

# REPORT

OF THE

# State Inspector of Boilers

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1895 AND 1896

TO THE GOVERNOR



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1897

REPORT  
OF THE  
STATE INSPECTOR OF BOILERS

FOR THE YEAR

1895



DENVER, COLORADO  
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS  
1897

# REPORT.

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Office of State Boiler Inspector,  
Denver, Colo., November 30, 1895.

TO HIS EXCELLENCY,

A. W. McINTIRE,  
GOVERNOR OF COLORADO.

Sir—In compliance with the law “Establishing the office of Inspector of Steam Boilers and defining the duties of the Inspector,” I have the honor of submitting to you the seventh annual report of this office, embracing a period of eight months, beginning April 3 and ending November 30, 1895.

During that time 545 boilers were inspected, in which were found 830 defects, 229 of which were dangerous. I present with this report a table, showing the defects classified.

Eight boilers inspected were regarded as unsafe, and were consequently condemned as the law requires.

They are itemized as follows:

Two boilers at the Cameron mine, Walsenburg, Colo.

One boiler at the Burleigh tunnel, Silver Plume, Colo.

One boiler at The American Zinc Lead Works, Canon City, Colo.

One boiler at Idaho Springs, Colo., W. P. McCormick, owner.

One boiler at The Ivy Steam Laundry, Aspen, Colo., Mrs. Ellen Madley, owner.

Two boilers at a coal mine, Walsenburg, Colo., J. S. Spencer, owner.

Repairs were ordered on 195 boilers, some of which were quite extensive, consisting, as a rule, of new sheets, new tubes, new pressure gauges, new pipe fittings, additional bracing of boiler and the enlargement of the safety valve.

There were 95 defective safety valves, of which 47 were dangerous. In a number of cases one safety valve was found to be doing the duty of two.

Of the 435 pressure gauges inspected, 185 of that number were defective, 30 of which were considered dangerous, and accordingly condemned from further use. Slight errors or defects were, as a rule, corrected by the inspector.

The total receipts and expenditures of the office are given as follows :

Total receipts .....		\$2,700 00
Salary drawn .....	\$1,645 71	
Expense account .....	500 00	
		<hr/>
Total .....	\$2,145 71	\$2,145 71
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Surplus .....		\$ 554 29

	Total	Dangerous.
	Defects.	
Safety valves defective in construction.....	95	47
Boilers without safety valves.....	5	5
Defective pressure gauges.....	185	30
Defective heads.....	20	9
Broken and loose braces.....	50	22
Defective settings.....	73	26
Boilers without pressure gauges... ..	3	3
Defective water gauges.....	130	95
Boilers in which all water gauges were defective..	12	12
Defective bracing.....	86	8
Defective blow-offs.....	28	12

	Total Defects.	Dangerous.
Boilers without blow-offs.....	3	3
Burned plates.....	40	4
Blistered plates.....	18	2
Bagged plates .....	9	5
Cases of internal grooving.....	11	1
Cases of internal incrustations and deposits.....	42	8
Cases of external corrosion and leakage.....	15	2
Mud drums condemned.....	5	5
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Total .....	830	229

Respectfully submitted,

RICHARD KETT,  
State Boiler Inspector.

REPORT  
OF THE  
STATE INSPECTOR OF BOILERS

FOR THE YEAR

1896



DENVER, COLORADO  
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS  
1897

## REPORT.

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Office of State Inspector of Boilers,  
Denver, Colo., November 30, 1896.

TO HIS EXCELLENCY,

A. W. McINTIRE,

GOVERNOR OF COLORADO.

Sir—In compliance with the law “Establishing the office of Inspector of Steam Boilers and defining the duties of the Inspector,” I have the honor of submitting to you the eighth annual report of this office, embracing a period of one year, beginning December 1, 1895, and ending November 30, 1896.

On entering upon the duties of my office, I found that the legislature had not made an appropriation for a clerk during the term of either my predecessor or myself, and it was evident that the books of the office had not been kept beyond a simple record of certificates.

This, of course, was a great drawback and retarded my work for the year 1895 very much, most of my time being employed in ascertaining the location of boilers that had not been inspected during Mr. Hegwer's term and of those that needed re-inspection; consequently, I did not use any of the \$1,500 appropriation for a deputy during the eight months of that year, and was compelled to spend more of my time in the office than was compatible with my duties as state steam boiler inspector.

During the fiscal year of 1896 I kept a deputy fully employed, and even then was greatly handicapped through the lack of proper clerical assistance.

The office is self-paying, and it is imperative that the inspector should personally attend to as much of the work of inspection as possible.

This can not be done in a satisfactory manner when the inspector is obliged to spend most of his time in the office.

The duties of the office become greater each year, as the mining and manufacturing interests of the state increase, and especially is this true of the mining industry.

Every day new mining properties are being developed, necessitating the use of increased boiler facilities, and a complete knowledge of which should be obtained by this office.

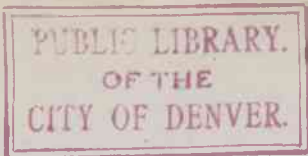
In a large majority of these cases, the owners, instead of buying new boilers, use old ones that have been abandoned for years and should have been condemned long ago, and, in addition to this, this office is seldom notified of the use to which such boilers are being put, and in a great many cases it is only found out by accident.

I would respectfully recommend the passing of more stringent laws, making it imperative to notify this office that such boilers have been put in use again, and more especially in regard to the collection of the \$5 fee, which the law requires shall be collected for the inspection of each boiler.

I have had a great deal of trouble in this respect. In a number of cases, where repairs have been ordered on boilers inspected before a certificate could be issued, the owners, while making the repairs ordered, have paid no attention to repeated requests from this office that they settle the amount of their indebtedness and secure a certificate, which, in order to protect myself, can not be issued until the fee has been paid.

I would respectfully suggest that the inspector be empowered, where a boiler has been inspected and the owners prove dilatory in regard to the payment of the





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legal fee, due for the inspection of said boiler, to order the closing down of the boiler, after a stated time designated by the law has been allowed for repairs ordered and the securing of a certificate, which must be paid for before issuing.

I wish to call attention to a paragraph in the report of Peter P. Egan, state boiler inspector for the fiscal years 1889-90, as, in my estimation, it is very important and should be given due consideration. The paragraph appears below as follows:

"There are many boilers not in use at the present time which is believed should be condemned, but as the law provides for the inspection of boilers in active operation only, those that are idle can not be examined into and their actual condition exposed. Many of these have been put in operation, but this office finds it nearly impossible to inspect many of them, because of their isolated condition and a lack of funds. In this connection I may say that the duties of this office, as outlined by the law, are so vast that without adequate appropriation it is impossible to perform them with that degree of promptness necessary, or with the satisfaction expected by those who are interested in the practical operation of the law, and for whose safety it was enacted."

The following is a list of the boilers condemned for the fiscal year of 1896:

Four boilers were condemned for The United Oil Company, Florence, Colo. In every case the fire box and tubing were in bad condition.

One boiler was condemned at the Garfield-Grouse mine, as being unfit for further use.

Two boilers were condemned at the City Water Works, Golden, Colo. They were both in bad condition and could not be used any longer.

Of six boilers inspected at the State Penitentiary, two were condemned as unfit for further use.

One boiler was condemned at Longmont, J. W. Denio, owner, which was in very bad condition.

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The total receipts and expenditures for the fiscal years of 1895-96 are given below as follows:

Receipts .....		\$7,305 00
Salary .....	\$4,145 71	
Assistants .....	1,500 00	
Expense .....	1,000 00	
Total .....	\$6,645 71	\$6,645 71
Surplus .....		\$ 659 29

	Total	Dangerous.
	Defects.	
Safety valves defective in construction.....	180	75
Boilers without safety valves.....	9	9
Defective pressure gauges.....	190	45
Defective heads.....	30	14
Broken and loose braces.....	73	37
Defective settings.....	98	56
Boilers without pressure gauges.....	8	8
Defective water gauges.....	135	105
Boilers in which all water gauges were defective...	18	18
Defective bracing.....	104	16
Defective blow-offs.....	43	20
Boilers without blow-offs.....	7	7
Burned plates.....	154	56
Blistered plates.....	80	15
Bagged plates.....	53	22
Cases of internal grooving.....	62	12
Cases of internal incrustations and deposit.....	224	80
Cases of external corrosion and leakage.....	198	71
Mud drums condemned.....	9	9
Cases of pittings.....	181	44
Cracked flue sheets.....	5	5
Total .....	1,861	724

Respectfully submitted,

RICHARD KETT,  
State Boiler Inspector.

