 13,376 17,003
Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Puel & Iron Co Colorado Springs Co Colorado & Utah Coal Co	Tobasco		614 .6120	$\begin{array}{c} 103,352\\ 129,818\\ 15,697\\ 22,729\\ 69,137\end{array}$	66.953 33,591 26,500 161,091	$\begin{array}{c} 170,305\\ 163,409\\ 15,697\\ 15,697\\ 230,229\\ 230,228\\ \end{array}$	15,850 57,637	696	14,822 38.287 1,511 170
Consolidated Coal & Coke Co Contexe. Frank. Contey, W. D. Cortey, W. D. Cortez Coal Co	Baum Converse. Contey Franceville Cortez		2	$\begin{array}{c} 905 \\ 1,325 \\ 2,333 \end{array}$	149,930 13,877	$\begin{array}{c} 149,930 \\ 13,877 \\ 13,877 \\ 1,325 \\ 2,333 \end{array}$	$\begin{array}{c} 94,525\\ 11,250\\ 1,000\\ 500\end{array}$	50	
Cottonwood Coal Co Cowan Coal Co. Cox Coal Co. Cox Coal Co. Cracker Jack Coal Co. Cracker Jack Coal Co.	Cottonwood Bluff Springs No. 1 Cox Cracker Jack Crane	1		$\begin{array}{c} 595\\ 604\\ 242\\ 242\\ 1,065\end{array}$	6,271	6,875 6,875 242 3,414 1,065	825 825 625 625 7 825		50

### STATE INSPECTOR OF COAL MINES

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TABLE No.

COAL MINES IN THE STATE OF COLORADO FOR YEAR ENDED E E U

		UECEMPEN	<u>- 1</u>	1925					
		Mining Machines	ing nines		Coal Mined by (Short Tons)	) )	Expl (F	Explosives Used (Pounds)	bd
Name of Operator	Name of Mine	No. Operated by Compressed Air	No. Operated by Electricity	. basH	<b>Мас</b> ћIne	Tofal	Black Powder	Dynamite	Permissible Explosives
Crescent Coal Co Crested Butte Anthracite M. Co Crested Butte Coal Co Crosted Butte Coal Co Crown Fuel Co Curown Fuel Co	Crescent. Smith-Anthracite Subuley No. 2 Crown Crunningham		1	186 40,123 59,192 84	25,682	$\begin{array}{c} 40,123\\ 59,192\\ 25,682\\ 84 \end{array}$	27,950 7,950 7,850 100	250	
Danville Coal Co	Danville			$\begin{array}{c} 4,159\\ 988\\ 2,142\\ 100\\ 174\end{array}$		$\begin{array}{c} 4,159\\ 9,88\\ 2,142\\ 100\\ 174\end{array}$	850	16	9
Dick Coal Co	Dix	u ا	3	$\begin{array}{c} 12,208\\ 3,322\\ \hline 500\\ 400 \end{array}$	59,437 15,000 9,340	$\begin{array}{c} 71,645\\ 18,322\\ 9,340\\ 500\\ 400 \end{array}$	$\begin{array}{c} 21,250\\ 1,500\\ 1,500\\ 400\\ 400\end{array}$	1,000	12,377 200
Durango Coal Co	New Porter (Durango) Black Diamond Empire	11111		$\begin{array}{c} 6,894 \\ 1,359 \\ 96,941 \\ 8,399 \\ 8,399 \end{array}$		$\begin{array}{c} 6,894\\ 1,359\\ 96,941\\ 500\\ 8,399\end{array}$	875	300	850 3,700 3,000
Farmer-Mutual Coal Co	Farmer-Mutual Berry Nine Mile Bear River		1	1,205 1,200 568 50.808	14.702	$1,205 \\ 1,200 \\ 568 \\ 65,510$	$1,250 \\ 425 \\ 24,175 \\ 24,175 \\ 31,17$	100	100

150	1,800	8.730 9,900		200 10	5,100	300 300 11,240	
25	350	1,080 550 1,000	105 105	1,100	40	1,200	
1,750 125 700	$6,175 \\ 2,570 \\ 2,575 \\ 2,575 \\ 2,575 \\ 3,57$	$\begin{array}{c} 4,175\\ 3,025\\ 21,075\\ 2,425\\ 2,425\end{array}$	$1,250 \\ 750 \\ 2,500 \\ 2,500 \\ 0$	500 68,125	4,000 150	500 3,750	150 900 500
3,032 1,606 3,437 7,307 7,307	$1,021 \\ 7,667 \\ 11,874 \\ 584 \\ 1,610$	$\begin{array}{c} 47,236\\73,221\\115,374\\6,758\end{array}$	9,534 1,235 2,415 954	$1,250 \\ 1,176 \\ 105,273 \\ 3,363$	$\begin{array}{c} 1,632\\ 664\\ 1,270\\ 61,526\\ 172 \end{array}$	$\begin{array}{c} 1,134\\ 1,924\\ 5,970\\ 44,641\\ 45,471\end{array}$	$\begin{array}{c} 273\\ 104\\ 34,171\\ 777\\ 1,107\end{array}$
3,032	584	47,060 65,395 109,697	9,534	8,354	17,446	28,547	
$\begin{array}{c} 1,606\\ 3,437\\ 3,437\\ 7,307\end{array}$	$1,021\\7,667\\11,874\\1,610$	- 176 7,926 5,677 6,758	$\begin{array}{c} 641\\ 1,235\\ 2,415\\ 954\end{array}$	$\begin{array}{c} 1,250\\ 1,140\\ 176\\ 96,919\\ 3,863\end{array}$	$1,632 \\ 664 \\ 1,270 \\ 44,080 \\ 172 \\ 172 \\$	$1,134 \\ 1,924 \\ 5,970 \\ 16,094 \\ 45,471 \\$	$\begin{array}{c} 273\\ 104\\ 34,171\\ 777\\ 1,107\end{array}$
		(( ຄຸດມຸດ	1	5	4	3	
-	4			]			
Witherbee Freeman School Sec. Lease Leader No. 2 Leader No. 2	Peacock (G. & G.) Garfield Carbonera Glendale (Sharon) Golden Dawn	Gordon Cameo Sterling Gray Green Valley	Griffiths Ground Hog Joerger Red Mountain Happy Canon	Hart Valley View Martis Hayden No. 3 Nonpareil	Hidden Treasure Gelwick Ludlow Hunter	Independent Baldy (Sherman) Jeffryes Creston-Jewel King	Keck Wise Keystone Knez Baker
Franklin Coal Co Freeman, Roy Freuth & Stone Fruth & Stone	Gadberry, R. V Gearhart, B., V Gison Asphalum Co. Glandale Mining Co. Golden Dawn Coal Co.	Gordon Coal Co. Grand Junction M. & F. Co. Grand Junction M. & F. Co. Gray, L. J. Green Valley Coal Co.	Griffiths Coal Co. Ground Hog Coal Co. Halbert Coal Co. Hall, A. W. & Son Happy Canon Coal Co.	Hart Coal Co Hauert, Karl Hawkins, Canby Hayden Bros. Coal Corp Head Bros.	Hidden Treasure M. Co	Independent Coal Co Irons, Wm., Jr Jeffryes Fuel Co Jewel Collieries Co Juanita Coal & Coke Co	Keck, W. R. Kern, C. L. Keystone Mining Co. Langley & Wolf.

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TABLE No.

STATE OF COLORADO FOR YEAR ENDED THE MINING MACHINES AND EXPLOSIVES USED AT COAL MINES IN

	ed	Permissible Explosives	1,000	100	17,977 17,272	3,000	3,611
IBER 31, 1925	Explosives Used (Pounds)	9jimsnyQ			1,136 1,091		100
	Expl.	Black Powder	27,200 500	2,225 750	35,897 34,489 500	3,500 1,000 1,000 250	$\begin{array}{c} 1,750\\ 100\\ 9,025\\ 46,775\end{array}$
		IstoT	$\begin{array}{c} 99,991\\ 99,991\\ 712\\ 887\\ 3,120 \end{array}$	$\begin{array}{c} 121\\ 2,755\\ 2,437\\ 12,036\\ 941 \end{array}$	145,823 138,815 382 382	2,623 80,278 607 617 200	3,598 302 40,989 144,478
	Coal Mined by (Short Tons)	эпілэяМ	68,825	5,986	20,963 26,102	27,067	40,989 132,090
	00-	busH	$31,166\\712\\887\\3,120\\3,120$	$^{,121}_{,755}$ $^{2,755}_{2,437}$ $^{2,437}_{6,050}$ $^{941}_{941}$	124,860 112,713 382 382	$\begin{array}{c} 2,623\\ 53,211\\ 607\\ 617\\ 200\\ \end{array}$	3,598 302 12,388
	ng ines	No. Operated by Electricity		2	0110	00	or
31,	Mining Machines	No. Operated by Compressed Air	11		1		6
DEC		Name of Mine	Mascot Mascot Mascot Mascot Mascot Mascot Mascot Mascot Marcot Marcot Marcon Marcon Marcon Mascon Ma	Matchless Bunker Hill Oldland Midwest Kurtzville	Minnie Oak Hills No. 1 Oak Hills No. 2 Monger Beaver Creek	Mt. Evans Mutual Rush. McGinley.	Stove Canyon Rollins MacGregor Monarch No. 2
		Name of Operator	Lee, Dan & Son Levder Coal Co Liberty Coal & Merc. Co. Liberty Coal & Sons Libri, A. C. & Sons Marcketti, J. R.	Matchless Fuel Co Mattivi, Steve & Sons. Meeker Coal Co. Midwest Coal Co. Mingan, Mike.	Minnie Coal Co. Moffat Coal Co. Moffat Coal Co. Monfat Carlo. Monger & Gray. Montague, Joseph	Mt. Evans Fuel Co. Mutual Coal Co. McCurdy Coal Co. McCintey, Wm. McKee, Robert	McLendon, O. K. McMillin Bros. McNeil Coal Co. National Fuel Co.

8,000	1,000 71,000	6,000	2,000	50 200 6,000	1,500 50 400 200	1,000	123
	150	25	55 16	125		64 25 400	1,632 8 200 399
100,000 375 750 125	40,000 375 275 325	2,800 1,525 150	1.250	8,250	3,750	400 375 200 175	$\begin{array}{c} 2.175\\ 29,985\\ 22,766\\ 11,939\\ 7,638\end{array}$
$\begin{array}{c} 125,975\\ 291,261\\ 72\\ 3,906\\ 1,522\end{array}$	$\begin{array}{c} 1,142\\ 62,721\\ 102\\ 86,604\\ 234\end{array}$	$\begin{array}{c} 8,362\\ 317\\ 4,179\\ 14,270\\ 490\end{array}$	$21,757 \\ 5,472 \\ 1,230 \\ 1,230 \\ 91 \\$	$217,606 \\ 929 \\ 1,746 \\ 16,296 \\ 33,145$	$16.014 \\ 2,874 \\ 19,740 \\ 1,842 \\ 573$	$159\\1,655\\3,758\\3,758$	$\begin{array}{c} 9,849\\ 99,894\\ 62,361\\ 38,004\\ 35,597\end{array}$
51,449 290,256 1,407	1,198	6,962		128,244	19,740		$\begin{array}{c} 9,849\\78,146\\37,649\\35,597\end{array}$
$\begin{array}{c} 74,526\\ 1,005\\ 2,499\\ 1,522\end{array}$	$\begin{array}{c} 1,142\\ 62,721\\ 102\\ 85,406\\ 234\end{array}$	$1,400\\317\\4,179\\14,270\\490$	$\begin{array}{c} 21,757\\ 5,472\\ 1,280\\ 1,280\\ 91 \end{array}$	$\begin{array}{c} 89,362\\929\\1,746\\16,296\\33,145\end{array}$	$16,014 \\ 2,874 \\ 1,842 \\ 573$	$159 \\ 1,655 \\ 3,758 \\ 3,758 \\$	$\begin{array}{c} 21,748\\ 62,361\\ 355\end{array}$
1 212	1	1		9	1 + 3		1
13	2						8 6 6 8
Thor Puritan Cloverdale Winger No Ash	North Magnet	Ohio Creek Ohkraut O. K. Oliver Owens	Miller Palisade Paonia Willie Little Porter	Pikeview Fawcett Pine River Regal No. 1 Prairie Canon	Reliance. Placita. Rapson. Rauman. Red Ash.	Montezuma Pleasant Valley McLearn Littile Bear Riverside.	Rocchio (Walden) Industrial. Simpson Acme Standard
National Fuel Co. National Fuel Co. National Fuel Co. Naturita Stores Co. New Grand Mesa Coal Co. No Ash Coal Co.	North Magnet Coal Co	Ohio Creek Coal Co	Pace, W. C. Palisade Coal & Supply Co. Paoliane Farmers Coal Co. Petry, Sam Petty, Thos. M.	Pikes Peak Fuel Co. Pine Fuel Co. Pine River Coal Co. Pinnacle-Kemmerer Coal Co. Prairie Canon Coal Co.	Purity Coal Co Rapini & Hughes Rapson Coal M. Co Rauman Coal Co Red Ash Coal Co	Reed & Alried Rice, Chas. & Sons. Rife Coal Co. Richards, C. Riverside Coal Co.	Rocchio Coal Co. Rocky Mountain Fuel Co Rocky Mountain Fuel Co Rocky Mountain Fuel Co Rocky Mountain Fuel Co

TABLE No. 4-Continued

MINING MACHINES AND EXPLOSIVES USED AT COAL MINES IN THE STATE OF COLORADO FOR YEAR ENDED DECEMBER 31, 1925

	ed	Permissible BayisofqxB	219 120	48.346 2,501 615	550		4,500
	Explosives Used (Pounds)	этітяпұП		4,055	$\begin{array}{c} 100\\100\\10\\300\end{array}$		
• •	Expl ()	Black · Powder	2,150 7,625	67,750 27,580 30,575	$\begin{array}{r} 625\\755\\18,975\\1,250\end{array}$	1,050 1,255 1,050	1,000
	ð.	<sup>`</sup> fstoT	$\begin{array}{c} 6,924\\ 6,118\\ 6,118\\ 22,606\\ 16,911\\ 12,057\end{array}$	$\begin{array}{c} {\bf 354,560}\\ {\bf 91,310}\\ {\bf 560}\\ {\bf 43,999}\\ {\bf 221,169} \end{array}$	$\begin{array}{c} 2,392\\ 68,5321\\ 2,165\\ 340\\ 340\end{array}$	$\begin{array}{c} 1,685\\ 30,757\\ 210\\ 210\\ 820\\ 820 \end{array}$	5,866 512 307 26,087
	Coal Mined by (Short Tons)	ЭліпэвМ	3,355 6,118 9,385	230,115 91,040	68,583	30,757	
, 1920	50	basH	$\begin{array}{c} 3,569\\ 3,569\\ 13,221\\ 16,911\\ 12,057\end{array}$	$\begin{array}{c} 124,445\\ 270\\ 560\\ 43,999\\ 221,169\end{array}$	2,392 321 2,165 .340	$1,685 \\ 430 \\ 210 \\ 820$	26,087 $5,866$ $307$ $26,087$
GR 31,	Mining Machines	Vo. Operated by Electricity		оо го	53	61	
DECEMBER	Mining Machine	Vo. Operated by Compressed Air	014	34	9		
DEU		Name of Mine	Gorham Vulcan Alpine Forbes No.9 Southwestern	Columbine Grant. Frederick Horace. Royal	Royal Gorge Royers. Russell Santa Fe Service.	Seven Points Shamrock. Shew Fairview Ljon Canon	South Canon Spencer Standard Stanley
		Name of Operator	Rocky Mountain Fuel Co- Rocky Mountain Fuel Co- Rocky Mountain Fuel Co- Rocky Mountain Fuel Co- Rocky Mountain Fuel Co-	Rocky Mountain Fuel Co- Rocky Mountain Fuel Co- Rocky Mountain Fuel Co- Ross Coal Co- Ross Coal Co- Royal Fuel Coal-	Royal Gorge Coal Co- Royers, S. J. Russell, W. E., Coal Co- Santa e Coal Co- Service Coal Co-	Seven Points Coal Co Shamreck Coal Co Shew Coal Co Shew Coal Co Shew Coal Co Shew Coal Co	South Canon Mine Leasing Co Spencer, Geo, S Standard Fuel Co Stanley Mine Co.

THIRTEENTH ANNUAL REPORT

	3,535		21.110	50	11.250	1.800	10	5.500		8 000	100	6.000	34,050	432	16 700	1,605		300				20					926 127
	200 200	00						225			150		12,000	142	*****	250		****			350	0.1	10				46 677
	$1,000 \\ 1.750 \\ 18,300 \\ 18,300 \\ 18,95 \\ 195 $	1,750		775	75				575		3 635	0,000		9,750	53 225	26,275	500		1,325	750	500		750	750		200	1,408 213
	3,209 4,245 63,082 997	10,546	249 139.470	608	19,662 1.239	11,531	1,790	49.368	585	16,170	363	23,047	179,581	20,656	374,138	78,129	3,402	4,935	8 26 9 000	300	247	1.187	870	625	17,846	221	10,440,387
	44,988		104.546			•		32,256		16,170	087 01	19,590	172,638	19.979	113,502	50,808			0000	000.0							5,293,092
0000	3,209 4,245 18.094 937	10.546	249 34.924	608	19,662 1.239	11,531	1,790	17.112	585		363	3,457	6,943	229	260,656 74,723	27,321	3,402	4,935	826	300	247	1,187	870	625	17,846	221	5,147,295
	2		9				-	4		en		400	17	10 1	4	4	-		-								306
										1										4					1	1	119
							_				· .	• •.										. ·	8 A	· ·	*		
	States Stokes Sunnyside Runf Surines No. 3	Sunshine	Kennedy Brodhead No. 9	Thomas	Three Pines	Torrid	Triangle Baldy Mountain	Pryor	Collom	Vesta	Cucnara Canon Brookside	·····	Chandler	Radiant	Pinnacle	Wadge	Red Canon	Wellington.	Wonroe	Whitlock	Williams	Pritchard		Wallahan	Yampa	Earnest	

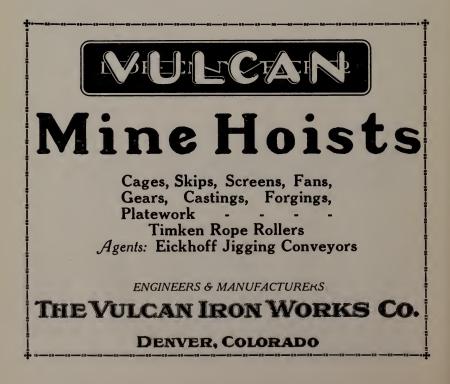
†Not in use. ‡Not stated. \$No explosives used. ¶Rock drilling.

### TABLE No. 6

Total Production Distributed	Loaded at Mines for Shipment	Sold to Local Trade and Used by Employees	Used at Mines for Steam and Heat	Coal Made into Coke	Coke Made
10,440,387	*9,347,661	668,216	229,883	*1,068,365	465,868

### PRODUCTION AND DISTRIBUTION OF COAL FROM ALL THE MINES IN THE STATE OF COLORADO FOR THE YEAR ENDING DECEMBER 31, 1925.

\*NOTE-873,738 tons were loaded at the mines for shipment and made into coke.



-	
No.	
E	
TAB	
2	
-	

NUMBER INJURED IN COAL MINES DURING THE CALENDAR YEAR ENDING DECEMBER 31, 1925

	Downowork	Domonont	Temporary	Temporary Disability	Total
CAUSES	Permanent Total Disability	rermanent Partial Disability	Time Lost More Than 14 Days	Time Lost Less Than 14 Days	Injuries
Underground- 1. Falls of roof (coal, rock, etc.) 2. Falls of face on illar coal	1	60 GJ	271 83	218 55	493 140
<ol> <li>Mine Cars and locomotives</li> <li>A clas explosions and burning gas.</li> <li>Coal-dust explosions (including gas and dust combined)</li></ol>		4	249 5 1	189 	442
			4		9
		co	4 <u>1</u> 60	31	107
		2	216	304	525
In Shaft— 13. Falling down shafts or slopes14. Objects falling down shafts or slopes14. Objects falling down shafts or slopes17.					
15. Cages of skips			1		1
	1	20	934	848	1,803
17. Mine cars and mine locomotives			15	9	21 1
Machinery Boiler explosions or bursting		1	ດດາ	14	<u>ू</u> द्रा
21. Railway cars and locomotives		1	27	23.3	51
Total number injured on the surface		2	50	49	109
GRAND TOTAL GRAND	1	22	992	897	1,912
<ul> <li>A. PERMANENT TOTAL DISABILITY. Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis or other condition permanently incapacitating workman from doing any work of a gainful occupation.</li> <li>B. PERMANENT PARTIAL DISABILITY. Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, and dislocation</li> </ul>	rms, one leg loing any wo , hand, eye,	and one arm, rk of a gainfu one or more fi	total loss of ey l occupation. ngers, one or r	resight, paralys nore toes, and	sis or other dislocation

where ligaments are severed, or any other injury known in surgery to be permanent partial disability. In this column include only accidents which cause a loss of time more than the balance of the day or shift upon which the accident occurred. v

TABLE No. 8

COAL MINE FATALITIES IN THE STATE OF COLORADO, CLASSIFIED BY CAUSE AND OCCUPATION, FOR YEAR ENDED

DECEMBER 31, 1925. UNDERGROUND AND SHAFT	Approximation and Approximation and Approximation and Helpers	Falls of roof (coal, rock, etc.) 10 3 1	pillar coal 9 7 1	ocomotives	Gas explosions and burning gas		mine gases.	or burns) 1 2 2	urned, suffocated	afts or slopes		
AFT	Bratticemen Timbermen and Rockmen Pump and Pipemen Blectricians		1 1	1 2								
	and Helpers All Others Total Underground	1 15	18		4	1		1 4		1		
	Surface Fatalities Total Fatalities	16	18	6				4		1		

### THIRTEENTH ANNUAL REPORT

												ĺ						
												-						
Surface-							•							:	2		67	2
12 Rischwichty (Shock or burns)											· · · · · ·							
19. Machinery			-									1	:					
20. Boiler explosions or bursting												:						
1 Railway cars and locomotives																	46	16
22. Other causes				-											1	i	1	1
Total							1					:			4	:	ŋ	10
Grand total		-	1	22	22 11 4 1	4	-+	3	01	-	1	2	67		9			57
*Number employed in each occupation 189 67 146 4,485 3.761 514 135 858 219 62 315 401 125 116 416 11,809 2.2081 14.017	189	67	146	4,485	3.761	514	135	858	219	62	315	101	125	116	416 1	1,809	2.2081	14.017
										1								

\*To be supplied from Table 10. ‡Above poll taken December, 1925.

### TABLE No. 10

### COAL MINE EMPLOYEES CLASSIFIED BY OCCUPATION IN THE STATE OF COLORADO DURING YEAR ENDED DECEMBER 31, 1925.

	UNDERGROUND	Employed in and around the mines of Colorado
1.	Foremen	189
2.	Assistant foremen	67
3.	Fire bosses	146
4.	Pick miners	4,485
5.	Machine miners	3,761
6.	Machine runners and scrapers	514
7.	Shot firers	135
8.	Drivers and runners	858
9.	Motormen and assistants	219
10.	Doorboys and helpers	62
11.	Trackmen and bratticemen	315
12.	Timbermen and rockmen	401
13.	Pumpmen and pipemen	125
14.	Electricians and helpers	116
15.	All others	416
	Total underground	11,809
	SURFACE	
1.	Superintendents	121
2.	Foremen	47
3.	Blacksmiths and carpenters	205
4.	Engineers and firemen	278
5.	Machinists and helpers	91
6.	Trackmen and helpers	35
7.	All others at mine	1,116
8.	Coke-oven employees	201
9.	Office employees	114
	Total surface	2,208
Tota	al employees	14,017
Nur	nber of days men worked during year	186.6

Table No. 9, omitted is covered by Table No. 8. Applies to Metal Mining. Above poll taken in December, 1925.



### NATIONAL CARBIDE

**Best** for House Lighting and Cooking, Heating Water, Ironing and for Barns, Poultry Houses, etc.

Because it is of Uniform Size-Free from Dust-works perfectly in all makes of generators-gives most gas per pound, and is made of the very finest materials in the most - Story of Carbider modern plants.

an e Caldide us

### Ask for NATIONAL Carbide

-In the RED Drum -SAVES You Money

Over 100 Warehouses-from coast to coast

TABLE A-1925

SHOWING BY COMPANIES: TOTAL NUMBER OF TONS PRODUCED AND NUMBER OF MEN EMPLOYED: NUMBER OF FATAL ACCIDENTS; NUMBER OF MEN EMPLOYED PER PER FATAL ACCIDENTS; NUMBER OF NEW FORDUCED PER NON-FATAL ACCIDENT; NUMBER OF TONS PRODUCED PER NON-FATAL ACCIDENT; NUMBER OF MEN EMPLOYED PER NON-FATAL ACCIDENT BER OF MEN INJURED PER 1,000 EMPLOYED.

1,000-Employed	151.5 216 0 222.2	76.1	200.0 98.4 181.8	58.8 30.3 363.6	214.3
Lilled per 1,000 Employed	3.8		16.4 45.4	8.4	1,000.0
Zumber of Tons Produced Per Non-Fatal Accident	8,025 4,065 3,943	9,491	$\frac{4,749}{6,639}$	$\frac{14,403}{13,456}$	1,705
No. of Men Em- ployed per Non- Fatal Accident	6.6 4.6 4.5	13.1	$\begin{smallmatrix}5.0\\5.5\end{smallmatrix}$	$\frac{17.0}{33.0}$	4.7
-noV of Non- Fatal Accidents	5 27 58	<u>L</u>	$1\\12\\4$	1 1 4	3
Number of Tons Pr5duced per fatal Accident	228,685		39,836 15.745	101,106	
Number of Men Employed per Fatal Accident	261.0		61.0 22.0	119.0	1.0
, Wumber of Batal Accidents			1	1	1
Employed Number of Men	125 125 13 21 21 21	000004 	1222	$119 \\ 119 \\ 333 \\ 333 \\ 11 \\ 11$	14 1 33 4
t Total* Production	$\begin{array}{c} 40.127\\ 109.763\\ 6,465\\ 1,577\\ 228,685\end{array}$	$\begin{array}{c} 1,010\\ 1,272\\ 829\\ 66,436\\ 3,043 \end{array}$	$\begin{array}{c} 7,397\\ 5,355\\ 4,749\\ 79,671\\ 15,745\end{array}$	$\begin{array}{c} 101,106\\ 13,456\\ 639\\ 4,057\end{array}$	$\begin{array}{c} 164 \\ 636 \\ 5,114 \end{array}$
COMPANIES	Ajax Coal Mining Co. Alamo Coal Co. Attude Coal Co. American Coal & Power Co. American Smelting & Refining Co.	Amos Coal Co. Anchor Coal Co. Arthur Coal Co. Aztec Coal Mining Co. Babson Coal Mining Co.	Bałdwin Fuel Co Barker, Wright. Baudino & Co Bear Canon Coal Co Beil Mining Co	Bennett Coal Co. Big Four Coal & Coke Co. Biack Canon Coal & Fuel Co. Biack Diamond Coal Co. Biack Hawk Coal Co.	Plack Hills Coal Co Block Coal Co Bloom, W. F. Coal Co

Boaglio Coal Co Bouner Coal Co Bouner Boulder Black Harvk Coal Co. Boulder Coal Mining Co. Boulder Valley Coal Co.	205,795	1 222 133		22.0	27,142	15	3.1	3,877 13,720	45.4	318.2 112.8
Bracken & Cozza. Brant Coal Co. Brown Thos, Coal Co. Burnitall Fuel Co. Burro Creek Coal Mining Co.	$1,099 \\ 2.41 \\ 1,002 \\ 450 \\ 450$	ณ ณ เว ณ ณ								
Butcher Knife Coal Co Caddell & Sons. Caliente Coal Co Calumer Phel Co Calumer Phel Co	$\begin{array}{c} 2,337\\ 2,791\\ 118,786\\ 493,211\\ 145\end{array}$	233 451 33	1	$\begin{array}{c} 4.0\\ 233.0\\ 451.0\end{array}$	2,337 118.786 493,211	1 26 41	$\begin{smallmatrix}7.0\\8.9\\11.0\end{smallmatrix}$	$2,791 \\ 4,568 \\ 12,030$	250.0 4.3 2.2	$\frac{142.9}{112.9}$
Canon Coal Association Canon District Coal Co Canon Quality Coal Co Canon-Relance Coal Co Canon-Relance Coal Co	$\begin{array}{c} 3,415\\ 6,587\\ 6,587\\ 2,226\\ 65,164\\ 3,804\end{array}$	12 18 68 88 88		34.0	32,582	33 19 19	4.0 4.5 8.0 3.6	$1,138 \\ 1,647 \\ 2,226 \\ 3,430 \\ \ldots$	29.4	250.0 2222. <b>2</b> 125.0 279. <b>4</b>
Carbon Creek Coal Mining Co. Cedar Hill Coal & Coke Co. Champion Coal Mining Co. Chergo, Tom Christensen Coal Co.	$\begin{array}{c} 7,258\\ 1,786\\ 2,773\\ 2,773\end{array}$	104170				144	4.0	1,815 1,786	· · · · · · · · · · · · · · · · · · ·	250.0
Clayton Coal Co	$\begin{array}{c} 260,683\\ 197\\ 22,685\\ 3,029,660\\ 49,229\end{array}$	$201 \\ 1 \\ 3,526 \\ 59$	13	271.2	233,051	16 603 15	12.6 5.8 3.7	$16,293 \\ 1,890 \\ 5,024 \\ 3,282$	3.7	$\begin{array}{c} 79.6\\ 230.8\\ 171.0\\ 254.2\end{array}$
Colorado & Utah Coal Co. Consolidated Coal & Coke Co. Converse, Frank Corley, W. D. Corlez, Coal Co.	$\begin{array}{c} 230,228\\ 149,930\\ 15,202\\ 15,202\\ 2,333\end{array}$	226 96 19 7				44 6 9 2	16.0 2.1 3.5	24,988 24,988 1,697 1,167		$\begin{array}{c} 194.7\\ 62.5\\ 473.7\\ 285.7\end{array}$
Cottonwood Coal Co	595 6,875 242 3,414	6.9.7.19 1				3	5.7	2,292		176.5 166.7

### STATE INSPECTOR OF COAL MINES

-43

TABLE A-Continued

----lnjured per 1,000 Employed 95.6 54.1 285.7 52.2 $\begin{array}{r}
 667 \\
 71.4 \\
 333.3 \\
 333.3 \\
 \end{array}$ 181.8 250.0 346.1 250.0 22.2 250.0 1,000 Employed Killed per Produced Per Non-Fatal Accident 16,157 2,430  $13,374 \\ 19,731 \\ 1,976$  $7,961 \\ 9,161 \\ 2,335$ 3,447 8,399 3,437 Number of Tons No. of Men Em-ployed per Non-Fatal Accident 3.3  $\begin{array}{c}
 15.0 \\
 14.0 \\
 3.0 \\
 \end{array}$  $10.4 \\ 18.5 \\ 3.5$ 5.5 9.2 4.0 4.0 :01 :9 27 : . . . . 6014 Vumber of Non-Fatal Accidents Produced per Fata<sup>1</sup> Accident 40,123 3,437anoT to redmuN Employed per Fatal Accident 45.04.0 Number of Men Number of Fatal Accidents 4400  $11 \\ 115 \\ 115 \\ 3$ 41~0300+  $\frac{94}{14}$ 40010 5 28 Employed Number of Men  $\begin{array}{c} 174\\71,645\\18,322\\9,340\\500\end{array}$  $\begin{array}{c}
400\\
6,894\\
1,359\\
96,941\\
500
\end{array}$ 8,3991,205 1,200 1,200 65,510  $\begin{array}{c}
186\\
186\\
59,192\\
25,682
\end{array}$  $\begin{array}{c} 84\\ 4,159\\ 988\\ 2,142\\ 100\end{array}$  $3,032 \\ 1,606 \\ 3,437 \\ 8,225 \\ 8,225$ 1.065Total Production Co. Crested Butte Anthracite Mining Crested Butte Coal Co...... Crown Fuel Co..... COMPANIES 00 Drott, John H. Durango Coal Co. Flectric Coal Co. Empire Coal Mining Co. Eno Coal Co. 00 Dennis & Malone Dick Coal Co. Domenico & Sons. Double Dick Coal Co... Danville Coal Co. Davies Coal Co. Davis, T. P. De Graffenried, J. R. Cunningham & Elliott Farmer-Mutual Coal Foreman, Thos. D..... Franklin Coal Co.... Freeman, J. R. Freeman & Fielding. Fruth & Stone...... Fitzsimmons, E. A. Robinson. Crescent Coal Co. Drennan Coal Co. Fraker Coal Co. Estes, J. F. Ş Crane

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### STATE INSPECTOR OF COAL MINES

TABLE A—Continued

Injured per 1,000 Employed	9 38.5	279.7		53.6 319.3		
L,000 Employed Killed per	76.	3.5		5	8.4	
Number of Tons Produced Per Non-Fatal Accident	12,036	3,558	2,170	13,663 3,544	20,907 7,873	
No. of Men Em- ployed per Non- Fatal Accident	26.0	3.6	2.9	18.7 3.1	18.0 10.8	
Number of Non- Fatal Accidents		80	37	159	3	
Number of Tons Produced per Fatal Accident	6,018	284,638		561,714	86,604	
Number of Men Employed per Fatal Accident	13.0	286.0		498.0	119.0	
Number of Fatal Accidents	2	1		1		
Employed Number of Men	244 264 26	01 9 00 00 00 01 01 01 01 01 01 01 01 01 01 01 0	106 3 2 2 3 3 6	4 56 498 41	$\begin{smallmatrix}&8\\5&4\\1&3\\1&19\end{smallmatrix}$	11 6
Total Production	$\begin{array}{c} 121\\ 2,755\\ 2,437\\ 12,036\\ 941\end{array}$	$\begin{array}{c} 284,638\\ 415\\ 2,623\\ 382\\ 2,623\\ \end{array}$	80,278 607 617 3,598	$\begin{array}{c} 3.02\\ 4.0,989\\ 5.61,714\\ 3.906\\ \end{array}$	$\begin{array}{c} 1,522\\ 1,142\\ 62,721\\ 86,604\end{array}$	234 8,362 317 4,179
COMPANIES	Matchless. Fuel Co Mattivi & Sons Meter Coal Co Midwest Coal Co Mingen, Mike.	Minnie' Coal Co Moffat Coal Co Monger & Gray.^ Montger & Joseph Mt. Bvans Fuel Co.	Mutual Coal Co McCurdy Coal Co McCinley, Wm. McKee, Robert McKee, Robert	McMillin Bros. McNeil Coal Co. National Fuel Co. Naturita Stores Co. New Grand Mesa Coal Co.	No Ash Coal Co North Magnet Coal Co North Park Coal Co Nyland, Andy Oakdale Coal Co	"Oberding, W. J Ohio Creek Coal Co. Ohkraut Mining Co. O. K. Coal Co.

	I6         11.0         13.600         90.9	2         22.5         8.148         44.4           7         6.9         4.735         145.8           2         19.0         8.007         55.6           4         3.8         66.7         266.7	19.740         12         3.6         1.645         23.3         279.1	1         6.0         3,578         166.7	248 967         130         5.9         5 745         3.9         168.4           43.999         9         8.3         4.889         13.3         120.0           110 555         16         14.6         13.23         8.6         68.7	68.583         3         26,3         22,861         12.7         38.0	
81 20 20 24 	11 12 12 12 12 12 12 12 12 12 12 12 12 1	45	43.0 19 2221 013 2221 013 22210 2221 013 2221 013 2221 2221 013 2221 013 2221 013 2221 013 2221 013 2221 013 2221 010 2221 010 22210 22210 22210 22210 22210 22210 22210 22210 22210 22210 22210 22210 22	0.00.06.4	772         3         257.3         248           755         1         75.0         43           233         2         116.5         110           4	79 · 1 79.0 68 9 · · · · · · · · · · · · · · · · · · ·	0.01 
14.270 190 193 21,772 5,472	1,280 217,696 919 929 1,746	16,296 33,145 16,014 2,874	19,740 1.842 573 173 176	186 325 1,655 3,758 9,849	746,902 43,999 211,169 231,169 321	68.583 2.165 2.165 2.165 3.60 3.0757 30.757	640 5.866 512 512
Oliver Fuel & Coal Products Co. Wen, Rowland & Sons. Pace, W. C. Palisade Coal & Supply Co. Paonia Farmers Coal Co.	Petry, Samuel Petry, Thomas M Pittes Peak Puel Co. Pine Fuel Co. Pine River Coal Co.	Pinnacle-Kemmerer Coal Co. Prairie Canon Coal Co. Purity Coal Co. Rapid Creek M. T. & P. Co. Rapid & Hughes.	Fapson Coal Mining Co Rauman, Chas. Read Ash Coal Co Reed & Alroid Coal Co •Reggio, Nick.	Rice, Chas, & Sons. Richards, C, H. Rithe Coal Co. Riverside Coal Co. Rocchio Coal Co.	hocky Mountain Fuel Co. Ross Coal Co. Royal Fuel Co. Royal Gorge Coal Co. Royer, S. J.	Russell, W. E. Coal Co. Santa Fe Coal Co. Service Coal Co. Seven Points Coal Co. Shamrock Coal Co.	Shew Coal Co Smith & Long South Canon Mine Leasing Co Spencer, Geo, S.

## TABLE A-Continued

Injured per 1,000 Employed	32.3 1 25.0 52.6	87.4	56.6 160.0 666.7	26.0 166.7 133.3	135.1 238.5	
L,000 Employed Killed per		5.5	18.9	41.7	4.8	
Number of Tons Produced per Non-Fatal Accident	26,087 4,245 12,616	8,717	6.554 2,883 992	24,684 4,043 9,740	4,609 3,127	
No. of Men Em- ployed per Non- Fatal Accident	31.0 8.0 19.0	11.4	17.7 6.3 1.5	38.5 6.0 7.5	7.4 4.0	
-noV of Von- Fatal Accidents	1 110	16	2 4 3	2 4 2	25 8 25 8	
Number of Tons Produced per Fatal Accident		139,470	19,662	16,170	161,333	
Namber of Men Employed per Fatal Accident		183.0	53.0	24.0	208.0	
Vumber of Brafal Accidents		1	1	1	no l	
namber of Men Employed	958 41 23	$\begin{array}{c} 16\\10\\183\\2\\2\end{array}$	က က က က က က က က က	77 10 15	1,040 12 12 12 3	20 1 4 2 2 4 1
Total Production	$\begin{array}{c} 26,087\\ 2,209\\ 4,245\\ 63,082\end{array}$	$\begin{array}{c} 237\\ 10,546\\ 139,470\\ 608 \end{array}$	$19,662 \\ 11,239 \\ 11,531 \\ 1,790 \\ 1,984$	49,368 585 16,170 363 19,480	$\begin{array}{c} 23,047\\ 806,663\\ 3,402\\ 4,935\\ 4,935\\ 826\end{array}$	$3,000 \\ 300 \\ 247 \\ 1,187$
COMPANIES	Standard Fuel Co. Stanley Mine Co. States Hall Oal Co. Stokes, W. D. Sunnyside Coal Mining Co.	Sunshine Coal Co. (Fremont County) Sunshine Coal Co. (La Plata County) Sunshine P. E. Temple Fuel Co. Temple Fuel Co.	Three Pines Coal CC Tipotsch, Frank Torid Coal Co Triangle Coal Co Trinidad Coal Co	Union Coal & Coke Co Ute Coal Co Vesta Mines, Inc Vesta Coal Co. Veszetti & Moschetti	Vickers Coal Co	White House Coal Co. Whitlock Coal Co. Williams Coal Co. Williams Coal Co.

148.1	156.36		
	4.66		
4,462	5,460		
6.8	6.4		
4	1,912		
	183,165		
	214.5		
	57		
19351	12,228		
$\begin{array}{c} 167\\870\\625\\17,846\\221\end{array}$	10,440,387		
Winkler, Gus Winton Coal Co. Wisconsin Coal Co. Yampa Collierles Co. Zullo & Perko.	Totals of State of Colorado	•Changed to Canby Hawkins. #No tonnage reported. #Development work.	

### Allen & Garcia Co.

CONSULTING AND CONSTRUCTING ENGINEERS DESIGNING, SUPERINTENDENCE, CONSTRUCTION

EVERYTHING FOR A COAL MINE, INCLUDING STRUCTURES, ME-CHANICAL AND ELECTRICAL IN-STALLATIONS, SHAFT SINKING, DEVELOPMENT AND OPERATION

Examinations :: Reports :: Appraisals

ISABELLA BLDG., 21 E. VAN BUREN STREET, CHICAGO

The EMPIRE COAL MINING Company

809 Interstate Trust Building Denver, Colorado



Produces and Markets

### Empire Heat

Colorado's Premier Furnace Coal

TABLE B

SHOWING BY COUNTIES, MINES OPERATED, NAME OF OPERATOR AND ADDRESS OF MINE, CHARACTER OF COAL, NUM-BER OF DAYS WORKED, AVERAGE NUMBER OF MEN EMPLOYED, TOTAL NUMBER OF TONS OF COAL PRODUCED IN 1925, AND CAPACITY OF MINE PER DAY IN TONS.

ARCHULETA COUNTY

Capacity of Mine Per 2noT , Yanz	20	
-muX lstoT snoT to r9d b92ub0rT	1.065 242	1,307
Employed No. of Men Average	1 6:	4
Vorked Morked Vorked	107	94.3
Character of Coal	Sub-bituminous Sub-bituminous	
Mine Post Office	Bayfield	
Name of Company	Crane & Robinson Cox Coal Co.	of Mines Operated: 2
Name of Mine	Crane	lber

΄.

	1,000 250000 2500000000	111-540-
	99,894 99,894 86,3597 85,597 14,4478 101,1106 11,068 1,084 1,084 1,084 1,084 1,084 1,084 1,084 1,084 1,084 1,127 1,084 1,127 1,084 1,127 1,084 1,127	615,943
	106 706 715 111 115 111 115 115 115 115 115 115	714
	$\begin{array}{c} 173.1\\ 190.5\\ 1190.5\\ 116.4\\ 134.\\ 134.\\ 134.\\ 238.2\\ 238.2\\ 238.2\\ 238.2\\ 238.2\\ 208.\\ 208.2$	171 2
	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	
BOULDER COUNTY	Superior Lafayette Lafayette Lafayette Gorham Gorham Lafayette Broomfield Louisville Louisville Louisville Boulder Boulder Boulder Corham Louisville Corham Louisville Boulder Gorham	
BC	Rocky Mountain Fuel Co- Rocky Mountain Fuel Co- National Fuel Co- Sign Four Coal & Coke Co- Big Four Coal & Coke Co- Big Four Coal & Coke Co- Big Four Coal & Co- National Fuel Co- Boulder Coal M. Co- Crown Fuel Co- Domenico & Sons, Inc- Domenico & Sons, Inc- Domenico & Sons, Inc- Domenico & Sons, Inc- Cracker Jack Coal Co- Domenico & Sons, Inc- Domenico & Sons, Inc- Domenico & Sons, Inc- Co- Red Ash Coal Co- Red Ash Coal Co- Red Ash Coal Co- Cambro Mining Co- Cambro Mining Co- Cambro Mining Co-	of Mines Operated: 19
	Industrial Simpson. Standard Gorham Vulcan. Wornarch No. 2 Wornarch No. 2 Capitol Black Diamond Crown Paramount (Champion) Paramount (Champion) Paramount (Champion) Cracker Jack Lewis. Lewis. Lewis. Lewis. Canbro Matchless	Total Number

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### STATE INSPECTOR OF COAL MINES

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### DELTA COUNTY

Capacity of Mine Per Day, Tons	1,000 50 30 30	$\begin{array}{c} 40\\20\\15\\30\\3\end{array}$	15 8 10	
Total Num- anoT to tod beoubord	$\begin{array}{c} 45,471\\ 6,758\\ 6,758\\ 5,472\\ 3,402\\ 3,209\\ 3,209\end{array}$	2,415 1.134 1.200 941 905	870 870 864 890 302 150	$\frac{100}{73,483}$
Average No. of Men Employed	0 20 4 10 4	40000	00001	1 - 93
Number of Days Worked	78 299 173 148.6 250	143 133 120 176 182	$163 \\ 226.5 \\ 120 \\ 53.5 \\ 100 $	60 127
Character of Coal	Bituminous	Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous	Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous	Semi-bituminous
Mine Post Office	Bowie Cedaredge Paonia Cedaredge Cedaredge	Cedaredge Cedaredge Paonia Hotchkiss Paonia	Austin Paonia Hotchkiss Delta Hotchkiss	Hotchkiss
Name of Company	Juanita Coal & Coke Co Green Valley Coal Co Paonia-Farmers Coal Co Wade Coal Co States Hall Coal Co	A. W. Hall & Son- Independent Coal Co. E. A. Fitzsimmons Milke Mingan. Frank Converse.	Winton Coal Co	J. R. De Graffenried
Name of Mine	King Green Valley rauula Red Canon States	Red Mountain	Winton Gelwick O wens Rollins Bennett	De Graffenried Total Number

### ELBERT COUNTY

100 20 30	
803 670 535	2,008
ବାରାରୀ	9
221 63 85	123
Sub-bituminous Sub-bituminous Sub-bituminous	
Matheson Matheson Matheson	
Burnitall Fuel Co	of Mines Operated: 3
Burnitall Mascot Wright	Total Number

	$1.500 \\ 500 \\ 500 \\ 250 \\ 50 \\ 50 \\ 50 \\ 5$	30 50 10 6	23		800	500 150 300	1.000 460 450 75	40 50 30	75 50 12 12 12 12 10
	$\begin{array}{c} 217,606\\ 34,171\\ 49,229\\ 13,877\\ 1,325\end{array}$	6,465 4,159 1,610 595	500 84 330.228		137,800 68,542	58.272 24.619 7.232	179,581 20,656 65,164 19,480	9,849 9,534 9,340 5,114 6,875 9,37	6,587 4,6587 3,804 2,392 1,280 1,280 1,142
	176 26 59 16 3	10000 1000 1000 1000	1 4 313		224 186	108 26 74	255 101 15	4 1 1 1 1 4 4 1 4 7 4 7 4	11 8 1 8 2 8 4 8 8 8 4 8 8 8 4
	189 229 302 160	221 247 267 126 251	163 26 205.8		192.5 154.4	170.2 181.8 38	264.6 89.8 214-5 264	203 168 251 167 241 43	200 310 265 265 269 273 152 152
	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous	Sub-bituminous Sub-bituminous		Semi-bituminous Semi-bituminous	Semi-bituminous Semi-bituminous Semi-bituminous	Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous	semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous	Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous Semi-bituminous
EL PASO COUNTY	Colorado Springs Colorado Springs Colorado Springs Colorado Springs Colorado Springs	Colorado Springs Colorado Springs Yoder Rush Colorado Springs	Colorado Springs Colorado Springs	FREMONT COUNTY	Rockvale	Florence	Chandler Pyrolite Canon City	Coal Creek Canon City Coal Creek Florence Florence	Canon City Canon City Canon City Florence Canon City Canon City Florence Florence
EI	Pikcs Peak Fuel Co. Keystone Mining Co. Colorado Shrings Company. W. D. Corley. W. D. Corley.	Altitude Coal Co Danville Coal Co Golden Dawn Coal Co McCurdy Coal Co Cottonwood Coal Co	Drennan Coal Co	FR	Fuel & Iron Fuel & Iron	Colorado Fuel & Iron Co. Colorado Fuel & Iron Co. Colorado Fuel & Iron Co.	Victor-American Fuel Co. Victor-American Fuel Co. Canon-Reliance Coal Co. Vezzetti & Moschetti	recento Coat Co. Driffiths Coal Co. Bluff Springs Coal Co. Swashine Coal Co.	Canon District Coal Co. Black Hawk Coal Co. Canon United Coal Co Canon Coal Association Royal Gorge Coal Co. Royal Gorge Coal Co. Canon Quality Coal Co. Sam Petry North Magnet Coal Co.
	Pikeview Keystone City Coal Mines Corley Pranceville	Altitude Danville Golden Dawn Rush Cottonwood	Drennan Cunningham Total Number		Coal Creek Rockvale	Nonac	Chandler Radiant Canon Brookside	Griffiths Double Dick Bluff Springs No. 2 Bluff Springs No. 1 Bluff Springs No. 3	Florence Canon Mohawk Jack O'Lantern Brewster Royal Gorge South Magnet Wille North Magnet

### STATE INSPECTOR OF COAL MINES

53

 $2.226 \\ 1.280 \\ 1.142$ 647.198

of Mines Operated: 23.

Total Number

1.199

186.3 273
 152
 129

	Capacity of Mine Per Day, Tons	$\begin{array}{c} 60\\100\\20\\30\end{array}$				$\begin{array}{c} 1,500\\ 500\\ 300\\ 300\\ 300\\ 300\\ \end{array}$	$\begin{array}{c} 300\\ 350\\ 200\\ 50\\ 100\end{array}$	25	
	-muN IstoT ber of Tons Droduced	$11,874 \\ 5,399 \\ 5,866 \\ 1,842 \\ 1,655 \\ 1,6$	$1,099 \\ 317 \\ 221$	31,273		$\begin{array}{c} 189,797\\92,428\\39,472\\59,472\\59,192\\40,123\end{array}$	$\begin{array}{c} 43,999\\ 22,606\\ 14,270\\ 8,362\\ 7,397\end{array}$	835 332	518,813
	Average No. of Men Average	$\begin{array}{c}1\\1\\5\\5\\5\end{array}$	1 1 73	35		$\begin{array}{c} 162\\ 111\\ 60\\ 42\\ 45\end{array}$	75 39 11 9	<u>н</u> 33	576
	Number Morked Days	240.5 282 195 247 206	$\begin{array}{c} 249.3\\ 110\\ 73\end{array}$	223.2		$\begin{array}{c} 183.1 \\ 187.4 \\ 202.3 \\ 225 \\ 220 \end{array}$	234.8 110 208 157 143	50 97	192.5
×.	Character of Coal	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous		1	Bituminous Bituminous Semi-anthracite Bituminous Anthracite	Anthracite	Bituminous Bituminous	
GARFIELD COUNTY	Mine Post Office	Mack Rifle Glenwood Springs. Rifle Rifle	New Castle		GUNNISON COUNTY	Somerset Crested Butte Crested Butte Crested Butte Crested Butte	Crested Butte Baldwin Somerset Gunnison Baldwin	Gunnison	
GA	Name of Company	Gilson Asphaltum Co	Bracken & Cozza. Ohkraut Mining Co. Zullo & Perko.	of Mines Operated: 8	GU	Calumet Fuel Co	Ross Coal Co Rocky Mountain Fuel Co Oliver Fuel & Coal Prod. Co Ohio Creek Coal Co Baldwin Fuel Co	Bonner Coal Co	of Mines Operated: 12
	Name of Mine	Carbonera. Estes South Canon Rauman McLearn	Harvey Gap Ohkraut Ernest	Total Number		Somerset. Crested Butte. Dilk Mountain Bulkley No. 2 Smith-Anthracite.	Horace Alpine Oliver Ohio Creek Baldwin-Star	Bonner Carbon Creek	Total Number

TABLE B—Continued

	2,700 1,150 900 800 800 800	600 935 935 1,000 1,000	600 500 600	500 300 175 150 150	71 60 45	20 10		$500 \\ 20$
	$\begin{array}{c} 482,474\\ 241,612\\ 241,612\\ 178,991\\ 136,105\\ 79,139\end{array}$	$\begin{array}{c} 66,442\\ 188,873\\ 72,042\\ 109,763\\ 86,604 \end{array}$	80.278 77.830 40.956 66.436 63.083	49.368 47.236 16,170 16,014 13,456	$\begin{array}{c} 11.531\\ 7.307\\ 918\\ 2.791\\ 2.755\end{array}$	$1, \frac{5.92}{1002}$ $363$ $164$	141.224	62.721 500
	470 203 192 182 130	$     \begin{array}{c}             62 \\             67 \\             67 \\           $	106 126 107 92 95	3 3 8 4 6 -1 3 3 8 4 6 -1	255 11 24 4	10.28	25.982	91 30 4
	256 225 193.8 141	242.9 202.4 196.1 187 235.1	188.5 251 156 177.5 129.5	131.5 244 227 149 180	232 237 88 135 84	68 22 22 22 22 22 22 22 20 8	207.1	199 90
Υ	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous	Bituminous Bituminous Bituminous Bituminous		Sub-bituminous Sub-bituminous
HUERFANO COUNTY	Walsen Farr Lester Ideal	Tioga Delcarbon Delcarbon Alanno Oakview	Walsenburg Ravenwood Maitland Toltec	Pryor Gordon Gordon Ojo Walsenburg	Rugby Rouse Rouse Pryor Rapson	Rouse Walsenburg	JACKSON COUNTY	Coalmont
HUI	Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co Colorado Fuel & Iron Co	Colorado Fuel & Iron <sup>*</sup> Co Calumet Fuel Co Calumet Puel Co Alamo Coul Co Oakdale Coal Co	Mutual Coal Co. Caliente Coal Co. Caliente Coal Co. Aztec Coal M. Co. Aztec Coal M. Co.	Union Coal & Coke Co	Torrid Coal Co. Fruth & Stone Fruth & Stone Caddell & Son Steve Mattivi & Sons	No Ash Coal Co. Thos. Brown Coal Co. Veta Coal Co. Black Hills Coal Co.	of Mineś Operated: 29 JA	North Park Coal Co.
	Walsen	Kebler No. 2 Calumet No. 1 Calumet No. 2 Alamo Oakdale	Mutual Ravenwood Maitland Toltec Sunnyside	Pryor	Torrid Leader No. 2 Leader No. 1 Hezron Bunker Hill	No Ash Round Oak Cuchara Canon Black Hills	Total Number	Moore Marr

### STATE INSPECTOR OF COAL MINES

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of Mines Operated:

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# JEFFERSON COUNTY

Capacity of Mine Per Day, Tons	$1,000\\100\\20$	
muN IstoT anoT to To Produced	$\begin{array}{c} 99,991\\ 2,773\\ 584\end{array}$	103,348
Employed No. of Men Average	109 5 4	118
Number Vumber Vorked	$\begin{array}{c}161\\210\\100\end{array}$	161
Character of Coal	Sub-bituminous Sub-bituminous Sub-bituminous	
Mine Post Office	Leyden via Golden Littleton Morrison	
Name of Company	Leyden Coal Co Christensen Coal Co Glendale Mining Co	of Mines Operated: 3
Name of Mine	Leyden No. 3 Christensen Sheron or Glendale	Total Number

## LA PLATA COUNTY

160 150 50 20	2002 2002 2002	25 15 10	10	
$\begin{array}{c} 42,499\\ 25,968\\ 10,546\\ 6,894\\ 4,749\end{array}$	$\begin{array}{c} 4,179\\ 1,786\\ 1,786\\ 1,786\\ 1,746\\ 1,239\end{array}$	$\begin{array}{c} 1,140\\ 1,021\\ 639\\ 576\\ 382\end{array}$	16	105,245
49 34 11 5	မာ <del>4</del> က တ	ରା ମ ର ରା ମ	3	141
220.3 223 223 229 228 228	185 177 180 231 158	$281 \\ 130 \\ 73 \\ 108 \\ 224$	30	207.3
Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Semi-bituminous	Semi-bituminous Semi-bituminous Bituminous Bituminous	Semi-bituminous	
Perins	Durango Durango Durango Bayfield Hesperus	Mancos Hesperus Durango Durango Bayfield	Durango	
Calumet Fuel Co American Smelt. & Refin. Co Sunshine Coal Co Durango Coal Co Baudino & Co	O. K. Coal Co Triangle Coal Co Champion Coal Co Pine River Coal Co Frank Tipotsch	Karl Hauert R. V. Gadberry Black Diamond Coal Co Minnie Coal Co Joseph Montague	Thos. M. Petty	of Mines Operated: 16
Perins Peak San Juan Sunshine New Porter (Durango). Morning Star	O. K. Trlangle (Graves) Trlangle (Graves) Pine River Tipotsch.	Valley View	Little Porter	Total Number

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Frederick Cojorado Berwind Colorado Toller Colorado Tabasco Sopris Colorado Primero Colorado Primero Colorado Primero Koval Pri	Fuel & Iron Fuel & Iron	Valdez		5 6 7 6 7 6	293	000,011	DOC.T
	Fuel	Berwind Berwind Berwind	Bituminous Bituminous Bituminous Bituminous	243.5 243.5 282.7 261	$\frac{211}{165}$	331,343 200,549 179,652 170,305	$1,600 \\ 750 \\ 750 \\ 900 $
	Colorado Fuel & Iron Co Colorado Fuel & Iron Co Victor-American Fuel Co National Fuel Co	Sopris. Primero Delagua Aguilar Bowen	Bituminous Bituminous Bituminous Bituminous Bituminous	223.8 21 183.8 252.7 260	231 139 431 233 127	$163,409\\15,697\\374,158\\221,169\\125,975$	1,000 1,200 2,500 1,100 1,100
Boncarbo. 9 Americ Brodhead No. 9 Templa Empire Beat Canon No. 6 Bear 0 Bear 0	American Smelt. & Refin. Co Temple Fuel Co Empire Coal M. Co Bear Canon Coal Co Bear Canon Coal Co	Cokedale Brodhead Aguilar Vallorso	Bituminous Bituminous Bituminous Bituminous Bituminous	231 228 1695 188.5	227 183 115 27 27	202,717 139,470 96,941 76,765 2,906	$1,500 \\ 700 \\ 700 \\ 500 \\ 15$
Dix Dick C Ludiow Huerfer C Creston Jewel Jewel Pewel Prairie Canon Prairie	Dick Coal Co Huerfano Coal Co Jewel Collicries Corp Dewel Collieries Corp Pradrie Canon Coal Co	Boncarbo Ludlow Aguilar Aguilar Vallorso	Bituminous Bituminous Bituminous Bituminous Bituminous	242 150.2 166 188 267	94 57 39 48	$\begin{array}{c} 71,645\\ 61,526\\ 26,383\\ 18,258\\ 33,145\end{array}$	400 600 225
Forbes No. 9 Rocky Southwestern Rocky Stanley Stanley Vickers Rapson Rapson	Rocky Mountain Fuel Co Rocky Mountain Fuel Co Stanley Mine Co Victors Coal Co Rapson Coal and M. Co	Forbes. Aguilar Boncarbo Rugby Rapson	Bituminous Bituminous Bituminous Bituminous Bituminous	$\begin{array}{c} 75.4 \\ 114.7 \\ 202.5 \\ 232 \\ 184.2 \end{array}$	51 31 43 37	$\begin{array}{c} 16.911 \\ 12.057 \\ 26.087 \\ 23.047 \\ 19,740 \end{array}$	$350 \\ 300 \\ 200 \\ 200 \\ 300 $
Three Pines Three Cedar Santa Fe	Three Pines Coal Co Cedar Hill Coal & Colte Co Jeffryes Fuel Co Wellington Mining Co	Vallorso Ludlow Trinidad Pryor Trinidad	Bituminous Bituminous Bituminous Bituminous Bituminous	140 134 276 162 70	53 16 12 9	$19,662 \\ 7,258 \\ 5,970 \\ 4,935 \\ 2,165$	250 250 35 400
Engle T. P. J Baldy Mt. Trinid Baldy (Sherman) Wm. 1 Bonner Home Beshoar Halber	T. P. Engle Trinidad Coal Co. Wm. Irons, Jr. Home Fuel & Supply Co. Halbert Coal Co.	Bugleburg Trinidad Trinidad Trinidad Trinidad	Bituminous Bituminous Bituminous Bituminous Bituminous	69 267 215 100 114	00 00 44 00 03	2,142 1,984 1,924 1,235 1,235	40 15 10

STATE INSPECTOR OF COAL MINES

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TABLE	ANIMAS
	LAS

Capacity C Mine Per Day, Tons	10 10 3 10 10 10 10	
Total Xun ber of Ton Produced	$\begin{array}{c} 1,187\\ 5929\\ 5777\\ 430\\ 210\\ 307\\ 197\\ 176\\ 174\\ 174\end{array}$	3,018,164
Employed No. of Mer Average	001010101	3,616
Number of Days Worked	$\begin{array}{c} 176\\209\\182\\84\\84\\60\\113\\45\\113\\113\\113\end{array}$	212.8
Character of Coal	Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous	
Mine Post Office	Trinidad Agullau Trinidad Trinidad Trinidad Trinidad Agullar Trinidad	
Name of Company	Wilton Coal Co Pine Fuel Co Boaglio Coal Co Shew Coal Co Shew Coal Co Standard Puel Co Andy Collier Andy Collier Camby Hawkins	of Mines Operated: 44
Name of Mine	Pritchard Fawcett Pickford Shew Standard Congo Morris	Total Number

### 25 30 4.245 3,9265 3,758 3,758 3,598 1,272 1,272 1,272 617 617 617 $\begin{array}{c} 73,321\\ 21,757\\ 12,036\\ 7,667\end{array}$ $340 \\ 247 \\ 186 \\ 172 \\ 102$ 137,381 198 194.5208.5169.580.9 $\begin{array}{c} 2279\\ 2230\\ 2230\\ 2231\\ 237\\ 1281\\$ 48 90 $\frac{25}{25}$ Semi-bituminous... Semi-bituminous.. Semi-bituminous.. Semi-bituminous. Semi-bituminous. Semi-bituminous. Semi-bituminous. Semi-bituminous. Semi-bituminous Semi-bituminous. Grand Junction..... MESA COUNTY Grand Junction.... Grand Junction... Fruita Grand Junction. Grand Junction. Palisade..... Grand Junction. Grand Junction. Grand Junction. Fruita Cameo..... Palisade.... Palisade.... Palisade. Palisade. Palisade. Fruita.. Fruita. Frand Junction M. & Fuel Co Palisade Coal & Supply Co..... Hidden Treasure M. Co..... New Grand Mesa Coal Co..... Midwest Coal Co..... B. Gearhart...... Riverside Coal Co..... Farmer-Mutual Coal Co.... Liberty Coal & Merc. Co of Mines Operated: 19. Wm. McGinley Service Coal M. Co..... Thomas Coal Co..... Williams Coal Co.... Crescent Coal Co.... W. D. Stokes. O. K. McLendon.... Anchor Coal Co... Andy Nyland J. B. Hunter. Total Number Farmer-Mutual No. Hidden Treasure. Stove Canyon... Anchor No. 2 Riverside Thomas..... McGinley.. Williams alisade Nearing. Midwest Garfield Midway Winger. Service. Hunter. Stokes.

### THIRTEENTH ANNUAL REPORT

	50 20 20	11		10			15				
	2,623 1,250 1,107 1,107 1,107 1,107 1,250 3255 3225 3200 3225 104	7,937		$ \begin{array}{c} 3.437\\ 2.333\\ 1.606\\ 1.512\\ 159\end{array} $	8.047		954 400 1666 1672 2234	2,013		450 249 193	892
-	eo ro oi ⊷ oi ⊷ oi ↔	26		بې ۲- څه هم درا	18		8110111	6		01 01	0
	381 80 159 159 130 200 133 133 133 210 21 21	132.2		225 240 136 210 136	200.3		112 120 92 92 92 92 92	88.9		$\begin{array}{c} 120\\90\\90\end{array}$	102
	Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous Bituminous		TY	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous		Y	Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous Sub-bituminous			Sub-bituminous Sub-bituminous Sub-bituminous	
MOFFAT COUNTY	Craig Craig Craig Craig Lay Axial Craig Craig Craig		MONTEZUMA COUNTY	Mancos		MONTROSE COUNTY	Montrose		DURAY COUNTY	Colona	
N	Mt. Evans Fuel Co- Hart Coal Co. Langley & Wolf. Knez Coal Co. Wisconsin Coal M. Co. Ute Coal Co. C. H. Richards. Whitlock Coal Co. Brant Coal Co.	of Mines Operated: 10	IOIN	Freeman & Fleiding Cortez Coal Co Roy Freeman Roy Freeman Reed & Aldreid	of Mines Operated: 5	MC	Happy Canon Coal Co John H. Drott. W. J. Oberding Wash, Rice & Son Gus Winkler. Naturita Stores Co	of Mines Operated: 6		Burro Creek Coal M. Co P. E. Swyhart C. W. Pace	of Mines Operated: 3
	Mt. Fyvans Hart Baker Knez Walihan Collom Wittlock Wittlock	Total Number		School Sec. Lease. Cortez Freeman Spareer Montezuma	Total Number		Happy Canon Liberty Bell Oberling Pleasant Valley Missouri Cloverdale	Total Number		Tyler	Total Number

### STATE INSPECTOR OF COAL MINES

	Capacity of Mine Per Day, Tons	40		25			$\begin{array}{c} 2,000\\ 2,000\\ 2,000\\ 1,200\\ 3,000\\ 3,000 \end{array}$	1,000 600 1,200 350 350	25 25 350 40
	Total Num- ber of Tona beoubord	3,120     2,874     5,994		2,437 1,359 820 568 200	5,384		$\begin{array}{c} 145,823\\ 138,815\\ 154,139\\ 78,129\\ 230,228\end{array}$	105,27365,51040,98917,84616,296	3,043 2,337 1,685 1,577 1,010
	Average No. of Men Amployed	6 4 2		40101-01	11		147 139 168 85 226	135 78 56 45	20 20 20 20 20 20 20 20 20 20 20 20 20 2
	Уитрег от Days Worked	$\begin{array}{c} 240.9\\ 198\\ 212.3\end{array}$		$272 \\ 227.3 \\ 227 \\ 227 \\ 90$	232.3		69.7 57 93 69.5 83.2	$\begin{array}{c} 107.9 \\ 145.5 \\ 28.6 \\ 149 \\ 68.5 \end{array}$	$200 \\ 166 \\ 169 \\ 120 $
	Character of Coal	Bituminous	Y	Bituminous Bituminous Bituminous Bituminous Bituminous			Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous Bituminous Bituminous Bituminous Bituminous	Bituminous
PITKIN COUNTY	Mine Post Office	Carbondale Carbondale	RIO BLANCO COUNTY	Meeker Meeker Meeker Meeker Meeker		ROUTT COUNTY	Oak Creek Oak Creek Oak Creek Mt. Harris Mt. Harris	Haybro Bear River MacGregor. Milner Mt. Harris	Hayden Bear River Oak Creek Bear River MacGregor
P	Name of Company	J. R. Marcketti Rapini & Hughes of Mines Onerated: ?		Meeker Coal Co Electric Coal Co Smith & Long Thos. D. Foreman Robert McKee	of Mines Operated: 5		Moffat Coal Co- Moffat Coal Co- Victor-American Fuel Co- Victor-American Fuel Co- Colorado & Utah Coal Co-	Hayden Bros. Coal Corp Fraker Coal Co McNeil Coal Co Yampa Collicies Co Pinacle Kemmerer Fuel Co	Babson Coal Co Butcher Knife Coal Co Seven Points Coal Co American Coal & Power Co Ames Coal Co
	Name of Mine	Marion	I NGL AND INCLUS	Oldland Black Diamond Lion Canon Nine Mile	Total Number		Oak Hills No. 1 Oak Hills No. 2 Pinnacle	Hayden No. 3	Babson Butcher Knife Seven Points Routt Pinnacle McCrosky

### THIRTEENTH ANNUAL REPORT

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TABLE B-Continued

	$ \begin{array}{c} 105\\ 211\\ 110\\ 125\\ 60\\ \end{array} $
inued	Bituminous Bituminous Bituminous Bituminous Bituminous
ROUTT COUNTY-Continued	Hayden
ROUTT	Linn & Sons. Ir Coal Co. Ind Hog Coal Co.

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10 25 20 20	
2 829 3 641 3 641 1 282 415 1 156 1 006 390	
20 20 21 22 24 24 24 24 24 24 24 24 24 24 24 24	0.044
211 110 125 60 37	±0
Bituminous Bituminous Bituminous Bituminous Bituminous	
Oak Creek Milner Steamboat Springs Steamboat Springs Oak Creek	
	Total Number of Mines Operated: 21
Mutual or Dry Creek. Arthur Hog Ground Hog Block. Monger Chergo.	Total Number

# SAN MIGUEL COUNTY

Royer	J. S. Royer W. R. Keck L. J. Gray.	Norwood Norwood Norwood	Sub-bituminous Sub-bituminous Sub-bituminous	120 69 90	101	321 273 199	2
Total Number	of Mines Operated: 3			87	4	793	

### 1,000 350 1,9002,0001,5001,000 1,200 600500 2.500400 50 $354,560 \\ 91,310 \\ 560$ 291,261260,683205,795149,930 115,374 68,58330,757 $\begin{array}{c} 22,685\\ 15,745\\ 3,032\\ 3,000\\ 826 \end{array}$ 10,440,387 1.614.101290 72 3 216 201 133 96 79 18 1,30812.211 $191.5 \\ 127.2$ 46 175.7 195 $\frac{153.5}{181.7}$ $\frac{157.2}{180.5}$ $\frac{197}{197}$ 186.6 172 93 186 120 120 162 Sub-bituminous.... Serene Frederick Frederick Erie Dacono Dacono Frederick Fort Lupton Erie La Salle WELD COUNTY Dacono..... 278. Frederick Erie Erie Colorado: Erie Mountain Fuel Co..... Rocky Mountain Fuel Co...... Rocky Mountain Fuel Co...... Bell Mining Co..... Franklin Coal Co. Colorado Dev. & Leasing Co. White House Coal Co..... National Fuel Co..... Boulder Valley Coal Co..... White Ash Coal Co..... Mines Operated: 15. of Mines Operated in Clayton Coal Co..... Rocky of Monroe. White Ash **Total Number** Total Number Puritan Columbine Baum..... Gvans Eureka Witherbee..... Boulder Valley. Clayton Grant..... Frederick..... Russell Shamrock. Sterling.

### STATE INSPECTOR OF COAL MINES

### TABLE C

### PRODUCTION OF COUNTIES BY MONTHS-1925

Months	Archuleta	Boulder	Delta	Elbert	El Paso	Fremont
						~
January	179	95,630	11,979	196	44,733	100,840
February	8	51,273	6,186	124	31,365	57,261
March	5	51,663	2,524	109	29,091	23,055
April	29	27,491	3,264	73	20,841	23,537
May	98	19,356	2,645	40	18,243	27,662
June	59	22,393	1,890	48	14,538	31,056
July	117	19,728	3,174	28	15,847	37,091
August	239	47,480	5,391	28	17,688	47.884
September	199	66,276	7,806	-118	23,000	63.991
October	106	76, 176	6 890	338	36 272	75,648
November	26	59,299	10,421	361	35.026	76,292
December	242	79,178	11,313	545	43,584	82,881
Totals	1,307	615,943	73,483	2,008	330,288	647,198

	Garfield	Gunnison	Huerfano	Jackson	Jefferson	La Plata
January	4.247	56.674	279.611	9.347	16,705	12,471
February	2,282	35.461	156,157	5,056	8.865	8,583
March	2.119	22.311	86,934	2,819	8,482	7.767
April	1,931	26,046	107,398	3,121	6,948	7,061
May	1,824	32,777	119,596	1,736	5,739	5,814
June	1,884	36,725	107,253	1 965	5,255	6,768
July	1.916	41,741	115,730	1,697	2,834	6,454
August	2002	47,130	177.057	5,228	6,850	8,603
September	2,731	48,315	213,859	6 461	8,206	9,513
October	2,824	58,736	255,821	8,033	10,556	9,855
November	3.652	58,081	265.081	8,702	10,667	10,202
December	3,861	54,816	256,727	9,056	12,241	12,064
Totals	31,273	518,813	2,141,224	63,221	103,348	105,245

	Las Animas	Mesa	Moffat	Montezuma	Montrose	Ouray
January	299,121	19,362	806	831	174	
February	231.834	8.831	635	515	102	
March	220,846	8,078	434	294	57	
April	226,780	6,014	287	269	48	
May	243,953	6,690	259	376	8	
June	246,674	6,933	247	449	286	
July	239,453	7,923	194	462	10	
August	197,094	10,824	388	600	155	
September	231,821	11,856	379	1,495	102	
October	266,520	17,291	441	318	148	
November	309,534	16,899	538	407	225	
December	304,534	16,680	3,329	2,031	698	892
Totals	3.018.164	137.381	7.937	8,047	2,013	892

Pitkin	Rio Blanco	Routt	San Miguel	Weld	Total	
1.116	699	121.016		248,556	1,324,293	
568	388	81,259			830.401	
432	382	22.065		132.921	622,388	
176	337			77.907	566.067	
142	227	55,568		62.491	605,244	
293	179	54.672		61,184	600.751	
246	148	58,352		50,752	603,897	
361	373	103,957		85,014	764,436	
538	446	101,087		137.079	935,278	
570	564	126,902		195,329	1,149,338	
783	681	122,158		179,704	1,168,739	
769	960	132,845	793	239,516	1 269,555	
5,994	5,384	1,006,390	793	1,614,101	10,440,387	
	$1,116\\568\\432\\176\\142\\293\\246\\361\\538\\570\\783\\769$	$\begin{array}{c cccccc} 1,116 & 699 \\ 568 & 388 \\ 432 & 382 \\ 176 & 337 \\ 142 & 227 \\ 293 & 179 \\ 246 & 148 \\ 361 & 373 \\ 538 & 446 \\ 570 & 564 \\ 783 & 681 \\ 769 & 960 \\ \end{array}$	$\begin{array}{c cccccc} 1,116 & 699 & 121,016 \\ 568 & 388 & 81,259 \\ 432 & 382 & 22,065 \\ 176 & 337 & 26,509 \\ 142 & 227 & 55,568 \\ 293 & 179 & 54,672 \\ 246 & 148 & 58,352 \\ 361 & 373 & 103,957 \\ 538 & 446 & 101,087 \\ 570 & 564 & 126,902 \\ 783 & 681 & 122,158 \\ 769 & 960 & 132,845 \\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

## TABLE D

### SHOWING INCREASE AND DECREASE BY COUNTIES, 1924-1925

Counties	Tons Produced 1924	Tons Produced 1925	Increase	Decrease
Archuleta	2,419	1,307		1,112
Boulder	682,541	615,943		66,598
Delta	88 547	73,483	······	15,064
Elbert	2,527	2,008		519
EI Paso	360,811	330,228		30,583
Fremont	698,238	647,198		51,040
Garfield	22,758	31,273	8,515	
Gunnison	469 081	518,813	49,732	
Huerfano	2,005,223	2,141,224	136,001	
Jackson	69,787	63,221		6,566
Jefferson	127,616	103,348		24,268
La Plata	92,927	105,245	12,318	
Las Animas	3,157,988	3,018,164		139,824
Mesa	136,694	137,381	687	
Moffat	6,808	7,937	1,129	
Montezuma	6,815	8 047	1,232	
Montrose	2,790	2,013		777
Juray		892	892	
Pitkin	5,941	5,994	53	
Rio Blanco	4,873	5,384	511	
Routt	904,876	1,006,390	101,514	
San Miguel	322	793	471	
Weld	1,651,506	1,614,101		37,405
Totals	10,501,088	10,440,387		

### TABLE E

#### COKE PRODUCED IN 1925 BY COMPANIES AND COUNTIES

Companies	Total No. of Ovens Used	Total Tonnage	Counties	Total No of Ovens Used	Total Tonnage
American Smelting and Refining Co	$210\frac{1}{2}$	105,957	La Plata	27 ½	12,677
Colorado Fuel and Iron Co.	222	539,911	Las Animas	285	143,534
110fi Co	424	000,911	Pueblo	120	489,657
Totals	4321/2	645,868		4321/2	645,868

#### REMARKS:

Average number of days worked at the coke ovens	328
Average number of men employed at the coke ovens	. 201
Number of tons of coal made into coke	1,068,365

F	
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SHOWING BY COUNTIES COAL PRODUCTION OF 1925 IN PREPARED SIZES

Counties	Mine Run	Lump	Nut	Pea	Slack	Total Tons
Archuleta Archuleta Boulder Delta Elbert El Paso	255 72,505 2,973 97,699	$\begin{array}{c} 256,174\\ 256,166\\ 30,553\\ 1,085\\ 92,954\end{array}$	$\begin{array}{c} 48,240\\ 25,448\\ 25,448\\ 24,153\\ 24,154\end{array}$	3,278 3,305 571 437 437	235,727 13,992 114,984	$\begin{array}{c} 1,307\\ 615,943\\ 73,483\\ 2,008\\ 330,228\end{array}$
Fremont Garfield Gunnison Huerfano Jackson	54,871 21,780 *406,790 494,925 6,483	$\begin{array}{c} 308,830\\ 5,877\\ 66,651\\ 759,972\\ 22,755\end{array}$	$102,944 \\ 3,129 \\ 15,284 \\ 308,693 \\ 13,651 \\ 13,651 \\$	$\begin{array}{c} 25\\447\\357\\180,490\end{array}$	$\begin{array}{c} 180,528\\ 29,731\\ 397,144\\ 20,332\end{array}$	$\begin{array}{c} 647,198\\ 31,273\\ 518,813\\ 2,141,224\\ 63,221 \end{array}$
Jefferson La Plata Las Animas Mesa Moffat	36,844 86,947 1,226,519 63,779 7,048	$\begin{array}{c} 20,412\\ 8,302\\ 431,597\\ 40,461\\ 717\end{array}$	$\begin{array}{c} 7,300\\ 3,246\\ 192,679\\ 10,099\\ 172\end{array}$	$\begin{array}{c} 500\\ 941\\ 20,738\\ 1,541\end{array}$	$\begin{array}{c} 38,292\\ 5,809\\ 1,146,631\\ 21,501\end{array}$	$\begin{array}{c} 103,348\\ 105,245\\ 3,018,164\\ 137,381\\ 7,937\end{array}$
Montezuma	3,681 1,238 892 5,994 937	3,332 724 3,115	30 942		1,034 21 371	$\begin{array}{c} 8,047\\ 2,013\\ 892\\ 5,994\\ 5,384\end{array}$
Routt San Miguel	$179,375\\793\\86,668$	473,701 707,027	130,067 178,335	18,164 16,501	205,083 625,570	$1,006,390\\793\\1,614,101$
Totals	2,859,434	3,235,005	1,064,566	244,336	3,037,046	10,440,387

\*84,122 tons Anthracite and 53,742 tons Semi-anthracite coal included.

NOTE-In the Slack, some mines include Pea and others Nut and Pea coal. The Egg and Grate coal is included in the Nut coal. (The Egg and Grate coal reported is from Routt and Well Counties.)

### THIRTEENTH ANNUAL REPORT

## COAL PRODUCTION OF COLORADO FROM 1873 TO 1925, INCLUSIVE

Year	Tons	Year	Tons
1873	69,977	1899	4,826,939
1874	87,372	1900	5,495,734
1875	98,838	1901	6,021,405
1876	117,666	1902	7,522,923
1877	160,000	1903	7,775,302
1878	200,630	1904	6,776,551
1879	322,732	1905	8,989,631
1880	375,000	1906	
1881	706,744	1907	
1882	1,161,479	1908	
1883	1,220,593	1909	
1884	1,130,024	1910	
1885	1,398,796	1911	
1886	1,436,211	1912	
1887	1,791,735	1913	
1888	2,185,477	1914	
1889	2,400,629	1915	
1890	3,075,781	1916	
1891	3,512,632	1917	12,515,305
1892	3,771,234	1918	
1893	3,947,056	1919	
1894	3,021,028	1920	
1895	3,339,495	1921	
1896	3,371,633	1922	
1897	3,565,660	1923	
1898	4,174,037		
		1925	

## The Crested Butte Anthracite Mining Company "Crescent Anthracite"

The Crested Butte Coal Company "Rusty Coal"

The Baldwin Fuel Company "Baldwin Coal"

FRANK BULKLEY, President JOSEPH GIEDLARTZ, Secretary and Treasurer

General Offices 850 EQUITABLE BUILDING DENVER COLORADO 65

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> Cameo Western Slope

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## MINE DISASTERS AND MISCELLANEOUS FATAL ACCIDENTS, 1925

## REPORT ON THE FIRE AT THE EMPIRE MINE, MARCH 26TH TO APRIL 15TH, 1925

On April 26th, 1925, at 3:00 a.m. a raging fire was discovered by the Fire Boss in the Empire Mine. This mine is operated by The Empire Coal Mining Company, and is situated one-half mile Northwest of Aguilar, Colo.

The fire was discovered in the 1st and 2nd cross or South Slopes, and was so fierce, that the smoke from it had ascended the entries for 900 feet against a volume of 20,000 cu. ft. of air. The Fire Boss stated that the electric lights on the slope parting, a short distance outside of where smoke was encountered, went out as he was approaching them.

On the day previous to the fire, at 4:00 p. m., one shot was fired in  $4\frac{1}{2}$  cross, off 3rd North. Permissible powder being used. On the night of the 25th, a small electric pump, located in 3rd North near intersection of 2nd dip was in operation.

Accompanied by Deputy Inspector Samuel Andrews, I arrived at the mine at 11:30 p. m., March 26th, 1925. Robert Mc-Allister, G. B. Parker, and other employes of the Colorado Fuel & Iron Co. were there with the C. F. & I. Rescue Car, also James Dalrymple, Jr., of The Hercules Powder Co., Deputy State Inspector of Coal Mines Hugo H. Machin, Joseph Cochrane, of the Mutual Insurance Co., and several employes of the Victor-American Fuel Co., were already on the ground fighting the fire.

Upon reaching the fire, accompanied by several others, conditions were considered so serious that it was decided to seal the mine. Preparations being already underway, making hitches for the walls. While this work was being done, the smoke receded for some distance. It was then decided to go ahead fighting the fire for 24 hours. The question of sealing being delayed until then. Some headway had been made at the expiration of this period and we determined to keep on fighting.

The morning shift on the 28th reached the 3rd North Entry, where the pump was located and found that the planks upon which the pump was set were not burned. The fire, however, had passed over the pump, traveling north and south on 3rd and 4th North Entries, also west into 1st and 2nd dips and adjacent rooms.

Room 1, off 3rd cross off 3rd North is connected with 2nd cross at a point 175 ft. east of 3rd North. Upon reaching this connection it was decided to seal it off temporarily, in order that the

fire might be conquered before reaching the old and new slope workings, which was accomplished on the 11th of April, when attention was turned to connection of room 1, 3rd cross off 3rd North. This section includes two cross entries and eighteen rooms which had been temporarily sealed for over two weeks and after 120 hours of continual fighting, it was decided to seal it off with concrete walls. This work has been completed in a very satisfactory manner and the production of coal has been resumed on a small scale.

Self-contained Breathing Apparatus were used on two or three occasions, but without the Burrell Gas Masks, the mine, as a whole, would have to have been sealed. The Victor-American Fuel Company, being the only coal company in this state having the gas masks, willingly gave us their whole supply.

## CLASSIFICATION OF MINE, SEAM BEING WORKED, AND ITS SURROUNDINGS

The mine is a gaseous one. The seam being worked is known as the Walsen or Peerless, overlaid by the Robinson seam at a distance of 90 feet. This seam is so gaseous that no pillars are being pulled in the Empire mine. Pillar work will not be started until all other coal is mined. Extra large pillars are being left and a boundary air course being driven for this purpose. The roof is a strong dense sandstone, very irregular in inclination and, wherever brushing is done to get the desired height and holes drilled deeper than regular line of roof, a continual bleeding of gas is found in considerable quantity.

The Royal Mine, which is one-half mile distant and working the same seam under same conditions, except that pillars are pulled as development advances, gives off one million cubic feet of gas every twenty-four hours, 50 to 60% of which comes from the Robinson seam.

On April 20th I called for a conference with Robert McAllister, G. B. Parker, Finlay McCallum, employes of The Colorado Fuel & Iron Company, Joseph Cochrane, Mutual Insurance Inspector, James Dalrymple, Jr., Hercules Powder Co., all volunteers and leaders in fighting this fire. John Hoss, Batiste Bertolinia and David Dalrymple, the Superintendent, Mine Foreman and Fire Boss respectfully, of the Empire Mine, and Hugo H. Machin, Deputy State Inspector of Coal Mines, to determine the cause of the fire and point of origin. Nine of the ten conferees agreed that the cause was an electric arc igniting a body of gas, present either through a cave on return of electric wires shortcircuiting the ventilation and allowing gas to come back over the wires, or from a cave on the intake of the wires and carrying the gas directly to the electric wires. This finding was based on two facts. The great amount of gas encountered in roof and the rapidity with which fire traveled during the first thirty-six hours of its existence, which was more than it traveled during a period of twenty days following.

In concluding, I wish to in my humble way express my appreciation first, to every man who took a real part in saving the Empire Mine. It took experience, confidence, perseverance and leadership to face the dangers encountered to be able to take advantage of the different conditions as they appeared. Second, to The Colorado Fuel & Iron Company for the use of their rescue car, including all that goes with it, including the hospitality and generosity of Baldy Parker and to The Victor-American Fuel Company for the liberality and kindness in turning over to us their gas masks, which must be credited with being one of the most important factors in our success.

### JAMES DALRYMPLE,

State Inspector of Coal Mines.

Box 91, Walsenburg, Colo., June 21, 1925.

Mr. James Dalrymple, State Inspector of Coal Mines, Denver, Colorado. Dear Sir:

An explosion of fire damp occurred at 5:45 p. m., June 19th, 1925, at the Gordon Mine, situated about 7 miles northwest of Walsenburg. The mine is owned and operated by the Gordon Coal Co., of Walsenburg. I was notified of the occurrence at 8:45, and arrived at the mine at 9:30 p. m., and accompanied by a workman employed at the mine, by the name of Frank Clark, I entered the mine after placing a man in charge of the fan, and another guard at slope entrance.

Arriving at 8th north parting, Ralph T. Poli, Supt., and his son, Leon Poli, who informed me that two of the bodies had been found and that the rest of the rescue party were searching for the other man. At 1st cross off 8th North, we met George Gregory, mine foreman, Fred Bellotti, fire boss, and the rest of the party. I instructed Bellotti and three other men to search for James Moran on the return side, who shortly afterward they found dead in the neck of room 5, 1st cross, which is on the return side of air current. Before taking the bodies outside, I inspected all the stoppings and curtains from near the outside of rock tunnel, to the face of 8th north, and also up into face of both pairs of cross entries. Most all the stoppings blown out were of temporary character, consisting of canvas and boards. At the face of 1st cross and air course, and 2nd cross and air course, a strong explosive gas cap was detected about 2 feet from roof. A slight cap of about  $\frac{3}{8}$  inch was indicated in air current from 2nd cross back to 1st cross, to where air current enters down into return. The rescue party closed up all the stoppings that had been blown out, using canvas and boards. A very weak movement in the air current could be felt in 1st cross, and the fumes of after damp were strong through the entire length of of the entry.

James Moran's body was found at the neck of room 5, 1st cross. Harvey Moyer, about 40 feet back from last cross cut in 1st cross in air course. Jack Stemberger was found lying between machine truck and right rib side of 1st cross, 17 feet from face. A Sullivan mining machine CE7, closed type, was under the coal at face of 1st cross, having under-cut  $\frac{2}{3}$  of the way across face of entry. Controller of machine was in neutral and power cable was properly attached. There were no signs of arcing on any of the connections or controller.

Face of 1st cross was 12 feet ahead of last ventilating crosscut. Face of air course 35 feet in advance of last crosscut. Gas transpires freely from floor and coal at face in both places. George Gregory, mine foreman, was overcome by the afterdamp, and was taken out of the mine in a semi-conscious condition. The three bodies were brought to the surface at 12:45 a. m. the following morning, and all power cut off from the mine and no one allowed to enter.

I made my second visit to the seat of the explosion and other parts of the mine on Saturday morning, 7:30 a. m., accompanied by Ralph Poli, and Fred Belotti, again inspected those parts of the mine affected by the explosion. The air current was measured at several places and the following are the results: Intake on main slope, 37,410 cubic feet. Intake to 8th north at entrance to rock tunnel, 10,420 cubic feet. Last crosscut, 8th north beyond rock tunnel, 1,800 cubic feet. Last crosscut, 8th north, no reading.

These readings go to show plainly that the quantity of air circulating in these places even when all crosscuts are closed up by means of news canvas, is far below what is necessary to dilute the quantity of gas given off. I am inclined to think that the men who were cutting around curve to 1st cross air course had the machine truck under the curtain that diverted the air current up to 1st cross. At least, I think that the curtain was torn, broken, or turned up in such a manner that most of the air that should have reached the last crosscut at face of 1st cross entry, short-circuited at this point. The gas exuding at face of 1st cross and air course must have filled the face for a considerable distance back, from roof to floor, and machine laboring hard, cutting in bottom, made sufficient spark from bit points to ignite an explosive mixture. The force of the blast was strongest about onehalf of the way back from face on both entries.

No work of any kind is to be done in the mine except pumping and working on stoppings. Before being allowed to operate, proper doors will be placed between cross entries and air courses, and 15,000 eubic feet of air passing through last crosseut, 8th north, and at least 8,000 eubic feet to last crosseut in each pair of cross entries.

Yours respectfully,

(Signed) SAMUEL ANDREWS,

Deputy Inspector, District No. 3.

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## LIST OF FATAL ACCIDENTS WHICH OCCURRED IN THE COAL MINES OF COLORADO DURING THE YEAR OF 1925

- (1)—January 9—AMELIA LINZA, Italian, machine miner, experience 7 years, age 30 years, single, employed by The Bear Canon Coal Co., at the Bear Canon Mine, Las Animas county, was injured by a fall of rock on January 2, and died on the above date. Deceased was working single in a room that had been cut and shot the night before. He was loading a car when a rock fell from a slip which was flush with the face of the coal. Apparently deceased had not sounded the roof before starting to work. It is possible had he done this, or set a prop between the car and coal face, the accident would have been avoided. However, accident is classed as unfore-seen and unavoidable.
- (2)—January 13—G. W. NELSON, American, acting mine foreman and miner, experience 40 years, age 64 years, married, 11 children, employed by F. W. Bloom at the Bloom mine. Montezuma county, was killed by a fall of rock. Deceased was in the act of cutting at the coal face when a rock fell from the roof killing him. Deceased is charged with the responsibility of the accident, because he did not test the roof or place timbers to support it.
- (3)—January 14—DAN MORELLI, Italian, pick miner, experience 15 years, age 33 years, married, 3 children, employed by The Colorado Fuel & Iron Co., at the Berwind Mine, Las Animas county, by a fall of rock. Deceased and partner were working on a dip, extracting room neck stumps and chain pillars. It was the system here to split a portion of the chain pillar and extract the remaining sides on the retreat. At the point of accident, the pillar had been split and de ceased had prepared a place on one of the sides to work by timbering up the bony and drawslate, this being done the roof was tested and considered safe. He and his partner started loading a car when a large piece of bony and drawslate fell on him from an invisible slip, causing such injuries that he died a few hours later. Deceased was considered a good and careful workman, and the accident was unforeseen and considered unavoidable.
- (4)—January 21—JOHN BORSUK, Russian, machine miner, experience 11 years, age 33 years, single, employed by the W. E. Russell Coal Co., at the Russell Mine, Weld county, eame to his death by electrocution. Deceased had taken his machine to a slant road where it was kept when not in use.

The accident occurred while he was putting on tape on two leads to the machine. It seems to me that deceased may have made a contact with his right hand against the two set screws on top of the feed plug from the cable reel to the machine motor, by examining the said plug, such accident is possible as by placing your hand over the plug and pressing down, the skin of the hand, will come against the two screws. Deceased was blameless in this accident and if responsibility is charged it may be on the Sullivan Iron Clad C. E. No. 7 type machines in not properly insulating the set screws.

- (5)—January 30—JAMES PRICE, American, driver, experience 8 years, age 24 years, single, employed by The Colorado Fuel & Iron Co., at the Robinson No. 2 Mine, Huerfano county, was killed by being pinned under a moving car. Deceased was pulling a car of coal to a side track when he accidently fell off the gun and the car was partly drawn over him. The car was spragged in all four wheels and mule hooked on by shaft and gun when found. Deceased was known as a steady, careful and experienced driver and his death was caused by a misadventure for which no one can be held responsible.
- (6)—January 30—ALEX OMELENCHUK, Russian, company man, experience 9 years, age 32 years, single, employed by The Colorado Fuel & Iron Co., at the Robinson No. 2 Mine, Huerfano county, was killed by a fall of rock. Deceased was apparently in the act of setting a prop when a slab of rock fell on him killing him. The rock broke along the upper rib line and parted with a smooth slip line which was not visible. Deceased was not aware of the condition of the roof at this point and neither he nor any other person can be held responsible for the accident.
- (7)—February 4—JOE KOSS, Austrian, pick miner, experience 35 years, age 56 years, employed by The Bear Canon Coal Co., at the Bear Canon Mine, Las Animas county, was killed by a fall of rock. Deceased and his partner were breaking a new place in a pillar and were loading a car when a rock gave way from a slip breaking off with the face of the coal. According to evidence, the roof had been tested and found in good condition. The accident was unforeseen and is classed as unavoidable.
- (8)—February 13—STEVE NEZES, Greek, pick miner, experience 10 years, age 33 years, single, employed by The Moffat Coal Co., at the Oak Hills Mine, Routt county, was killed by a fall of coal that bumped out while deceased was in the act of mining. The roof was good and solid and the place was well timbered. The accident was unforeseen and classed as unavoidable.

- (9.—February 21—E. CHAVEZ, Mexican, machine miner, experience 12 years, age 26 years, single, employed by The Rocky Mountain Fuel Co., at the Columbine mine, Weld county, was killed by a fall of coal and rock at the face of a stump. The seam at this mine is about 11 feet thick which is taken down all except 15 to 24 inches, which is left for a roof. Above this top coal is about three or four feet of rock and on top of that is a four foot seam of coal. Width of pillar is about 60 feet (two 12-ft. cuts are taken out of pillar by machine), the remaining stumps of coal are taken out by pick work. Deceased and his partner were taking out stumps, the former picking down coal on the inby end and he was warned by the latter not to work on that side, but he persisted. The place was well timbered and the mine foreman had visited the place three time during the shift, on his second visit he examined the stump and ordered three more props set up which was carried out. However, a fall of coal and rock followed a few minutes later, which caught deceased and crushed him to death. After the fall it was disclosed that the roof up to the four feet of coal overlying the rock was potty and indicated slips which could not be seen by the men. The accident was unforeseen and is classed as unavoidable.
- (10)-March 2-EARL S. WRIGHT, American, electrician, experience 4 years, age 38 years, married, four children, employed by The Canon-Reliance Co., at the Canon Mine, Fremont county, came to his death by electrocution. At the time of the accident he was repairing a 440 volt power line on an entry and the switch controlling the power in this part of the mine was open. One of the machine men came and put in the switch to get power for cutting, not knowing any one was working on the line. Evidently deceased came in contact with an uninsulated part of the line and the switch being put in, gave him the fatal shock. The sign "Man Working on Line" was not hung on the switch box as required by the regulations of this mine. Mr. Wright was considered a careful and efficient worker with many years of practical experience as an electrician, but evidently he neglected to hang up the warning. Accidents of this nature can be avoided in this mine only by the strictest observance of the safeguarding regulations.
- (11)—March 3—WILLIAM BONE, American, company man, age 21 years, employed by The Royal Fuel Co., at the Royal Mine, Las Animas county, was injured February 20, 1924, by being squeezed between a car and weight-house and severely injured and died over a year later on the above date. There was little hope from the start that he could recover as an infection set in, which finally terminated in death. Full de-

tails of the accident at this date are not at hand. However, according to Section 163 of the Coal Mining Laws, this accident is charged to the industry although over a year elapsed before he died.

- (12)—March 15—L. C. PATTERSON, American, barn boss, age 42 years, married, two children, employed by The Colorado Fuel & Iron Co., at the Morley Mine, Las Animas county, was fatally injured by being kicked by a mule on the 7th of the month and died on above date. It was an unforeseen accident for which no one could be held responsible.
- (13)-March 13-JOHN R. JENKINS, American, assistant mine foreman, experience 44 years, age 59 years, married, three children, employed by the Colorado Fuel & Iron Co., at the Berwind Mine, Las Animas county, was killed by being run over by a trip of loaded cars. The accident occurred at quitting time and it was customary for him and a few company men to arrange for the man-trip and ride out of the mine. For some reason, instead of waiting for the mantrip, he boarded the motor. The motorman protested that this was against the rules, but he insisted that it did not apply to him as he was a mine official, and climbed on top of the motor. The motorman being very busy with his trip as he had a heavy grade to make, did not see him any more. A car got off the track and he stopped the trip and noticed that Jenkins was not there, but thinking that he got off of his own accord, paid no further attention to the matter. A pump man happened to follow the trip to examine the water pipe line, and found deceased dead and badly mangled. As there was no eye witness to the accident, the cause of his fall off the car cannot be determined. Anyway the accident was due to a violation of the law by deceased.
- (14)—March 9—E. HERNANDEZ, Mexican, machine miner, experience 2 years, age 41 years, married, 5 children, employed by the Victor-American Fuel Co., at the Chandler Mine, Fremont county, was injured February 12th, by a fall of rock and died on the above date. Deceased was shoveling coal at the head of the roadway when a rock fell down from the roof. The place was fairly well timbered and he was considered a careful and competent man to keep his place secure. He was ready to put in a prop at the particular spot where the rock fell as soon as he had loaded sufficient coal out to make room for it. The accident is classed as unavoidable.
- (15)—March 19—DORTEO PEREZ, Mexican, pick miner, experience 3 years, age 35 years, married, 5 children, employed by The Colorado Fuel & Iron Company, at the Totler Mine, Las Animas county, was killed by a fall of rock. Deceased and partner were taking a corner off a slant to make a haulage

road. When this was completed, deceased knocked a prop out which was set about eight feet away from where they were working and released a rock which fell on him and killed him instantly. The accident was unforeseen and is classed as unavoidable.

- (16)—March 23—E. N. AGUILAR, Mexican, pick miner, experience 18 years, age 35 years, married, 3 children, employed by The Colorado Fuel & Iron Co., at the Ideal Mine, Huerfano county, was killed by a fall of rock. Deceased was working single, extracting a pillar and exposed a slip. He was in the act of setting a prop when the rock came down on him. The place was well timbered, and the accident was unforeseen and is classed as unavoidable.
- (17)—April 21—E. P. DURAN, American, pick miner, experience 26 years, age 47 years, married, two children, employed by The Three Pines Coal Co., at the Three Pines Mine, Las Animas county, was killed by a fall of rock. Deceased was engaged in breaking off a room neck and was shoveling coal to the track when a rock gave way from a slip. Apparently he had not tested the roof before starting work, as only a few minutes elapsed after he entered his working place that the accident occurred. It was unforeseen and is classed as unavoidable.
- (18)—April 24—GEORGE DORCHOFF, Bulgarian, machine miner, experience 13 years, age 44 years, widower, two children, employed by The Bell Mining Co., at the Eureka Mine, Weld county, was killed by a fall of rock. Deceased was working in room pillar. It is the custom here, when taking out a pillar, to first take out the top coal clear to the rock roof. Deceased had taken out two props and taken down the top coal, leaving an open space between timbers and coal face. He was in the act of removing some of the coal at the bottom when a large rock fell on him, killing him instantly. Evidently deceased considered the roof safe as he did not timber it but continued to work under it. It was a case of faulty judgment, however, he is not held responsible for the accident.
- (19)—April 24—SCHUYLER HODSON, American, pick miner, experience 8 years, age 54 years, widower, two children, employed by The Ross Coal Co., at the Horace Mine, Gunnison county, was killed by a fall of rock. Deceased had just cleaned up a brushing shot and had pulled down all loose rock and sounded the roof. He was in a kneeling position mining coal with a pick when a rock fell from the top and struck him. The accident is classed unavoidable.
- (20)—May 1—JOHN ZDUNICK, Austrian, machine runner, experience 13 years, age 36 years, married, two children, em-

ployed by The American Smelting & Refining Co., at the Boncarbo Mine, Las Animas county, was instantly killed by a fall of rock. Deceased was engaged in setting props at a point where the tracks had been moved when a rock from an invisible slip gave way with the above results. The rest of the place was well timbered. The accident was unforeseen and is classed as unavoidable.

- (21)—May 5—IDRIS ROBERTS, Welsh, fire boss, experience 25 years, age 42 years, married, two children, employed by The Canon-Reliance Coal Co., at the Canon Mine, Fremont county, was killed by a runaway motor and some empty cars. Deceased was running an electric motor pulling several empty cars. He was preceded by another motor pulling empty cars and when at the top of an entry, this motorman lost control of his motor, owing to faulty brakes, it ran back and collided with the motor of deceased and struck him and he was crushed between front of motor and car next to it. This accident could have been avoided had the motor brakes been in good condition.
- (22)—May 26—WM. MONTEITH, Seotch, shot firer, experience 25 years, age 38 years, married, one child, employed by The Rocky Mountain Fuel Co. at the Columbine Mine, Weld county, came to his death by an explosion of powder. He was making up a charge of powder in a crosscut entry, which is used as a powder station. While in the act of inserting an electric detonator in a stick of powder, it exploded, injuring deceased so severely that he died a few hours later. The cause of the explosion is not known, it might have been caused by a defective detonator or some other element. The accident is not charged to deceased, but to the hazard of his work.
- (23)—May 29—SAM CHAVEZ, Mexican, pick miner, experience five years, age 23 years, married, one child, employed by The Calumet Fuel Co., at the Calumet No. 1 Mine, Huerfano county, was injured February 24, 1925, by a fall of rock and died on the above date. We was working in a room pillar loading coal. At the head of the roadway he saw a slab of rock which he attempted to pull down and failed. Instead of propping the rock, he left it and went on with his work and so was caught when it released itself a little later. The accident was due to his own lack of caution.
- (24)—June 9—EMILIO BACA, American, railroad car dropper, experience 10 years, age 40 years, married, three children, employed by The Huerfano Coal Co., at the Ludlow Mine, Huerfano county, was crushed to death in a collision of two cars. Deceased was lowering an empty railroad car from one track to another and in some way was caught between

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the cas he was lowering and the one that was left standing on the lower track. Evidently he miscalculated the position of the car on the lower track for when he lowered his car he realized that the two cars would collide and in attempting to free himself from his position at the lever brake on the end of the car, he was caught between them with fatal results. The accident was unforeseen and therefore unavoidable.

- (25)—June 10—STEVE NAGY, Hungarian, machine miner and runner, experience 17 years, age 37 years, married, four children, employed by The Colorado Fuel & Iron<sup>\*</sup>Co. at the Cameron Mine, Huerfano county, was killed by a fall of rock. He was in the act of pulling down rock at the face of the room when it gave way, in some manner he slipped under it and was struck and injured so severely that he died instantly. Accident was a mishap for which no one could be held responsible.
- (26)—June 18—J. R. FOREFIELD, American, pumpman, experience 40 years, age 48 years, married, two children, employed by The Victor-American Fuel Co., at the Chandler Mine, Fremont county, was injured June 15th by being struck by a haulage rope and died on the above date. Deceased was walking down the main slope to work. He stopped at the side track to let a trip pass when the rope slipped off the pully causing it to swing and strike his leg, from the effects of which he dies three days later. The deceased was considered a careful man, fully capable of taking care of himself and the accident was a mischance for which no one could be held responsible.
- (27)—June 19—JAMES MORAN, American, machine runner, experience 23 years, age 43 years, married, two children, together with
- (28)—JACK STEMBERGER, Austrian, machine helper, experience seven years, age 30 years, married, no children, and
- (29)—HARVEY MOYER, American, machine runner, experience 18 years, age 39 years, married, three children, all employed by The Gordon Coal Co. at the Gordon Mine, Huerfano county, were killed by an explosion of firedamp. See detailed report on page 69 of this report.
- (30)—June 26—PAUL SMITH, German, pick miner, experience 18 years, age 49 years, single, employed by The Crested Butte Anthracite Mining Co., at the Smith Anthracite Mine, Gunnison county, was killed by a fall of rock and coal. Deeeased was mining coal at a room face when without any warning a pot rock fell bringing down coal, covering him and smothering him to death. The place was well timbered and the accident was unforeseen and is classed as unavoidable.

- (31)—July 3—ROCCO CESSERICH, Slav, pick miner, experience 13 years, age 32 years, single; and,
- (32)--FRANK PANDOLEI, Italian, pick miner, experience four years, age 35 years, single, employed by The Colorado Fuel & Iron Co., at the Toller Mine, Las Animas county, were instantly killed by a fall of rock. Decedents were taking a skip off a crosseut between two rooms for haulage purposes. They were loading a car when a rock gave way from an invisible slip paralleling the left side of the crosscut, striking both. The accident is classed as unforseen and therefore unavoidable.
- (33)—July 27—BENARDO ALVARDO, Mexican, rock man, experience two and one-half years, age 30 years, married, three children, employed by The Victor-American Fuel Co. at the Chandler Mine, Fremont county. Deceased was cleaning the track on the main slope and was struck by a trip of empty ears landing into the slope parting, some of the cars passing over his body. He was considered a good workman and capable of taking care of himself. It seems however, he did not hear or see the trip coming and the accident is classed as unforeseen, and no one can be charged with its responsibility.
- (34)—August 4—W. J. LEE, American, night watchman, no underground experience, age 60 years, married, seven children, employed by The Hayden Bros Coal Corp., at the Hayden No. 3 Mine, Routt county, was killed by falling down a shaft. One of his duties was to meet the train to receive the mail, but on the night of the accident he failed to turn up. Later he was found dead and badly smashed at the bottom of the shaft. Why he went there no one was able to say. However, he approached the shaft and it being dark did not see the opening which was not equipped with gates, but closed by bars being laid across it, which are raised to let the cage land. Undoubtedly the bars were left raised and consequently deceased fell down. The mine management is responsible for this accident in not properly equipping the landing with safety gates.
- (35)—August 13—VINCENTO PEDRON, Italian, timberman, experience 25 years, age 64 years, single, employed by The Victor-American Fuel Co. at the Delagua mine, Las Animas county, was injured on July 31st by falling under a pit car and died on the above date. Deceased was acting as man trip driver in connection with his regular work as timberman. On the day of the accident he was landing his man trip and cut loose the mule while his car was still running on a one and one-half per cent grade to a level place. He reached out for the line of the mule to prevent him from running up the slope with his harness on. The mule lunged forward,

causing deceased to fall off the car to the middle of the track and he was run over. The accident was a mischance for which no one could be held responsible.

- (36)—August 15—JOSE G. GOMEZ, Mexican, driver, experience six years, age 33 years, married, two children, employed by The Oakdale Coal Co., at the Oakdale mine, Huerfano county, was crushed to death between a loaded car and leg of set of timbers. Deceased was gathering loaded cars from room pillar and while there was sufficient clearance room on one side of the moving car, in some unaccountable manner he was caught between it and the set of timbers. There was no eye witness to the accident and he was well experienced in his work, and it was due, no doubt, to a mischance for which no one could be held responsible.
- (37)-August 22-WILLIAM OWENS, Welsh, pick miner, very little experience, age 51 years, single, employed by The Rapid Creek Mining, Tunnel & Power Co., at the Genter Mine, Gunnison county, was killed by an explosion of gas. At 8 a.m. on the above date, deceased and four other men entered the tunnel with their carbide lamps before the place had been examined by acting fire boss. Before reaching the face of the tunnel a body of gas was ignited by the open lights and the explosion that followed struck deceased, from the effects of which he died a short time after. The other men were able to escape the worst of the explosion, but all were more or less burned about their faces and necks. Deceased came to his death through no fault of his, but through the gross negligence of the acting mine foreman and fire boss who had no certificate for either position. The mine had been giving off methane and it was the duty of the mine management to take no chances by allowing men to enter the tunnel without first having made it safe to enter.
- (38)—September 7—WILFORD SCOTT, English, rope rider, experience 10 years, age 25 years, single; and,
- (39)—MELTON B. THOMAS, American, motorman, experience nine years, age 23 years, married, no children, employed by The Midwest Coal Co., at the Midwest Mine, Mesa county. were both electrocuted. The investigation showed that the big power wire which had been used for lights was disconnected, but 15 inches of it was left hanging and came in contact with the telephone wire running underneath it, burned the insolation and charged it with 440 volts. The telephone was loose and lying on the signal bell line and when Scott reached up to give the signal he received a shock. Thomas, it seems, also took hold of the signal bell line and was killed. The accident was due to carelessness in not attending to the wiring.

- (40)—September 15—EULALIO RICO, Mexican, pick miner, experience three years, age 32 years, single, employed by The Caliente Coal Co., at the Ravenwood Mine, Huerfano county, was killed by a fall of rock. Deceased was working single, driving a room. Here the coal was overlaid with an 18-inch band of draw slate which was brushed along the road and held up by timbers on the gob side. There was no eye witness to the accident. Evidently deceased was in the act of setting a prop under a piece of rock which gave way from an invisible slip and fell on him, killing him. The place was well timbered and the accident was unforeseen and no one can be blamed for it.
- (41)—September 25—NICK DE PEDRO, American, machine miner, experience five years, age 19 years, single, employed by The Big Four Coal & Coke Co., at the Centennial Mine. Boulder county, was killed by a fall of rock and coal. Deceased and three other miners were extracting pillars and had undercut the place and shot the coal down. Deceased was loading coal when he heard a crashing or bouncing of coal left standing. He tried to get out of the way, but the fall caught him and injured him so severely that he died instantly. The place was well timbered and the accident was unforeseen and is classed as unavoidable.
- (42)—September 28—RALPH F. McKINLEY, American, foreman, experience five years, age 30 years, married, two children, employed by The Butcher Knife Coal Co., at the Butcher Knife Mine, Routt county, was killed by a fall of draw slate. Deceased was loading a car at the face of his room when a piece of draw slate fell on him. Apparently he was in the act of setting a prop as he had made a cap piece and a prop was lying beside him. There was no eye witness to the accident and it is not known if he used his best judgment in protecting himself. The place was well timbered.
- (43)—September 29—TONY NIVITOSKY, Pole, pick miner, experience three years, age 35 years, single, employed by The Colorado Fuel & Iron Co., at the Morley Mine, Las Animas county, was killed by an empty car running over him. Deceased and his partner had assisted in putting two empty cars, that had been derailed, on the track, and he started back to his place, ahead of the front car, while his partner was behind the trip. There was no evidence given to show how deceased got under the first car. The first his partner noticed was that his light had disappeared. The bell line on the plane was out of order and had been for several days. It is possible had the signal bell been working the accident might have been avoided.
- (44)—October 7—MIKE ARCHULETA, Spaniard, pick miner, experience a few years, age 39 years, single, employed by

Freeman & Fielding, at the Freeman Mine, Montezuma county, was killed by a fall of rock. The accident was due to neglect in timbering his place although it was known that the roof was bad. The accident would have been avoided had a certified man been employed as mine foreman to see that the working places were kept in safe condition.

- (45)—October 19—JOHN SISNEROS, American, pick miner, experience six years, age 27 years, married, two children, employed by The Huerfano Coal Co., at Ludlow Mine. Las Animas county, was killed by a fall of rock. Deceased and his partner were extracting a portion of a room pillar and while loading a car from the outby corner, a piece of rock sheared off the roof and fell on Sisneros, killing him instantly. Examination showed that the place was well timbered The accident was unforeseen and considered unavoidable.
- (46)-October 23-GAVINE DERRERA, American, timberman, experience five years, age 21 years, married, two children, employed by The Royal Fuel Co., at the Royal Mine, Las Animas county, was killed by a fall of rock. Deceased with several other persons, was engaged extracting props in an abandoned room where no pillars had been extracted and good roof conditions generally prevailed. However, at the point of accident, a small roll was running across the room forming a slip in the roof, and when deceased knocked out a prop with an ax, a large piece of rock came down with it and fell on him, killing his instantly. The place had been examined and found to be safe. The roof was tested each time before a prop was knocked out and in this instance no loose. ness was detected. The accident was due to the inherent danger of the work and possibly might have been avoided had proper tools for pulling props been used.
- (47)—October 29—J. F. CASTLEBERRY, American, machine miner, experience three years, age 42 years, married, three children, employed by The Rapson Coal Mining Co., at the Rapson Mine, Las Animas county, was killed by a fall of rock. Deceased and his partner had been instructed by the mine foreman to put in some more props to support the roof. The partner of deceased was in the act of placing a cap piece on top of a prop when a piece of rock fell on his feet, he shouted for help and deceased and an entryman rushed to his rescue. The entryman took the injured man by the shoulders and pulled him away while deceased lifted the rock, and before he could get awav himself, another rock came down, killing him instantly. The accident was due to the inherent danger of the work and classed as unavoidable.
- (48)—November 13—CHARLES C. BALLARD, American, topman, no experience, age 47 years, married, two children, employed by Dan Lee & Son, at the Mascot Mine, Elbert county,

was killed by a run-a-way trip of empty ears. He was hoisting and dumping coal on the surface and had pushed a trip of empty ears over the knuckle into the slope when he discovered that the rope was not attached to the trip. In an effort to stop the trip from running wild down the slope he was flung under the last ear and killed almost instantly. It was an unforeseen accident for which no one could be held responsible. He evidently feared that someone in the mine might be injured and endeavored to prevent it by risking his own life.

- (49)—November 16—RAFAEL AGUILAR—Mexican, machine miner, experience 12 years, age 35 years, married, no children, employed by The Temple Fuel Co., at the Brodhead No. 9 Mine, Las Animas county, was killed by a fall of rock. Deceased was working at the face of a room when a rock sheered off the face and knocking out a line of props, fell on him, injuring him so seriously that he died shortly after. The place was well timbered and the accident was unforeseen and is classed as unavoidable.
- (50)—November 21—A. J. CUPON, American, carpenter, experience not stated, age 60 years, widower, two children, employed by The Victor-American Fuel Co., at the Pinnacle Mine, Routt county, was killed by a mortar box. He was moving it along on its edge when he slipped and fell in such a way that a corner of the box struck his head, causing fracture of the skull from which he died a few hours later. The accident was a misadventure for which no one could be held responsible.
- (51)—November 24—TONY RAORO, Italian, pick miner, experience 11 years, age 39 years, married, four children, employed by The Colorado Fuel & Iron Co., at the Sopris Mine, Las Animas county, was killed by a fall of rock. Deceased was in the act of prying loose a rock from a slip at the face of a skip when it fell on him. He was found dead under the rock with the iron bar lying across the body showing he was prying the rock loose when the accident occurred. The place was well timbered and the accident is classed as unavoidable.
- (52)—December 2—HILTON K. GREENE, American, machine helper, experience two years, age 23 years, single, employed by The Vesta Mines, Inc., at the Vesta Mine, Huerfano county, was killed by a fall of roof. The machine crew had finished sheering the first cut on the back slope chain pillar and set the jack pipe and started to load the machine, when from an invisible slip in the roof a rock fell on deceased, killing him instantly. From all appearances and information obtained, the accident was unavoidable and due to the hazard of the industry.

- (53)—December 7—HAMAYAK ZAMANIAN, Armenian, pick miner, experience five years, age 25 years, single, employed by The National Fuel Co. at the Monarch No. 2 Mine, Boulder county, was killed by a fall of rock. Deceased and his partner were pulling a pillar when a rock fell from a slip in the roof between the last timber and face. The place was well timbered and plenty of props were available. The accident is classed as unavoidable.
- (54)-December 24-ROCCO MOSCHETTI, Italian, driver, experience 20 years, age 37 years, married, three children, employed by The Boulder Coal Mining Co., at the Black Diamond Mine, Boulder county, was injured by runaway cars on the 21st of December, from the effects of which he died on the above date. A trip of loaded cars was about to be landed onto the tipple when two cars broke loose from the trip and ran back on the slope and caught deceased and another man switching cars from the slope to an entry, and before they could get out of the way of the runaway cars, were struck, deceased's companion was not seriously hurt. The accident was due to the negligence of deceased and his co-workers. Had a drag been put on the trip and the man who coupled the first and second cars noticed the defective coupling, it might not have happened.
- (55)—December 26—JOHN JOHNSON, Slav, farmer, no experience in coal mining, age 40 years, married, no children, lessee of the Star Mine, Moffat county, was killed by a fall of coal. Deceased and several other farmers have a lease on this mine and only take out enough coal for their own use. The opening is in only about 25 feet, but deceased was not in the mine, getting his load of coal from the outside where the coal was exposed. He was warned that he was mining coal in a very insecure place, but he paid no heed and the coal became loose as he was undermining it and about 1,000 pounds fell from the face, crushing him so seriously that he died four hours later. This was a case of incompetent mining without regard of the Coal Mining Laws.
- (56)—December 29—PORFIRIO AGIRE, Mexican, machine miner, experience four years, age 28 years, married, no children, employed by The Rocky Mountain Fuel Co., at the Columbine Mine, Weld county, was killed by a fall of face coal. The room had been machine cut and the coal shot down, but a part was still standing up. The face boss warned deceased to be very careful in taking down this coal as it was loose. However, deceased took no precaution and began to take it down when it fell on him, killing him instantly. The accident could have been avoided had deceased taken proper care in taking down the coal.

(57)—December 31—JIM SANTI, Italian, pick miner, experience 19 years, age 45 years, married, five children, employed by The Colorado Fuel & Iron Co., at the Robinson No. 2 Mine, Huerfano county, was killed by a fall of roof. Deceased was pulling a chain pillar between main and back entry when a rock released by a slip in the roof broke loose about six inches above the coal, and fell on the roadway side, giving very little warning. The place was well timbered and every reasonable precaution was taken to safeguard life. The accident was unavoidable and is charged to the hazard of the work.

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## LIST OF SUCCESSFUL CANDIDATES WHO PASSED THE EXAMINATION FOR COAL MINE OFFICIALS, JULY 6, 7 AND 8, 1925

## First Class Mine Foreman

Cert.		
No.	Name	Address
10	Biekerton, Joseph R.	
9	Bryan, Thomas	Cokedale, Colo.
24	Chase, J. N.	
1	Cornali, John	
54	Jeffryes, A. E.	Trinidad, Colo.
2	Jenkins, Edward H	Walsen, Colo.
8	McIlwee, James P	
27	Scott, Harold E	
52	Vallely, John	Oak Creek, Colo.

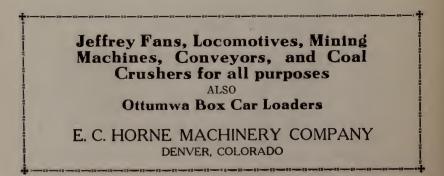
## First Class Assistant Mine Foreman

15	Arnoldi, Pete	Ideal,	Colo.
5	Blyth, Thomas	Florence	Colo.
37	Geiser, William C	Trinidad,	Colo.
48	Kos, Peter	Walsen,	Colo.
	Roberts, James		Colo.
7	Trew, N. H.	Aguilar,	Colo.

## Fire Boss

42	Adair, William	Ojo,	Colo.
6	Allen, John	Louisville,	Colo.
16	Bertotti, James A	Boulder,	Colo.
4	Brown, George W	Denver,	Colo.
39	Bryan, W. J	Trinidad,	Colo.
11	Cairney, James	Denver,	Colo.
13	Cameron, James R	Delcarbon,	Colo.
33	Dale, John	Cokedale,	Colo.
14	Dowds, Hugh	Durango,	Colo.
44	Ellis, Elmer	Louisville,	Colo.
45	Falgien, John	Coal Creek,	Colo.
18	Ferguson, William	Colorado Springs,	Colo.
34	Fiorinia, Adolph A	Rockvale,	Colo.
20	Fritz, Tony R	Coal Creek,	Colo.

Cert.		
No.	Name	Address
40	Fuller, Elmer	Coal Creek, Colo.
41	Godfrey, Richard	Cameo, Colo.
47	Hallett, Carl T	Oak Creek, Colo.
25	Haynes, Arthur Edwin	Oak Creek, Colo.
31	Hill, John W	Cokedale, Colo.
35	Houghney, Thomas	Vallorso, Colo.
19	Hughes, Carl G	Colorado Springs, Colo.
46	Jarrett, Stanley	Oak Creek, Colo.
29	Limberg, Joseph	Lafayette, Colo.
17	McKinley, Ralph F	Bear River, Colo.
26	Madone, Dominick	Canon City, Colo.
22	Marshall, William	
32	Monks, William	Oak Creek, Colo.
23	Murray, James S	
43		
12	O'Donnell, David	Denver, Colo.
21	Prendergast, James	Glenwood Springs, Colo.
49	Prendergast, Francis L	Glenwood Springs, Colo.
51	Santarelli, Thomas P	Pyrolite, Colo.
30	Schenkier, Leo W	Walsenburg, Colo.
50	Smith, Lee H.	
53	Sweet, F. J	Walsenburg, Colo.
28	Taylor, Edward	Coal Creek, Colo.
36	Westbrook, J. T	Toltec, Colo.
38	Zontine, Joseph	Rockvale, Colo.





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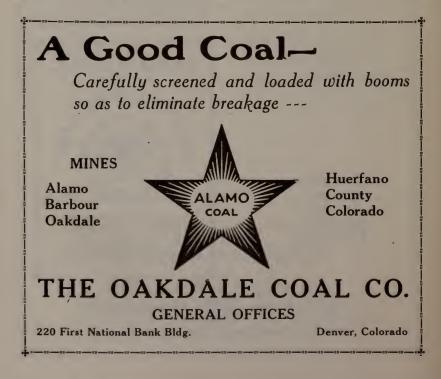
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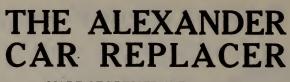
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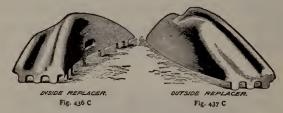
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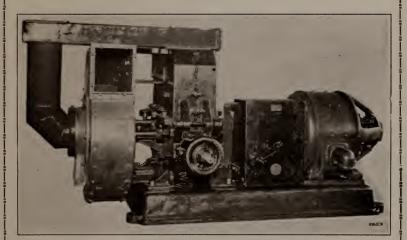
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