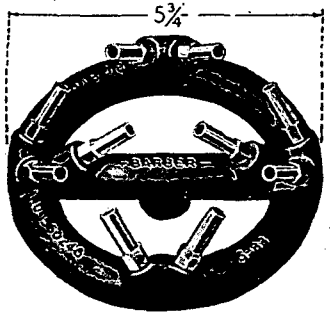
The Barber Gas Burner Company

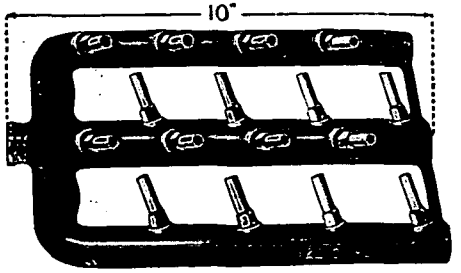
3704 Superior Ave., **Cleveland, Ohio**

Address Michigan Inquiries to THE BARBER GAS BURNER CO., OF MICH., 4475 Cass Ave., Detroit, Mich.

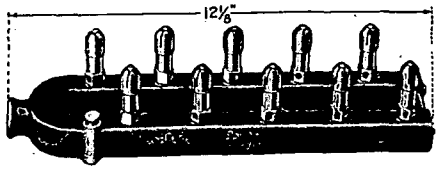
Barber Automatic Jet Gas Conversion Burners, for heating and air conditioning equipment, have a record of high efficiency, for a period of over 20 years, giving continuous satisfaction in many thousands of homes and other buildings in United States and Canada. The exclusive Barber Jet principle of combustion, attaining 1900 deg flame temperature on atmospheric pressure, and other basic advantages of design, have given Barber a permanent place in modern heating and air conditioning practice. Barber Burners for gas burning appliances have been adopted as standards by many appliance manufacturers. Shown here are only a few items from Barber's complete line. Illustrated No. 38A Catalog and Price List furnished on request.



No. S-85 Burner Unit



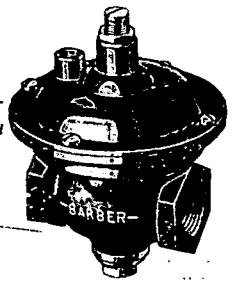
No. U-16 Burner Unit

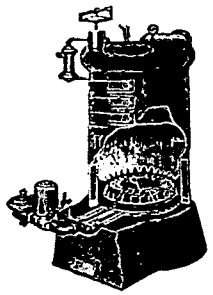


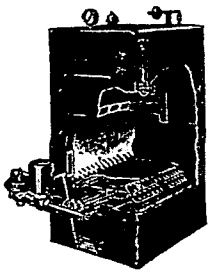
No. C. L-90 Burner Unit

Barber Gas Pressure Regulators A.G.A. Approved

Made in sizes ¼" and up.







Conversion Burners for Furnaces or Boilers

Burners are adjustable as to diameter, on the job, to fit practically all round grate sizes. Also to fit grates of oblong furnaces and boilers. Listed in the *A.G.A.* Directory of Approved Appliances. *Equipped with automatic* controls with motor gas valve, with magnetic gas valve control, with quick acting gas valve control (for buildings equipped with automatic heat control), or in "M" series with manual control.

Barber Burners and Regulators are Adaptable to: Air Conditioning Equipment, High Pressure Boilers (Tubular and Tubeless), Bakery Ovens, Garage Heaters, Coffee Urns, Hair Dryers, Space Heaters, Floor Furnaces, Clothes Dryers, Water Heaters, Confectioners' Stoves, Vulcanizing Machines, Pressing Machine Boilers, Japanning Ovens, Core Ovens, Banana Room Heaters, Other Appliances.

Gas Burner Specialists offering Engineering Department and Laboratory facilities for Gas Burner problems. Consultation invited.

The Webster Engineering Co.

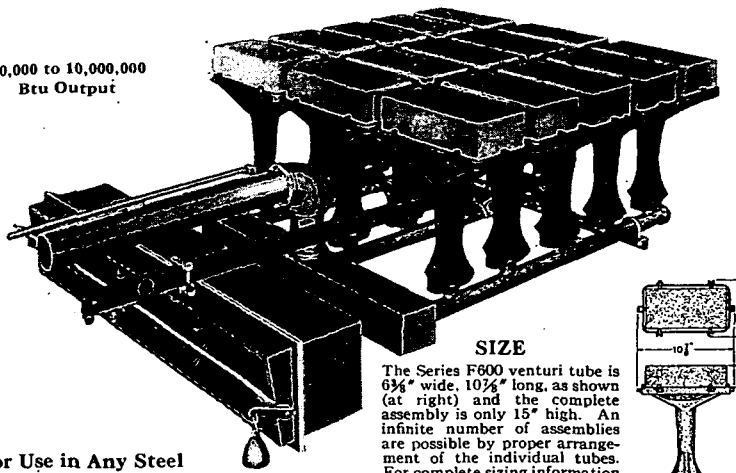
419 West 2nd St., **Tulsa, Oklahoma**

Division of

SURFACE COMBUSTION CORP., TOLEDO, OHIO

WECO-N.G.E. SERIES F600 GAS BURNERS

50,000 to 10,000,000 Btu Output



SIZE

The Series F600 venturi tube is 6⅜" wide, 10⅞" long, as shown (at right) and the complete assembly is only 15" high. An infinite number of assemblies are possible by proper arrangement of the individual tubes. For complete sizing information see *Bulletin F600H.*

For Use in Any Steel Firebox or Sectional Boiler

Improved venturi and greater port area insure much higher capacities at lower pressures.

Unique baffles at the outlet of the mixing tube make possible perfectly even distribution of flame completely around the baffle brick. As a result the maximum flame length is greatly reduced.

Interchangeable grills with multiple ports can be varied to suit the combustion characteristics of various gases. The proper sizing of these grills prevents any possibility of flash back.

In addition to the above major improvements the F600 possesses the same desirable features that made the 600 so popular.

1. Simple installation requiring no expensive insulated combustion chamber and having no furnace radiation loss.
2. Extreme quietness due to low rate of combustion over a large area.
3. Flexibility from infinite number of possible combinations varying both size and shape to meet load and firebox conditions at various gas pressures.
4. High radiant transmission rate due to radiant temperature of the standard firebrick baffles on the top of the burner tubes.
5. Low draft loss because of ample secondary air openings.
6. Plain gas pilots of heat resistant material and of a design that will not allow flame to pull off.
7. Safety pilot applied in a cool zone in a manner that insures perfect direct ignition of the burner yet allowing the the thermal element to cool quickly upon flame failure.
8. Guaranteed vibrationless under all conditions.

CAPACITY OF SINGLE F600 VENTURI TUBE—No. 16 M. T. D. ORIFICE

Manifold Gas Pressure	0.5" W.C.	1.0" W.C.	2.0" W.C.	3.0" W.C.	4.0" W.C.	5.0" W.C.	6.0" W.C.	4 oz	6 oz	8 oz
Input—Cu Ft, 1 hr...	26.5	40.5	60.5	75.0	87.0	98.0	108.0	116.0	143.5	166.5
Output—Sq Ft, St. Rad	81	124	185	229	267	301	331	355	440	510
Output—Boiler H.P...	0.58	0.89	1.33	1.65	1.91	2.15	2.37	2.54	3.14	3.66