

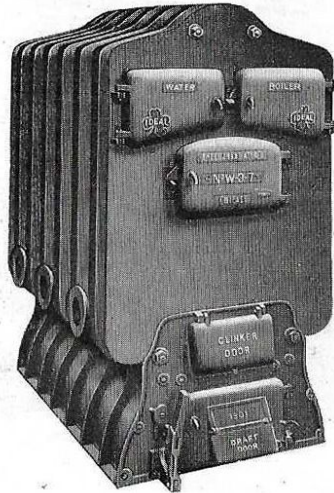
STEAM & HOT WATER BOILERS 1840-1930



THE IDEAL FITTER

BOILERS FROM CATALOGUE OF AMERICAN RADIATOR COMPANY, LONDON 1904

IDEAL NO. 3 "C" SERIES WATER BOILERS



No.	No. of Sections.	* Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity Lineal Feet. 4-inch Pipe.	Capacity Direct Radiation Sq. Feet.	PRICE.	
							£	s. d.
535	5	29 $\frac{3}{8}$	24 $\frac{3}{4}$ × 12 $\frac{1}{2}$	2 3	950	1100	38	0 0
636	6	35 $\frac{5}{8}$	31 × 12 $\frac{1}{2}$	2 3	1150	1350	44	0 0
737	7	41 $\frac{1}{2}$	37 $\frac{1}{4}$ × 12 $\frac{1}{2}$	3 3	1375	1600	50	0 0
838	8	48 $\frac{1}{8}$	43 $\frac{1}{2}$ × 12 $\frac{1}{2}$	3 3	1600	1850	56	0 0

Extra for Fire Tools, per set . . . £1 6 0

Fire Tools will be forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

* Add 7 inches to allow for Smoke Hood.

Total width 30 $\frac{1}{2}$ inches.

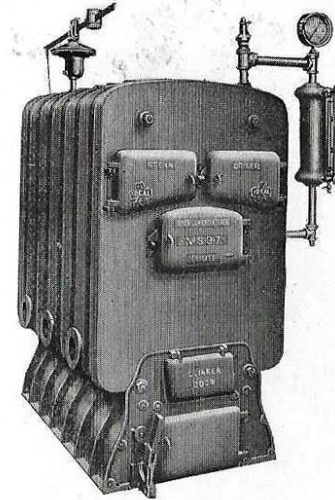
Total height 51 $\frac{1}{2}$ inches.

Diameter of Smoke Outlet 9 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL NO. 3 "C" SERIES STEAM BOILERS



No.	No. of Sections.	* Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity Direct Radiation. Sq. Feet.	PRICE.	
						£	s. d.
530	5	29 $\frac{3}{8}$	24 $\frac{3}{4}$ × 12 $\frac{1}{2}$	2 3	600	44	0 0
630	6	35 $\frac{5}{8}$	31 × 12 $\frac{1}{2}$	2 3	720	51	0 0
730	7	41 $\frac{1}{2}$	37 $\frac{1}{4}$ × 12 $\frac{1}{2}$	3 3	840	58	0 0
830	8	48 $\frac{1}{8}$	43 $\frac{1}{2}$ × 12 $\frac{1}{2}$	3 3	960	65	0 0

Extra for Fire Tools, per set . . . £1 6 0

Extra for Trimmings ,, . . . 6 11 6

Fire Tools and Trimmings will be forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

A set of Trimmings consists of Steam Gauge, Water Column complete, Safety Valve, Automatic Damper Regulator, and Draw-off Cock.

* Add 7 inches to allow for Smoke Hood.

Total width, excluding Trimmings, 30 $\frac{1}{2}$ inches.

Total height 56 $\frac{3}{8}$ inches.

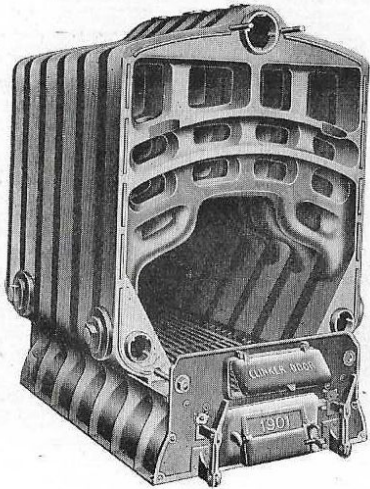
Diameter of Smoke Outlet 9 inches.

Height of Water Line 48 $\frac{1}{2}$ inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL NO. 5 "C" SERIES WATER BOILERS



No.	No. of Sections.	* Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity. Lineal Feet. 4-inch Pipe.	Capacity. Direct Radiation. Sq. Feet.	PRICE.		
							£	s.	d.
555	5	37 $\frac{1}{4}$	32 $\frac{1}{2}$ × 22	2 4	2850	3400	96	0	0
656	6	45 $\frac{1}{2}$	40 $\frac{3}{4}$ × 22	2 4	3420	4060	114	0	0
757	7	53 $\frac{3}{4}$	49 × 22	3 4	3990	4720	132	0	0
858	8	62	57 $\frac{1}{4}$ × 22	3 4	4560	5380	150	0	0
959	9	70 $\frac{1}{4}$	65 $\frac{1}{2}$ × 22	4 4	5130	6040	168	0	0

Extra for Fire Tools, per set . . . £2 0 0

Fire Tools will be forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

* Add 8 $\frac{3}{8}$ inches to allow for Smoke Hood.

Total width 48 $\frac{1}{4}$ inches.

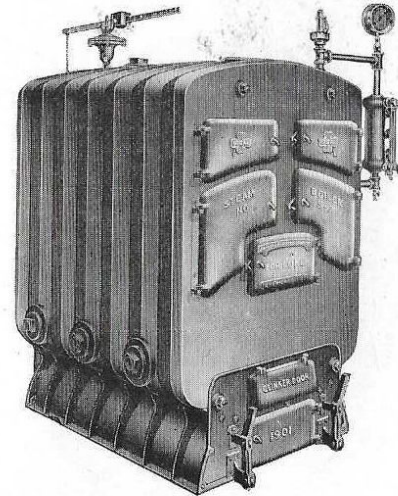
Total height 69 $\frac{1}{4}$ inches.

Diameter of Smoke Outlet 12 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL NO. 5 "C" SERIES STEAM BOILERS



No.	No. of Sections.	Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity Direct Radiation. Sq. Feet.	PRICE.		
						£	s.	d.
550	5	37 $\frac{1}{4}$	32 $\frac{1}{2}$ × 22	2 4	1740	102	0	0
650	6	45 $\frac{1}{2}$	40 $\frac{3}{4}$ × 22	2 4	2070	121	0	0
750	7	53 $\frac{3}{4}$	49 × 22	3 4	2400	140	0	0
850	8	62	57 $\frac{1}{4}$ × 22	3 4	2730	159	0	0
950	9	70 $\frac{1}{4}$	65 $\frac{1}{2}$ × 22	4 4	3060	178	0	0

Extra for Fire Tools, per set . . . £2 0 0
 Extra for Trimmings ,, . . . 6 11 6

Fire Tools and Trimmings will be forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

A set of Trimmings consists of Steam Gauge, Water Column complete, Safety Valve, Automatic Damper Regulator, and Draw-off Cock.

* Add 8 $\frac{3}{8}$ inches to allow for Smoke Hood.

Total width, excluding Trimmings, 48 $\frac{1}{4}$ inches.

Total height 72 $\frac{1}{4}$ inches.

Diameter of Smoke Outlet 12 inches.

Height of Water Line 63 $\frac{3}{8}$ inches.

For additional data see page 102.

See General Conditions, page 80.

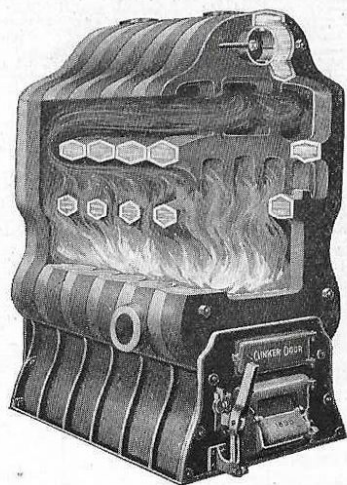
VALVES.

M. & C. I. FIGS.

TOOLS.

REGISTERS.

IDEAL SECTIONAL 18-INCH WATER BOILERS



No.	No. of Sections.	* Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity Lineal Feet. 4-inch Pipe.	Capacity Direct Radiation. Sq. Feet.	PRICE. £ s. d.
184	4	28	18 x 18	2 3	700	800	31 0 0
185	5	34	24 x 18	2 3	840	1000	37 0 0
186	6	40	30 x 18	2 3	1010	1200	43 0 0
187	7	46	36 x 18	2 3	1180	1400	49 0 0

Extra for Fire Tools, per set . . . £1 6 0

Fire Tools are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

* Add 11½ inches to allow for Smoke Hood.

Total width 28 inches.

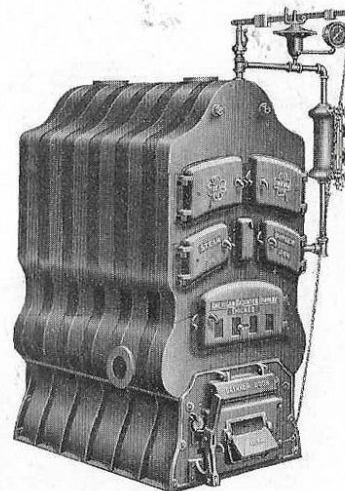
Total height 52 inches.

Diameter of Smoke Outlet 8 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL SECTIONAL 18-INCH STEAM BOILERS



No.	No. of Sections.	* Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity Direct Radiation. Sq. Feet.	PRICE. £ s. d.
084	4	28	18 x 18	2 3	420	33 0 0
085	5	34	24 x 18	2 3	525	40 0 0
086	6	40	30 x 18	2 3	630	47 0 0
087	7	46	36 x 18	2 3	735	54 0 0

Extra for Fire Tools, per set . . . £1 6 0

Extra for Trimmings ,, . . . 6 11 6

Fire Tools and Trimmings are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

A set of Trimmings consists of Steam Gauge, Water Column complete, Safety Valve, Automatic Damper Regulator, and Draw-off Cock.

* Add 11½ inches to allow for Smoke Hood.

Total width, excluding Trimmings, 28 inches.

Total height 55 inches.

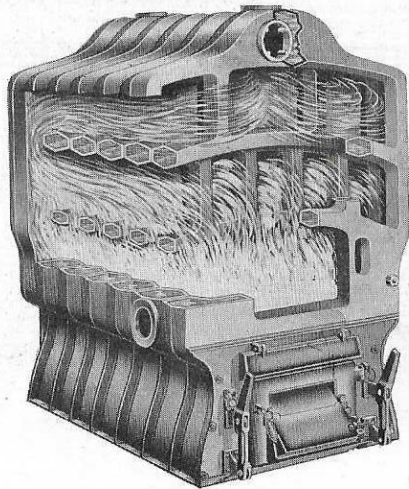
Height of Water Line 44 inches.

Diameter of Smoke Outlet 8 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL SECTIONAL 24-INCH WATER BOILERS



No.	No. of Sections.	* Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity Lineal Feet. 4-inch Pipe.	Capacity Direct Radiation Sq. Feet.	PRICE. £ s. d.
245	5	39	29 × 24	2 4	1470	1750	52 10 0
246	6	46¼	36¼ × 24	2 4	1800	2125	62 0 0
247	7	53½	43½ × 24	2 4	2100	2500	71 10 0
248	8	60¾	50¾ × 24	3 4	2425	2875	81 0 0
249	9	68	58 × 24	3 4	2750	3250	90 10 0

Extra for Fire Tools, per set . . . £1 6 0

Fire Tools are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

* Add 14¼ inches to allow for Smoke Hood.

Total width 40½ inches.

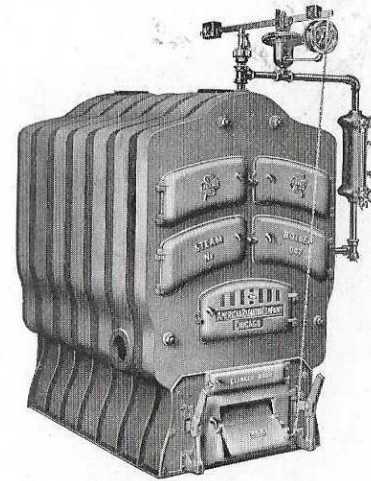
Total height 58¾ inches.

Diameter of Smoke Outlet 12 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL SECTIONAL 24-INCH STEAM BOILERS



No.	No. of Sections.	* Length. Inches.	Size of Grate. Inches.	No. and Size Outlets on Top. No. In.	Capacity Direct Radiation. Sq. Feet.	PRICE. £ s. d.
045	5	39	29 × 24	2 4	900	60 0 0
046	6	46¼	36¼ × 24	2 4	1100	70 0 0
047	7	53½	43½ × 24	2 4	1300	80 0 0
048	8	60¾	50¾ × 24	3 4	1500	90 0 0
049	9	68	58 × 24	3 4	1700	100 0 0

Extra for Fire Tools, per set . . . £1 6 0
 Extra for Trimmings ,, . . . 6 11 6

Fire Tools and Trimmings are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

A set of Trimmings consists of Steam Gauge, Water Column complete, Safety Valve, Automatic Damper Regulator, and Draw-off Cock.

* Add 14¼ inches to allow for Smoke Hood.

Total width, excluding Trimmings, 40½ inches.

Total height 62 inches.

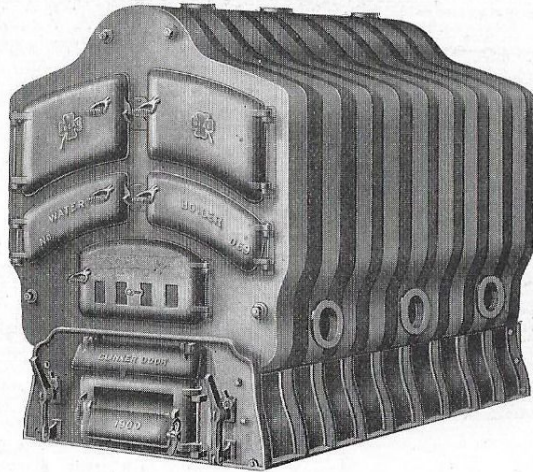
Height of Water Line 50 inches.

Diameter of Smoke Outlet 12 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL SECTIONAL 36-INCH WATER BOILERS



No.	No. of Sections.	* Length.	Size of Grate.	No. and Size Outlets on Top.	Capacity Lineal Feet.	Capacity Direct Radiation	PRICE.
		Inches.	Inches.	No. In.	4-inch Pipe.	Sq. Feet.	
365	5	46 $\frac{3}{4}$	32 x 36	2 4	2900	3450	118 0 0
366	6	55	40 x 36	2 4	3550	4200	138 0 0
367	7	63 $\frac{1}{4}$	48 x 36	3 4	4190	4950	158 0 0
368	8	71 $\frac{1}{2}$	56 x 36	3 4	4800	5700	178 0 0
369	9	79 $\frac{3}{4}$	64 x 36	4 4	5450	6450	198 0 0

Extra for Fire Tools, per set . . . £2 0 0

Fire Tools are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

* Add 10 $\frac{1}{4}$ inches to allow for Smoke Hood.

Total width 57 $\frac{1}{2}$ inches.

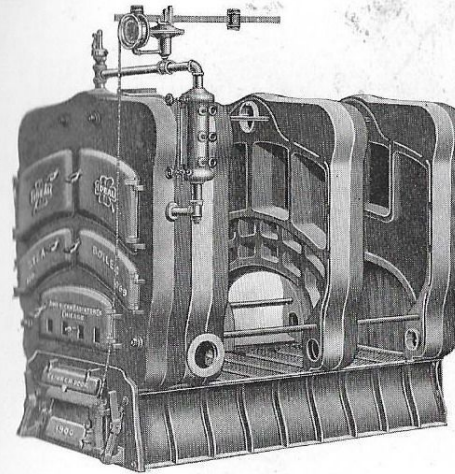
Total height 72 inches.

Diameter of Smoke Outlet 14 $\frac{1}{2}$ inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL SECTIONAL 36-INCH STEAM BOILERS



No.	No. of Sections.	* Length.	Size of Grate.	No. and Size Outlets on Top.	Capacity Direct Radiation.	PRICE.
		Inches.	Inches.	No. In.	Sq. Feet.	
005	5	46 $\frac{3}{4}$	32 x 36	2 4	1800	128 17 6
006	6	55	40 x 36	2 4	2200	150 7 6
007	7	63 $\frac{1}{4}$	48 x 36	3 4	2600	171 17 6
008	8	71 $\frac{1}{2}$	56 x 36	3 4	3000	193 7 6
009	9	79 $\frac{3}{4}$	64 x 36	4 4	3400	214 17 6

Extra for Fire Tools, per set . . . £2 0 0
 Extra for Trimmings ,, . . . 6 11 6

Fire Tools and Trimmings are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

A set of Trimmings consists of Steam Gauge, Water Column complete, Safety Valve, Automatic Damper Regulator, and Draw-off Cock.

* Add 10 $\frac{1}{4}$ inches to allow for Smoke Hood.

Total width, excluding Trimmings, 60 $\frac{1}{2}$ inches.

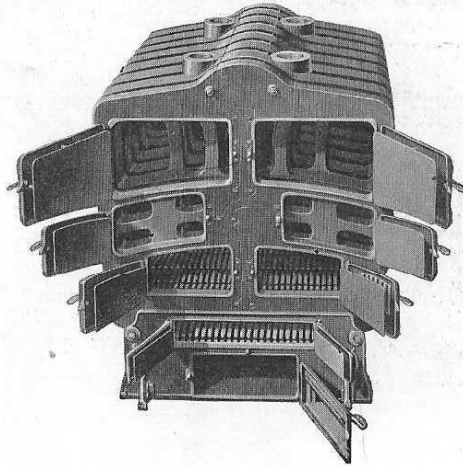
Total height 72 inches.

Height of Water Line 61 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL SECTIONAL 48-INCH WATER BOILERS



No.	No. of Sections.	* Length.	Size of Grate.	No. and Size Outlets on Top.	Capacity Lineal Feet. 4-inch. Pipe.	Capacity Direct Radiation.	PRICE.		
		Inches.	Inches.	No. In.	Sq. Feet.	£	s.	d.	
486	6	64	54 × 48	2 6	5920	7050	209	0	0
487	7	74 ³ / ₄	64 ³ / ₄ × 48	2 6	7050	8400	240	0	0
488	8	85 ¹ / ₂	75 ¹ / ₂ × 48	3 6	8190	9750	271	0	0
489	9	96 ¹ / ₄	86 ¹ / ₄ × 48	3 6	9320	11100	302	0	0
4810	10	107	97 × 48	3 6	10450	12450	333	0	0

Extra for Fire Tools, per set . . . £2 0 0

Fire Tools are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

*Add 27¹/₄ inches to allow for Smoke Hood.

Total width 68 inches.

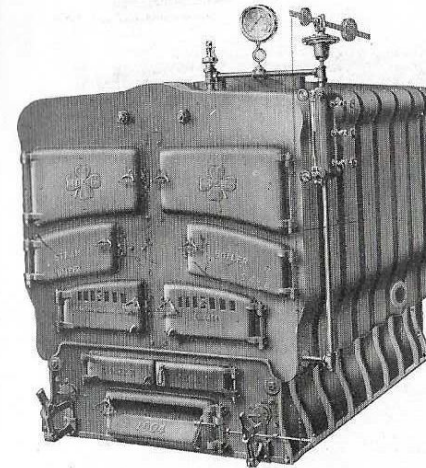
Total height 81³/₄ inches.

Diameter of Smoke Outlet 21 inches.

For additional data see page 102.

See General Conditions, page 80.

IDEAL SECTIONAL 48-INCH STEAM BOILERS.



No.	No. of Sections.	* Length.	Size of Grate.	No. and Size Outlets on Top.	Capacity Direct Radiation.	PRICE.		
		Inches.	Inches.	No. In.	Sq. Feet.	£	s.	d.
406	6	64	54 × 48	2 6	3800	225	0	0
407	7	74 ³ / ₄	64 ³ / ₄ × 48	2 6	4550	258	0	0
408	8	85 ¹ / ₂	75 ¹ / ₂ × 48	3 6	5300	291	0	0
409	9	96 ¹ / ₄	86 ¹ / ₄ × 48	3 6	6050	324	0	0
4010	10	107	97 × 48	3 6	6800	357	0	0

Extra for Fire Tools, per set . . . £2 0 0

Extra for Trimmings ,, . . . 6 11 6

Fire Tools and Trimmings are forwarded with Boiler and charged as above, unless otherwise specified.

A set of Fire Tools consists of Poker, Slice Bar, Flue Brush, Scraper, Hoe, and Shovel.

A set of Trimmings consists of Steam Gauge, Water Column complete, Safety Valve, Automatic Damper Regulator, and Draw-off Cock.

* Add 27¹/₄ inches to allow for Smoke Hood.

Total width, excluding Trimmings, 69 inches.

Total height 81³/₄ inches.

Height of Water Line 70 inches.

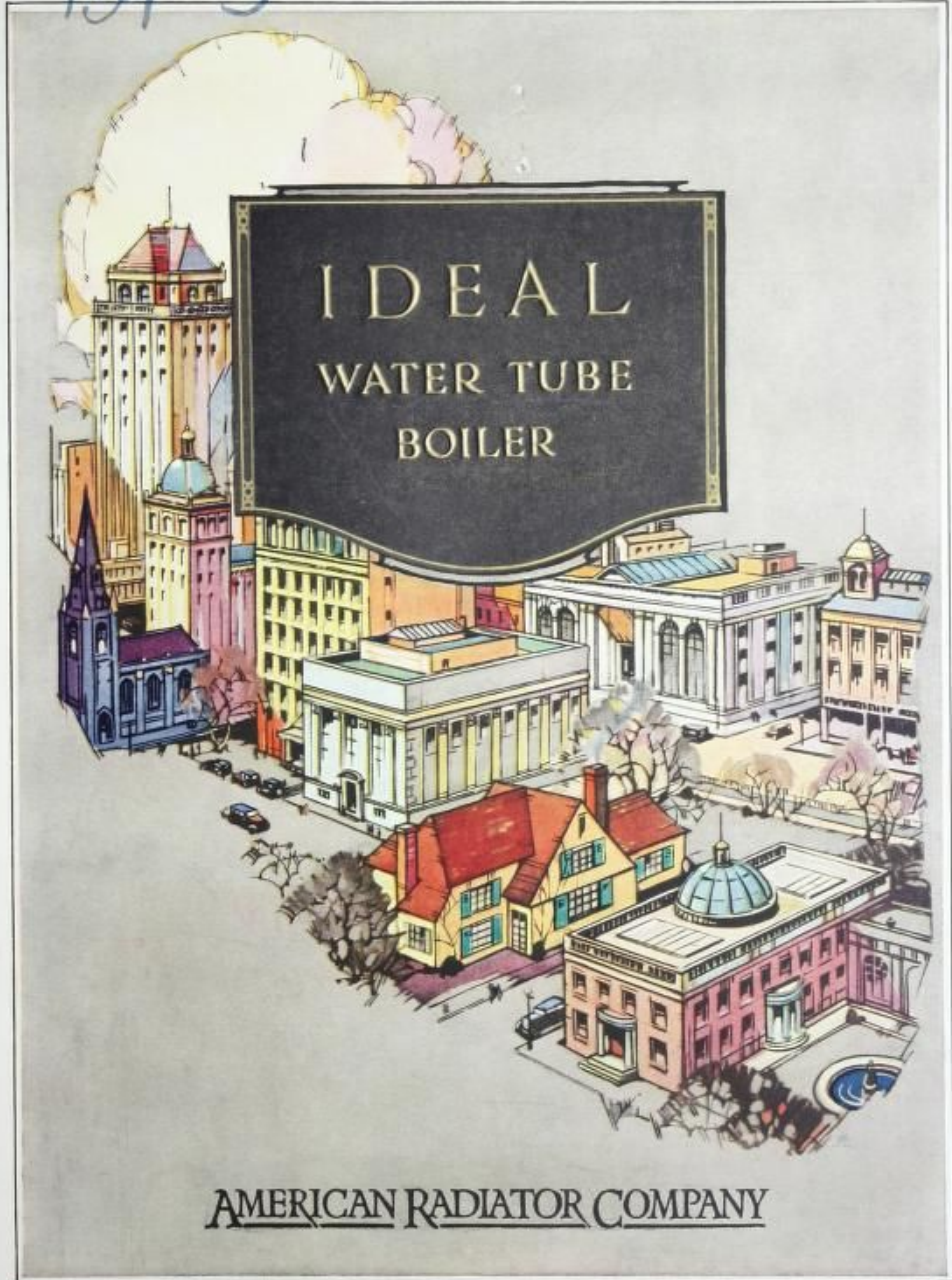
Diameter of Smoke Outlet 21 inches.

For additional data see page 102.

See General Conditions, page 80.

VALVES
M. & C. L. FIGS.
TOOLS

139-5



AMERICAN RADIATOR COMPANY

1925



*Ideal
Water Tube
Boilers*



23-inch



29-inch



36-inch

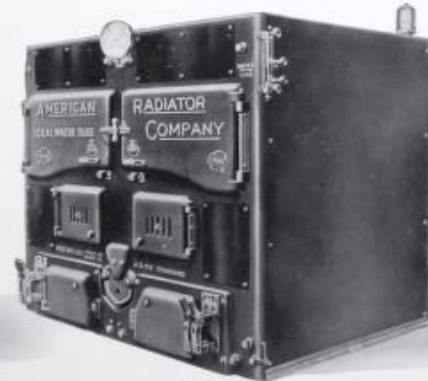
four



*Designed to serve the heating needs
of larger residences ~ apartment houses ~
hotels ~ churches ~ banks ~ clubs ~ stores ~
theatres ~ and public buildings ~ ~*

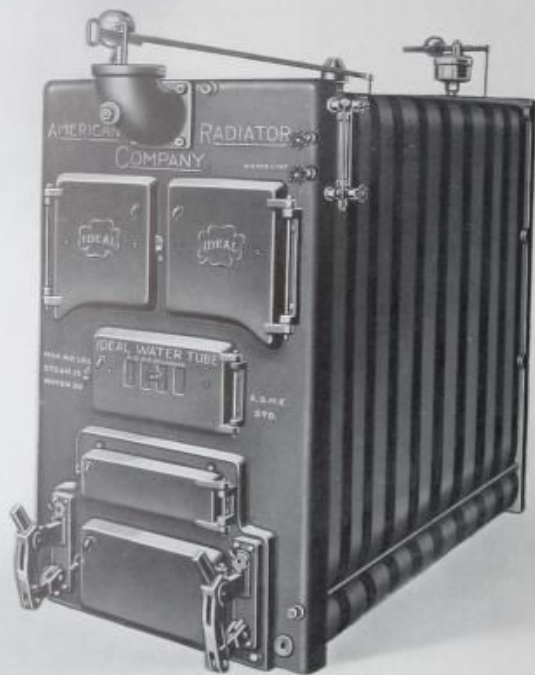


48-Inch



79-Inch

100-00111-11F



29" IDEAL WATER TUBE BOILER

IDEAL WATER TUBE BOILERS ARE SCIENTIFICALLY DESIGNED AND CONSTRUCTED TO RENDER EFFICIENT, DURABLE SERVICE WITH THE MINIMUM OF ATTENTION. NOTE THE STURDY, CLEAN-CUT APPEARANCE, ABSENCE OF OLD-FASHIONED, BOTHERSOME CHAINS, THE UNUSUALLY HEAVY DOORS, PLATE WORK AND HINGE PINS, AND FREEDOM FROM MANIFOLDS AND OUTSIDE PIPING

THE IDEAL WATER TUBE BOILER IS A PERMANENT INVESTMENT

OF the entire equipment that goes into any house, there is no single item which means so much to the owner from the investment point of view as the heating boiler.

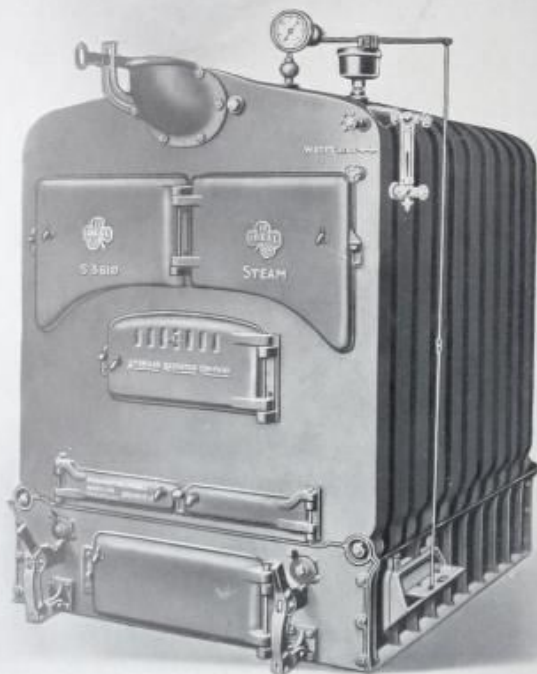
Here is an item, to secure the service of which necessarily involves a certain initial expenditure, and to operate which means yearly maintenance costs in the form of fuel and labor. In return, the boiler is expected to generate the heat to keep the building comfortably warm. The selection of a specific boiler then, becomes a question of balancing service against expenditure. Carefully selected, a boiler means money well invested; but a poorly selected plant becomes a source of endless regret.

The Ideal Water Tube Boiler is a sound, permanent investment. Very reasonable in its initial cost, it operates with unusual economy of coal consumption, and without requiring skilled attendance. It will serve efficiently throughout the lifetime of the building it occupies, and it may be relied upon always to produce quick heating responses to every need.

Designed to Meet the Heating Requirements of all Types of Buildings

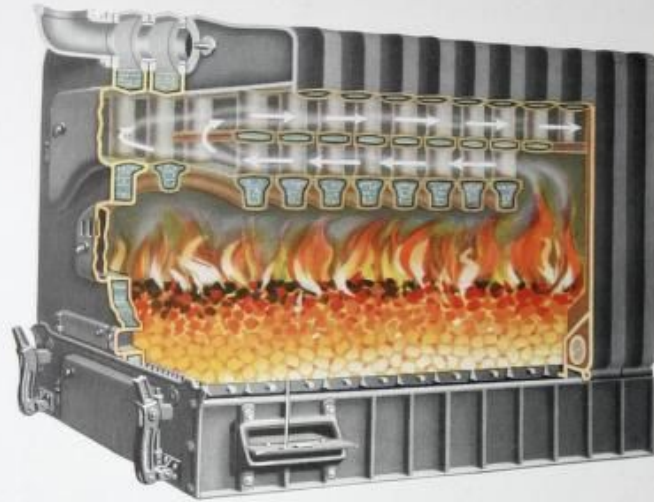
The Ideal Water Tube Boiler is the perfected product of many years of experience. To the solution of actual heating problems as they have presented themselves in buildings of all types and sizes, in all sections of the country, has been brought the service of our staff of heating engineers and the experimental equipment of the largest heating laboratory in the world—the Institute of Thermal Research. Today, the Ideal Water Tube Boiler embodies every desirable feature adapting it especially to the actual working conditions obtaining in its field of service.

The boiler is made in a complete range of sizes. No building is too large to secure its heating advantages.



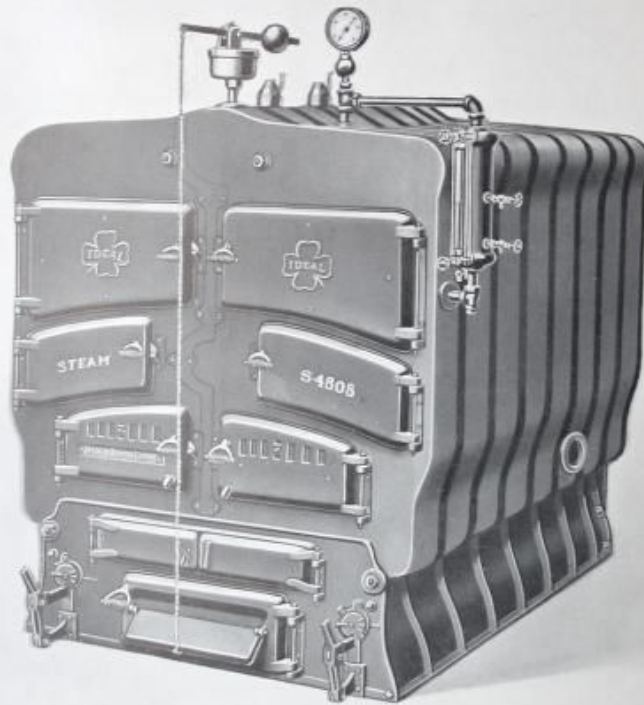
36" IDEAL WATER TUBE BOILER

THE CONTACT FACES ON ALL DOORS AND PLATE WORK IN IDEAL WATER TUBE BOILERS ARE GROUND SMOOTH, MAKING A GAS-TIGHT CONSTRUCTION. THE HIGH STANDARD OF OPERATING ECONOMY AND CLEANLINESS IS PERMANENTLY MAINTAINED



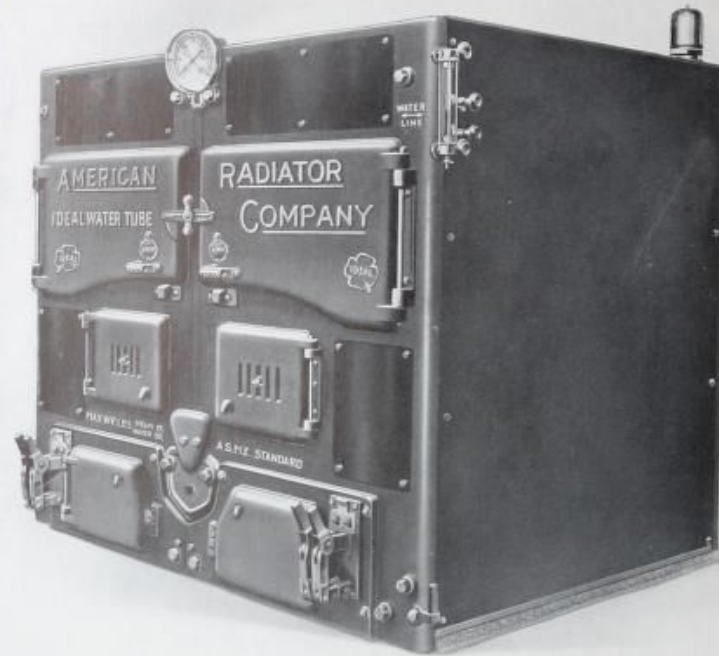
FRONT-TO-REAR CROSS-SECTION VIEW OF THE
36" IDEAL WATER TUBE BOILER

THE REFINED BALANCE IN THE DESIGN OF THE GRATE AREA, FIRE CONTACT HEATING SURFACE, FLUE AREA AND GAS TRAVEL; THE MULTIPLICITY OF TUBULAR WATERWAYS WHICH DIVIDE THE WATER INTO MANY THIN STREAMS, AND THE UNUSUALLY LARGE HEAT-ABSORBING SURFACE, ACCOMPLISH QUICK, DEPENDABLE, AND EFFICIENT HEATING FOR ALL IDEAL WATER TUBE BOILERS



48" IDEAL WATER TUBE BOILER

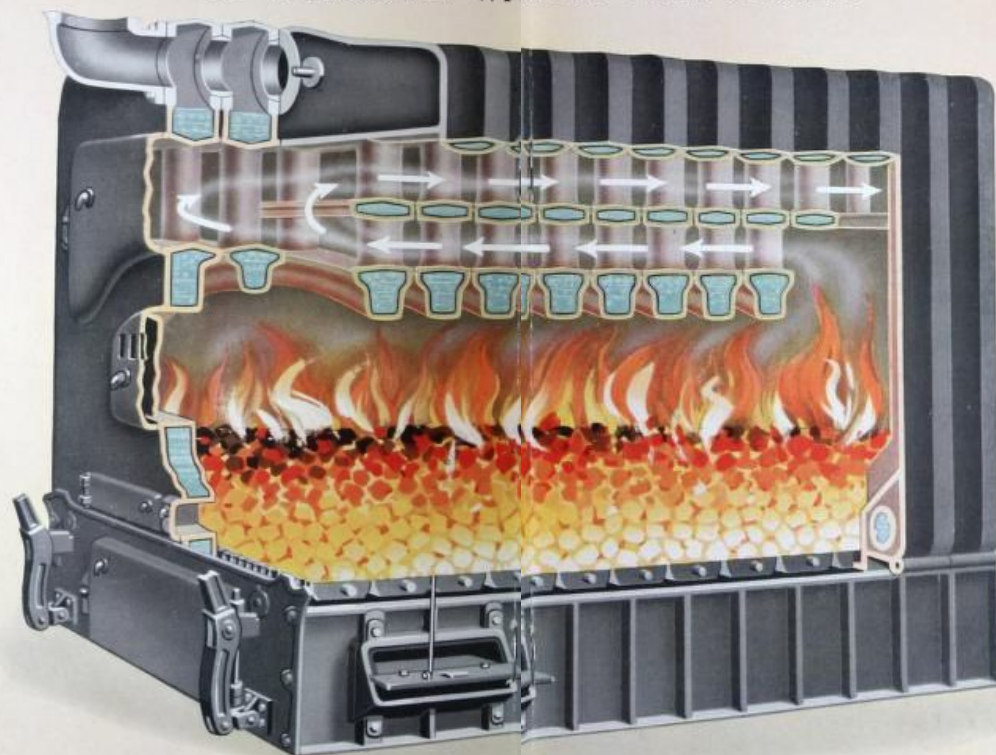
THE 48" SIZE IDEAL WATER TUBE BOILER IS ONE OF THE OLDEST AND BEST KNOWN IN THE SERIES. ITS SPECIAL GAS TRAVEL IS DESCRIBED ON PAGE THIRTEEN. IN POINT OF OPERATING EFFICIENCY AND STURDY CONSTRUCTION, THE 48" BOILER IS THE SAME AS THE OTHER UNITS IN THE SERIES



79" IDEAL WATER TUBE BOILER

MANY OF THE LARGEST BUILDINGS THROUGHOUT THE COUNTRY ARE HEATED BY THE 79" IDEAL WATER TUBE BOILER IN BATTERY. NO BUILDING IS TOO LARGE FOR ITS USE. THESE BOILERS ARE WATER-BACKED TO THE FLOOR AND HAVE A VERY LOW WATER LINE. THEY ARE COMPACT, CLEAN-CUT, EASILY ATTENDED, AND OPERATE WITH A MARKED ECONOMY OF FUEL CONSUMPTION.

SECTIONAL VIEW ILLUSTRATING INTERNAL DESIGN AND CONSTRUCTION
OF THE IDEAL WATER TUBE BOILER



The Ideal Water Tube Boiler has derived its name from the basic characteristic of its design—the extensive series of water-backed vertical tubes which divide the body of water into many thin streams, and expose an unusually large amount of heat-absorbing surface to the fire and the hot gases of combustion. This design, united with the other features of the boiler—

the scientifically balanced proportions of its grate area, direct heating surface, flue area, and gas travel; its gas-tight flue construction; its unusually heavy grates, doors, plate work, and hinge-pins; its large, substantial smokehood and automatic regulation—all unite in accomplishing quick, economical, and durable heating service with the very minimum amount of attention.

New
AMERICAN RADIATOR
E PRODUCTS

January 1928

AMERICAN RADIATOR COMPANY

New
AMERICAN RADIATOR
PRODUCTS

The Greatest Line of
Heating Equipment
in the World at
New Low Prices

—
JANUARY 1928
—

AMERICAN RADIATOR COMPANY

1928

IDEAL RED JACKET BOILER

*First Completely Equipped, Metal-Covered,
Porcelain Enamel Finished Boiler*

AT NEW LOW PRICES

For hard or soft coal, coke, oil or gas

HERE is the greatest line of heating boilers in the world. That statement may be made without hesitancy or qualification. The Ideal Red Jacket Boiler brings something new and highly desirable to home owners, and a new opportunity for heating merchants to render more and better service. It is unquestionably the most important development of a generation in the heating industry and one of the most noteworthy contributions which the American Radiator Company has had the privilege of offering to the heating profession.

1. Perfected Design—Long Double Flue, Highly Efficient
2. Completely Equipped with Mechanical Regulation and All Accessories
3. Jacketed and Thoroughly Insulated
4. Of Enduring Beauty—All Doors Porcelain Enameled

Yet it costs no more than ordinary equipment



No. 1. Ideal Red Jacket Boiler

No. 2. Ideal Red Jacket Boiler

No. 3. Ideal Red Jacket Boiler

[6]

THE new Ideal Red Jacket Boiler has been developed to meet the new demands of our day. It has been entirely appropriate that the various improvements made heretofore in boilers have been fundamentally along the lines of operating economy and utter reliability. It was so with the automobile. The primary purpose of a boiler is heating, just as the primary purpose of the automobile is transportation. But the time has come when the people expect and demand, not only a high degree of mechanical perfection in the products that they buy—but products which are beautiful as well.

Beauty and High Efficiency—Combined

The American Radiator Company has frankly faced these facts. With forty years of designing and manufacturing experience as a background, and having developed the several types of Ideal boilers to the highest degree of practical operating efficiency, we sought to incorporate in one boiler every desirable feature and to add, if possible, new features of utility and beauty. The new Ideal Red Jacket Boiler represents the culmination of our efforts. It is the finest combination of efficiency and beauty that has ever been developed and brought within the reach of the average home owner.



No. 4. Ideal Red Jacket Boiler

No. 5. Ideal Red Jacket Boiler

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PATENTS PENDING

Sectional Design—Long Double Flue

THE Ideal Red Jacket Boiler is made in sectional design with long double flue gallery through which the gases of combustion must travel before escaping—a distance twice the boiler's length—which is not possible in the usual type of boiler. As a result of its long flue travel and carefully balanced design, the Ideal Red Jacket Boiler attains a very high efficiency. It has an unusually quick pick-up heating capacity, insuring quick heating and abundant warmth on cold winter mornings. Its design is carefully calculated so that the boiler functions with exceptionally high efficiency while performing at the rates at which it is called upon to operate during the major part of the heating season. Interposed between the beautiful and indestructible cabinet exterior and the boiler is a one-inch, corrugated, air-cell asbestos lining, to prevent radiation heat-loss. The boiler is completely equipped with mechanical regulation and all accessories.

Note, also, the two-way smokehood, allowing vertical or horizontal chimney connection, thus permitting close connections and a considerable saving in floor space. The smokehood is equipped with both choke and check dampers. And the well designed grates, with reinforced trussed construction and well-proportioned teeth and openings permit the use of small-sized coal, such as buckwheat and pea; the openings being carefully calculated to provide a large percentage of free area so that an adequate supply of air may pass through and allow rapid, uniform and complete combustion. The top surfaces of the grates are angular in form, effecting an easy grinding of clinkers when the grates are shaken—thus greatly facilitating care-taking. Every feature in this new boiler has been studiously developed in the minutest detail to insure quick heating response, high operating efficiency, and easy care-taking.



REAR VIEW

CLOSE-UP OF TWO-WAY
SMOKE-HOOD FULLY
EQUIPPED WITH DAMPERS

Transforms the Cellar into a Really Useful Place

It is stated by the Architectural Forum that over three billion dollars is invested in cellar space in America's homes; and that about three hundred million dollars is spent annually on cellar construction. Most of this space is at present wasted—due largely to the unsightliness of the old-fashioned heating plant.

Through its cleanliness and great beauty, the Ideal Red Jacket Boiler solves this entire problem and allows the house-owner to convert his cellar into a really useful, livable place. In accomplishing this, it opens to heating merchants a new, almost unlimited opportunity for replacement business. The metal jacket of the boiler is finished in a beautiful, lustrous red baked enamel; all doors are finished in black porcelain enamel. The beauty of the boiler is permanent.

GRATE BAR OF IDEAL RED
JACKET BOILER

SPECIAL SMOKELESS BOILER

Burns Soft Coal Smokelessly



IDEAL RED JACKET BOILER FOR SOFT COAL

THE Ideal Red Jacket Boiler (sizes 2, 3, 4 and 5) is available also with the famous Ideal Smoke Oxidizer for the burning of any grade of soft coal. The operation of this simple, perfected device is explained below. It is water-backed throughout, and cannot burn out.

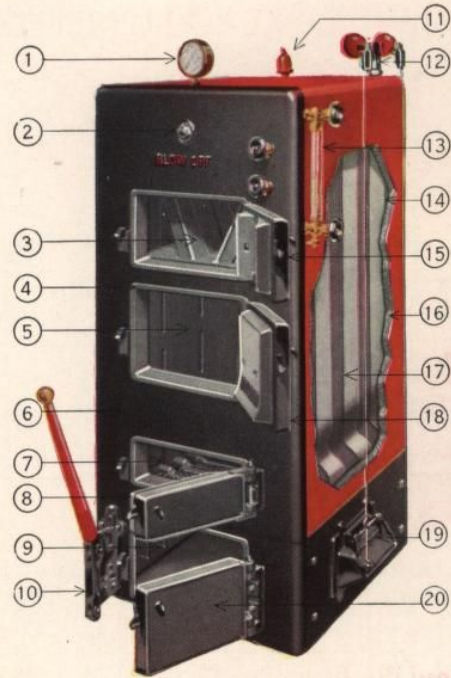
The Ideal Red Jacket Boiler for soft coal does not require any special degree of skilled attendance. It is easily fired and cared for, assuring satisfactory service with ordinary attention.

How the Ideal Smoke Oxidizer Operates

- A** Black volatile matter from the soft coal, driven off by the heat of combustion, in which are suspended the countless smoke-making particles of carbon.
- B** Ideal Smoke Oxidizer—supplies the required amount of oxygen to the volatile matter in such a way as to effect a thorough, compressed and combustible mixture.
- C** Mixing channel—here the volatile matter and secondary air supply are thoroughly mixed and ignited.
- D** Secondary gas chamber into which the ignited mixture bursts with an intensely hot flame. In the heat of this flame the carbon particles are completely burned to the colorless gas, carbon dioxide CO₂. Thus smokeless performance is accomplished, and the latent heat of the smoke, instead of passing up the chimney, is utilized for practical service.



SECTIONAL VIEW OF IDEAL RED JACKET SMOKELESS BOILER



SPECIFICATIONS

- 1 Sensitive retard steam gauge.
- 2 Blow-off conveniently located in front for cleaning.
- 3 Long, double gallery flue for hot gas travel secures high operating economy.
- 4 All contact-surfaces on doors and plate work ground to smooth finish for dust-proof construction.
- 5 Large, scientifically proportioned fuel chamber of abundant coal-carrying capacity for long firing periods and easy caretaking.
- 6 Jacket, indestructible sheet steel, baked enamel finish.
- 7 Special grates allow use of small size coal, such as Buckwheat and Pea. Triangular top construction grinds clinkers when grates are shaken, facilitating caretaking. Reinforced trussed construction.
- 8 Porcelain enamel finished doors of enduring lustre and beauty.
- 9 Ashpit of ample proportions for easy caretaking with cast iron base of strong, trussed construction.
- 10 Shaking mechanism, flexible, durable.
- 11 Safety valve.
- 12 New, sensitive Arco Regulation.
- 13 Water gauge glass with brass fittings, easily read.
- 14 Latest improved type air cell asbestos insulation permanently prevents radiation heat loss.
- 15 Flue door with curved baffle lining, insures easy gas travel with minimum draft.
- 16 Side metal jacket, indestructible and finished with beautiful red baked enamel.
- 17 New, sealed, seepage-proof construction between all sections.
- 18 Sturdy fire door with special baffle lining containing secondary air distributor.
- 19 Primary Draft Inlet.
- 20 Note substantial construction of all doors, plate fittings, hinge pins, etc., all porcelain enamel finished, for permanent beauty.