THE HOLLY SYSTEM OF STEAM-HEATING.

Will Rochester Try It?—Prominent Business Men Discussing the Subject—How it Operates.

A meeting of prominent gentlemen desirous of information regarding the Holly System of Steam-Heating for cities was held last night in the office of Burt Van Horn, Collector of Internal Revenue, Powers's Block. A reporter for the UNION was present.

Dr. D. F. Bishop, President of the Holly Company, came down from Lockport to explain the system and all connected with it. Previous to the arrival of Dr. Bishop, the assemblage discussed the subject in a general way as far as understood. E. H. Cook said he had entertained a fear that the difficulty of preventing condensation in the pipes would be fatal to the idea, but recently he became convinced that injurious condensation had been obviated.

When Dr. Bishop came in he related the history of the system in these points of interest to the public, and answered all questions proposed. The company of which he is President has been in existence two years. Last year the first attempt to heat houses in general by the steam system was made in Lockport, where the company put up two boilers 5 by 16 feet, and from Sept. 9th to June 24 supplied sixty houses with heat to a degree satisfactory to the occupants. They laid three miles of three inch wrought iron pipe, but did not induce all who live along the line to try it at first. The result of last winter's experiment was so satisfactory that all the residents on the line are now asking for the privilege of using it. Last year it was only supplied to dwelling houses, but now they are connecting their pipes with stores. The longest distance from the boilers to which they supply steam, is a mile and a third, and at that distance a pressure is maintained that runs an engine as well as if near the boiler. The pressure at the point of consumption is regulated by a reducing valve and metre, by which the steam can be reduced at will from sixty pounds in the main to any lower degree desired. The Doctor had doubts concerning the success of the system until the invention of the metre alluded to, which has been perfected within a week or two; since then every doubt has vanished.

The pipe is laid in a trench dug four or five feet deep. In the bottom of the trench a board is placed, on top of which tile is laid to secure perfect drainage. Above the tile the pipe is placed, having first been wrapped in non-conducting material—asbestos, hair cloth, one coat of porous and another of non-porous paper, wound with copper wire. It is then placed in wooden pipes in a way to secure air spaces between the steam pipes and wooden covering, and next laid over the tile. In the pipe laid at Lockport no imperfection has been found since it was put in use. In a test made to ascertain the time required to get up steam and send it to a distance at working pressure, a fire was started under the boiler, and in an hour and twenty-four minutes steam was at such a pressure that in four minutes from the time it was let on from the boiler to the main, it worked an engine a mile and a third distant. The pipe in the ground is provided with "junction boxes" containing sleeve joints that allow for contraction and expansion. The junction boxes are situated 100 feet apart, and from them lateral pipes extend that are tapped to get a supply of steam, the main pipe remaining intact. At the junction boxes, any water that condenses in the mains accumulates and is carried by the steam to the buildings, where, when the pressure is reduced, it is re-vaporized and goes to the radiator as steam. When the steam is wanted for an engine it is taken from the main by a pipe so situated that no water enters, while that for heating draws off the water. The Company have twenty-nine claims in their patent which is for the combination. The junction box is patented, also the trap by which steam alone is supplied to engines. The combination of the boiler house, street main expansion box, radiators, metres, &c., is also patented.

The expense of laying the pipe and necessary valves &c., is found to be $1.40 a foot, at least the Company will lay it for that. It is not yet long enough in use to enable them to say what the exact expense of heating by it is. But from present experience they are confident that the cost is not more than what is required for the fuel heating by any system now in use, such as stoves, individual boilers &c.

The following table of comparison, prepared by the Holly Company, shows their views of the advantages of their system over others:

EXPENSES OF THE FURNACE SYSTEM.

Inasmuch as there is no economy in estimating more than a single dwelling, we will state the matter thus:

One furnace will cost	$275 00
One consumer will use 10 tons of coal at $5.00 per ton	$ 50 00
Depreciation and repairs, 10 per cent. on investment	27 50
Five cents per day for attendance	11 00
Interest 7 per cent. on investment	19 25
Unreduced insurance	5 00
Total	$113 75

EXPENSES OF INDIVIDUAL STEAM SYSTEM.

Boiler and fixtures	$200 00

RUNNING EXPENSES.

12 tons coal at $5.00 per ton	$ 60 00
Depreciation and repairs	40 00
15 cents per day for attendance	54 00
7 per cent. interest on investment	56 00
Cost of unreduced insurance	5 00
Total	$197 00

Comparison of the Holly District system with the furnace and individual steam systems, all reduced to a single consumer:

HOLLY DISTRICT SYSTEM WITH 400 CONSUMERS.

7 per cent. interest on fixtures, $200	$ 14 00
2 " depreciation and repairs	4 00
Heat bills from company	46 00
Total cost per season	$ 64 00

HOLLY DISTRICT SYSTEM, 1,000 CONSUMERS.

7 per cent. interest of fixtures, $200	$ 14 00
2 " depreciation and repairs	4 00
Heat bills from company	39 80
Total cost per season	$ 57 80

FURNACE SYSTEM.

Total cost per season	$113 75

INDIVIDUAL STEAM SYSTEM.

Total cost per season	$197 00

They are putting in the apparatus for Lockport landlords, who pay ten per cent on the cost of the apparatus for the steam. Sixty to eighty per cent of heat is lost through ordinary stove-pipes and chimneys. By burning the same amount of fuel through one chimney upwards of fifty per cent. of this waste can be saved. Instead of heating a large boiler in one's house, (to do which economically, the boiler should be worked to its utmost capacity,) by turning on a valve steam is at once let on or cut off, and no man is required to look after furnaces, &c. The system can, at slight expense, be attached to radiators, and steam-pipes now in use. It can be used for heating by direct or indirect radiation, and the condensed water resulting may be used for domestic purposes.

We have here presented the chief features of the system as explained by the President of the Holly company. Every person of intelligence will form his own opinion of its merits. The cities of Auburn, N. Y., and Springfield, Mass., will shortly have experience with it, as works have been constructed to heat those cities by the system. The Rochester gentlemen intend to investigate the idea further.