JOSEPH HARRINGTON CO., SUBSIDIARY

Whiting Corporation

Harvey, Illinois

Manufacturers of the Whiting Automatic Stoker for Heating and Power Plant Boilers of 25 to 250 HP.

The Whiting Stoker (formerly the King Coal) is a front, horizontal feed, stepped grate mechanism, having two stationary and two movable sections. Gravity plays no part in the horizontal progression of the fuel bed. It provides fully automatic stoking for small boilers, discharging the ash as well as feeding the fuel.

Hospitals, hotels, apartments, schools and laundries and all sizable buildings find its smokeless combustion, fuel saving and fully automatic operation of substantial value in reducing their heating costs.

Fits any Boiler—The Whiting Stoker can be built to exactly fit any type of boiler of 25 to 250 hp. and installed with but few or no changes. It requires a minimum of setting height, making possible larger combustion space with greater efficiency and ability to carry overloads. Sixty-two sizes are available, all identical in construction.

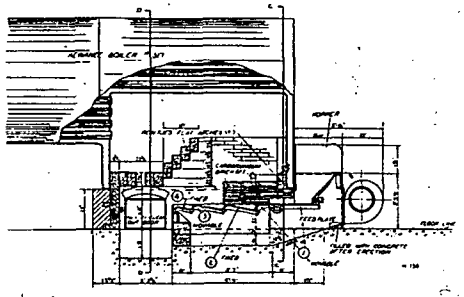
Smokeless Operation with any grade of fuel has made the Whiting Stoker the solution of the smoke problem of hundreds of buildings.

Flexibility—Varying speed of travel and depth of coal bed are secured by one to four inch adjustability of the stroke and the adjustability of the hopper gate. Only alternate grates are movable, thus securing uniform flow of coal without caking. An even fire is maintained continuously.

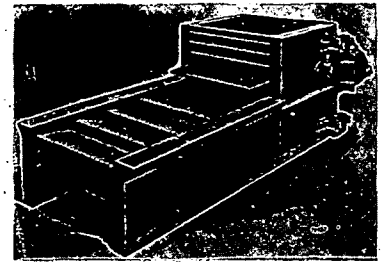
Combustion is progressive and complete.

Burns all Grades of Fuel, including Mid-Western screenings without smoke and with high efficiency, resulting in substantial reductions in fuel costs.

Continuous and Automatic Ash Discharge is an exclusive feature of the Whiting Stoker which is entirely self cleaning.



1. *Feed plate and first step of grate (movable).*
2. *Second step of grate (stationary).*
3. *Third step of grate (moves synchronously with step No. 1).*
4. *Fourth step of grate (stationary).*
5. *Cast iron door in ash pit (also provides seal for wind box).*



Whiting Stoker (Patented)

Standard Sizes

Grate Widths in feet: 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6.

Grate Lengths in feet: 3½, 3¾, 4¼, 4½, 5, 5¼, 5¾, 6.

Each width can be made in any length specified above. Required furnace width 9 in. more than the grate width. Active grate area 10 in. shorter than maximum depth of furnace.

Webster Tallmadge & Co., Inc.

50 Church Street, New York, N. Y.

HIGH EFFICIENCY HEATING SYSTEMS

Tallmadge Methods insure better economy, comfort, health and proficiency from correct heating of buildings, and in process work in industrial plants.

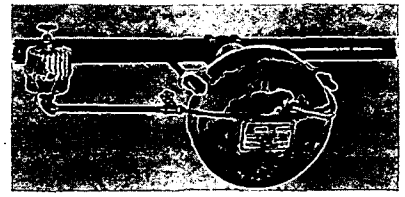
The first cost of Tallmadge Heating Systems is lower and the complete story is told in Bulletin 130 "Zone Heating," which also covers Electrical Control of Zoned Orifice Distribution.

Some of the outstanding advantages of the orifice type of steam distribution are:

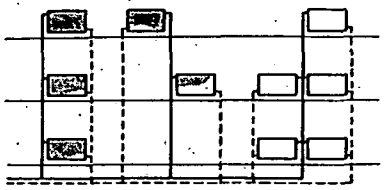
1. Low steam consumption of radiators, in mild weather with just enough heat to supply the building losses, maintaining a more healthful atmosphere and greater operating economy.

2. Simplicity of control, minimum of devices and less elaborate piping makes these systems economical to operate and lowers maintenance expense.

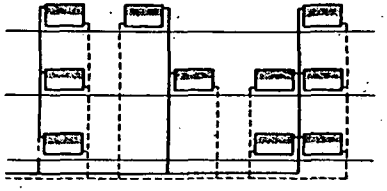
3. Permits zoning of buildings for various heating and weather requirements with resultant fuel saving.



Type F Tallmadge Valve Control Mechanism



With reduced steam supply and ordinary distribution the closest radiators get all the steam



With Tallmadge Orifice System the supply to each radiator is correctly proportioned

In the design and operation of the orifice type system, reference to the accompanying diagrams, indicates recognition of the following facts:

1. The most valuable heat obtainable from the steam in a radiator is the latent heat. A heating system should therefore operate at approximately 100 per cent thermal efficiency, as compared with modern power plants which have only 20 per cent economy because of loss of this latent heat.

2. If the steam supply to a radiator is reduced it will be observed that the upper portions of the radiator will be hot and the lower portions cold. It is therefore often unprofitable to pump the return water long distances back to the boilers as there is no appreciable heat left.

3. When the steam flows into the top of a radiator, the air being heavier, if permitted to freely do so, will naturally flow out of the bottom and no unusual device is required to make it do so.

4. With the orifice system of distribution, the supply of steam to the radiators is so easily controlled that return valves, or radiator traps, are not essential.

5. If the return pipes are either vertical or have a slight uniform pitch downward with the flow, it is not necessary to go to the expense of pumping a vacuum on the return piping. An ordinary return water receiver with open vent pipe to let the air out and a pump to put the water back into the boilers are all that are necessary.

6. The modern method of selecting steam supply pipe sizes is to keep the frictional resistance or pressure drop in the steam mains within certain percentage limits of flow to the more remote radiation.

Ask to have our engineers analyze your problem in either new or old buildings