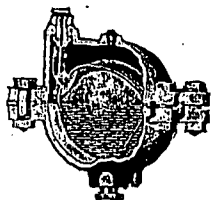


GET RID OF AIR ACCUMULATIONS IN PIPE LINES...



a BIG
Trouble Saver that
Costs You LITTLE!

When air lodges at high spots in pipe lines, it reduces the effective area of the pipe, creates a friction head, lowers pumping capacity, and may result in serious water hammer!

Simplex Air Release Valves bring you a sure, efficient cure for these difficulties... venting air automatically before it can cause damage.

The Simplex Air Valve is easily installed... positive in action... simple in capacity. Standard valves for pressures up to 250 p.s.i. ... special valves for pressures up to 800 p.s.i. Thousands have been in successful use for over 30 years.

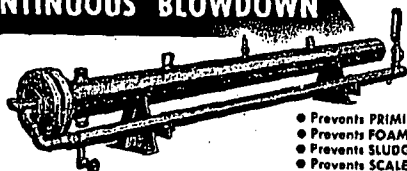
Write for free bulletin to Simplex Valve & Meter Co.,
6780 Upland Street, Philadelphia 42, Pa.

SIMPLEX
VALVE AND METER COMPANY

IT'S SIMPLEX
IT'S ACCURATE

HENSZEY

PACKET-TYPE Automatic
CONTINUOUS BLOWDOWN



- Prevents PRIMING
- Prevents FOAMING
- Prevents SLUDGE
- Prevents SCALE

(with simple chemical treatment)

This compact self-contained unit is completely assembled. Can be installed by your own men in hours. It provides completely automatic control of boiler water concentration regardless of variations in boiler load. This is accomplished WITHOUT HEAT LOSS. Maintain clean efficient boilers for substantial savings in fuel, equipment and manpower.

Also...

Standardized or
special units for
ALL CAPACITIES.

HENSZEY

Consult your nearest HENSZEY
Representative for FREE Blowdown
Chart or write to:
HENSZEY COMPANY
Dept. D4 • Watertown, Wis.

CONTINUOUS BLOWDOWN and BOILER PLANT SPECIALTIES
Boiler Feed Regulators • Distillation Systems • Heat Exchangers • Feed Water Meters
Flow Indicators • Proportioning Valves
Also MILK EVAPORATORS and PREHEATERS



My Biggest
Boner

I GOT MY START in hand plants without automatic controls. In those days every chief engineer was a safety-valve wart. Every time we popped a tea the chief came flying into the boiler room, on the double. We were sure to catch it—was more valuable in engine cylinders than in the air.

After I got my license I landed a shift-engineer's job. The plant was a beauty with completely automatic controls for stoker, fan and boiler water level. She was a honey to run and I soon forgot the boiler had safeties.

One night my fireman called me into the boiler room to tell me the water level was acting funny. Every time our load shot up the level almost dropped from sight. When load fell off, level went back to normal. I put my weights on feed-pump governor to jack pressure; it went from 180 to 225 psi.

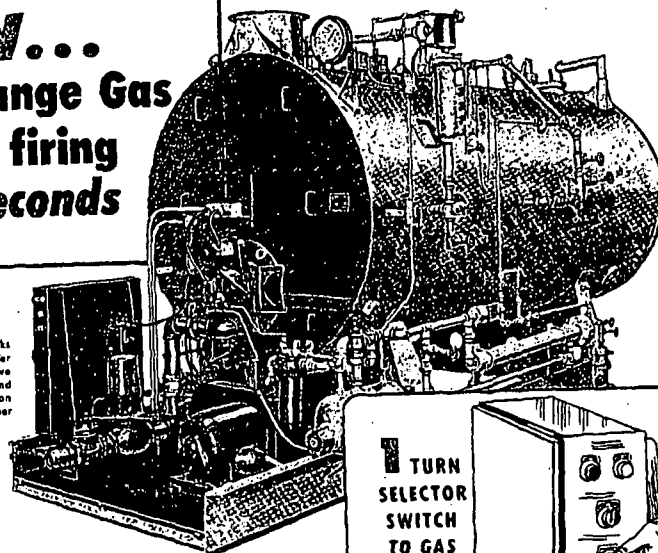
Climbing around the boiler drum I checked the feed valve but they seemed OK. Something told me we were in trouble so I connected a steam gage to boiler vent line. It showed pressure over 240 psi on heavy loads. Drum gage read only 165 psi.

I tried lifting safeties by hand but they wouldn't budge. I yelled to the fireman and we shut the boiler down in a hurry.

After boiler cooled we found safeties stuck shut, steam-pipe line plugged, and nonreturn valve jammed in a half-open position. Right then and there I learned that you can't forget ordinary safety practices when boiler is on automatic controls. They do a fine job but the engineer must check safeties every day, blow out steam-gage line and check other parts of boiler at regular intervals.

ANY REXTON Montreal, Canada

NOW... Interchange Gas and Oil firing in 10 seconds



Cleaver-Brooks
Model 18 Steam Boiler
Equipped with Exclusive
Combination
Gas and/or Oil Burner

**TWO, simple
motions eliminate
time-consuming
change-over**

Now you can use oil or gas at the flick of a switch! This exclusive new Cleaver-Brooks development permits changeover from oil to gas or vice versa in only 10 seconds.

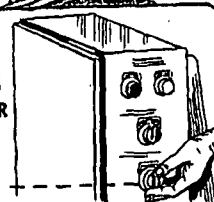
That's because the Cleaver-Brooks Combination Gas and/or Oil Fired Boiler operates on gas with the oil burner in place. Simply turning a selector switch on the control panel to either gas or oil completes the entire changeover — and in 10 seconds or less!

For gas users in all parts of the country — and in particular where local requirements demand immediate changeover — this additional fuel flexibility can be an important factor in determining your overall operating economy.

Second conversion, like 4-pass construction, self-contained and guaranteed 80% efficiency, is another "plus" feature pioneered by Cleaver-Brooks. It demonstrates Cleaver-Brooks' continuing effort to bring steam users even greater flexibility and reduced operating costs.

If you are considering simplifying your present boiler plant, consider Cleaver-Brooks Combination GAS and/or OIL Fired Boilers. Sizes 15 to 500 h.p. — 15 to 250 p.s.i. Write for complete literature.

1 TURN
SELECTOR
SWITCH
TO GAS
OR OIL



2 TURN OFF ONE FUEL
LINE AND OPEN THE OTHER



Cleaver-Brooks

Originators of the
Self-Contained Steam Boiler



CLEAVER-BROOKS COMPANY
Dept. D, 301 S. Kettle Ave., Milwaukee 19, Wis., U.S.A.
Cable Address: Cleav-Bro-Milwaukee
Builders of Equipment for the Generation and
Utilization of Heat • Steam Boilers • Oil and Steam
Turbine Heaters • Distillation Equipment • Oil and
Gas-Fired Conversion Burners