

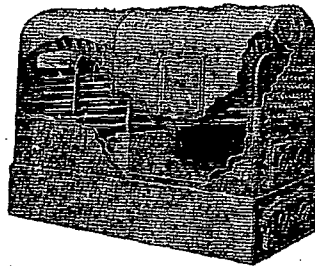
A. D. Granger Co.

ESTABLISHED 1893

19 Park Row New York City

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

"Oswego" Water Tube Boilers

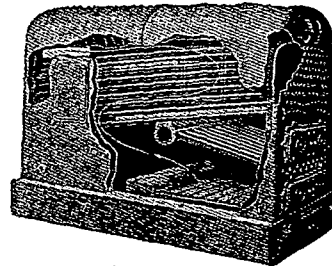


Type "A," Up-Draft

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	11-4	11-6	11-6	13-0	13-0	13-0	14-0	14-0	15-0	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	2-0	2-0	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	17	18	18	19	19	20	25	25	28	31	31	31	37	40	48	57
Radiating Surface.....sq. ft.	5000	6000	7000	7600	8500	9000	10500	11000	12500	13500	15500	18000	20000	22500	25000	30000	30000
Corresponding H. P.....	50	60	65	70	75	85	90	100	110	125	135	150	175	200	225	250	300

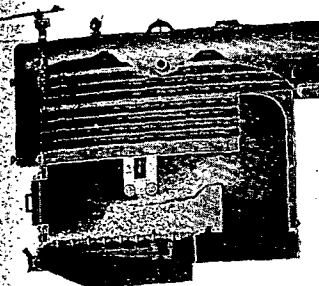
TRADE MARK REGISTERED

Heggie-Simplex Boiler Co.

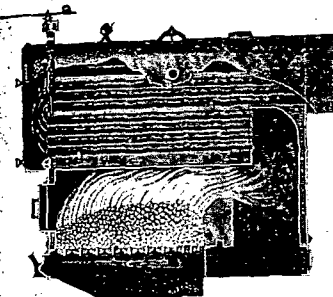
Joliet, Illinois

Heating Boiler Division of James G. Heggie & Sons,
Manufacturers of Steel Boilers for Over 39 Years

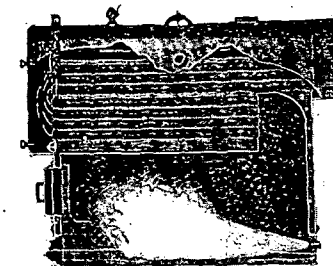
Representatives in Principal Cities



For Burning Soft Coal Smokelessly



For Burning Any Solid Fuel



For Mechanical Firing

The introduction of Heggie-Simplex Boilers marked the beginning of a new era in heating boiler design and construction. While widely imitated today, they embody the simplicity in design upon which the durability, that has made them so popular, depends. Patents protect this superiority.

The crown and side walls of the firebox and auxiliary combustion chamber are made from a single plate—there are fewer plates, and fewer seams in Heggie-Simplex Boilers than in other boilers of this popular type.

While built to conform with the A. S. M. E. Code, its requirements are minimum only in Heggie-Simplex specifications. For example, where the Code calls for $\frac{1}{4}$ " plate, Heggie-Simplex employ $\frac{5}{16}$ ". All openings are reinforced with forged steel flanges. Bases are made of steel channels. Similarly, every detail affecting greater strength and longer life is incorporated.

S. H. B. I. Ratings

Heggie-Simplex Boilers are rated in conformity with the "Steel Heating Boiler Institute's Code for Rating Low Pressure Heating Boilers."

These ratings are the total radiation load at the boiler outlet; expressed in square feet of cast iron radiation. Steam ratings are based upon the emission of 240 B.t.u. per hour per square foot of rating at 2 lb. pressure. Water ratings are based upon the emission of 150 B.t.u. per hour per square foot of rating at 180 deg. Fahr.

To determine the Heggie-Simplex Boiler required to heat a building, add the following: (1) the direct radiation, (2) the equivalent to compensate for losses through water heaters or other apparatus connected to the boiler, (3) and the equivalent to compensate for losses through piping connecting the radiation, water heater and other apparatus to the boiler. Then select a size with a rating equal to this total load.

Send for catalog to obtain more detailed information and specifications.