

A. D. Granger Co.

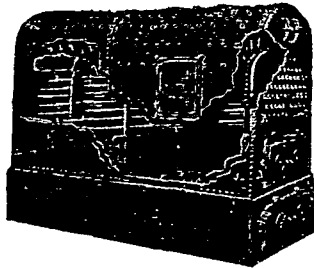
ESTABLISHED 1893

19 Park Row

New York City

Boilers, Engines, Turbines, Feed Water Heaters, Pumps, Stacks,
Grates, Steel Plate Construction, Cranes, Hoists, Complete Plants.

"Oswego" Water Tube Boilers

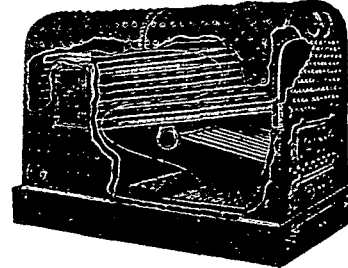


Type "A," Up-Draft

A self-contained, internally fired, Water Tube Boiler, with straight inclined water tubes connecting front and rear water spaces. Inner and outer shells form a complete water jacket surrounding the fire. Steel construction, no cast-iron used, in boiler proper. Built in both up-draft and down-draft types. All under A.S.M.E. Code for working pressures up to 150 lbs.

Type "A," for anthracite coal, up-draft is made in 22 sizes, both low and high pressures, ranging from 20 H. P. to 300 H. P. or an equivalent in radiating surfaces of from 2000 sq. ft. to 30,000 sq. ft.

Type "B" is a development from Type "A," to include the down-draft water grate for the smokeless combustion of bituminous coal. Also made in 22 sizes with radiating surfaces from 2000 sq. ft. to 30,000 sq. ft.



Type "B," Down-Draft

Type "W." A welded unit, built for 15 lbs. working pressure, under the A.S.M.E. Code, made in 20 sizes to carry from 2000 sq. ft. of radiation to 30,000 sq. ft. This is built with either vertical or horizontal baffles.

Space—Oswego Boilers are compact and occupy very small space per horsepower.

Designed for Maximum Fuel Economy and to obtain highest efficiency. The furnace is entirely surrounded by water surface and the water tubes take the direct heat from the fire as well. The gases of combustion must pass across the bank of tubes three times to the smoke outlet.

Designs for Oil Burners and Natural Gas. We have units operating with all the best known oil burners and several installations with gas burners.

Low Pressure Type "A" Oswego Internally Fired Water Tube Boilers

Number of Boiler...	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Width.....ft. in.	4-2	4-2	4-2	4-2	4-2	4-2	4-10	4-10	4-10	4-10	5-0	5-0	5-0	5-9	5-9	6-11	6-11
Length.....ft. in.	9-2	9-10	10-6	11-0	11-4	11-6	11-6	11-6	13-0	13-0	13-0	13-0	14-0	14-0	15-0	15-0	18-0
Total Height.....ft. in.	6-11	7-1	7-2	7-2	7-2	7-5	7-8	8-0	8-0	8-0	8-11	9-5	9-5	9-11	10-6	10-6	10-6
Height of Base.....ft. in.	1-5	1-5	1-6	1-6	1-6	1-6	1-8	1-8	1-8	1-8	1-8	1-8	1-8	2-0	2-0	2-0	2-0
Height Water Line.....ft. in.	6-1	6-3	6-4	6-4	6-4	6-7	6-10	7-1	7-1	7-2	7-11	8-3	8-3	8-7	8-11	8-11	8-11
Diameter Smoke Flue.....in.	21	22	23	23	23	25	26	28	30	30	34	34	34	37	39	40	42
Grate Surface.....sq. ft.	16.8	17.6	18.8	19	19	20.7	25	25.5	28.5	28.5	31	31	31	37	40	48	57
Radiating Surface.....sq. ft.	5000	6000	6500	7000	7600	8500	9000	10500	11000	12500	13500	15500	18000	20000	22500	25000	30000
Corresponding H. P.....	50	60	65	70	75	85	90	100	110	125	135	150	175	200	225	250	300

TRADE MARK REGISTERED

The Titusville Iron Works Company

Titusville, Pennsylvania

Manufacturers of Riveted and Welded Steel Fire-Tube Boilers for Power and Heating; Fronts, Grates, Castings, Smoke Stacks, Tanks and Oil Field Boilers; Steam, Gas, Oil and Gasoline Engines; Pumping Powers and Oil Well Machinery

Atlanta, Ga.	511 Grand Theatre Bldg.	Dallas, Texas	803 Burt Bldg.	New Orleans, La.	1666 Abundance St.
Barre, Vt.	46 Pearl St.	Detroit, Mich.	729 Seward Ave.	New York, N. Y.	285 Madison Ave.
Birmingham, Ala.	239 Brown-Mart Bldg.	Erie, Pa.	507 Cherry St.	Philadelphia, Pa.	1015 Chestnut St.
Buffalo, N. Y.	1502 Marine Trust Bldg.	Kansas City, Mo.	712 E. 31st St.	Pittsburgh, Pa.	2224 Farmers Bank Bldg.
Charlotte, N. C.	705 Realty Bldg.	Los Angeles, Calif.	940 Maple Ave.	Richmond, Va.	1708 Lewis St.
Chicago, Ill.	20 N. Wacker Drive	Nashville, Tenn.	1605 Church St.	St. Louis, Mo.	1010 Telephone Bldg.
Cleveland, Ohio.	National Bldg.			Washington, D. C.	1013 Woodward Bldg.

Facilities—At the Titusville Iron Works Company every practicable mechanical provision is made for the bending, flanging, riveting, and electric welding so essential to high grade products.

Construction—In addition to being thorough in engineering design, Titusville Boilers are built by men experienced in every detail of their particular operations.

All riveting is done by competent steel workers and all welding is done exclusively by experts who do nothing but welding. Wherever possible Titusville Welded Boilers are welded inside as well as outside.

A. S. M. E. Code—Our boilers are built in strict accordance with the latest A. S. M. E. Boiler Code Standards and

to local requirements when specified.

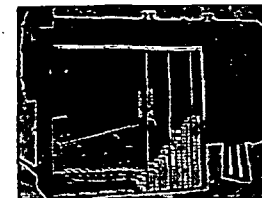
Inspection and Test—Titusville Boilers are continually inspected during construction by a resident representative of the Hartford Steam Boiler Inspection and Insurance Company, Hydrostatic tests are made upon completion. Insurance company certificate furnished free on request.

Working Pressures—Boilers are built in two-pressure ranges: 100–350 lb. working pressure, A. S. M. E. Code, for power and high-pressure service, and 15 lb. w.p.—A. S. M. E. Code, for heating service.

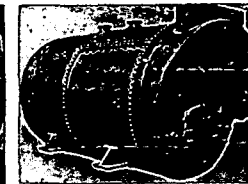
Grates, Stacks, Etc.—All boilers are provided with complete sets of doors, fronts, castings, etc., as illustrated and of the types which are standard for our boilers. Special grates furnished on request.

This company also offers its facilities for the construction of stacks, breechings and steel plate work.

Catalogs—Descriptive catalogs of our boilers and equipment will be sent upon request.



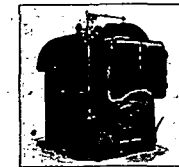
Perfection Down Draft Smokeless Boiler



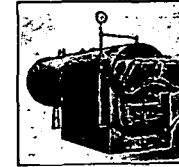
Titusville Standard Internal Fired Scotch Type Boiler



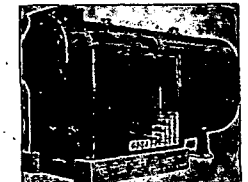
Titusville Vertical Tubular Boiler



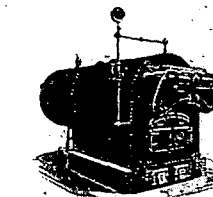
Series SR—Compact Type Welded Boiler



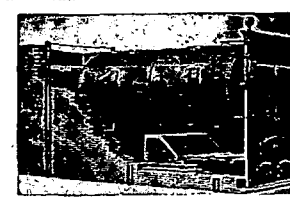
Series W—Welded Fire Box Boiler



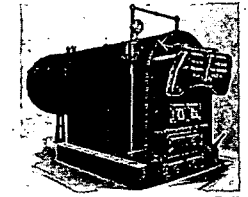
Titusville Perfection Boiler—Built in Sizes 25 H. P. to 200 H. P. from 16 lbs. to 150 lbs. Working Pressure



Series "R" Riveted Fire Box Boiler



Titusville Standard Tubular Boiler



Series "R.S." Smokeless Riveted Boiler