

# THE EXHAUST IS USED

HOUSE HEATED BY MEANS OF  
HOT WATER.

A SUCCESSFUL TEST OF MR.  
YARYAN'S INVENTION.

The Problem of How to Utilize the  
Exhaust From Electric Light  
Engines is Solved—Description of  
the Plant.

Homer T. Yaryan has practically  
solved the problem of heating resi-  
dences by means of hot water. He  
conceived the plan now being experi-  
mented upon several months ago. Yes-  
terday a fire was started in the Floyd  
street station, and the pipes were  
tested. Everything worked surpris-  
ingly well.

Electricians are especially interested  
in the new venture, and a large num-  
ber have visited the station during  
the past week.

Mr. Yaryan's device is a simple one.  
The station supplies houses one mile  
away circulating water through  
pipes under a pressure of 40 pounds.  
Connections are made with houses by  
taking a water tap just as is done with  
water pipes, and is turned into the  
hot water system or any other  
mode of heating that has been used in  
the house. Where a place has been  
heated by an ordinary hot air fur-  
nace, the latter is undisturbed beyond  
the coils of pipe in the cold  
air line. This alone is a triumph, as  
any system that has been used is not  
tampered with.

When the water has passed through  
the coils and given up its heat, it re-  
turns to the station to be reheated,  
and sent again upon its mission.

## A Complete Loop.

The pipe line is a complete loop, be-  
ginning and ending at the station.

Attached to the latter is a tank 15  
feet high and 30 feet in diameter, hold-  
ing 80,000 gallons of water. Its func-  
tion is to take the exhaust from the  
electric light engine during what is  
called the "maximum load." It be-  
gins at 4 p. m. and ends at 10:30 p. m.  
During that time the engine operates  
through a system of coils, inside the  
tank, heating the water to a boiling  
temperature by the time the engine is  
shut down.

The tank then contains 80,000 gallons  
of boiling hot water, which is circu-  
lated by the pump during the succeed-  
ing eighteen hours, returning to the  
tank cooled off by surrendering its  
heat to the houses on the line. Should  
the exhaust from the engine prove in-  
adequate to heat all the houses by ex-  
treme cold weather, enough live steam  
is added to supply the deficiency.

In connection with its electric light-  
ing feature, the station has a storage  
battery which is charged while the en-  
gine is in operation. It furnishes light  
during the "minimum period," which  
is from 10:30 p. m. to 4 p. m. After  
10:30 p. m. during breaks the still gas of  
night is used at the station save the measured  
strokes of the pump. Two men oper-  
ate the plant, one during the day and  
the other at night.

## Worked as a Test.

To-day the station was worked sim-  
ply as a test. Water was sent through  
the entire line, a distance of 4,300 feet,  
with a loss of 10 degrees. The fluid  
left the station at 208 degrees and re-  
turned at 198 degrees. A large number  
of West-End residents are having  
their houses connected with the line,  
among whom are: J. F. Zahm, Irving  
B. Hett, C. J. Walding, Wm. Mervin,  
J. E. Bailey, H. P. Yaryan, John Kin-  
nan, John Berdan, A. M. Woolson, Ed.  
Farragardner, D. C. Shaw, F. J. Hoag  
(two houses), James Melvin, and St.  
Mary's church.

The heat produced is of an exhilar-  
ating nature, and costs only what the  
raw coal sells for. The cheapest of  
coal is used in the station, and by  
means of a remarkable smoke consumer  
the tall chimney appears super-  
fluous. It is Mr. Yaryan's intention  
to build other stations as fast as the  
demand for hot water increases. This  
he avers is better than having one  
large plant, as it obviates the necessity  
of laying large pipes.