

currents directed them. A portion ascended through so-called ventilating flues, having 4 inch mouths, to the attick, where a zinc 10 or 12 inch duct, of *uniform* calibre, received them, in company with all the similar flues from every part of the four stories of the building, numbering in all some hundreds. The uniform zinc duct emptied, or was supposed to empty, its foul air into a large round tower, which was surmounted by a costly and very heavy copper cowl, topped by a wind vane, whose duty it was to turn the cowl so as always to oblige it to keep the mouth to leeward. I have seen these cowls (there was one in each wing of the building,) as often gaping to windward as to leeward. In calm weather the whole apparatus was a nullity. In high winds it very frequently acted as a back-driver.

Without this delusional contrivance, the other arrangements for preventing the escape of foul air were quite sufficient; for when it is considered that the 10 inch zinc duct in the attic was to receive and carry onward to the round chimney, the air ascending to it through a multitude of ascending flues, whose aggregate area was twenty-fold greater than its own, it must be pretty obvious that a very unpropitious jamming took place, under even the most favorable circumstances. The flues from the lowest story were about 36 feet in length; those from the top or fourth story were not 18 inches, whilst those from the second and third stories were of intermediate length. All ran up side by side in fours associated. The most heated air was, of course, sent up from the furnace rooms, the laundry, and the kitchens. The velocity of the air in the ducts from these parts would be so much greater than that in any of the others, as to impel their delivered contents forward in monopolising precedence, and thus to prevent the entrance of other cooler air from the shorter flues. Not only was this a constant fact, but still worse, the over-cram of air from the longer flues relieved itself by downward escape through the shortest ones into the apartments of the uppermost story, as I scores of times demonstrated, by holding lighted candles, or other current tests, at the mouths of the latter. Here, surely, was a most ingenious contrivance for providing unfortunate lunatics and their attendants with salubrious air! And yet all these and numerous other worse than childish contrivances were presided over, and sanctioned, if not devised, by a sapient body styled the *Building Committee*.

In addition to the sources of contamination already instanced, was one of which every visitor passing through the halls was nauseously cognizant. In even small private resi-