

More About Heating Cities by Steam.

A few months ago the Lockport papers were bristling with information in reference to a magnificent plan, devised by Mr. Holly, for heating the city with steam. The manifest advantages of this scheme were unfolded at length in these columns, and Mr. Holly was urged to push his enterprise forward as rapidly as possible in the interest of shivering humanity. Nothing more was heard about the matter for some weeks, until an announcement appeared that a stock company, under the gorgeous title of "The Holly Steam Combination Company, Limited, for the Purpose of Supplying Steam for Heating, and Doing All the Various Machine Labor of Cities and Villages, Domestic and Mercantile Manufacturing," &c., had been formed in Lockport, with a view of carrying out Mr. Holly's plan. A book has also been published by Holly in reference to this subject, from which the following information is extracted :

In cities or towns of from 3,000 to 8,000 inhabitants, where the main business portion does not exceed one-half mile square, one set of boilers, located near the centre of the place, with pipes leading out in four directions, will do all the work. If the city is one mile square, four sets of boilers will be necessary. The main pipes that leave the boilers will be 4-inch, and diminish to 3, 2½, 2, 1½ and 1-inch at the extreme end away from the boilers, the mains of 4 inches continuing as the use along the lines may demand. The main pipes are placed about four feet below the surface of the earth. The iron pipes are first covered with asbestos, and then put in a wood pipe four inches thick, and leaving a space for confined air between the asbestos and wood. This outside pipe keeps all water and moisture from the steam pipe, and prevents condensation. The pipes, both wood and iron, are put down in lengths of two feet, when they terminate in hollow, upright posts, firmly secured in the earth. The upper part of this post is arranged so as to receive the ends of the steam pipes through stuffing boxes to allow the pipes to expand and contract, without moving the post. The posts are also arranged so as to receive the ends of the service pipes either with or without expansion joints. It will be seen that the service pipes are not taken directly from the mains, but from the hollow supports, thus allowing them to be attached or detached from the support instead of passing through the outside wooden pipe to enter the steam pipe, which could not be done, because the steam pipe expands and contracts, while the wooden pipe does not. Tests made during the month of July

does not. Tests made during the month of July with very small pipe, proves that steam may be carried through well protected pipes for a distance of a mile, and then be more economical than any other system. But it is thought that 1,200 or 1,500 feet each way, making a half mile square, is about all that need be finished from one location. This, even in a city with a population of 1,500, would include nearly all the business places, hotels, churches, and schools. Buildings further out could be reached by a single line of small pipe. Steam can be manufactured on a large scale for one-fourth the cost that it is on a small scale for warming a single dwelling or block. You can stop the expense at any time by turning the steam cock in your house, whereas in the use of a private boiler, when you shut off the steam, combustion goes on just the same.

The publishing of this book appears to have exhausted the energies of the inventor, as nothing more has been heard on the subject, and the winter is rapidly slipping away. This Holly system, next to the Keely motor, is one of the most brilliant discoveries of the age, and entitles the discoverer if not to the honor of canonization at least to the admiration of mankind in general. Mr. Holly is well known as the inventor of the so-called Holly water works, and he wishes to still further increase his reputation by generating vapor for the benefit of shivering mankind. Of course if such an enterprise could be effectually carried out every northern community would have cause to bless the name of Holly. Our readers can imagine after the experience they have passed through during the last two months the value of such a scheme as this. No more snow in the streets, no more icicles on the roofs, overcoats also could be dispensed with, and the expensive seal skin sacques ladies so delight in would become as a dream to them. The introduction of this system into houses has of course several drawbacks. In the first place the amount of heat consumed would have to be measured by some kind of a meter. Every one is aware from experience with a gas meter how the instrument records. Several families have already been conveyed to the insane asylum from the actions of the gas meter alone, in their vain endeavors to solve its hidden mysteries. The less gas is burnt, the

hidden mysteries. The less gas is burnt, the more the meter registers, and there are cases on record in this city where persons have been ruined by shutting off the gas and burning kerosene—an act which the gas meter never fails to revenge by tremendous feats of addition and multiplication, and if this burden on the house-holder was supplemented by a steam meter universal bankruptcy would be the result. Another point worthy to be noticed is the fact that, like gas, the steam might sometimes fail to work. Such an accident as this would invariably happen on the coldest day of the year, and the unhappy family who were dependent on Mr. Holly's machine for their heat would have to go to bed and swear at the inventor and everybody in general in order to keep warm. For several reasons, then, it is doubtful if this scheme will ever become a popular one, and it would require a great deal of persuasion to induce the owner of a house to trust his earthly happiness in the hands of one of Mr. Holly's engineers.