and especial care is necessary to prevent settlement and fracture at the junction with the horizontal pipe leading to the sewer.

Finally, it is essential to the success of this plan to have a cold roof, or the pipe will become choked with ice. How this may be accomplished was explained very clearly by Professor Godfrey at the last meeting. But I think if proprietors could be induced to go to the additional expense, it would be more satisfactory to extend the space mentioned by the learned professor into an entire attic story between the roof covering and the warmed apartments of the house. This attic story should be arranged to commence just below the eaves cornice of the roof, and may be a mansard or any other form of attic in common use. To the great utility and convenience of an attic story to a dwelling, all householders will bear witness; nor would there be in such case any necessity for having openings for the passage of cold air, as is essential in the sub-attic described and recommended by Professor Godfrey.

I will now, Mr. President, briefly describe the second plan of ventilated house drainage proposed by myself and fully set forth and explained in several numbers of the PUBLIC HEALTH MAGAZINE. By referring to the diagram, * you will notice that there is a general resemblance to the plan exhibited at the last meeting by Professor Godfrey. Both connect in the same manner with the common sewer, and both continue up through the building to the roof; but in this plan we start at the outset with the intention of trapping and preventing by all possible means the passage of gas and effluvia into the building from the common sewer; but whatever gas or effluvia may be generated *in* the house drain or soil pipe, or may be accidentally forced through the air traps, that amount and that alone is carried up the drain pipe and ejected above the roof into the atmosphere.

Here, then, is an essential difference between the two plans; by the first, a column of sewer gas is brought into the building and carried up to the roof, without trap or hindrance of any kind to serve the purposes already described; by the second plan, gas from the sewer is not allowed to enter the building at all. By the first plan, the gaseous contents of the sewer are transferred

* See next page.