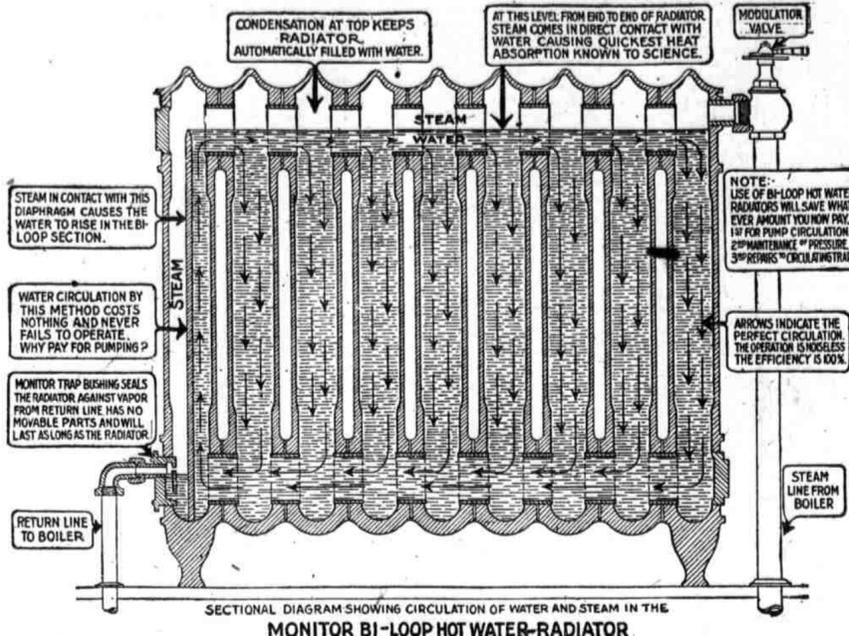


# GOOD-BYE HEATING TROUBLES

- good-bye fuel-waste and its excessive, unnecessary cost;
  - good-bye shivering hours of waiting for radiators to heat-up to useful temperature;
  - good-bye rooms that are too cold in winter and too hot in the spring;
  - good-bye half-hot radiators that make but little impression on frigid atmosphere;
  - good-bye hissing air-valves, noisy steam pipes, leaking hot water radiators;
  - good-bye nauseous, vile-smelling, gas-charged air from air valves;
  - good-bye pumps and all other mechanical devices (and their cost and trouble) for expelling air from radiators and steam pipes;
  - good-bye boilers that crack or explode, leaving you heatless — almost invariably choosing the coldest days of mid-winter for their defection;
- In fact, you can wave a permanent Good-bye to all the exasperations ever developed by any other system of heating



SECTIONAL DIAGRAM SHOWING CIRCULATION OF WATER AND STEAM IN THE MONITOR BI-LOOP HOT WATER RADIATOR

In operation, this radiator is 95 per cent. filled with water and the remaining space with steam. The steam heats the water in the radiator, producing the quickest heat absorption known to science. It also heats the metal diaphragm or partition in the bi-loop section, causing the water to circulate within the radiator; each radiator thus becomes a separate circulating unit. Within 20 minutes after steam enters the radiator, complete circulation is established and the radiator is hot all over. By means of a by-pass valve any bi-loop radiator can be emptied of water separately.

## WHEN YOU INSTALL THE MONITOR BI-LOOP MODULATED HOT WATER HEATING SYSTEM (Patented)

Get the Bi-Loop 1919 Catalogue

### Most Heat—Least Fuel

If we can prove that you can **SAVE 25 per cent. of the fuel bill** and practically **all of the repair bill** and get satisfactory heat under all conditions, wouldn't it **pay to investigate** the Monitor Bi-Loop Modulated Hot Water Heating System?

This system is revolutionizing the heating industry wherever introduced.

### Like All Great Things

#### It Is Extremely Simple

In the Monitor Bi-Loop Hot Water Heating System, the water is heated **in each radiator** by steam. You thus secure the very desirable **quick action of steam** and the **mild, healthful heat of hot water**. In the Monitor Bi-Loop Hot Water Radiator (patented), steam is brought into direct contact (in each radiator) with the water, the operation being **absolutely noiseless**. Within twenty minutes after steam enters the radiator, complete circulation is established and the radiator is hot all over. Each radiator thus becomes a **separate circulating unit**. Many evils, heretofore believed to be indispensable conditions of heating systems, are entirely eliminated from the Bi-Loop system. Instead, we have the **certain, costless** operation of the law of gravitation and the strong natural affinity of steam for water.

### No Guess-Work—It Works

The Monitor Bi-Loop Modulated Hot Water Heating System is no untried experiment. It is working out exactly as claimed (or better) in hundreds of buildings, including **churches, apartment houses, office buildings, factories, homes, hospitals**, and other institutions throughout the country. It is also solving the problem of hot water

heating from a central plant for **groups of buildings**, and for **high buildings**, such as **modern hotels and office buildings**.

### Owners' Actual Experiences

By actual experience the Monitor Bi-Loop Modulated Hot Water Heating System produces **more heat** from the same amount of **fuel** or the **same heat** from **less fuel**.

By actual experience "Monitor Bi-Loop" repair bills are practically **nothing**.

By actual experience the Monitor Bi-Loop Hot Water Heating System provides an even, satisfactory, controllable temperature in all parts of any building under all conditions.

This experience has been gained and is being gained by the **owners** of Bi-Loop Hot Water Heating installations, by the people most vitally interested, by those who have pinned their faith to and invested their money in the Bi-Loop System. They have no "axes to grind" beyond getting the **most satisfactory heat at least expense and trouble**.

### Tested by Experts

The Monitor Bi-Loop Modulated Hot Water Heating System has been tested in every conceivable way by heating engineers, professors of mathematics and physics, state boards, hospital boards, building committees and practical firemen.

These critics are disinterested, cold-blooded, searching, authoritative. Here is what they agree upon regarding it: "The Monitor Bi-Loop Modulated Hot Water Heating System possesses all the **advantages of heating by steam, vapor, vacuum and every other hot water system and eliminates their defects**; that it operates with unprecedented fuel-economy and maintenance effort; that its cost for repairs is practically nil; that it

is absolutely 100 per cent. efficient for high and large buildings, as well as dwellings; that it accomplishes the elimination of air without the aid of a pump or any other mechanical device; that it is easy to install and is easiest to operate; that it adds measurably to the investment value of the building in which it is installed and considerably cuts down the overhead charges."

### Bi-Loop Hot Water Radiators Correct Defective Steam Systems

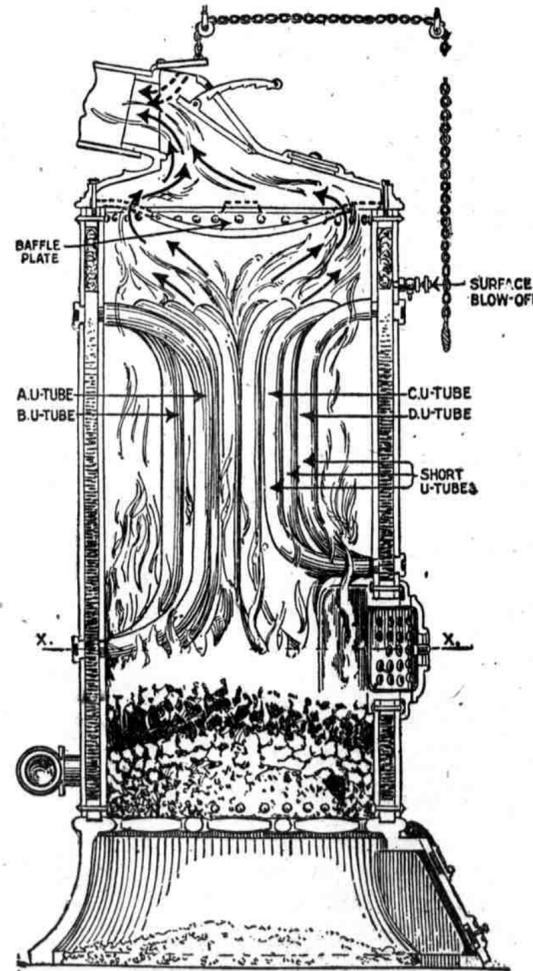
By substituting Bi-Loop Hot Water Radiators for the old steam radiators, an inefficient steam system may be converted into a highest class hot water system. The case of the Lancaster General Hospital (Lancaster, Pa.), is a notable example. They had an elaborate steam heating system in operation. But it was impossible to maintain an even and adequate temperature. The management retained the old boilers and substituted Bi-Loop Hot Water Radiators for the old steam radiators and, during the coldest winter this section has known (1917-18), a perfectly even, satisfactory temperature was maintained throughout the big structure without difficulty and with considerable saving of fuel.

### Ask for Proof

But don't accept our wonderful claims without question. Ask Bi-Loop owners. We have hundreds of testimonials—write for those that bear upon your **own** heating problem.

### Get the Bi-Loop 1919 Catalogue

Look it over, then **ask your heating man to study it carefully**. Don't put off this important matter until every heating contractor and fitter is swamped with business. Attend to it **NOW** and get it off your mind. If you want an economical, scientifically correct, easily operated heating system you can have it. It's up to you.



THE MONITOR "U" TUBE BOILER

A Monitor "U" Tube Boiler is so made that it cannot crack nor explode. **NO DANGER** of having the heating plant out of commission in mid-winter. It is the most powerful steam, or water-heating boiler made. It is for high- or low-pressure. Less fuel is required to produce and maintain steam than with any other pattern. Its life is longer, repair expense practically nothing, and it requires the least attention of any boiler now offered for sale anywhere. Monitor Boilers have been in use as long as 25 years without needing a single repair.

### Mail This Requisition Now

Monitor Bi-Loop Radiator Co.,  
Lancaster, Pa.

Send me your latest Catalogue. It is understood that this request involves me in no obligation whatsoever.

Name .....

Address .....

City .....

State .....

**Monitor Bi-Loop Radiator Co., Lancaster, Pa.**  
Philadelphia Office, 408 Finance Building (South Penn Square); or, ask any Progressive Steam Fitter