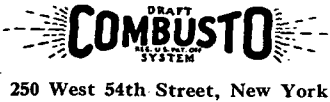


Combustion Specialties Corporation

Manufacturers of

Walter S. Timmis, past president of the AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS has written an extensive report on COMBUSTO Draft System from which the following paragraphs are quoted. (Complete report will gladly be forwarded on request.)



250 West 54th Street, New York

FOR HEATING PLANTS
Saves coal and labor;
maintains even heat
with less draft.

FOR POWER PLANTS
Higher evaporation per
pound of coal eliminates
smoke

Mr. Timmis states, "To secure the most economical results in combustion for heating it is necessary to use the proper amount of air under the fuel bed for the distillation of the gases and the correct amount of air properly diffused, preferably heated and delivered over the fire bed in order to complete the combustion by burning the distilled gases—in brief—an efficient boiler is a gas producer having means for consuming gas produced."

WHAT COMBUSTO IS

To quote Mr. Timmis further, "Combusto is a system carefully studied, tested and developed for each individually different case and provides means for supplying the necessary diffused and heated air (oxygen) over the fire to properly complete in the second stage the combustion begun in the fuel bed by distillation of gases."

UNIQUE AND FUNDAMENTAL REQUIREMENT FOUND IN COMBUSTO

"Perhaps the most important feature of Combusto is the resistance to the flow of air through

the apparatus itself, which is made to equal the resistance of the fuel bed, thus producing a balanced condition above and below and through the fuel bed—a fundamental requirement for correct and economical combustion which is ignored in regular furnace and boiler design.

WHAT COMBUSTO DOES

(See illustration of COMBUSTO equipped plant below.)

"Combusto is of cast iron cellular structure, the air is heated on passing through this structure and is then discharged through a large number of small apertures over the fire bed. The amount of air thus admitted having been carefully computed for the required conditions, the result is practically perfect combustion, which to the user of Combusto results in—

Economy of fuel

Fewer firings

Complete combustion of fuel, hence—

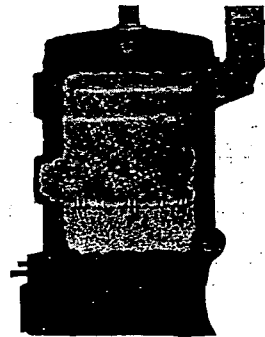
A finer ash and reduction of clinker

Elimination of coal gases

Means for producing a steady even heat."

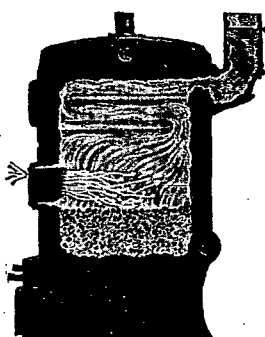
COAL WASTED (Left)

Without Combusto, a checked fire produces no dependable results. The gases that distill from fuel bed are a total loss. Heat can be produced only by speeding up stack draft. This is wasteful and requires frequent attention.



COAL SAVED (Right)

With Combusto, all gases are burned completely with Bunsen blue flame with stack draft continuously checked to minimum. Hence, amount of gas made can be regulated to amount of heat needed by simple adjustment of the ash pit damper.



SPECIFICATION: The following clause adopted since 1916 by one of the largest railways in the United States is suitable as a standard specification in connection with low pressure hot water or heating boilers or warm air plants. "Equip all boilers (warm air furnaces) with Combusto of size recommended by Combustion Specialties Corporation's engineers."

A FEW NOTABLE INSTALLATIONS

Daniel Guggenheim Estate
Clarence H. Mackay Estate
Otto Kahn Estate
George Eastman (Eastman Kodak Co.)

Garford Motor Truck Co.
U. S. Department of Labor
John J. Bausch (Bausch & Lomb)
Firestone Tire & Rubber Co.

Frederick G. Erbe (Yawman & Erbe)
Childs Co., 52 installations
D. L. & W. Railroad, 40 installations
Bank of the Manhattan Co., 26 inst.

G. M. Davis Regulator Company

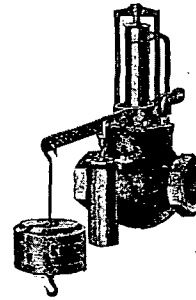
407 MILWAUKEE AVE., CHICAGO, ILL.

Since 1875 Manufacturers of Better Valve Specialties

Davis Piston Type Regulator

For reducing high pressure steam down to any service pressure. Patented inner valve design insures proper regulation regardless of velocity.

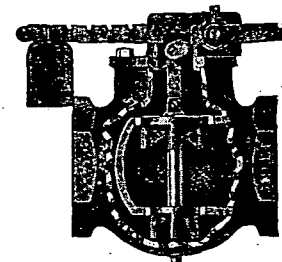
Lever gives visible operation and makes hand testing possible. Oil dash pot insures steady action. Sizes $\frac{1}{2}$ to 14 in.



Davis Piston Type
Pressure Regulator
(Any service pressure)

Davis Back Pressure Valve

The original semi-balanced exhaust line valve for maintaining a given back pressure. Has double seated piston disc—operates noiselessly—requires comparatively small counterweight, patented disc and seat construction prevents sticking. May be used horizontally or vertically. Sizes 2 to 30 in. Angle valves made to order.



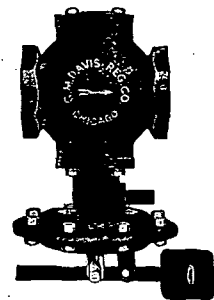
Davis Back Pressure Valve

Davis Steam Trap

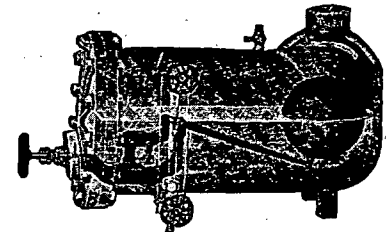
Double cone shaped balanced valves give continuous flow—unusually large capacity—handle any pressure—take care of widely fluctuating load. All vital parts are renewable and quite accessible. Sizes $\frac{1}{2}$ to 3 in.

Other Davis Valves

A 64 Page catalog showing a number of pressure regulating devices not here illustrated will be sent on request. Tell us about your special problems in pressure control—we may be able to be of service.



Davis
Diaphragm
Type
Pressure
Regulator
(Low Service
Pressure)



Davis Steam Trap