Grinnell Co, 260 Exchange St, Providence 1, R. I.
Power Piping Div, Blaw-Knox Co, 1625 Pennsylvania Ave, Pittsburgh 12, Pa.
Rockwood Sprinkler Co, 26 Harlow St, Worcester St, Mass.

SPROCKETS
(See Wheels, Sprocket)

STACKS, RIVETED, WELDED, STEEL
Badenhausen, John Phillips Inc, South Ave & Reading R R, Wyncote, Pa.
Bergen Point Iron Wks, Foot of W 5th St, Bayonne, N. J.
Bethlehem Steel Co, Bethlehem, Pa.
Bigge Boiler Wks Co, Akron, Ohio
Bros, Wm, Boiler & Mfg Co, 1061 10th Ave, S E, Minneapolis 14,
Brownell Co, 508 N Findlay St, Dayton 1, Ohio
• Condenser Service & Engrg Co, Inc, 68 River St, Hoboken, N. J.
Connery Construction Co, Inc & Lanserne Sts, Phila 40, Pa.
• Erie City Iron Wks, 1412 East Ave, Erie, Pa.
Parrar & Trefts Inc, 20 Milburn St, Buffalo 12, N. Y.
General American Transportation Corp, Sharon, Pa.
Godfrey-Keeler Co, 1 Hudson St, New York 13, N. Y.
Graver Tank & Mfg Co Inc, 4809 Todd Ave, East Chicago, Ind.
E Keeler Co, 253 West St, Williamsport 3, Pa.
Kirk & Blum Mfg Co, 2274 Spring Grove Ave, Cincinnati 25, Ohio
Koven, L O & Brother, Inc, 134 Ogden Ave, Jersey City 7, N. J.
Lakeside Bridge & Steel Co, 2200 W Villard Ave, Milwaukee 9
Michelmann Steel Construction Co, 137 N 2nd St, Quincy, Ill.
Nestar, John, Boiler Works Co, 1400 S 2nd St, St Louis 4, Mo.
Petroleum Iron Wks Div, Box 2031, Beaumont, Texas
• Pratt-Daniel Corp, 84 S Water St, E Port Chester, Conn.
Quaker City Iron Wks, Aramingo Ave & Ontario St, Phila 34, Pa.
Steel Products Corp, 611 Vanderbilt Ave, New York 17, N. Y.
Stover Steel Tank & Mfg Co, 100 S Hancock St, Freeport, Ill.
• Thermix Corp, 1st National Bank Bldg, Greenwich, Conn.
Tippett & Wood, Rudolph & William Sts, Phillipsburg, N. J.
Treadwell, M H Co Inc, 140 Cedar St, New York 6, N. Y.
• Union Iron Works, 1429 Cascade St, Erie, Pa.
Warren Brothers Roads Co, 35 Memorial Dr, Cambridge 42, Mass.
Wickes Boiler Div, 512 N Water St, Saginaw, Mich.

STOKERS, CHAIN-TRAVELING GRATE
American Coal Burner Corp, 12-18 E Erie St, Chicago 11, Ill.
• Babcock & Wilcox Co, 85 Liberty St, New York 6, N. Y.
Bros, Wm, Boiler & Mfg Co, 1061 10th Ave, S E, Minneapolis 14,
Combustion Engrg Co Inc, 200 Madison Ave, New York 6, N. Y.
Hoffman Combustion Engrg Co, Marquette Bldg, Detroit 26,
Illinois Stoker Co, 102 W 7th St, Alton, Ill.
Johnston & Jennings Co, Cleveland 14, Ohio
Laclede Stoker Co, 4438 Hunt Ave, St Louis 10, Mo.
McClave, R B, Engrg Co, 149 Broad St Station Bldg, Phila
Riley Stoker Corp, 9 Neponset St, Worcester, Mass.

STOKERS, OVERFEED
American Coal Burner Corp, 12-18 E Erie St, Chicago 11, Ill.
Bros, Wm, Boiler & Mfg Co, 1061 10th Ave, S E, Minneapolis 14,
• Canton Stoker Corp, 141 Avedrews Pl S W, Canton 1, Ohio
Combustion Engrg Co Inc, 200 Madison Ave, NYC 6, N. Y.
• Detroit Stoker Co, General Motors Bldg, Detroit, Mich.
Flynn & Emrich Co, 301 Holliday St, Baltimore 2, Md.
Iron Fireman Mfg Co, 3170 W 106 St, Cleveland 11, Ohio
Johnston & Jennings Co, Cleveland 14, Ohio
Laclede Stoker Co, 4438 Hunt Ave, St Louis 10, Mo.
Whiting Stoker Co, 4711 W North Ave, Chicago, Ill.

STOKERS, SPREADER
American Coal Burner Corp, 12-18 E Erie St, Chicago 11, Ill.
• American Engrg Co, Aramingo Ave & Cumberland St, Phila
Badenhausen, J Phillips, Inc, South Ave & Reading RR, Wyncote, Pa.
Bros, Wm, Boiler & Mfg Co, 1061 10th Ave, S E, Minneapolis 14,
Chicago Automatic Stoker Co, 14 N Clinton St, Chicago 6, Ill.
Combustion Engrg Co Inc, 200 Madison Ave, New York 6, N. Y.
• Detroit Stoker Co, General Motors Bldg, Detroit, Mich.
Hoffman Combustion Engrg Co, Marquette Bldg, Detroit 26,
Iron Fireman Mfg Co, 3170 W 106 St, Cleveland 11, Ohio
Johnston & Jennings Co, Cleveland 14, Ohio
Laclede Stoker Co, 4438 Hunt Ave, St Louis 10, Mo.
McClave, R B, Engrg Co, 149 Broad St Station Bldg, Phila
McNally Pittsburgh Mfg Corp, Pittsburg, Kans.
Riley Stoker Corp, 9 NePonset St, Worcester, Mass.
Whiting Stoker Co, 4711 W North Ave, Chicago, Ill.

SOLENOIDS
Allen-Bradley Co, 1328 S 2nd St, Milwaukee 4, Wisc.
Cannon Electric Development Co, 3209 Humboldt St, Los Angeles
• Cook Electric Co, 2700 Southport Ave, Chicago 14, Ill.
Cutler-Hammer Inc, 316 N 12th St, Milwaukee 1, Wis.
General Controls Co, 801 Allen Ave, Glendale 1, Calif.
General Electric Co, 1 River Rd, Schenectady 5, N. Y.
• Graybar Electric Co Inc, 420 Lexington Ave, N Y C 17, N. Y.
Jefferson Electric Co, Bellwood, Ill.
Keckley, O C, Co, 400 W Madison St, Chicago 6, Ill.
McDonnell & Miller, Inc, 400 N Michigan Ave, Chicago 11, Ill.
Monitor Controller Co, 51 S Gay St, Baltimore 2, Md.
Nilsson Electrical Laboratory, Inc, 103 Lafayette St, N Y C 13,
Penn Electric Switch Co, Goshen, Ind.
Rockwell, W S Co, 200 Eliot St, Fairfield, Conn.
Roebling's, John A Sons Co, Trenton 2, N. J.
Synchro-Start Products, Inc, 1046 Fullerton Ave, Chicago

Ward Leonard Electric Co, 100 South St, Mount Vernon, N. Y.

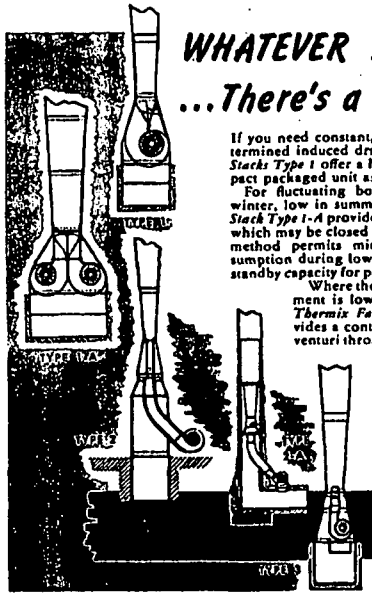
SPRAY PONDS
(See Cooling Systems, Spray)

SPRAY TOWERS
(See Towers, Cooling)

SPRINKLER SYSTEMS, FIRE
Central Automatic Sprinkler Co, 4th & Cannon Ave, Lansdale, Pa.
• Grinnell Co Inc, 260 W Exchange St, Providence 1, R. I.
Power Piping Div, Blaw-Knox Co, 1625 Pennsylvania Ave, Pittsburgh 12, Pa.
Rockwood Sprinkler Co, 26 Harlow St, Worcester St, Mass.

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Graver Tank & Mfg Co Inc, 4809 Todd Ave, East Chicago, Ind.
E Keeler Co, 253 West St, Williamsport 3, Pa.



WHATEVER YOUR DRAFT REQUIREMENT
...There's a Thermix Stack made for it!

If you need constant, dependable, predetermined induced draft . . . *Thermix Fan Stacks Type 1* offer a highly efficient, compact packaged unit as the answer.

For fluctuating boiler loads, peak in winter, low in summer . . . *Thermix Fan Stack Type 1-A* provides twin fans, either of which may be closed off by dampers. This method permits minimum power consumption during low periods with ample standby capacity for peak boiler operation.

Where the boiler draft requirement is low (below 1.5") . . . *Thermix Fan Stack Type 3* provides a controlled ejector in the venturi throat. As the ejector area is reduced, the velocity of gas leaving the nozzle is increased with consequent improvement in overall efficiency at lower loads.

Where high temperatures (2,000°F) or corrosion laden gases are handled . . . the *Thermix Fan Stack Type 2* is designed with an outside fan ejecting atmospheric air into the throat of the Venturi section. Wear and damage to the fan is thus avoided.

An alternate of this arrangement is shown by *Thermix Fan Stack Type 2-A*. Here the fan handles air, a mixture of air and gas or gas when required. This system may be used where explosive gas mixtures are handled to permit free passage to atmosphere. *Type 2-A* also shows a method for installing the Thermix system in your existing stack.

For complete information on how Thermix Fan Stacks can increase the efficiency of your plant, write or call our project engineers.

THE THERMIX CORPORATION
Project and Sales Engineers
First National Bank Bldg. *Greenwich, Conn.*

Equipment designed and manufactured by
PRAT-DANIEL CORPORATION
Manufacturing Plant **East Port Chester, Conn.**

For additional information about products of manufacturers

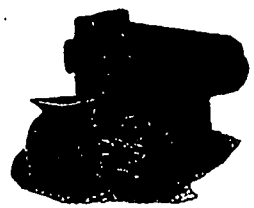
DETROIT STOKER COMPANY

Sales and Engineering Offices
General Motors Building, Detroit, Mich.

Since 1898 Main Office and Works: MONROE, MICH. District Offices in Principal Cities

PRODUCTS AND SERVICE

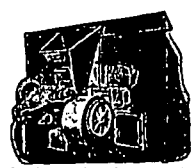
Detroit Stokers are unsurpassed for economy and dependability. Both Underfeed and Overfeed Stokers of many sizes and capacities. All grades of bituminous coal are successfully burned without expensive preparation. Operating costs are low, plant efficiencies raised to new standards and capacities of present boilers increased. The purchaser is assured a Detroit Stoker, best suited to his particular boiler, kind of coal available and capacity required. Proper design and application by experienced builders produce best results. Write for *Bulletin 330.*



Detroit LoStoker, built to fit the furnace of Firebox Boilers. Requires no side wall or front wall brick work.

DETROIT LOSTOKER

Single retort, side cleaning adjustable plunger feed, Underfeed Stoker, mechanically driven by electric motor, or steam turbine, automatically controlled from steam pressure, water temperature or room thermostat. Compact, easily installed for all types of boilers 50 to 150 horsepower. A great coal saver. *Write for Bulletin 330.*



Detroit UniStoker with Adjustable Feed provides a wide range of coal feed control.

DETROIT UNISTOKER

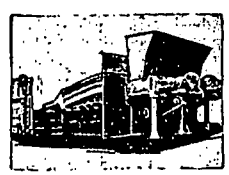
Plunger feed, side cleaning, stoker is available in various sizes for 125 to 250 horsepower boilers. Compact, unit type, has full-housed blower, either motor or steam turbine driven, conveniently mounted at stoker front. Adjustable feed, provides for either manual or automatic coal feed control. Thousands in daily operation. *Bulletin 630.*



Detroit Double Retort Stoker, suited to medium sized boilers with wide furnaces.

DETROIT DOUBLE RETORT STOKER

A multiple retort stoker having two retorts, with the side-cleaning feature. No basement or tunnel for ash disposal is required. Built for heavy service, and high ratings with medium boilers. *Bulletin 430.*



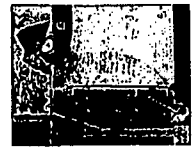
Detroit Multiple Retort Stoker, on inclined stoker with many outstanding features.

DETROIT MULTIPLE RETORT STOKER

Underfeed, rear cleaning stokers for large boilers of high capacities. Adjustment of fuel feed and distribution is provided for each retort. Zoned air for all sections of the fuel bed, may be preheated if desired. *Bulletin 130.*

Listed in bold-face type see advertisers' index pages 226–227

DETROIT ROTOSTOKER



Detroit RotoStoker with Stationary Grates. Ash removal is through doors at grate level.



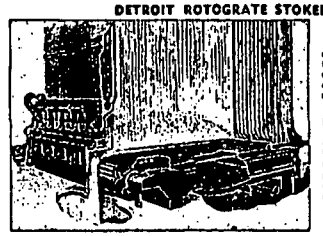
Detroit RotoStoker with Hand Dumping Grates, cleaned by releasing dumping levers at the front.



Detroit RotoStoker with Power Operated Dumping Grates, either steam or compressed air operated.

Detroit RotoStoker is spreader stoker with OVERTHROW ROTORS that distribute the fuel uniformly in the furnace. Fine particles burned in suspension. Coarse coal, burned on the grate with a comparatively thin but uniform fuel bed. Three types of grates shown are available. RotoStokers burn successfully an extremely wide range of fuels without any special preparation. Responsive to fluctuating loads, maintaining uniform steam pressure under automatic control of fuel and air supply to the furnace. Operate with high CO_2, low combustible loss in ash. Little power required for operation. Maintenance costs are negligible. In combination with coal, RotoStokers also successfully burn wood and other refuse. *Bulletin 830.*

DETROIT ROTOGRATE STOKER



RotoGrate Stoker above has six sections as applied to a typical water cooled furnace of a steam generator.

RotoGrate has a CONTINUOUSLY CLEANING FORWARD MOVING GRATE that permits higher burning rates with fuels of either high or low ash content.

An advanced design of spreader stoker with FORWARD MOVING GRATES for large and medium boilers. Fine particles of fuel are burned in suspension and coarse coal, burned on the grate. Screenings or crushed run-of-mine coal are used without grinding or pulverizing. Successfully burns a wide range of fuels, such as the lower grades of Bituminous Coal and Lignites, mined in the Western States, as well as the better grades of Bituminous Coal. Fuels of high ash content are burned with higher burning rates for longer periods. Intermittent cleaning of fires or disturbance of uniform combustion is eliminated by the slow continuous FORWARD MOVEMENT OF THE GRATES that discharges the ash at the front. Combustible content of ash is usually less than two per cent. *Write for Bulletin 6030.*