

kinds of matter, and similarly exhale others by mouth and nose, we must provide some systematic means whereby these persons may not only be prevented from polluting the air unduly, but may also be prevented from suffering from the lack of fresh air. Of course, it is apparent that there must be some limit to the number of persons living in any given space, and a standard has been adopted, under Public School Acts, in most progressive countries, whereby each child must be provided with 2,000 cubic feet of fresh air per hour. In an ordinary schoolroom, the space per child is commonly measured by the floor area of 4 x 5 feet in a room 12 feet high, thereby allowing each about 250 cubic feet. It is apparent that this air will require eight changes per hour to supply the required amount. Heating appliances are now available, whereby fresh air is warmed over steam pipes in the basement of schools and other buildings, and delivered by fans through ducts, which will supply the requisite amount by what is known as mechanical ventilation. The ordinary household, however, is not, on the one hand, subjected usually to the limited amount of air space just indicated; but, on the other, it is not commonly supplied with facilities for changing the air, such as that just described. Some have asserted that enough fresh air comes in around windows and under doors, etc., in northern cold climates to provide the requisite amount of fresh air. This, as a matter of fact, is not true; but

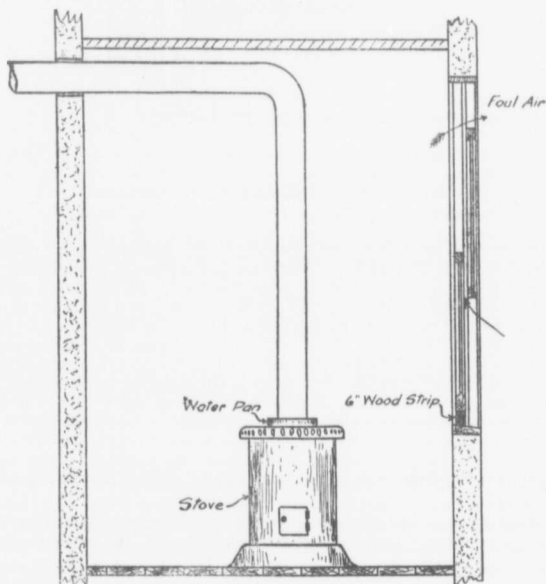


DIAGRAM NO. 1—Window Ventilation