

*Efficient*  
House Heating  
*with Gas*



THE PITTSBURGH WATER HEATER COMPANY

PITTSBURGH, PENNSYLVANIA

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The Pittsburg Water Heater Co.

## A Development in House Heating

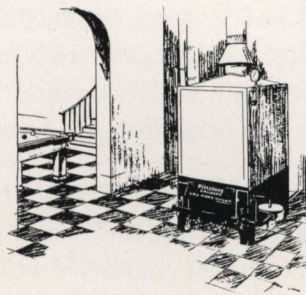
MODERN engineering and inventive genius is constantly striving to excel previous standards, high as they already seem.

In the field of household heating, remarkable improvements have been perfected, resulting in lower heating cost, better utilization of existing fuels, a considerable reduction in time and attention required to heat the average house and an increase in the efficiency and safety of gas-fired boilers. These are definite contributions to the welfare and comfort of organized society. The Pittsburg Water Heater Company, with its vast manufacturing resources, is justly proud to have a hand in the development, manufacture and sale of a perfected gas-fired house-heating boiler—the famous “Pittsburg-Gallagher.”

The leadership of this great Company in the water heater construction field stands as undisputed testimony of the scientific correctness of its products. The same high standards, the same perfection in manufacture and operation is therefore to be expected in the “Pittsburg-Gallagher” Boiler.

A detailed study of the features of this boiler, together with the advantages to be had by the use of gas-fired equipment, will be found in the pages that follow.

In presenting “Pittsburg-Gallagher” Boilers for your consideration, we do so with the firm conviction that the utmost in heating comfort and efficiency is to be gained by its use.



The Pittsburg Water Heater Company  
Pittsburgh, Pa.

PITTSBURG-GALLAHER *House Heating* BOILER

## Why Coal is Unsatisfactory as a House-Heating Fuel

THERE is an oft repeated expression "You'll never know how good it is until you try it." That is exactly the case with a gas-fired boiler. Until you have it in your home, enjoy its convenience and cleanliness, you will never know how much better it is than a coal furnace.

Every coal furnace operates under conditions of poor efficiency, dirty surroundings, and the use of a large amount of space. It means the frequent bother of buying coal of the right size and quality, delivery by truck, leaving the front of the house strewn with pieces of coal and dust, and often resulting in damaged walks and drives. It means a tremendous amount of smoke, spreading soot and dirt throughout the neighborhood, ruining plants and flowers.

A coal furnace, with its attendant coal pile, takes up considerable space in the basement. With the approach of winter a day-in and day-out back-breaking stoking job stares you in the face. To the woman of the home this means a daily drudgery, making it inconvenient to leave the house for even short periods. Because the heat in the furnace does not always hold until morning, the house is frequently cold upon arising, requiring gas heaters to be lighted. This extra expense is entirely unnecessary with a "Pittsburg-Gallaher." In addition to this, you must pay for the coal *before* you have used it. You do not pay for gas unless you actually use it and then for only the amount you have used.



Coal is the most unsatisfactory fuel from an efficiency standpoint. It means extra cleaning work in the house, constantly soiled walls and decorations, and results in nothing but labor for the housewife.

The expense of keeping the house clean where coal is used, of removing and disposing of ashes, is a factor contributing to the increased cost of coal-fired boilers. In the modern home, coal is rapidly giving way to gas—the clean, inexpensive, economical fuel.

EFFICIENT HOUSE HEATING WITH GAS

## Why Oil Heating is Not Popular

THE advocates of oil burners make many alluring statements, apparently in their favor. One should learn the other side of the question before buying oil-burning equipment. The trouble lies, not so much in the lack of efficiency of the equipment, but in the nature of the fuel itself.

There are many oil burners on the market, some of which are more or less efficient in operation. A very few, however, have the approval of the insurance underwriters. Oil is not a satisfactory substitute for gas, because it is not as safe as gas, its storage, handling in use, creating fire hazards. It collects sufficient carbon and other dirt to require frequent cleaning of the tubes supplying the oil to the furnace.

The large number of working parts in a mechanical draft oil burner makes constant repairs inevitable. Oil is not an easy fuel to handle. Besides its strong odor, oil spots on clothes, cemented floors, lawns, etc. are very injurious and cannot be easily removed. A small leak in the oil line will cause tremendous damage to property before it can be fixed.

All oil burners are noisy. The vibration is so strong as to frequently rattle dishes in the pantry, and is very dangerous to the foundations of the house.

One should consider such matters as the necessity for careful selection of the quality of the oils, the danger of electrical storms hampering the electric lines operating the power, the mechanical inefficiencies of many oil systems, and the fact that you must store large quantities of oil either in the house or in the yard. This, together with the fact that you must pay for the oil before you have used it, makes this type of heating unsatisfactory and entirely too costly.

The "Pittsburg-Gallaher" Boiler is so designed as to utilize gas with the utmost efficiency. Even if gas pressure should vary, the "Pittsburg-Gallaher" Boiler will continue uninterrupted in operation, because it does not require any greater pressure than that necessary for the kitchen stove.



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## Why Gas is the Best House-Heating Fuel

**G**AS is rapidly becoming recognized as the ideal house-heating fuel. Its advantages over all other forms of heating are so great as to make it the truly economical fuel.

It is economical. The cost of gas is the only fuel subject to governmental regulation of price, and the tendency has been to continually reduce the price, making it by far one of the cheapest of fuels available for household heating purposes. The discovery of new sources of gas and the improvements in the manner of manufacturing gas all tend to keep the price of this fuel as low as possible. Because you do not pay for it until you actually use it, and then for only as much as you use, there is no waste and no storage. Supplied to you direct from the company lines, measured out as the gas is turned on, there is no possibility of mistake or error. You know exactly how much you get and how much you pay for.

It is clean. You do not have to order gas in advance and then wait a long time for its delivery. It is not shoveled into the basement, causing dirty cellars and torn up lawns. No ashes are to be removed—an expensive and laborious job. Once you turn on the gas in the gas-fired boiler, you have no stoking or sifting of ashes. Nothing dirty—nothing messy—nothing of disadvantage when you use a gas-fired boiler.

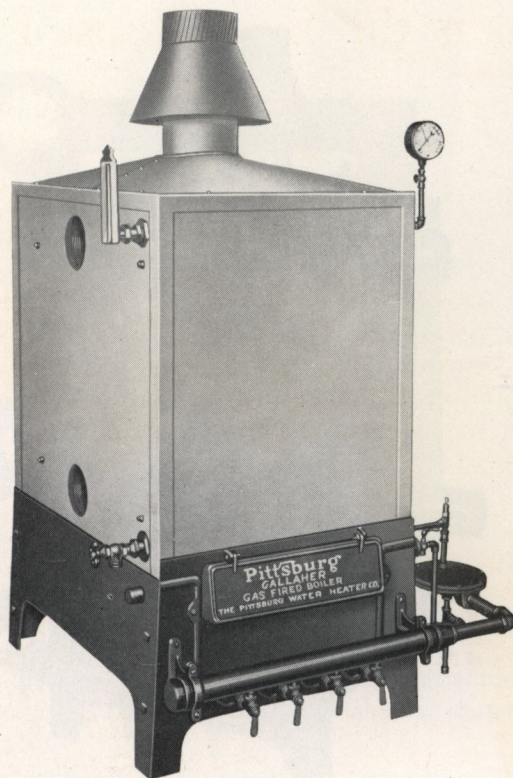
It is dependable. You can always depend upon gas. New gas wells of long life are continually being opened. The amount of gas available today is far greater than that available 15 and 20 years ago. Coal strikes do not interfere with your supply of gas, and once you have a gas line running into your house, you can depend upon the quality of it being uniform, year in and year out. With the right kind of gas-fired boiler, even varying gas pressure will not affect the successful and continued operation of the boiler.

It is safe. You can shut off the gas from the basement at any time. You do not have to worry about explosions and spontaneous combustion such as is often the case in coal piles and oil storage tanks. Your local gas company maintains a Service Department of men who will respond to your call upon a minute's notice, in the event that anything is wrong with your gas lines. Such service is not available with coal or oil.

It is convenient. You obtain a supply of gas sufficiently adequate for all your house-heating purposes. It is piped to your door, available for use in any part of the house, and if the house-heating plant is the right kind, you will have a sufficient amount of gas constantly available to meet the heating requirements of your home. Gas is the most convenient fuel available. A turn of the pilot gives you an instant supply, dependable and unvarying. There is no loss of gas unless you waste it.



EFFICIENT HOUSE HEATING WITH GAS



## A Famous Boiler

THE crowning engineering achievement in the gas boiler industry has been the design and perfection of the famous "Pittsburg-Gallagher" Boiler, the most advanced gas-fired house-heating boiler of the day.

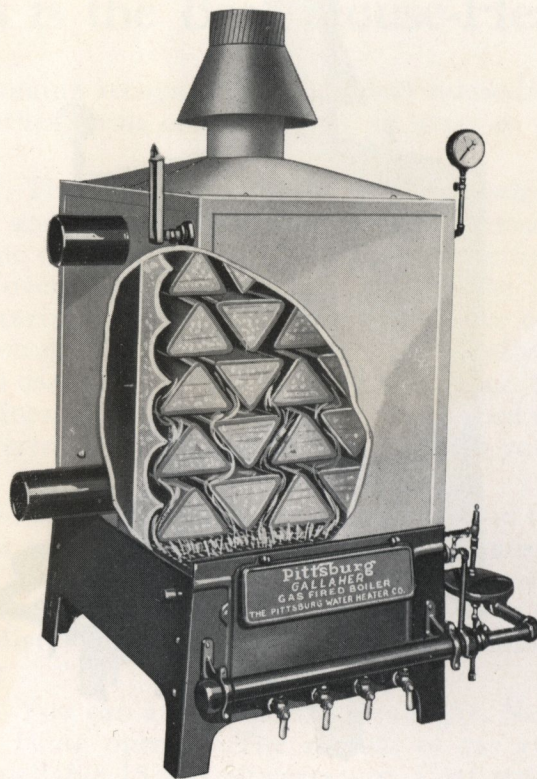
Hundreds upon hundreds of installations have definitely proven the superiority of the "Pittsburg-Gallagher", achieving a fame that is rapidly spreading to all parts of the country.

Back of the design and construction of the "Pittsburg-Gallagher" Boiler rests the manufacturing resources of the world's largest water heater manufacturers—The Pittsburg Water Heater Company.

The "Pittsburg" label on these boilers is your assurance of the highest mechanical and engineering perfection, a service organization that extends into every town and city of any importance in the land and an iron-bound guarantee of proven dependability.

Just as "Pittsburg" Water Heaters have demonstrated their superiority, so you will find "Pittsburg-Gallagher" Boilers rendering unsurpassed service wherever installed.

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**Design of the Water Tubes**—The tubes are of triangular shape and are nested in a horizontal plane, with the space between them so arranged as to afford direct heat travel through the boiler, with the maximum heat absorption by the water surface.

The triangular tubes are staggered, one above the other, so that the heat in passing through the boiler entirely surrounds them.

The full surface of every tube is exposed to the flame, therefore, all surfaces in the "Pittsburg-Gallaher" Boiler are prime heating surfaces. There are no corrugations or uneven surfaces to hinder the free flow of gas flame—which cause air or gas pockets and reduce the heating efficiency.

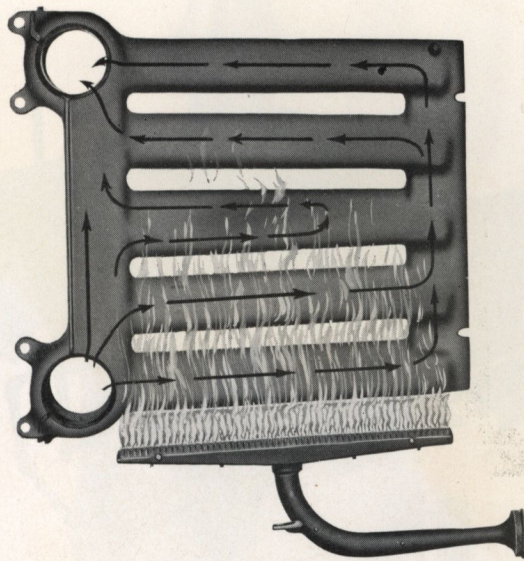
**Heat Travel Through Boiler**—The fire travel through the boiler is baffled from the burners to flue outlet. It is so baffled that all water surfaces are covered. The triangular shaped tubes are staggered in successive tiers, one over the other as to give the maximum flue travel commensurate with proper draft.

To increase the fire travel at the sacrifice of draft, is a mistake. In "Pittsburg-Gallaher" Boilers the matter of draft has been taken into account. The baffling of the hot gases, the spacing and staggering of the tubes, and the length of fire travel have been carefully proportioned to give maximum heat absorption and to maintain sufficient draft for complete combustion.

The triangular tubes are surrounded and "lapped" on all sides by the hot gases. The water jacketed sides, with their convex projections, take their share of the heat from the flame. Long fire travel does not necessarily mean high efficiency. The utilization of all water surfaces for their maximum heat absorption, the maintenance of proper draft conditions and a proper flue temperature safely above the condensation point, are accomplished in "Pittsburg-Gallaher" Boilers. In this they are unequalled.

EFFICIENT HOUSE HEATING WITH GAS





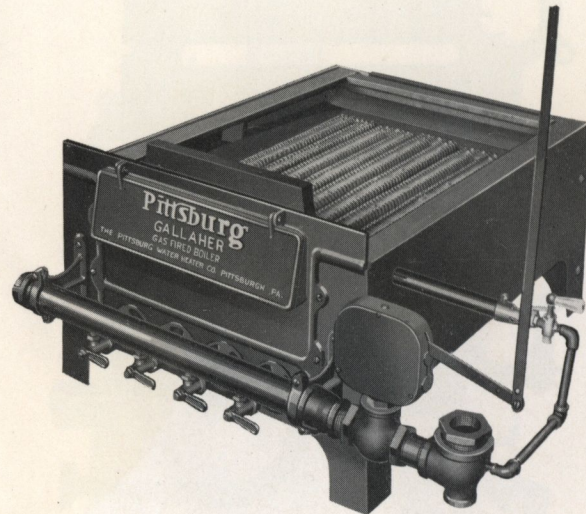
**Super Sections**—A gas-fired boiler is no better than the sections composing it. The "Pittsburg-Gallaher" Boiler sections are made of tiers of triangular shaped tubes, and are the key to its wonderful heating efficiency.

The important feature of the "Pittsburg-Gallaher" Boiler sections is the arrangement of the tubes. The two lower tubes slope in one direction. The bottom of the center tube is a parallel to the lower tube, but the top of this tube slopes in the reverse direction. The two upper tubes are parallel to the top of the center tube and slope in the opposite direction to the lower tubes.

This is a marked and unique feature of the "Pittsburg-Gallaher" design. It causes the water to constantly pass back and forth through the tubes, absorbing the maximum amount of heat from the hot gases. This design also insures a steady water line in a steam boiler—with total absence of priming. The "Pittsburg-Gallaher" sections are connected by Iron Push Nipples, which insure a full and rapid flow of the water through the boiler. The marvelous results which have been obtained with these sections in actual operation show that the faith of the designers was justified.

**The Burners**—Of considerable importance to all gas-fired boilers are the burners. The "Pittsburg-Gallaher" burners are of cast iron construction, running longitudinally from front to rear through the boiler. These burners are so spaced in the boiler that the hot gases hit on the sides of the bottom row of triangular tubes and the gases pass without obstruction to the upper tiers. In other words they are so spaced as to distribute the flame evenly to both the center tubes and water jacketed sides. Each burner has two double rows of raised ports with a scientifically baffled opening in the center to supply secondary air to the inner raised ports. This secondary air is baffled so that it passes across both inner and outer ports insuring complete combustion and the cooling of the burners.

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A Venturi Mixing Tube and Air Mixer are parts of this burner. The tube and mixer conform to the recommendations of the U. S. Bureau of Standards. The air mixer is provided with an adjustable shutter, with lock nut to regulate the primary air supply. A brass burner cock is provided with each burner and affords individual control of the burners.

The tube which carries the gas from the mixer and Venturi to the burner is constructed in the form of a long radius curve. This prevents friction and delivers the gas to the burner in an even, steady flow. This is an exclusive feature of the "Pittsburg-Gallaher" Boilers.

All burners are readily accessible through the hinged door in the base and can be removed or inserted with ease.

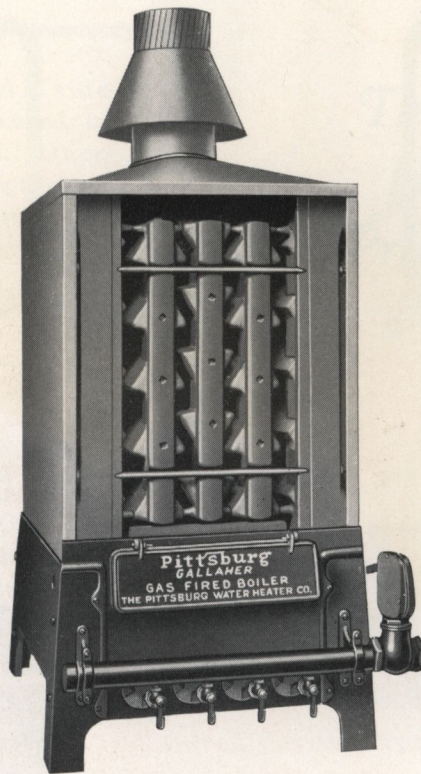
**Bottom Construction**—The entire base of the "Pittsburg-Gallaher" Boiler is made of cast iron. All parts of the burners are easily accessible from the hinged door. All piping is made of quality material, accurately threaded and joined. There is nothing to get out of order.

The illustration above shows the position of the burners in the base frame. Each burner is separate and can be quickly and easily removed.

The gas valve for the pilot light is shown on the left. Lighting the pilot and opening the gas valves at the base sets the boiler in operation. There is nothing else to do. Thermostats and control valves take care of your heating problems better than you, yourself, could do.

The "Pittsburg-Gallaher" is built for a lifetime of service and satisfaction.

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**Water Jacketed Sides**—"Pittsburg-Gallagher" Boilers have water jacketed sides. This is an exclusive feature of the "Pittsburg-Gallagher" as other gas-fired boilers have merely a baffle plate or projections on the sides which are supposed to direct the heat into the tubes.

The "Pittsburg-Gallagher" Water Jackets have projections which extend into the path of the flames. These projections have the same effect as the baffles in the construction of other gas-fired boilers, but have the additional value of conducting this heat into the water as well as directing the gases against the tubes.

In addition to this, the heat which is normally lost through the iron plate on the sides of other gas-fired boilers, is put into the water by the "Pittsburg-Gallagher" Boiler water jacketed sides. In other words, in "Pittsburg-Gallagher" Boilers, the water jacketed sides absorb the heat just as the water tubes do. None of the heat is wasted.

**Insulated Jacket**—"Pittsburg-Gallagher" Boilers are equipped with an insulated Jacket covering the entire side walls of the boiler. The Jacket is made of metal, Duco finish, lined with asbestos insulating material. In addition, the finished appearance of the Jacket makes the boiler "a thing of beauty."

The front of the Jacketed Cover can be removed, without inconvenience. The vertical cast iron panels in the front of the Boiler can also be removed. This opens the boiler for inspection and cleaning. As the triangular tubes are plain surfaces, and as there are no obstructions to all interior water surfaces, the "Pittsburg-Gallagher" is more easily cleaned than any other gas-fired house-heating boiler.

**PITTSBURG-GALLAHER *House Heating* BOILER**

# These Famous Features Mean Utmost

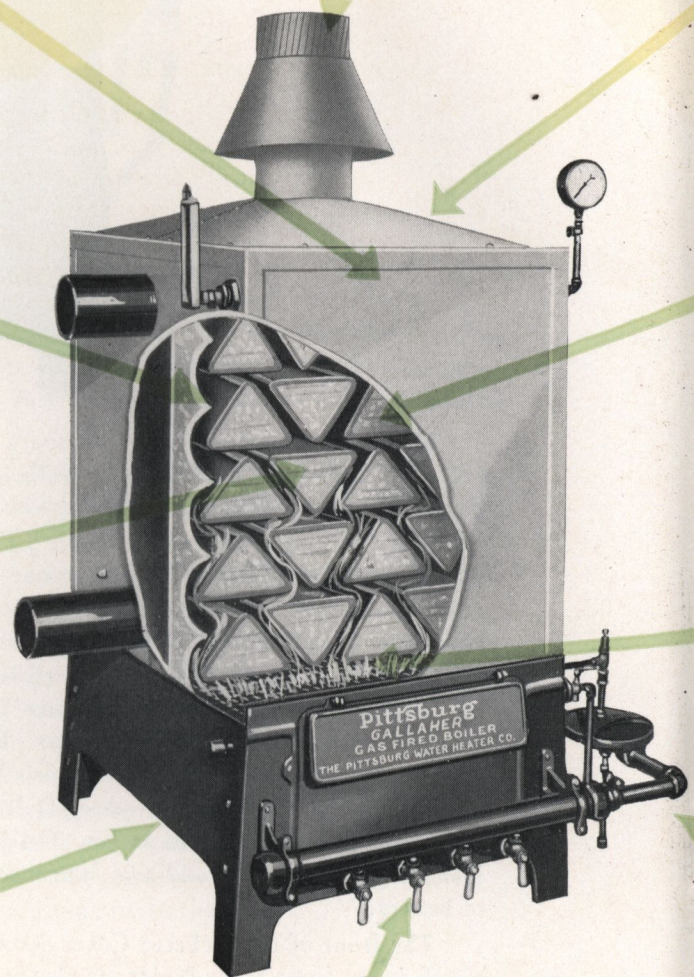
**1. Removable Front.** Entire front of boiler is easily removed, permitting access to water tubes for cleaning purposes.

**2. Water Jacketed Sides.** An exclusive feature of the "Pittsburg-Gallaher" which utilizes all possible Heating surfaces in the boiler.

**3. Triangular Tubes.** A scientific design, another exclusive "Pittsburg-Gallaher" feature, making prime heating surfaces of all tube sides. Promotes rapid heating.

**4. Heavy Cast Iron Base.** Sturdy construction insures long life without repairs. Base of durable cast iron, black Japanned finish.

**5. Efficient Heat Absorption.** Maximum percentage of heat is absorbed by the water tube surfaces, resulting in low heat temperature at flue. Heat is not wasted by escaping up the chimney.



**6. Burner Control.** Individual control of each burner makes it possible to operate any or all burners as desired. Each tube has its own mixing chambers. Saves gas.

# Most Heating Comfort at Lowest Cost

**7. Duco Finished.** All side plates and top finished in durable, beautiful Duco Enamel, easily kept clean and bright. A feature any woman will appreciate.

**8. Compact Construction.** The scientific nesting arrangement of the tubes saves space and prevents waste of fuel. No air pockets to heat. Flame plays on all three sides of tubes.

**9. Economy Gas Burners.** Straight-flow gas burners, having two rows of ports with opening in center of burner, supplying secondary air directly to each burner. No backfire, no noise.

**10. Full Equipment.** Everything necessary for perfect operation is included—water cut-off, valves, regulator, thermostats, etc.

## *The Most Advanced Heating Engineering Principles Combined with Modern Design and Construction*

THE "Pittsburg-Gallaher" Boiler embodies every desirable feature of every kind of boiler, with a number of important features not to be found in other boilers. Years of painstaking research and experiments have resulted in a boiler so designed and so constructed as to afford maximum heating efficiency without sacrifice of its beautiful proportion or its cabinet type design.

Unlike other boilers of huge dimension, the "Pittsburg-Gallaher" is neat and compact, occupying the least space possible and actually enhancing the appearance of the basement or room in which it is placed. And because it operates with gas, instead of coal or oil, you will always find the "Pittsburg-Gallaher" looking clean and attractive. Its Duco finished sides are as easily cleaned as a porcelain table top.

Your friends will admire the "Pittsburg-Gallaher." You, yourself, will be proud to possess this latest type of boiler. Its initial cost is the last, and once you have it in your home you will continue to enjoy its features and convenience long after the price is forgotten.

# Types of Heating Systems

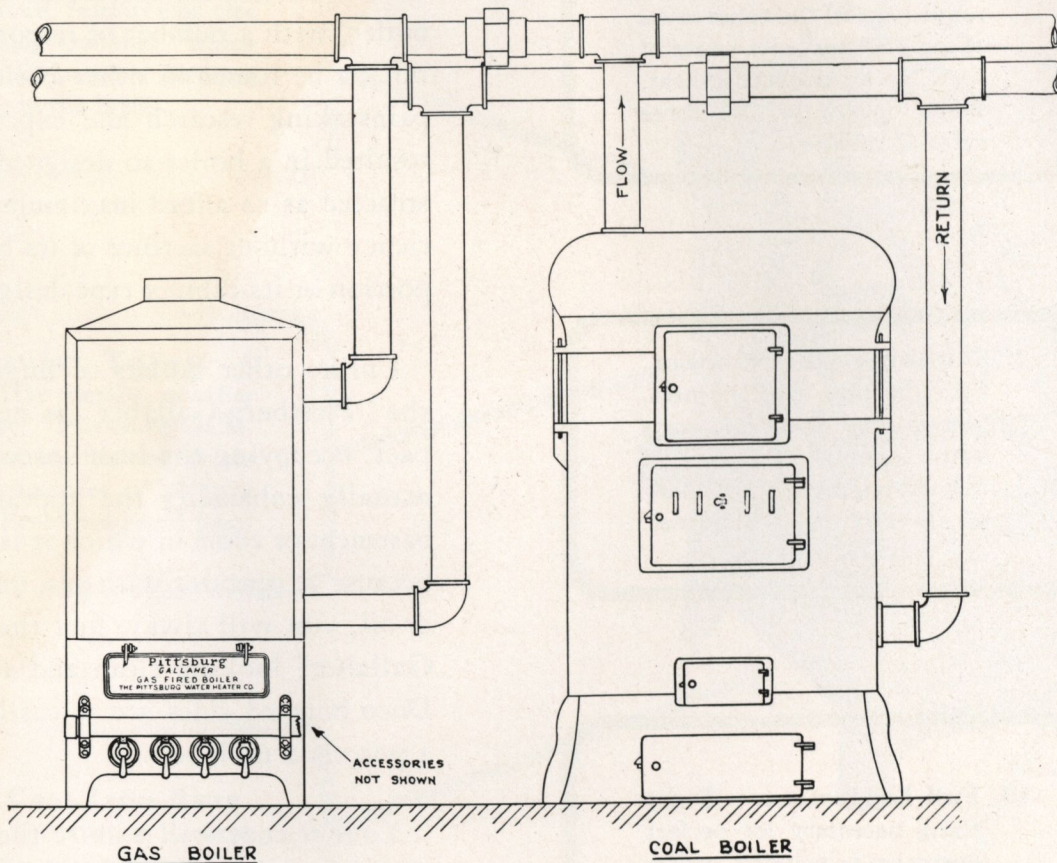
**PITTSBURG-GALLAHER** GAS-FIRED BOILERS are designed for either hot water, steam or vapor heating. All of these require cast iron radiation.

In a Hot Water system the entire system is filled with water. As the water is heated in the boiler tubes it rises, causing a free circulation through the entire piping system. The radiators, filled with hot water, radiate heat into each room.

In a Steam System the water is heated in the boiler tubes and generates steam. The dry steam rises causing a circulation through the entire piping system. The radiators are filled with steam and radiate heat into each room.

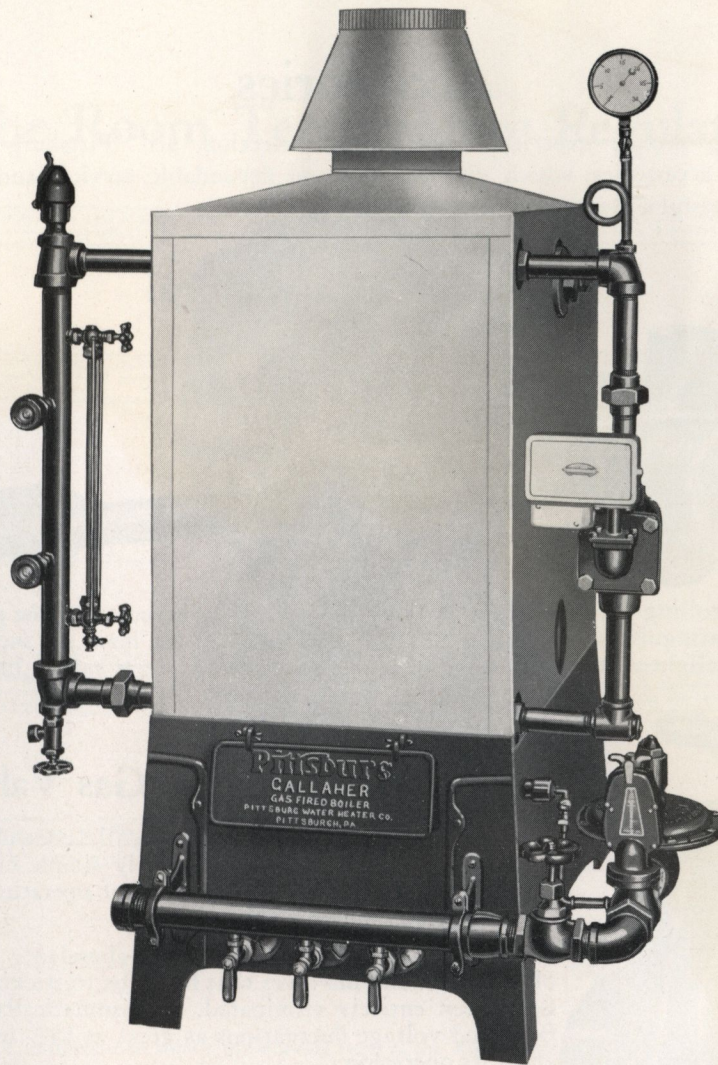
In a Vapor System the water is heated in the boiler tubes and the vapor from the hot water rises up through the entire piping system, which is under vacuum, (all air being eliminated) and the vapor circulates through the system returning to the boiler.

"Pittsburg-Gallagher" Gas-Fired Boilers may be connected to any Steam, Vapor or Hot Water Heating System that is in good operating condition. It is a simple matter to connect a "Pittsburg-Gallagher" Boiler in conjunction with a Coal Boiler, or to remove the Coal Boiler entirely and connect the Gas-Fired Boiler in its place.



"Pittsburg-Gallagher" Connected Supplementary to Coal Boiler

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## "Pittsburg-Gallaher" Steam Boiler

THE full equipment of the "Pittsburg-Gallaher" Steam Boiler, shown above, consists of a gas pressure regulator, automatic safety pilot control, electric motor gas valve, combination low water cut-out and pressure control, pop safety valve, set at 15 lbs., drain and shut-off cocks, draft hood, steam gauge and thermometer. These accessories have all been proven by test under severe conditions, to be worthy of their place on this, the most efficient house-heating boiler on the market.

This steam boiler may be used on a vapor system or in conjunction with a coal boiler. When connected supplementary to a coal boiler, the installation is made as pictured on page 14.

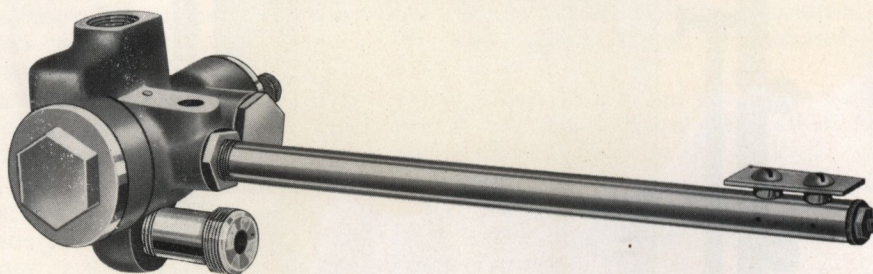
"Pittsburg-Gallaher" Steam Boilers may be used for other purposes than heating homes. There are many industries that require low pressure steam, for various purposes. Manufacturers will find the "Pittsburg-Gallaher" ideal for this use on account of its being a very rapid steamer.

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## Accessories

Based upon long, proven experience and careful selection, all "Pittsburg-Gallaher" Boilers are equipped with accessories, which give efficient and dependable service, and which are found to aid in their successful and economical operation.

### Automatic Pilot Control



This device, controlling the flow of gas through the burners, is actuated by the pilot light. Should the pilot light be extinguished, the Safety Pilot Control shuts off the main gas supply to the burner. When the pilot is relighted, the Pilot Control opens a valve on the gas supply line, thus relighting the burners.

### The Electric Gas Valve

**T**HIS Electric Gas Valve automatically controls the fuel supply to the boiler in a new and extremely simple manner. Several exclusive features provide positiveness of operation—without attention—over a long period of years.

Being *motor operated*, there is an abundance of power and the objections found in valves that fail, due to sticking or other causes, have been entirely eliminated. It automatically closes if current fails, and voltage fluctuations as great as 15% from normal do not affect its operation.

The motor is the induction type. There are no brushes or attendant parts, no commutator or armature windings to necessitate service. It is operated from line voltage, the current limited to a safe amount, and when under full load, the power consumed is no more than that of an ordinary 25-watt lamp.

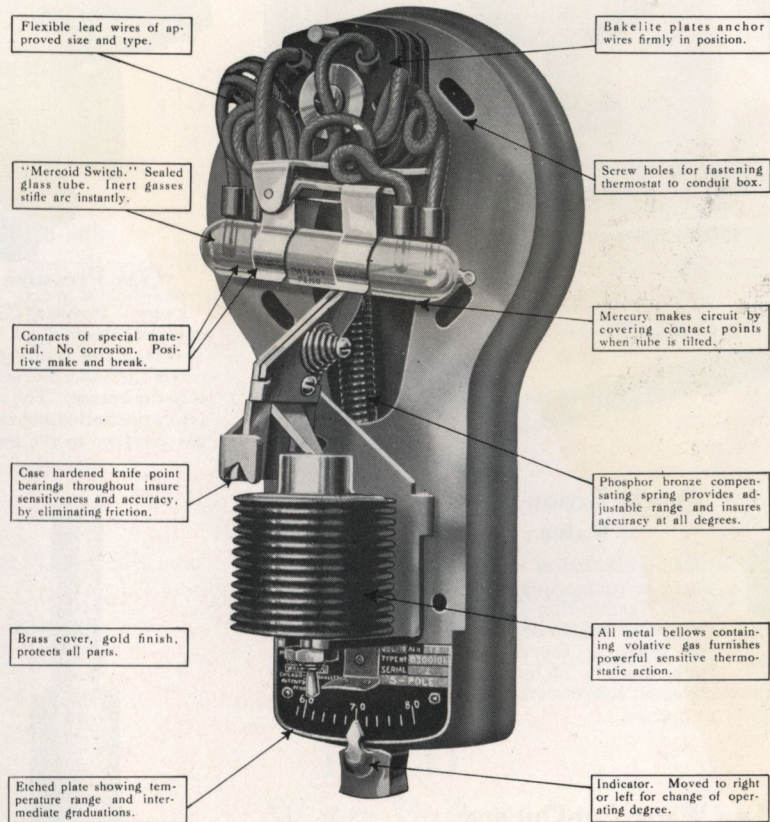
When the circuit from the thermostat is made to the motor, the motor revolves, and through a train of high strength duralumin gears, a plunger with valve disc attached thereto is lifted—by means of which a Monel metal actuating spring is compressed. As long as the current is continued, the spring is compressed and the valve remains in the open position. As soon as the circuit is broken, either through the action of the thermostat or normally, or in the event of current failure, the spring expands and forces the valve to a position seat. The valve opens and closes quickly, preventing puff-backs. The valve can be opened and closed manually by operating a lifter on top of the plunger.



EFFICIENT HOUSE HEATING WITH GAS



# The Room Temperature Regulator

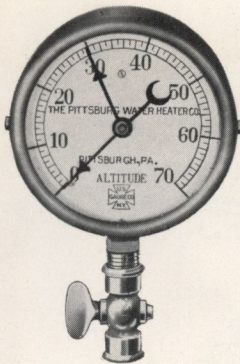


This illustration shows the working parts of the Room Temperature Regulator. When it is installed a brass cover, gold finish, covers and protects working parts.

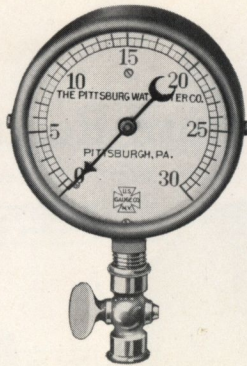
The regulator is a remote control, usually installed on the first or second floor. By merely setting the indicator for a certain degree of temperature, that temperature will be automatically maintained, never below, never above.

Then too, these temperature regulators are furnished with a clock attachment. By setting the clock say for 7 in the morning and setting the indicator at 70, the clock will release the thermostat at 7 A. M. and the gas will come on in the heater. The house will heat to 70 and then the thermostat will shut off the gas automatically. The house can be kept at 70 in the daytime and 60 after retiring at night.

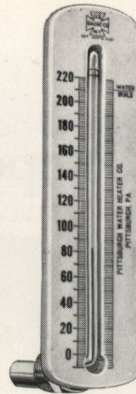
With a room temperature regulator on a gas-fired boiler, you light the pilots in the Fall of the year and there is no need to go near the basement to do anything to the heater until it is time to close down the system in the Spring.



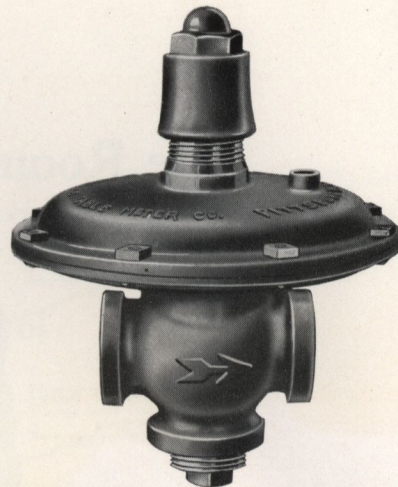
Altitude Gauge



Steam Pressure Gauge

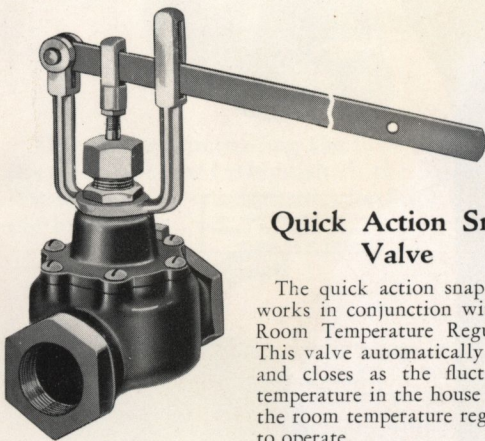


Thermometer



### Gas Pressure Regulator

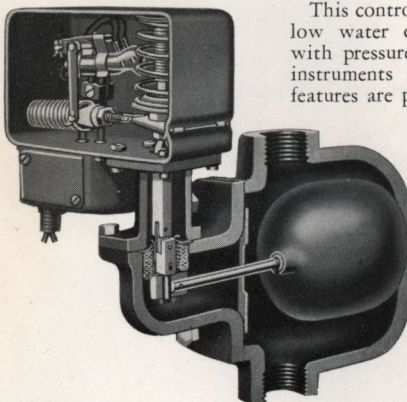
Every "Pittsburg-Gallagher" Boiler is equipped with a gas pressure regulator. This regulator is placed where the gas line enters the boiler and all gas passes through it to the burners. The regulator acts as a safety precaution and cuts down any excess gas pressure to the burners.



### Quick Action Snap Valve

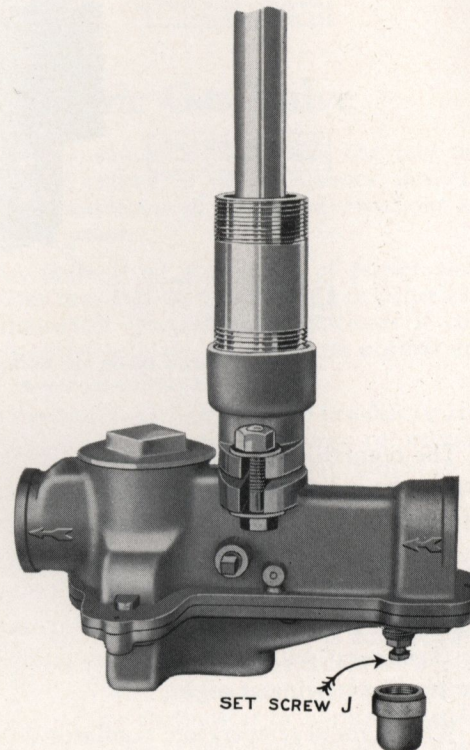
The quick action snap valve works in conjunction with the Room Temperature Regulator. This valve automatically opens and closes as the fluctuating temperature in the house causes the room temperature regulator to operate.

### Combination Low Water Cut-Out and Pressure Control for Steam Boilers



This control combines the low water cut-out feature with pressure control—two instruments in one. Safety features are provided in the design of the instrument, so that in case of damage to the float, bellows, power element or Mercoid Switch, the circuit will be broken.

The low water cut-out is obtained by means of a float in a cast iron, water-tight housing installed a few inches below the normal water line. As the float falls, the Mercoid Switch is tilted and the circuit broken. Pressure control is secured by an all-metal bellows which, expanding and contracting with pressure changes, tilts the Mercoid Switch to make or break the circuit. The bellows also acts as a seal around the stem, thus eliminating troublesome packing.



### Water Temperature Control for Hot Water Boilers

This thermostatic control regulates the temperature of the water in the boiler, cutting off the gas when the temperature of the water reaches a pre-determined point and opening the gas valve when the temperature of the water is below the desired degree. This control operates independently of the room temperature control.

# Equipment with "Pittsburg-Gallagher" Gas-Fired Boilers

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## Type S Steam Boilers

Insulated Metal Jacketed Cover

Draft Hood

Labeled Shut-Off Cock

Combination Control with Water Gauge Glass and  
Try Cocks (Low water cut-out and steam pressure  
governor)

Gas Pressure Regulator

Thermostatic Pilot

Steam Gauge (Cock and Siphon)

Pop Safety Valve, set at 15 lbs.

Drain Cock— $\frac{1}{2}$ "

Electric Motor Gas Valve

## Type W Water Boilers

### *Equipment*

Insulated Metal Jacketed Cover

Draft Hood

Labeled Shut-Off Cock

Gas Pressure Regulator

Drain Cock— $\frac{1}{2}$ "

Thermostatic Pilot Control

Monarch Thermostatic Snap Valve

Altitude Gauge and Connections

Thermometer ( $\frac{1}{2}$ " Angle)

Electric Motor Gas Valve  $1\frac{1}{4}$ "

## Type D Water Boilers

### *Equipment*

Insulated Metal Jacketed Cover

Draft Hood

Labeled Shut-Off Cock

Gas Pressure Regulator

Drain Cock— $\frac{1}{2}$ "

Thermostatic Pilot Control

Monarch Thermostatic Snap Valve

Altitude Gauge and Connections

Thermometer ( $\frac{1}{2}$ " Angle)

Snap Action Gas Valve

## Type E Water Boilers

### *Equipment*

Insulated Metal Jacketed Cover

Draft Hood

Labeled Shut-Off Cock

Gas Pressure Regulator

Drain Cock— $\frac{1}{2}$ "

Pilot Light, Cock and Piping

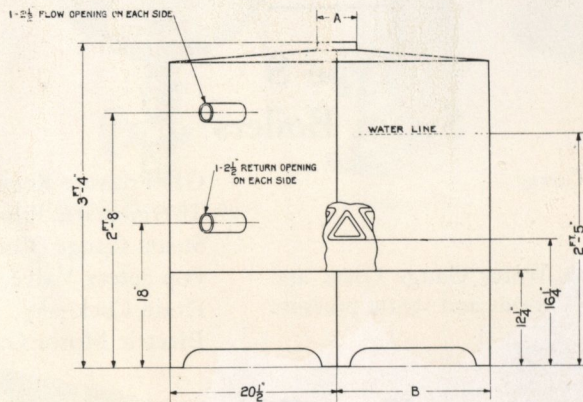
Altitude Gauge and Connections

Thermometer ( $\frac{1}{2}$ " Angle)

Quick Action Gas Valve

# Roughing-in Dimensions

## The A Series—2½" Tappings

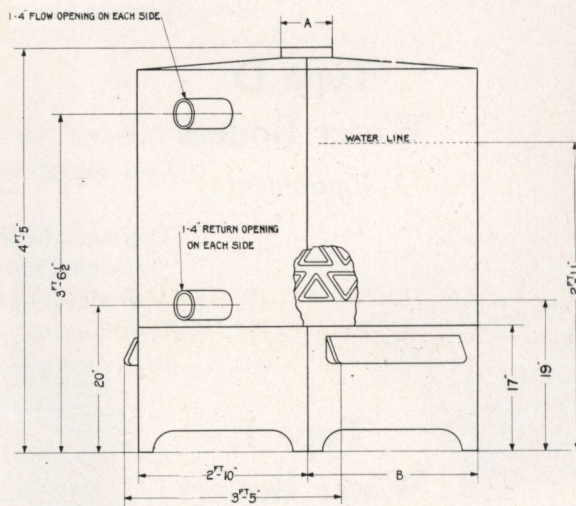


C—size of gas line if not exceeding 100 feet

SIZE BOILER

	3A	4A	5A	6A
A.....	5"	5"	6"	6"
B.....	18 <sup>9</sup> / <sub>16</sub> "	21 <sup>5</sup> / <sub>8</sub> "	2' 11 <sup>11</sup> / <sub>16</sub> "	2' 3 <sup>3</sup> / <sub>4</sub> "
C.....	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	1 <sup>1</sup> / <sub>2</sub> "

## The B Series—4" Tappings



C—size of gas line if not exceeding 100 feet

SIZE BOILER

	6B	8B	10B	12B	14B	16B	18B	20B
A...	8"	8"	8"	10"	10"	10"	10"	10"
B...	2'11"	3'3"	3'7"	3'11"	4'3"	4'7"	4'11"	5'3"
C...	1½"	1½"	1½"	2"	2"	2"	2"	2"

# Ratings

## of "Pittsburg-Gallagher" Gas-Fired Boilers

### Steam Boilers

No. of Boiler	A.G.A. Rating Sq. Ft.	B.t.u. Available	Size Tappings		Gas Line if less than 100 ft. long	Dia-meter Flue Pipe	Horse Power	Approximate Weight
			Flow	Return				
3A	320	96,000	2-2½"	2-2½"	1¼"	5"	2.3	300
4A	427	128,000	"	"	"	5"	3.1	450
5A	533	160,000	"	"	1½"	6"	3.8	600
6A	640	192,000	"	"	"	6"	4.6	750
6B	666	195,000	2-4"	2-4"	1½"	8"	4.8	1260
8B	888	260,000	"	"	"	8"	6.4	1650
10B	1110	325,000	"	"	"	8"	8.0	2050
12B	1332	390,000	"	"	2"	10"	9.6	2450
14B	1555	455,000	"	"	"	10"	11.1	2850
16B	1777	520,000	"	"	"	10"	12.07	3250
18B	1998	585,000	"	"	"	10"	14.3	3650
20B	2220	650,000	"	"	"	10"	16.0	4050

### Water Boilers

No. of Boiler	A.G.A. Rating Sq. Ft.	B.t.u. Available	Size Tappings		Gas Line if less than 100 ft. long	Dia-meter Flue Pipe	Horse Power	Approximate Weight
			Flow	Return				
3A	512	96,000	2-2½"	2-2½"	1¼"	5"	2.3	300
4A	683	128,000	"	"	"	5"	3.1	450
5A	853	160,000	"	"	1½"	6"	3.8	600
6A	1024	192,000	"	"	"	6"	4.6	750
6B	1066	195,000	2-4"	2-4"	1½"	8"	4.8	1260
8B	1421	260,000	"	"	"	8"	6.4	1650
10B	1777	325,000	"	"	"	8"	8.0	2050
12B	2132	390,000	"	"	2"	10"	9.6	2450
14B	2487	455,000	"	"	"	10"	11.1	2850
16B	2843	520,000	"	"	"	10"	12.07	3250
18B	3199	585,000	"	"	"	10"	14.3	3650
20B	3554	650,000	"	"	"	10"	16.0	4050

### *The Actual Cast Iron Radiation that "Pittsburg-Gallagher" Boilers Will Carry*

Size Boiler	Actual Calculated Radiation HOT WATER	Actual Calculated Radiation STEAM
No. 3-A .....	262 sq. ft.	160 sq. ft.
No. 4-A .....	342 sq. ft.	214 sq. ft.
No. 5-A .....	427 sq. ft.	267 sq. ft.
No. 6-A .....	512 sq. ft.	320 sq. ft.
No. 6-B .....	711 sq. ft.	444 sq. ft.
No. 8-B .....	947 sq. ft.	592 sq. ft.
No. 10-B .....	1185 sq. ft.	740 sq. ft.
No. 12-B .....	1421 sq. ft.	888 sq. ft.
No. 14-B .....	1658 sq. ft.	1037 sq. ft.
No. 16-B .....	1895 sq. ft.	1185 sq. ft.
No. 18-B .....	2132 sq. ft.	1332 sq. ft.
No. 20-B .....	2369 sq. ft.	1380 sq. ft.

**PITTSBURG-GALLAHER House Heating BOILER**

# Architect's Specifications for Installation of "Pittsburg-Gallaher" Boiler STEAM or VAPOR

CONTRACTOR shall furnish complete, and set up in basement in accordance with instructions furnished by the manufacturer, one No. .... "Pittsburg-Gallaher" Steam (or Vapor) Boiler, rated ..... square feet capacity, as manufactured by The Pittsburg Water Heater Company, Pittsburgh, Pa. Boiler to be complete with gas pressure regulator, draft hood, fuel control governor, steam gauge, safety valve and low water cut-out.

Feed and draw-off cocks, of proper size for boiler, to be furnished, and connected to water supply and sewer.

The vent opening of gas pressure regulator shall be connected to the outside of the building foundation with  $\frac{3}{8}$  inch galvanized pipe; union placed at regulator end, and elbow faced down on outdoor end of vent line.

Connect draft hood on boiler with a ..... inch flue pipe, made from ..... gauge galvanized (or lead coated) iron and connect same to chimney.

Furnish ..... inch gas line direct from meter to boiler. Use ..... standard make of globe valve in vertical drop, connecting to gas pressure regulator and to the boiler.

Contractor shall furnish and install metal jacketed covering designed for boiler by the manufacturer.

## HOT WATER

Contractor shall furnish complete and set up in basement, in accordance with instructions furnished by the manufacturer, one No. ...., "Pittsburg-Gallaher" Hot Water Boiler, rated ..... square feet capacity, as manufactured by The Pittsburg Water Heater Company, Pittsburgh, Pa. Boiler to be complete with gas pressure regulator, draft hood, quick action gas valve (or snap action thermostat and electric motor valve), altitude gauge, and thermometer.

Furnish and properly connect feed and draw-off cocks of proper size for boiler.

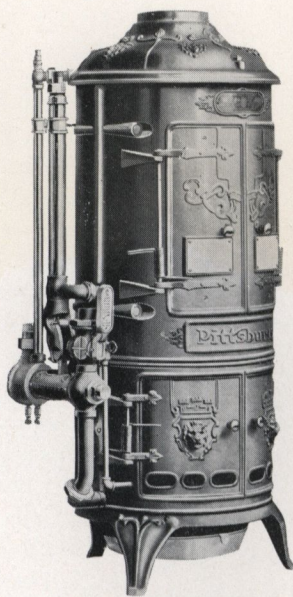
The vent opening of gas pressure regulator shall be connected to the outside of the building foundation with  $\frac{3}{8}$  inch galvanized iron pipe; union placed at regulator end, and faced down on outdoor end of vent line.

Connect draft hood on boiler with a ..... inch flue pipe made from ..... gauge galvanized (or lead coated) iron and connect same to chimney.

Furnish ..... inch gas line direct from meter to boiler. Use ..... standard make of globe valve in vertical drop, connecting to gas pressure regulator and to the boiler.

Contractor shall furnish and install metal jacketed covering designed for boiler by the manufacturer.

## "PITTSBURG" Automatic Gas Water Heaters

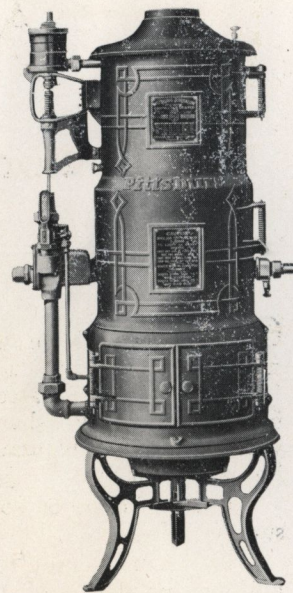


The Pittsburg, capacities 4, 6 or 8 gallons a minute

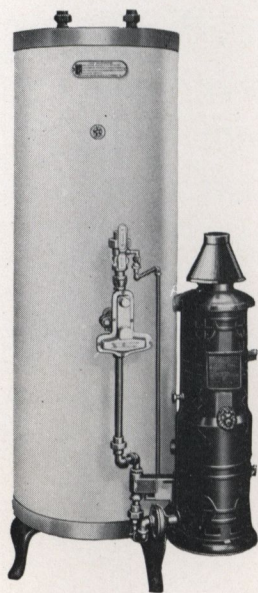
STEAMING hot water and plenty of it for all the family and for all purposes is an absolute necessity for comfort, convenience and happiness. No home is truly modern, no building is really complete unless adequate provision has been made for automatic hot water service.

Twenty-two sizes of "Pittsburg" Water Heaters are available—a size and type for every building and for every hot water demand—a more complete line of water heaters is not only unnecessary but unavailable as well. Therefore, choose your water heater from the "Pittsburg" line.

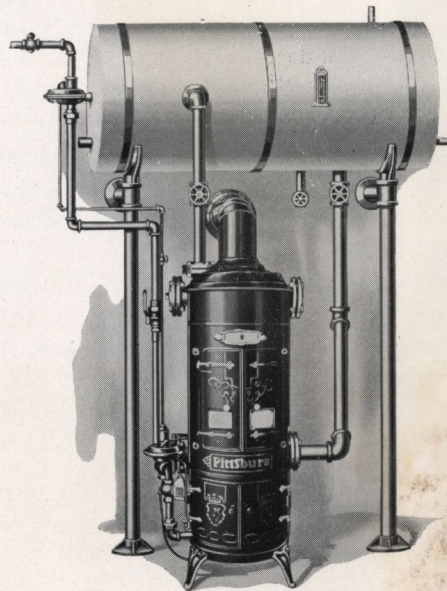
The four heaters illustrated on this page are a few of the more popular sizes for the home. Other "Pittsburg" Water Heaters are available in sizes to meet any hot water demand—from the smallest automatic heater to the largest Multi-Coil Storage System. Write for catalog describing type and size of heater in which you are most interested.



The Pittsburg Bungalow, capacities 2, 2½ or 3 gallons a minute



The Pittsburg Storage, tank capacities 20 to 66 gallons

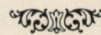


The Pittsburg Multi-Coil Storage, tank capacities 80 to 1000 gallons

## Sales Offices in All Principal Cities

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ALLENTOWN, PA.	222 N. 8th St.	MONTREAL, QUEBEC	208 Confederate Bldg.
ATLANTA, GA.	507 Citizens & Southern Nat. Bank Bldg.	MUNCIE, IND.	5 Anthony Block
BALTIMORE, MD.	1109 N. Charles St.	NASHVILLE, TENN.	110 Bolling Ave.
BIRMINGHAM, ALA.	520 Powell St., W.E.	NEWARK, N. J.	233 Central Ave.
BOSTON, MASS.	50 Elm St., Box 2845	NEW HAVEN, CONN.	15 Crown St.
BROOKLYN, N. Y.	351 Atlantic Ave.	NEW ORLEANS, LA.	427 Baronne St.
BUFFALO, N. Y.	70 W. Huron St.	OAKLAND, CALIF.	309 13th St.
CANTON, OHIO	210 Dime Savings Bank Bldg.	OKLAHOMA CITY, OKLA.	310 N. Robinson St.
CHATTANOOGA, TENN.	740 Georgia Ave.	PEORIA, ILL.	315 Harrison Ave.
CHICAGO, ILL.	167 W. Wacker Drive	PHILADELPHIA, PA.	50 N. Fifth St.
CINCINNATI, OHIO	622 Main St.	PITTSBURGH, PA.	110 Jenkins Arcade
CLEVELAND, OHIO	6535 Euclid Ave.	ROCKFORD, ILL.	502 Sheridan St.
COLUMBUS, OHIO	41 West Gay St.	SAVANNAH, GA.	2505 Bull St.
CRAFTON, PA.	70 Haldane St.	SCHENECTADY, N. Y.	337 McCellan St.
DALLAS, TEXAS	2010 Jackson St.	ST. LOUIS, MO.	3628 Olive St.
DAYTON, OHIO	15 N. Jefferson St.	ST. PAUL, MINN.	513 S. Third St.
DENVER, COLO.	1309 Grant Ave.	SAN ANTONIO, TEXAS	209 Broadway
DES MOINES, IOWA	1225 11th St.	SAN DIEGO, CALIF.	115 Broadway
DETROIT, MICH.	4478 Cass Ave.	SAN FRANCISCO, CALIF.	478 Sutter St.
ERIE, PA.	1202 W. 26th St.	SOUTH BEND, IND.	737 Cottage Grove Ave.
EVANSVILLE, IND.	1310 Kentucky Ave.	SYRACUSE, N. Y.	501 Everson Bldg.
GRAND RAPIDS, MICH.	1455 Byron St., S.E.	TAMPA, FLA.	1809 Virginia Ave.
HAZELTON, PA.	222 Markle Bank Bldg.	TERRE HAUTE, IND.	33 North 6th St.
HOUSTON, TEXAS	611 San Jacinto St.	TOLEDO, OHIO	4336 Vermaas St.
HUNTINGTON, W. Va.	711 Tenth Ave.	TORONTO, ONT.	440 Spaidina Ave.
INDIANAPOLIS, IND.	45 S. Pennsylvania St.	TRENTON, N. J.	16 Carroll St.
JACKSONVILLE, FLA.	22 Laura St.	TULSA, OKLA.	808 E. First Place
JOHNSTOWN, PA.	324 Hockstein Ave.	WASHINGTON, D. C.	1305 G St., N.W.
KANSAS CITY, MO.	3806 Broadway	WHEELING, W. VA.	46 18th St.
LOS ANGELES, CALIF.	242 S. Western Ave.	WILMINGTON, DEL.	301 Delaware Ave.
LOUISVILLE, KY.	611 S. Third St.	UTICA, N. Y.	1015 West Street
MEMPHIS, TENN.	1210 Madison Ave.	YOUNGSTOWN, OHIO	Builders Exchange.
MILWAUKEE, WIS.	1627 St. Paul Ave.		



## THE PITTSBURGH WATER HEATER CO.

*Factories and General Offices*

PITTSBURGH, PENNSYLVANIA

EFFICIENT HOUSE HEATING WITH GAS



## Nominal Ratings of Pittsburg-Gallaher Gas-Fired Boilers

No. of Boiler	A. G. A. Rating for Water	Nominal Rating for Water	A. G. A. Rating for Steam	Nominal Rating for Steam	Net B. T. U. Available	Size Tappings		Gas Line if Less than 100 ft. Long	Dia. Flue Pipe	Horse Power	Approximate Wgt.
						Flow	Return				
3	525	600	330	375	78,750	2-2½"	2-2½"	1¼"	6	2.7	565
4	704	800	440	500	103,600	2-2½"	2-2½"	1¼"	6	3.6	665
5	880	1000	550	625	130,900	2-2½"	2-2½"	1½"	7	4.5	765
6	1056	1200	660	750	158,400	2-2½"	2-2½"	1½"	8	5.4	865
30	1290	1500	806	937	193,500	2-4"	2-4"	1½"	8	6.7	1500
40	1720	2000	1075	1250	258,000	2-4"	2-4"	1½"	8	8.9	1755
50	2150	2500	1343	1562	322,500	2-4"	2-4"	2"	8	11.2	2050
60	2580	3000	1612	1875	387,000	2-4"	2-4"	2"	10	13.4	2360
70	3010	3500	1881	2187	451,500	2-4"	2-4"	2"	10	15.6	2680
80	3440	4000	2150	2500	516,000	2-4"	2-4"	2"	10	17.9	3010
441	3870	4500	2418	2812	580,500	2-4"	2-4"	2"	2-8	20.1	3660
451	4300	5000	2687	3125	645,000	1-6"	1-6"	2"	2-8	22.4	3915
551	4730	5500	2956	3437	709,500	2-4"	2-4"	2½"	2-8	24.6	4180
561	5160	6000	3225	3750	774,000	1-6"	1-6"	2½"	2-8	26.8	4450
661	5590	6500	3493	4062	838,500	2-4"	2-4"	3"	2-10	29.1	4730
671	6020	7000	3762	4375	903,000	1-6"	1-6"	3"	2-10	31.3	5020
771	6450	7500	4031	4687	967,500	2-4"	2-4"	3"	2-10	33.6	5320
781	6880	8000	4300	5000	1,032,000	1-6"	1-6"	3"	2-10	35.8	5630
881	7310	8500	4568	5312	1,096,500	2-4"	2-4"	3"	2-10	37.9	5950
6462	7740	9000	4837	5625	1,161,000	1-6"	1-6"	3"	2-10	37.9	5950
6562	8170	9500	5106	5937	1,225,500	2-4"	2-4"	3½"	3-10	40.1	6600
6662	8600	10000	5375	6250	1,290,000	2-6"	2-6"	3½"	3-10	42.3	6855
6762	9030	10500	5643	6562	1,354,500	2-4"	2-4"	3½"	3-10	44.6	7115
7672	9460	11000	5912	6875	1,419,000	2-6"	2-6"	3½"	3-10	46.8	7385
7772	9890	11500	6181	7187	1,483,500	2-4"	2-4"	3½"	3-10	49.0	7685
8682	10320	12000	6450	7500	1,548,000	2-6"	2-6"	4"	3-10	51.2	7995
8782	10750	12500	6718	7812	1,612,500	2-4"	2-4"	4"	3-10	53.5	8315
8882	11180	13000	6987	8125	1,677,000	2-6"	2-6"	4"	3-10	55.7	8645
						2-4"	2-4"	4"	3-10	57.9	8985

