

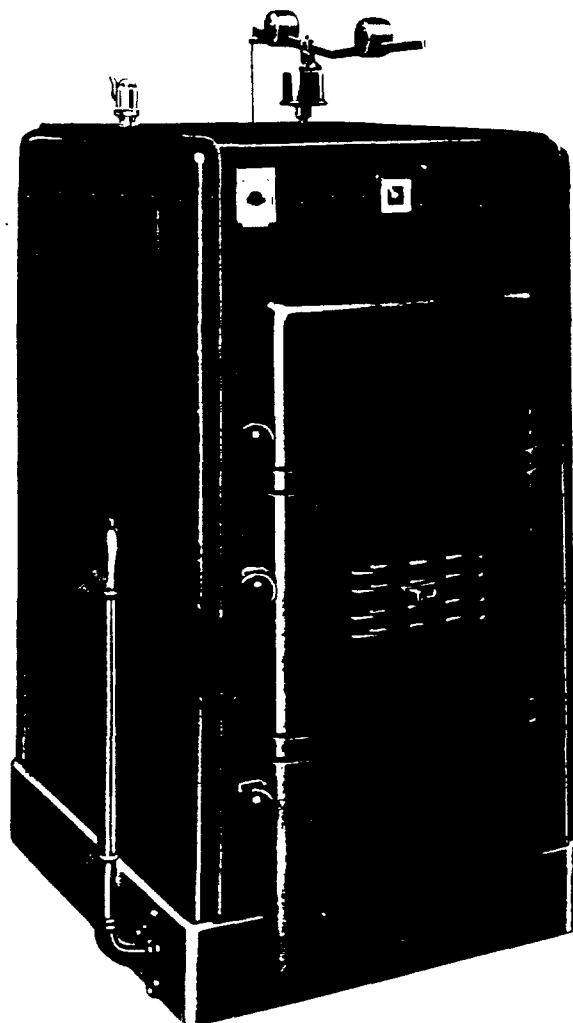
FILE NO. 30-C-1
(March, 1950)

Severn

B O I L E R

by

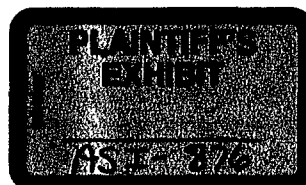
AMERICAN-Standard



- ▶ for coal
(hand fired or stoker)
- ▶ for oil
- ▶ readily adaptable to gas
- ▶ durable cast iron
construction

AMERICAN-Standard

First in heating . . . first in plumbing



17234

FILE NO. 30-C-1
(March, 1950)

THE UNIVERSAL **BOILER**

THE SEVERN BOILER leads in appearance, design and advanced features. The skill of capable engineers and industrial designers combined to produce it. The internal construction is scientifically correct and properly balanced to assure more than average heating power, quick heat-making and low operating cost. Many refinements and improvements are included for extra convenience and labor-saving. A handsome jacket in the new Forge Red color just perfected by American-Standard, together with its streamlined doors, give the Severn its striking appearance.

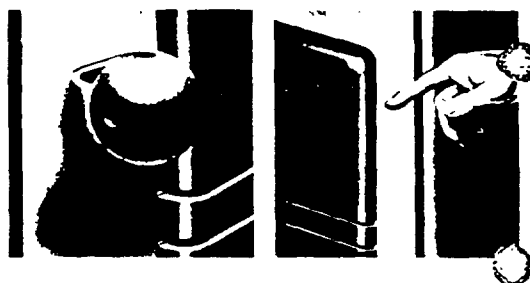
The Severn is made for small to medium sized homes. It's a universal boiler, specially designed to burn the fuel used with high efficiency and economy. With all its quality features it is moderately priced, and merits the careful consideration of homeowners and builders who want to heat their homes more abundantly and with less operating cost.

NEW FORGE RED FINISH

The attractive jacket in the new Forge Red finish is both distinctive and durable. A warm shade of red, this new jacket finish has a smart hammered effect, and blends with almost any color scheme. The jacket surface is easy to keep clean and new-looking with a minimum of effort, yet it is hard and unusually resistant to scratches and marring.

MODERN REFINEMENTS

The Severn Boiler includes many improvements for convenience and good appearance. For example, the grate shaker is located on the left side of boiler, out of the way, and has a long detachable handle that eliminates stooping, makes shaking easy and quick. Water Column on steam boilers is located on the side, and the glass is easily visible through opening in jacket. A removable panel provides convenient access when necessary. Smooth fitting doors all have concealed hinges, which carry out the streamline effect. The door handles are ball shaped and air cooled, adding a unique touch to the whole ensemble. All doors are protected against warping and damage by cast iron baffle linings.



Close-up of streamlined door showing ball shaped handles. Hinges are concealed.

IMPROVED STYLING

The handsome jacket of the Severn was styled by industrial designers who have an intimate knowledge of home requirements. This fine boiler combines simple beauty and utmost utility. It will harmonize with practically any surroundings.

HEAVY INSULATION

The Severn has a thick layer of insulation between the jacket and the boiler. This effectively prevents heat loss and helps to save fuel.

BILTIN TACO WATER HEATER

When specified, hand fired steam and all stoker fired Severn Boilers can be equipped at small extra cost with a Biltin Taco Water Heater, which will supply abundant hot water for domestic use while the heating system is in operation. Oil boilers and oil heating units can also have similar heaters for supplying hot water the whole year 'round. These are described elsewhere.

Luxury and economy in home heating

MODERN DESIGN ADVANCED FEATURES HIGH EFFICIENCY

IRCO AUTOMATIC DAMPER REGULATOR—on Coal Boilers; both Steam and Water; controls dampers to maintain desired temperature. An economy factor.

AMPLE STEAM SPACE—assures dry steam for efficient and noiseless heating.

HANDSOME JACKET—of modern design finished in the new Forge Red Color. Helps keep up the basement and looks attractive.

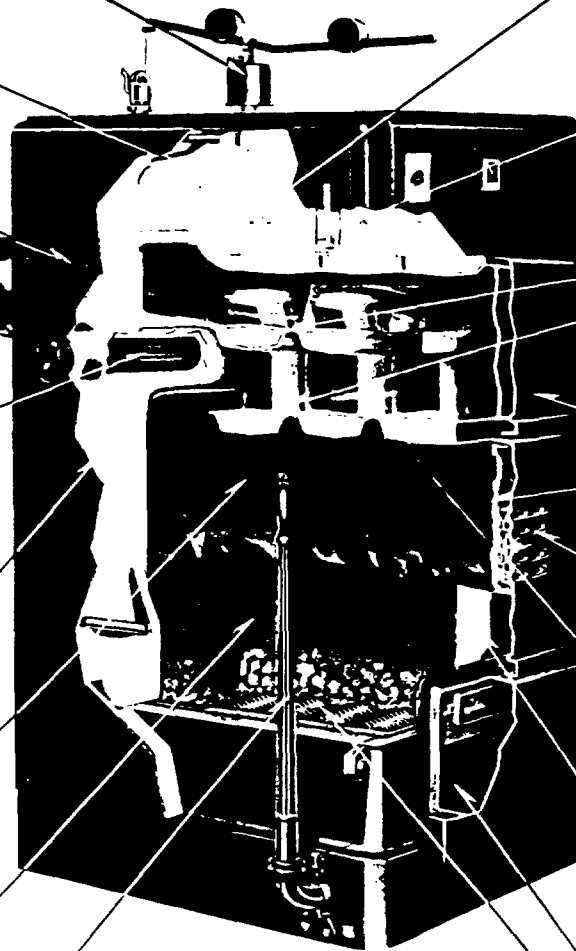
MILITIN TACO WATER HEATER—furnished at small extra cost . . . On Coal (Hand Fired) steam and all Stoker Boilers Tank Type Taco provides or hot water while heating system operates; on Oil Boilers and Oil Heating Units it supplies year 'round hot water. Taco Tankless Water Heater, which requires no storage tank is also available on Oil Fired Boilers.

HEAVY INSULATION—thick layer of insulating material effectively prevents excessive heat loss . . . helps save fuel.

HEATING SURFACE—large area and so designed to assure maximum heat absorption.

FIRE BOX—Scientifically proportioned and air tight to assure complete, economical burning. Also provides correct combustion space when oil or stoker fired.

GRATE SHAKER—located at side, out of the way, has long detachable handle to eliminate stooping.



EXTRA LARGE NIPPLES—extend below water line and insure rapid circulation of boiler water and quick heat transfer . . . Also permit use of an internal water heater without extensive outside piping connections.

WATER COLUMN—on steam boilers located on side . . . Easily accessible through removable panel.

TIGHT JOINTS—machine ground surfaces of doors and sections assure tight iron to iron contact, and prevent wasteful infiltration of air, the escape of dust and odors, and short circuiting of hot gases in flue passages.

FIRE AND CLEAN-OUT DOORS—have cast iron baffle linings to protect them against warping and damage.

STREAMLINED DOORS with concealed hinges—sturdily built for hard usage. Doors have ball shaped handles . . . air-cooled . . . as shown in other illustrations.

EFFECTIVE FLUE PASSAGES—absorb maximum heat from hot gases, which travel twice the length of boiler through a double gallery of heating surface.

WATER CONTENT—relatively small amount of water to be heated in waterways permits rapid heat transfer and quicker pick-up.

GRATES AND ASHPIT—sturdy grates correctly designed for easy shaking with minimum loss of coal. Ample grate area for efficient burning. Large ashpit and door for easy removal of ashes.

Note: A built-in McDonnell-Miller Low Water Control is optional equipment on oil or stoker fired steam boilers at extra cost. Affords protection automatically against a too low water line.

BY **AMERICAN-Standard**

Back View
Oil Fired

OPENING BOTH SIDES

Center Section — With Tankless Heater Other Center Sections are similar except for Taco opening and have same dimensions.

Boiler No.		Number and Size of Tappings, Inches		Dimensions, Inches					
Steam	Water	Flow	Return	A	B	C	D	E	L*
S-17	W-17	1-3 1-4	2-3	11¾	7¼		17	4¼	23¾
S-21	W-21	1-3 1-4	2-3	15¾	7¼		21	6¼	27¼
S-25	W-25	1-3 1-4	2-3	11¾	15¼		25	8¼	31¼
S-29	W-29	1-3 1-4	2-3	15¾	15¼		29	10¼	35¼
S-33	W-33	1-3 1-4	2-3	19¾	15¼		33	12¼	39¼
S-37	W-37	1-3 2-4	2-3	15¾	23¼	16	37	14¼	43¼

*On Hand Fired Boilers add 12½ in. to length for Smoke Hood. On Oil and Stoker Fired, add 2 in. for Smoke Collar.

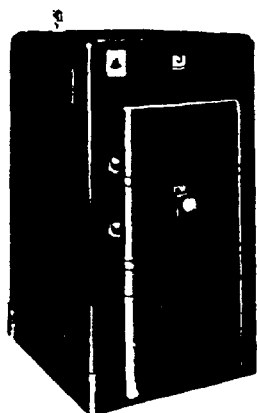
Diagram 1: Cross-section of a boiler with a float valve assembly at the top. The float valve is in the closed position, allowing water to fill the boiler.

Diagram 2: The float valve assembly is shown with the float ball rising to the 'BLOW OFF' position, indicating that the water level is high.

Diagram 3: The float valve assembly is shown with the float ball rising to the 'BLOW OFF' position, indicating that the water level is high.

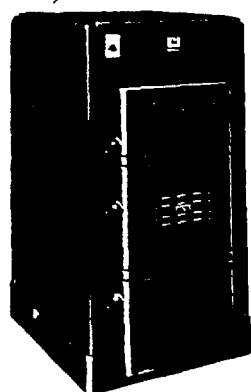
Diagram 4: The float valve assembly is shown with the float ball rising to the 'BLOW OFF' position, indicating that the water level is high.

Location on Boiler	Size of Tapping	Steam Boilers	Vapor Boilers	Water Boilers
"A" & "B"	1"	External Low Water Control or Feeder	External Low Water Control or Feeder	"A" Alternative Water Limit Control "B" not Used
"C"	2½"	Internal Low Water Control	Internal Low Water Control	Water Limit Control
"D"	1½"	Pressure Control	Vapor Control	Not Used
"E"	1"	Water Temp Control	Water Temp. Control	Water Temp. Control
"F"	1¼"	Safety Valve	Safety Valve	For Relief Valve
"H"	2½"	Bilun Taco Water Heater	Bilun Taco Water Heater	Bilun Taco Water Heater
Smoke Pipe		Stack Control	Stack Control	Stack Control



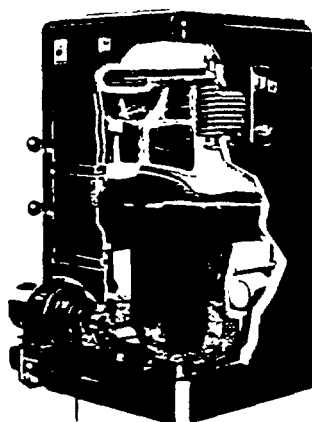
Designed to operate with high efficiency and economy.

SEVERN OIL BOILER



Dependable, fuel-saving performance. Stokers may be installed in front or either side.

SEVERN STOKER BOILER



Cutaway View Showing Biltin Taco Tankless Water Heater.

SEVERN ARCOFLAME OIL HEATING UNIT

AUTOMATIC FIRING

EXCELLENT FOR OIL OR STOKER AND READILY ADAPTABLE TO GAS

Because of special care and ingenuity in designing, the Severn Boiler is also well adapted for automatic firing with oil, stoker or gas. Highly efficient performance with any good oil burner or stoker can be expected. Burners may be installed in front or rear, and, due to special openings provided, stokers can operate from front or either side. The illustrations at left show the external appearance of Severn Oil and Stoker Boilers. Internally they follow the same general design as shown in the cutaway views. The Severn also offers the advantages of efficient automatic gas firing, with the Stanflame Conversion Burner or other quality conversion burners.

SPECIAL COMBUSTION CHAMBER

The Heat Lib-O-Rator Refractory Combustion Chamber, specially designed for the Severn Oil Boiler, is available at slight extra cost. This is a factory molded chamber which helps rapid and complete combustion and eliminates the labor and expense of building an ordinary hand-made brick chamber.

BILTIN TANK TYPE OR TANKLESS WATER HEATER

On Severn Boilers for automatic firing, a Biltin Taco Water Heater is available at small extra cost. The Tank Type Taco is connected to a storage tank, and the Tankless Taco (on oil-fired boilers and oil heating units) is self-contained and requires no storage tank. Both will supply ample hot water for domestic use, plus all year 'round hot water when oil fired.

PROVISION FOR ALL CONTROLS

All Severn Boilers for automatic firing have necessary tapping arrangements for connecting the conventional controls required. These various tappings are shown under "Control Applications" on another page. This is a further step to simplify installation of these boilers.

SEVERN ARCOFLAME OIL HEATING UNIT

This is an efficient and fully coordinated Boiler-Burner Unit consisting of the Severn Oil Boiler and flange-mounted Arcoflame Oil Burner. Both are specially designed to work as a team — to give the best possible heating comfort and economy. In the Severn Oil Heating Unit the Heat Lib-O-Rator Refractory Combustion Chamber is regular equipment.