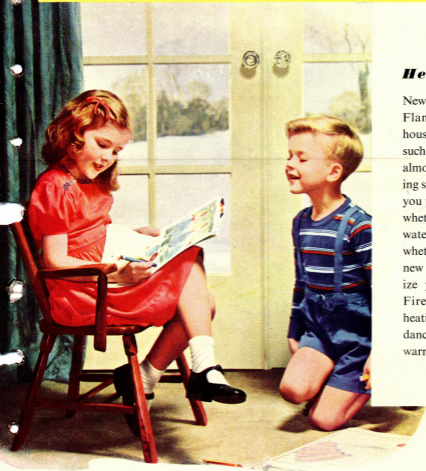


*New*  
**IRON FIREMAN**  
*Luminous Flame*  
**COAL OR OIL HEATING**



***True  
Heating Comfort.***

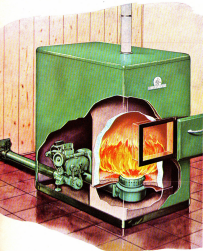
New Iron Fireman Luminous Flame heating produces a houseful of contentment with such quiet efficiency that you almost forget you have a heating system. No matter whether you prefer coal or oil for fuel; whether you like steam, hot water, or warm air heating; whether you want to install a new heating plant or modernize your present one, Iron Fireman Luminous Flame heating will provide an abundance of carefree, dependable warmth.



**Standard of value in automatic heating equipment**

# IRON FIREMAN *Luminous*

## THE *Luminous Flame* COAL-FLOW STOKER



The Iron Fireman Coal-Flow stoker is shown here (left) as an integral part of the Waterbase unit. The Coal-Flow can also be installed in any standard boiler or furnace, as in the small illustration below.

In Iron Fireman automatic coal-firing the fuel is fed from below and is supplied with air under forced draft as it enters the combustion chamber. As the coal rises in the retort it is gradually heated and releases the more volatile elements which, in the form of combustible gases, pass through the fuel bed, where they are entirely consumed. In hand-firing, where the new coal is thrown on top of the fire, a large share of these gases go up the stack unburned. Automatic control of fuel and air produces the clear, highly efficient luminous flame.

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

### Radiant Heat from a *Luminous Flame*

The bright, white radiance of the Iron Fireman fire is the same efficient source of radiant heat, whether generated from coal or oil. Iron Fireman equipment is engineered to produce a luminous flame, and it is the radiant effect of this flame that achieves the highest degree of heat transmission through the side walls and crown sheet of the furnace. It thus produces useful heat—heat that is not lost through the chimney.

The radiance of the Iron Fireman Luminous Flame is accomplished with precise, automatic, continuous control of the supply and mixture of fuel and air, and the result is a highly efficient source of heat units in the heart of your heating system.



### 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



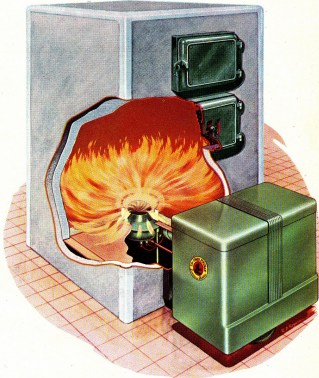
Known from coast to coast for dependability, reliability and fuel economy. Available with standard Iron Fireman automatic day and night temperature controls.

# Flame HEATING with coal or oil

## THE Luminous Flame 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 completely covers the hearth and blankets the combustion chamber walls. It exposes a maximum area of highly luminous flame, throwing 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. Servicing is simple and easy—upkeep and fuel costs exceptionally low. Oil nozzle faces black crown sheet of furnace rather than a heat reflecting, refractory wall, protecting nozzle against carbonization.

The Iron Fireman Vortex oil burner can be easily installed in all standard types of furnaces or boilers.



### FOR OIL

#### IRON FIREMAN VORTEX OIL BURNER



Whirling vortex of oil vapor and air makes new-type luminous flame, blanketing combustion chamber walls. No moving parts subject to furnace heat. Low oil consumption.

#### IRON FIREMAN M-2 OIL BURNER



Precise control of air-fuel ratio and effective mixing of oil and air gives high combustion efficiency. Provides years of quiet, dependable service and home heating comfort.

#### The M-2 Oil Burner

The high combustion efficiency of the M-2 Oil Burner is mainly the result of Iron Fireman's carefully engineered air diffuser, in which atomized oil is carried into the combustion chamber by whirling air currents. The fuel-saving ability of this burner has been well established, not only in actual use, but in extensive engineering tests both in the Iron Fireman and independent engineering laboratories.

The M-2 oil burner can be easily installed in all standard types of furnaces or boilers. It is readily altered for a wide range of fuel capacities—from six-tenths of a gallon to four and one half gallons per hour.



3167 W. 106th ST., CLEVELAND 11, OHIO

Other Plants: PORTLAND, ORE.; TORONTO, CAN.

**IRON FIREMAN** *Luminous Flame* WATERBORNE HEATING



**IRON FIREMAN WATERBORNE HEATING**

—a steam, vapor, or hot water heating unit with the Iron Fireman Luminous Flame. This combination unit of modern design and styling contains a boiler, an instrument panel neatly recessed into the side of the cabinet, and a built-in Iron Fireman Vortex oil burner or Coal-Flow stoker. The boiler is particularly designed for efficient utilization of the Iron Fireman Luminous Flame. Heating surfaces are of ample area to absorb and transfer heat as fast as it is liberated by the burner. Its steel plate construction, together with its efficient design, make this boiler unusually responsive to heat demands.



**IRON FIREMAN** *Luminous Flame* AIRBORNE HEATING

**IRON FIREMAN AIRBORNE HEATING**



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

**IRON FIREMAN WATERBORNE HEATING**



Self-contained, automatically fired boiler unit for steam, hot water or vapor heating. Oil model has Vortex burner, coal model feeds direct from bin. No coal handling.

**IRON FIREMAN AIRBORNE HEATING**—a self regulating, self-firing, self-contained warm air heating unit—all in one compact attractive cabinet. The necessary elements for thoroughly modern warm-air heating are built into this trim space-saving cabinet, including the amazingly efficient Iron Fireman Vortex oil burner or Coal-Flow stoker. It cleans, humidifies, and circulates the air. It regulates itself through automatic instruments, maintaining steady comfort-giving warmth regardless of changing weather. The *Airborne* unit is available in three sizes, which allows you to make an economical installation, exactly fitting the needs of your home.



**IRON FIREMAN MANUFACTURING COMPANY** ★ CLEVELAND, OHIO