

completely upset its ventilation. Or again, if a strong wind were blowing against the gable of the tall house, or from the roof of the same down upon the roof of the two-story house, this would also disturb the up-draught of the latter house and stop its ventilation, until a change took place in the direction of the wind. What, again, would be the effect of a whole street of houses, many of them of different heights, and both sides of the street drawing from the same sewer? And this sewer having a number of street water-shafts, besides! It is certain that the draught pipes of some of these houses would have such a strong current as must greatly modify if not entirely prevent any up-draught in the others, while the relative position of the water-shafts would accelerate the up-draught in some houses and retard it in others. Moreover, in a city circumstanced as Montreal is, with some portions of it two hundred feet or more above the others, it is clear that the up-draught of sewer gas would be much stronger—other things being equal—in the higher situations than in the lower ones, and thus the uptown parts of the city might draw to themselves the greater part of the gas and effluvia generated in the city sewers, while in the lower parts of the city, the ventilating drain pipes would cease to operate, simply from want of gas, and thus the different heights of the city would form another means of disturbing the contemplated uniformity of the up-draughts of sewer-air, by flooding the high levels with it, and depriving the lower levels of their fair share of this ventilating commodity.

Now let us examine these low level parts of the city from another point of view. The crown or top of the large brick tunnel in Craig street, from the foot of St. Antoine street to Viger Garden, is about sixteen feet above the ordinary level of the river, and the sewerage of St. Ann's Ward and the Craig street valley is about the same level. The spring and fall floods usually rise sufficiently high to completely fill these sewers and tunnel with water; at such times, therefore, all the gas in these sewers must be forced into the ventilating drains of the houses, or through the water-shafts of the streets, or else, as is most likely, be forwarded to the higher levels of the city, and accumulated there to a dangerous extent, especially during the fall floods, when the street