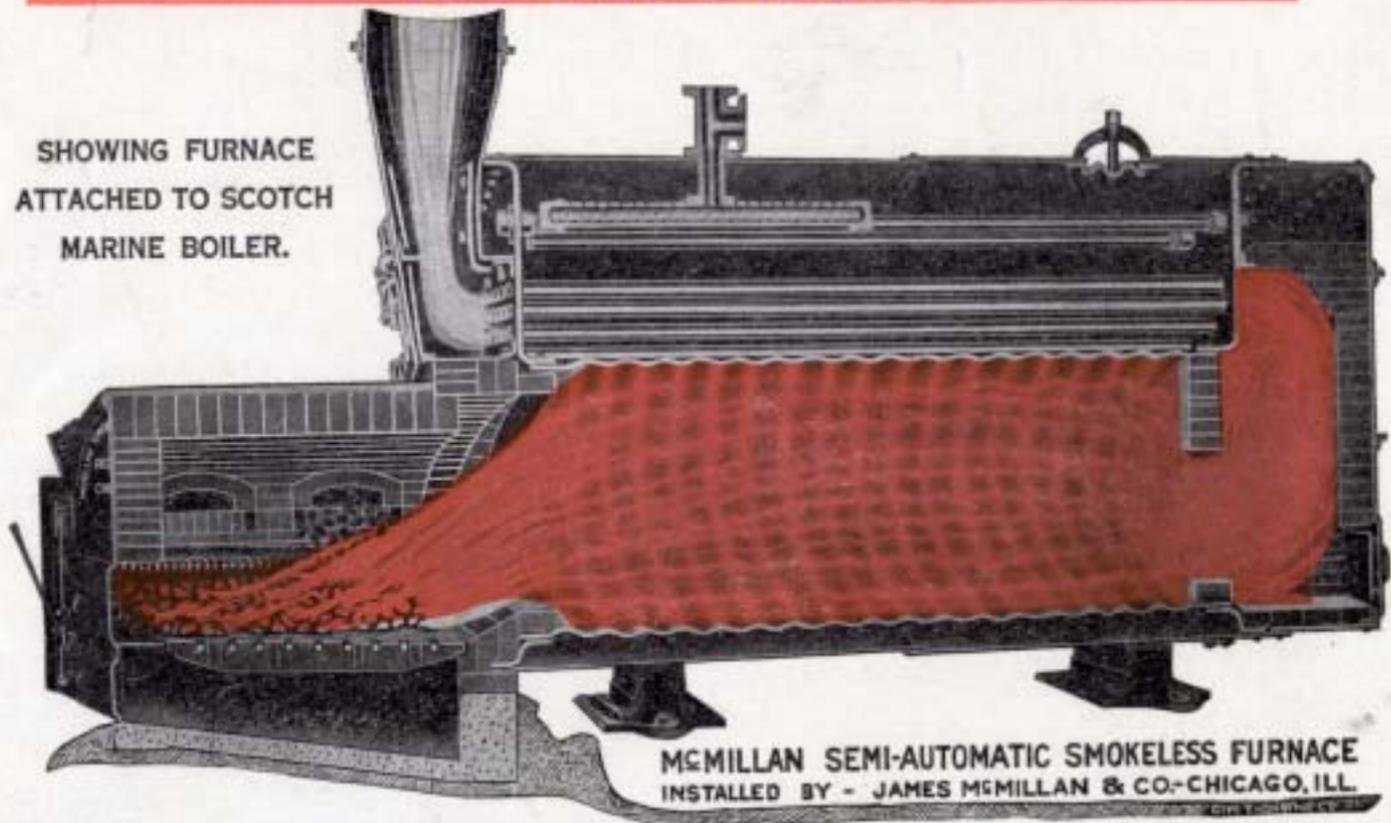


McMILLAN SMOKELESS FURNACES

SHOWING FURNACE
ATTACHED TO SCOTCH
MARINE BOILER.



McMILLAN SEMI-AUTOMATIC SMOKELESS FURNACE
INSTALLED BY - JAMES McMILLAN & CO. - CHICAGO, ILL.

IT'S REALLY

SMOKELESS.



VIEW FROM FRONT

McMILLAN
SEMI-AUTOMATIC GRAVITY FEED SMOKELESS FURNACE
33 N. MARKET STREET, CHICAGO, ILL.

The McMillan Semi-Automatic Gravity Feed Smokeless Furnace

is of the Dutch Oven Type and extends in front of the boiler. It is mounted on a suitable foundation and is made of metal, lined with brick, or if desired, brick sides can be furnished. The coal is fed through the roof of the furnace by gravity and is coked on the side or incline grates. The hydro-carbons in the coal are slowly released from the coal on the coking grates and when released are mixed with the oxygen, fed in through the openings on side of furnace, passing over the fire on the center grates and impinging on the incandescent surface of the fire brick arch, and in this way a smokeless plant is obtained. No coal is fired through the furnace door; this door is used only for cleaning purposes. The coal, after same is coked on the incline grates, can be removed in three ways: First, in using the pockets to poke the coal; second, in using a slice bar in slice openings in front of the furnace, and thirdly, in using the side shaking or transfer grates. These grates, as shown by cut, are movable in the side structure and are segments mounted on a square shaft which rotates and same can be operated from the front of furnace by a bar, and requires only one movement to shake or transfer the coked coal towards the shaking grates in the center of the furnace. This feature is intended to do away with the poking and slicing on the grates and to enable the fireman to have entire control from the front of furnace.

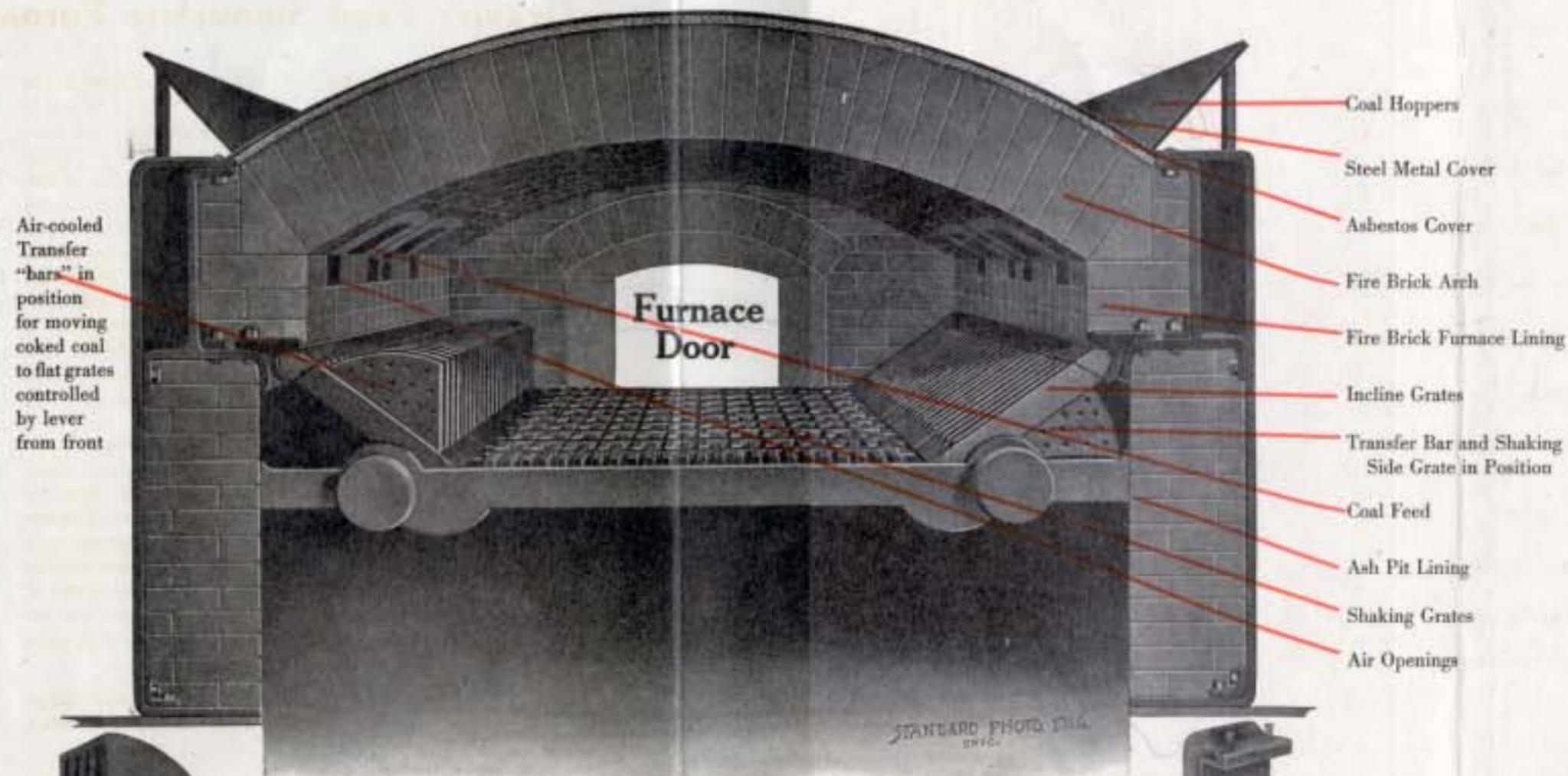
This illustration explains in detail the construction of the furnace. We will gladly furnish further information upon application.

These furnaces can be attached to practically any type of boiler on the market, either high or low pressure, and a smokeless plant guaranteed where they are installed. Kindly write to us today or file this folder for future reference.

JAMES McMILLAN & CO., 33 North Market Street, Chicago, Illinois

Exclusive Manufacturers of

McMILLAN SMOKELESS FURNACES

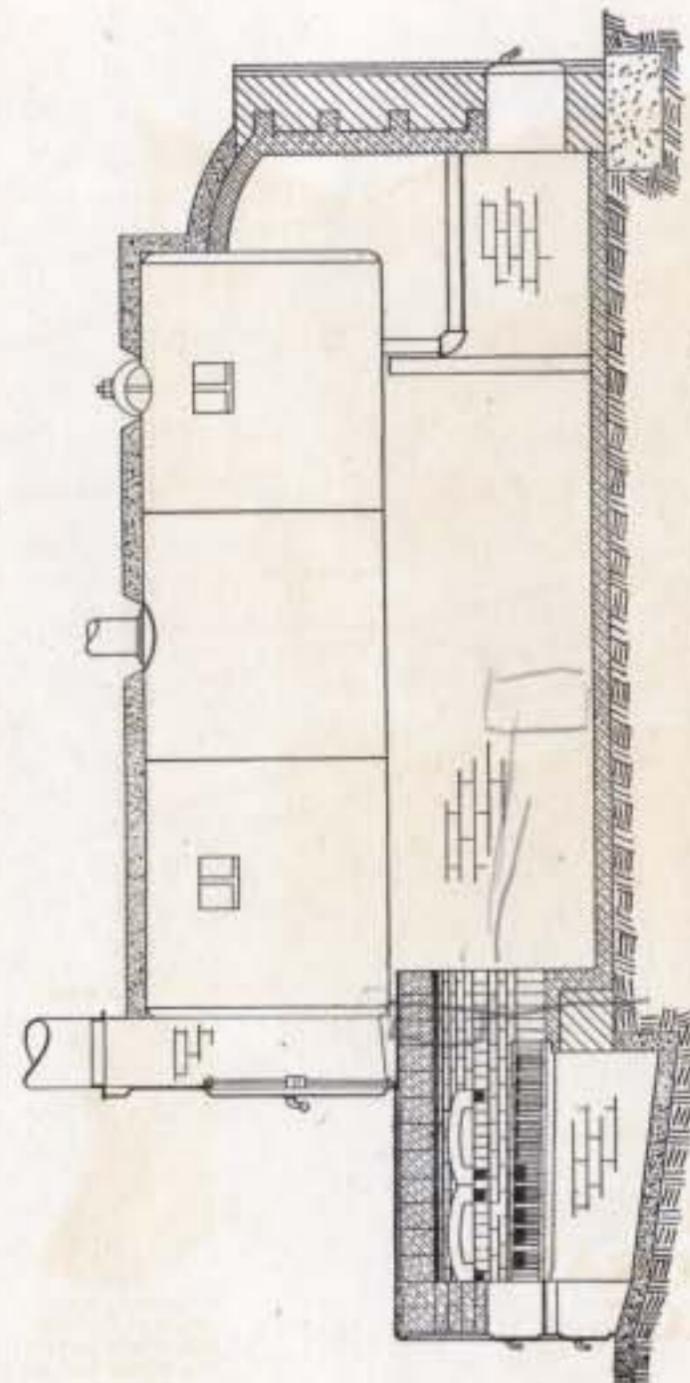


VIEW FROM REAR OF FURNACE

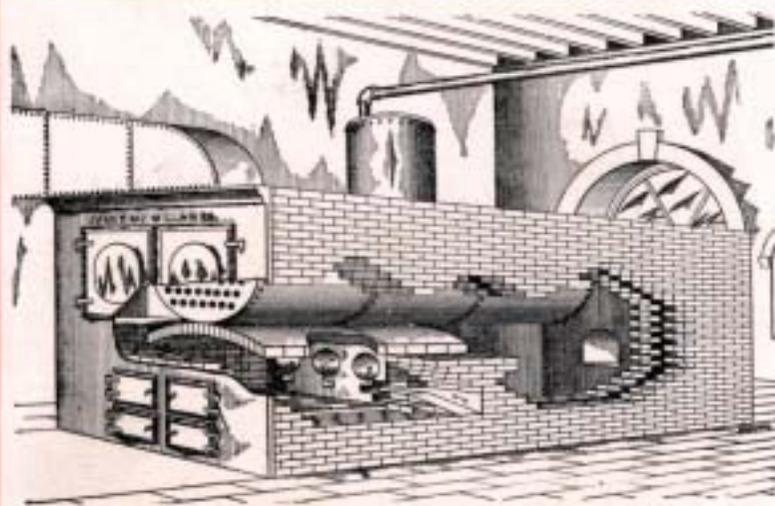
McMILLAN SEMI-AUTOMATIC GRAVITY FEED FURNACE

Showing Front View of Transfer Bar, which pushes the coked coal on the flat grates

Showing Rear View of Transfer Bar, which pushes the coked coal on the flat grates



SHOWING FURNACE ATTACHED TO RETURN TUBULAR BOILER



A McMILLAN FURNACE UNDER A TUBULAR BOILER

It does not require any room in front of the boiler in this type, and it can be used for either high or low pressure plants. Smokelessness guaranteed in either operation

James McMillan & Co.

James McMillan Patents

MAIN OFFICE: 33 N. MARKET STREET
CHICAGO, ILL.

TEL. MAIN 2364

McMILLAN Direct Type Smokeless Furnace

- Scientifically and practically perfect.
- No steam, power or machinery required to get results.
- Time is the true test of a "Smoke Consumer."
- This furnace has a successful try-out of 15 years.
- No change in boiler setting required.
- No change in firing methods.
- Cannot stop steam making by breaking down.
- Protects boilers from sudden changes in temperature, increasing its life from 5 to 10 years.
- Burns cheapest grade of screenings.
- Temperature of 3000° F. has been attained.
- No metal to warp or burn.
- A minimum of soot—less cleaning—greater absorption of heat.
- Small cost—pays for itself in a few months.
- Maintenance guaranteed indefinitely at small cost.
- Installed in one day.