

IRON FIREMAN

Heating

WITH GAS, OIL OR COAL



True Heating Comfort

Iron Fireman automatic heating produces a houseful of contentment with such quiet efficiency that you almost forget you have a heating system. No matter whether you prefer oil, coal or gas for fuel; whether you

like steam, hot water, or warm air heating; whether you want to install a new heating plant or modernize your present one, Iron Fireman heating will provide an abundance of carefree, dependable warmth.



IRON FIREMAN *Heating*

... for any size

**A heating unit
for any kind of firing job—
with genuine **IRON FIREMAN**
dependability and economy**

Whichever fuel you prefer, you can find just the right Iron Fireman conversion oil burner, gas burner or stoker to turn your present boiler or furnace into a modern automatic heating plant. Or, if you plan to replace your old heating plant or equip a new home, Iron Fireman offers you a choice of automatic furnaces or boilers for gas or oil or coal.

**A quarter-century of
heating engineering!**

Iron Fireman's quarter-century of manufacturing and engineering experience in automatic heating assures owners extra value in the fuel economy and thorough dependability of their equipment.



IRON FIREMAN *Radiant* GAS BURNER

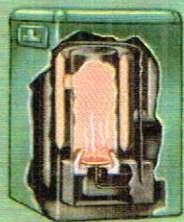
Radiant heat is the type of heat most readily absorbed by the primary furnace heating surfaces and most economically transferred through them into a circulation system.

However, a gas flame is in itself non-radiant. Iron Fireman combustion engineers have perfected a method of transforming the non-radiant gas flame into rich, efficient radiant heat. That's headline heating news!

Here, in brief, is the story: the gas flame is released through horizontal ports into a special refractory combustion chamber, where it is thoroughly mixed with preheated air. The complete combustion obtained instantly heats the refractory elements almost to incandescence. From their glowing surface, waves of rich radiating heat shoot out in all directions, blanketing every square inch of furnace crown sheet and sidewalls.

FOR GAS

IRON FIREMAN GAS-FIRED FURNACE



Forced and gravity models. Built-in Iron Fireman radiant gas burner provides highly radiant heat for exceptional furnace efficiency. For manufactured, natural, mixed or "bottled" gases.

IRON FIREMAN GAS-FIRED BOILER



Extremely compact, quick acting boiler for hot water or radiant panel heating. 72,000 to 500,000 Btu. input. Models range from 26 inches to 36 inches in height. Year 'round domestic hot water.

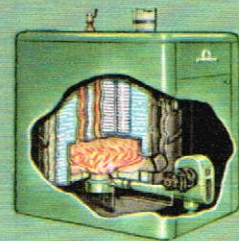
FOR OIL

IRON FIREMAN OIL-FIRED FURNACE



Winter air conditioner for small homes. Vortex-type oil burner of special design. Furnace body of heavy gauge steel, electrically welded. Floor area 26" x 34" 85,000 Btu. per hour at bonnet.

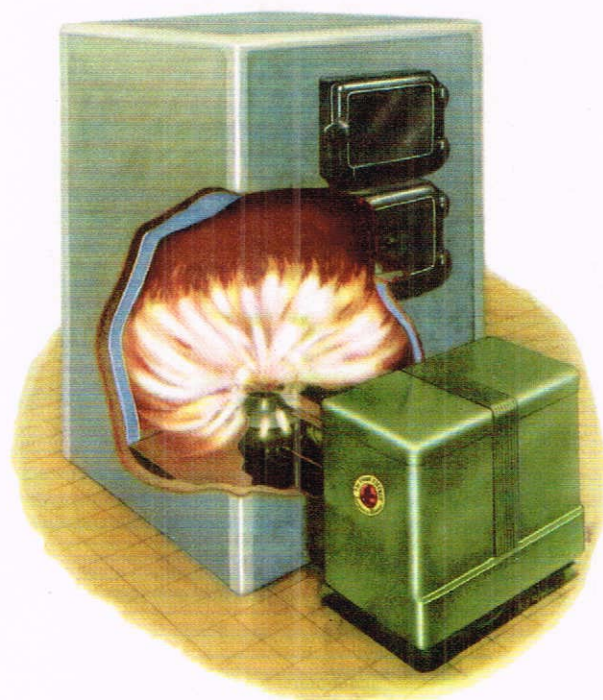
IRON FIREMAN OIL-FIRED BOILER



Medium sized boiler for steam, hot water or radiant panel heating. Vortex oil burner. (Also available with Radiant gas burner.) Boiler body and flues of heavy gauge steel, electrically welded. 115,000 Btu. per hour at nozzle.

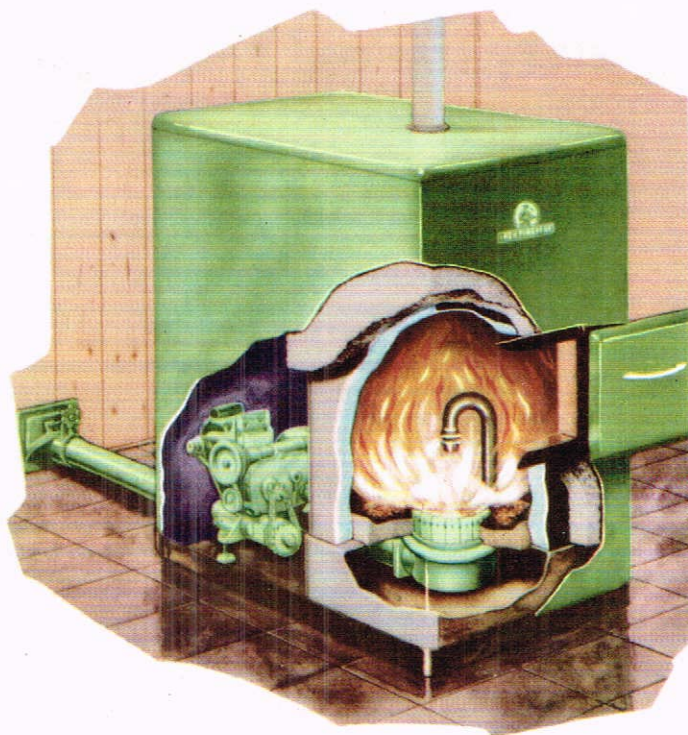
**A fresh start for your present heating plant
with an **IRON FIREMAN** conversion burner**

home, any type of heating...with any fuel!



IRON FIREMAN *Vortex* OIL BURNER

An outstanding development in oil burner engineering. Its whirling vortex of oil vapor and air creates a highly efficient, bowl-shaped flame which blankets the hearth and combustion chamber walls. Maximum area of highly radiant flame, throws intense radiant heat against the most effective heating surfaces—the crown sheet and side walls of the furnace. Its horizontal hearth is a heat reflecting surface which adds to the efficiency of the radiant flame. There are no moving parts in the burner head or under the combustion chamber, therefore no moving mechanism subject to furnace heat. Upkeep and fuel costs are exceptionally low. Easily installed in all standard types of furnaces or boilers.



IRON FIREMAN *Coal-Flow* STOKER

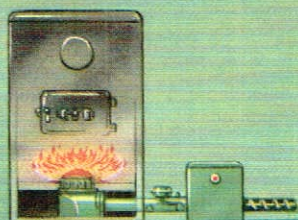
Coal is fed from below, and is supplied with air under forced draft. As the coal rises it releases the volatile gases which pass through the fuel bed, where they are entirely consumed. In hand-firing, where coal is thrown on top of the fire, a large share of these gases go up the stack unburned.

The new Coal-Flow stoker has many new features which make it easier to install, more efficient in operation, and permit much more convenient basement layouts.

Down-Draft jet brings air to the center of the fire. Increased combustion efficiency cuts fuel costs as much as 25%. Stainless steel tuyeres (supporting the fuel bed) are guaranteed for 5 years. These two outstanding features are obtainable *only* with Iron Fireman.

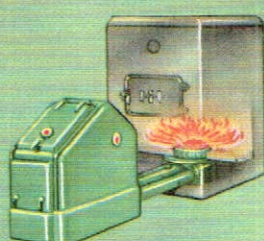
FOR COAL

IRON FIREMAN COAL-FLOW STOKER



Feeds from bin—no coal handling. Installed in your present heating plant it gives you the convenience and luxury of precision controlled automatic heat, day and night.

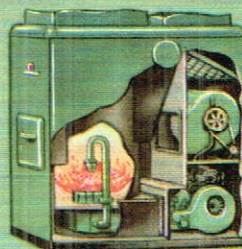
IRON FIREMAN HOPPER MODEL STOKER



Known from coast to coast for dependability, reliability and fuel economy. Available with exclusive Iron Fireman Synrostat automatic day and night temperature controls.

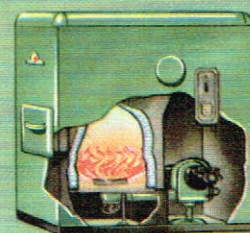
FOR GAS, OIL OR COAL

IRON FIREMAN SELF-FIRING FURNACE



Self-contained automatic warm air heating unit. Hears, cleans, humidifies, circulates the air. Oil model has Vortex oil burner, gas model has Radiant gas burner. Coal model feeds direct from bin.

IRON FIREMAN SELF-FIRING BOILER



Self-contained, automatically fired boiler unit for steam, hot water or vapor heating. Equipped with Vortex oil burner, Radiant gas burner or Coal-Flow stoker, which feeds direct from bin; no coal handling.

The right start for your new home with an **IRON FIREMAN** self-firing furnace or boiler

There's an Iron Fireman *Syncrostat* precision control system for every size and type of heating plant

OIL or GAS . . . Automatic day-night Temperature and Time control

The Iron Fireman Syncrostat Control System is the highest development of automatic controls for heating plants. It is designed and made to serve you dependably for many years.

The Day-Night Thermostat has dials for setting the day and night temperatures you desire. Most homes prefer 72° during the day and 62° at night. Reducing the temperatures

10° at night saves approximately 10% of your fuel. Easy-to-set dials on the Telechron clock (time switch) control the times at which the temperature automatically changes. These two instruments can be mounted on the same base, as shown, or can be placed in separate locations, thus providing a handsome and accurate timepiece in any room desired.



Clock
Thermostat



C-200 Controller

COAL . . . Automatic day-night Temperature, Time and Refueling control

COAL SYNCROSTAT SYSTEM NO. 1

This control system includes day-night thermostat and Telechron clock (time switch) described above, and the C-200 stoker controller, which combines several stoker instruments in one unit—transformer, automatic refueling timer (which keeps fuel bed alive during "off" periods), clean-fire switch (self-resetting), and master stoker controller.



Day-Night
Thermostat



C-120 Controller

COAL SYNCROSTAT SYSTEM NO. 2

Day-night thermostat and C-120 stoker controller. In this group the Telechron time switch is built into the stoker controller unit, which also includes all other instruments listed above for the C-200 controller. Provides full day-night automatic control, but time switch is a control switch only, not a clock.



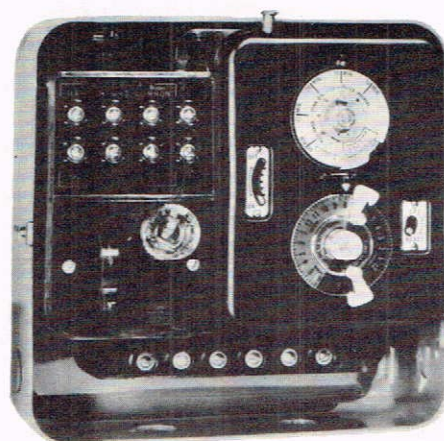
Day-Night
Thermostat



C-110 Controller

COAL SYNCROSTAT SYSTEM NO. 3

Day-night thermostat, C-110 stoker controller, and Pyrometric fire control. This control group is basically the same as system No. 2, with the addition of the "fire-out" feature, which prevents stoker operation in case of fire failure and operates "fire-out" alarm. This exclusive Iron Fireman system is by far the most advanced automatic coal stoker control available.



Iron Fireman Stoker Controller

The C-110 Stoker Controller pictured here is the most complete instrument available for controlling an automatic coal stoker. In one compact unit it combines: master stoker control; transformer; day-night time switch; refueling timer; "fire-out" shutdown timer and alarm switch; self-resetting clean-fire switch; and fused hand switch.



Iron Fireman Pyrometer

Performs two important functions: (1) prevents operation of stoker if fire goes out; (2) helps refueling timer maintain a tiny fire during "off" periods.



IRON FIREMAN MANUFACTURING COMPANY

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Other Plants: PORTLAND, OREGON; TORONTO, CANADA