When a radiator so equipped becomes full of steam the steam will begin to flow out at the return end, into the return piping and this steam coming in contact with the internal fixtures (after a while they become infernal) of the trap is supposed to close the outlet, preventing the escape of steam. As a matter of fact many of these traps work fairly well when new and clean, but being placed in the path of all water escaping from the radiator they become coated with grit, grease and other dirt which is always escaping from the radiator, they soon get out of order, and do not prevent the escape of steam.

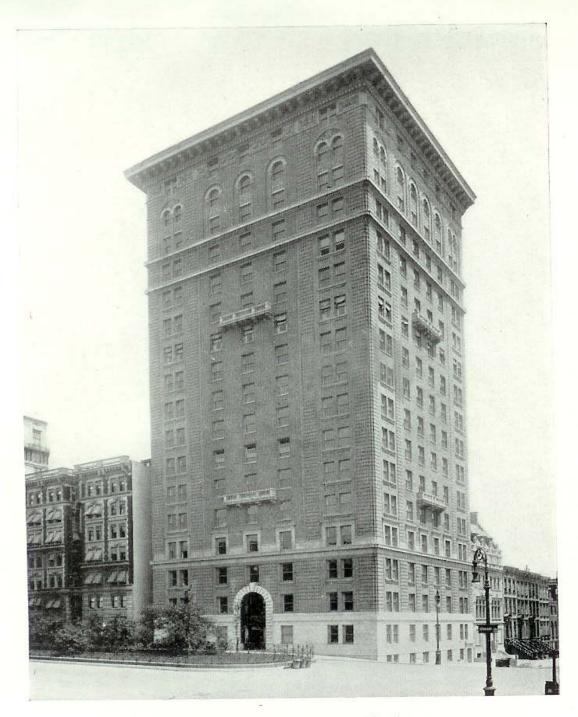
To get anything like satisfactory results it is necessary to remove the trap frequently and clean the inside parts, something easier said than done. When the traps at the return end work as intended it becomes a closed system, and pressure with all of its dangers and disadvantages will accumulate on the radiator and piping.

THE BROOMELL SYSTEM OF VAPOR HEATING IS THE ONLY SYSTEM that does not use some kind of a mechanical trap or fixture at the return end of the radiator. THE BROOMELL SYSTEM is, always has been, and always will be open to the atmosphere, making it impossible to get any pressure on the radiator.

Space in this booklet will not permit the mention of many other important points which go to make up a perfect VAPOR HEATING SYSTEM, a system which makes it possible to get the greatest economy in the use of fuel, to regulate the temperature at will, either by hand or automatically, to work noiselessly, to dispense with air valves and traps, to operate with the minimum amount of attention, and give the user more real satisfaction and better results in every possible way than can be secured in any other system.

We will be glad to furnish interested parties the fullest information. Do not overlook the fact that the engineers of the VAPOR HEATING COMPANY make plans and specifications for every installation, that our inspectors are on the job, and that we guarantee results.

VAPOR HEATING COMPANY.



Owners: Bing & Bing, 505 Fifth Ave. Architects: Warren & Welmore, 16 E. 47th St.

Engineer: Percival R. Moses, 366 Fifth Ave.

This seventeen-story apartment house, located at 903 Park Avenue, corner 79th Street, New York City, is undoubtedly one of the most complete and finest buildings of its kind in the world.

The Broomell System of Vapor Heating has been installed in this building by Heating Contractors Reis & O'Donovan, 207 E. 37th Street, New York City, and the system works in the most perfect and satisfactory manner, vapor being circulated through every one of the 341 radiators, having a total of 13,276 square feet of radiating surface, at a pressure of six ounces.

WHAT IS VAPOR HEATING

Vapor Heating is the art of circulating this steam through radiators without pressure to force the steam or without

any vacuum pump or other mechanical appliance to pull it through the radiator.

If the system has been properly designed and certain laws of nature observed no pushing or pulling is necessary. On the contrary if there is sufficient fire in the boiler to generate VAPOR it will flow through the piping and radiators smoothly, silently, and continuously, until every radiator is full to the bottom and hot all over.

This will be all right in zero weather, but if not so cold the house will soon become very much over-heated. In a condition like this if it were a straight steam heating plant it would be necessary to shut off the radiator valve entirely, and after a short time open it again, and again repeat the operation, in the attempt to hold the room temperature at a desired point.

In the BROOMELL SYSTEM we use a four-ported valve, and the room temperature can be regulated to a nicety by

opening the valve so that VAPOR will flow into the radiator through one, two or more ports as required.

The valve is located at the top of the radiator and can be operated by thumb and finger. This results not only in a delightfully heated house, but in a great economy and ease of management. It must be remembered that VAPOR HEAT-ING is absolutely without pressure.

The return end of each radiator must be open to the atmosphere through a proper system of piping. All water of condensation must flow back to the boiler by gravity, and there must be no escape of VAPOR at the end of the return pipe where

it opens to the atmosphere.

It is impossible to regulate the temperature with a graduated or multi-port valve unless the system be open to the atmosphere. Any system of heating using an expansion trap or other device at the return end of the radiator which closes when steam strikes it is not a VAPOR system, and not a system open to the atmosphere.