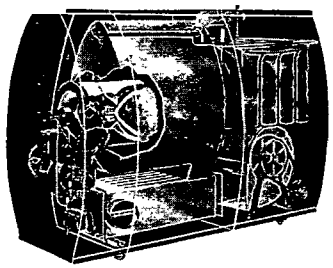
Gar Wood Industries, Inc.
Heating Division

7924 Riopelle Street
Detroit 11, Michigan

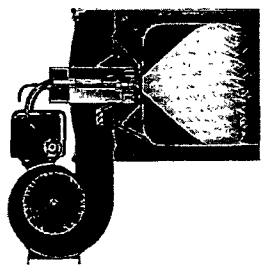


Tempered-Aire Unit

TEMPERED-AIRE UNIT

A high efficiency, direct fired heating unit incorporating a large-volume firebox, an integral economizer, a coordinated oil burner combustion chamber firing unit, a flash-type humidifier, washable cloth filters, and a low speed, resilient-mounted blower.

The primary transfer of heat occurs in the large firebox, having its outlet at the bottom, through which the hot gases pass down into the economizer. Here the gases divide into long thin slices, within the economizer tubes. Each tube is swept at high velocity by cold return air from the blower. The rapidly flowing cool air absorbs a maximum of heat from the economizer surfaces.



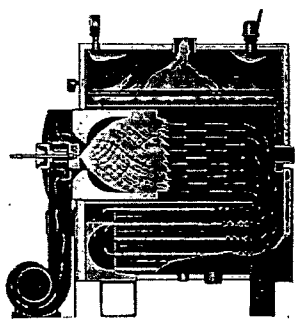
Oil Burner Combustion Chamber Firing Unit

TYPE "O" OIL FIRING UNIT

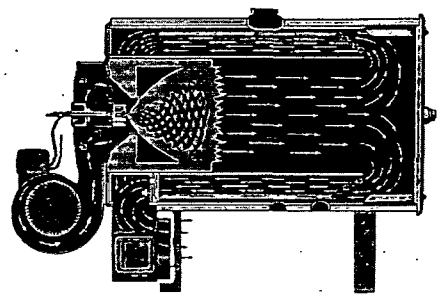
The burner and fire bowl combustion chamber are built together as an actual unit, with the back end of the fire bowl forming a windbox containing air for combustion at sufficient pressure to offset the effect of draft variations. Air from the windbox passes through metering chutes, set at an angle to cause rotation. Both air and oil rotate and intermingle in a conical spray, resulting in a definitely controlled flame entirely contained within the fire bowl.

OIL-FIRED Boiler-Burner UNITS

An internally fired, downdraft, high efficiency Boiler-Burner Unit employing the same firing unit used in the Tempered-Aire Furnace-Burner Unit.



Steam Type Boiler-Burner Unit.



Hot Water Type Boiler-Burner Unit

The oil-fired Boiler-Burner Units are made in two types, an obround design having a steam chest for steam systems and a cylindrical design for hot water systems. The steam type is available with a built-in tankless water heater. The hot water type can be supplied with a domestic water storage tank having an integral water heater all contained within the boiler jacket.

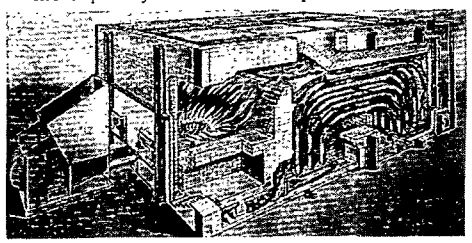
Lee Engineering Company

Union National Bank Bldg., **Youngstown, Ohio**

LEE DIRECT WARM AIR HEATING

Is Ideal for War and Post-War Construction

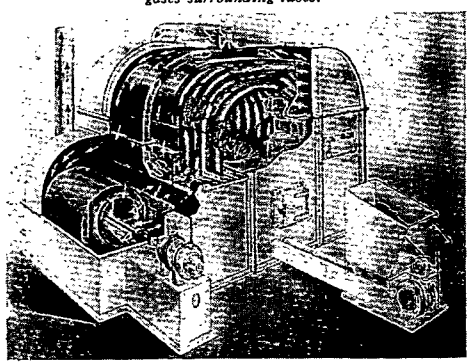
1. **Less critical materials are required.** The Lee Heater can be installed with non-metallic or masonry ducts and operated without steam valves, pressure gauges, flow meters or other critically scarce instruments.
2. **Installations can be made without delay.** A Lee Heating System can be installed more quickly and with less expense than most other types of heating systems.



Lee Central System. Brick-set Tubular Heater. Air to be heated passes through steel tubes counter-current to hot gases surrounding tubes.

3. **Any fuel can be used.** Lee Direct Air Heating Systems operate with **any** fuel and less of it.
4. **Air-to-Fuel efficiencies of 80 per cent to 90 per cent are obtainable.** The Lee System of air distribution supplies heat exactly where needed and when needed, without waste.
5. **No skilled attendance required.** Unlike a steam boiler, the Lee Heater requires no licensed engineer.

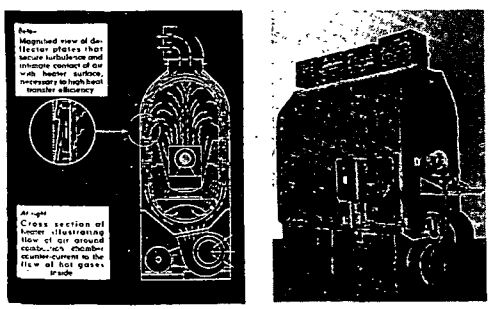
Heaters for use with the Lee System are made in the three types illustrated and described briefly below.



Lee Central System—Steel-encased Tubular Heater

The Lee Brick-set Heater is generally furnished in sizes of from 3,000,000 to 8,000,000 Btu per hour, for use as a centrally located heater connected by duct work to the space being heated.

Lee Steel-encased Heater. The operation of this heater is similar to that of the brick-set heater shown above. This type of heater is usually furnished in sizes of from 1,500,000 to 6,000,000 Btu per hour.



Lee Unit Heater

The **Lee Unit Heater** differs from the Lee Central System Heaters in that the Unit Heater is made in relatively small, standardized, self-contained steel-encased models of up to 1,500,000 Btu per hour capacity, for operation either as a unit heater without connecting ducts or as a central heater with ducts.

●

For further information write for Catalog HVG.