

during the remaining six days the moisture contained in the wood causes a very unpleasant odor. The same remarks regarding boxing space under sinks also apply to wash-tubs. It is an excellent plan to lay the floor immediately under sinks, wash-tubs, &c., with cement. A portion of the walls under and around them may also be made of cement or slate, with advantage, as they are not so liable to absorb moisture as the ordinary plaster or wood, and can be kept clean with very little trouble, or, better still, with glazed tiles, now plentiful and cheap in this market.

All water-closets, bath rooms, laundries, sculleries, &c., should have well-painted walls and ceilings, or, better still, *be tiled*, so that they can be frequently washed. Urinals should have a large ventilator immediately over them, and coming down as close as may be convenient to allow of one standing under them. They should be set on slate, marble or cement walls, and the flooring immediately under them should be of similar material. They require particular attention as regards cleanliness, and on this account I think the law in this city, compelling the fitting of a self-closing cock on them under a penalty of \$15 per annum—for a penalty it really is—is offering a premium for the encouragement of an offensive apparatus, and is certainly not economy from a sanitary point of view, although a saving of water is effected. I also am of opinion that the taxing by special rate of water-closets is on a par with the above-mentioned system of doing business. For, let a closet be ever so bad, it is not nearly so terrible a nuisance as the outside privy; for while the water-closet may cause inconvenience and injury to one or two families, the outside privy is carrying death and destruction to a whole neighborhood, and for this there is hardly any remedy, especially if the sewer is connected with the pit by an open drain, as is frequently the case, while the water-closet, with all its defects, may, with proper care and attention, be kept in a comparative state of effectiveness, and becomes a convenience that is far in advance of the outside privy in a rigorous climate such as ours. A citizen who has expended time and money, and has fitted his dwelling with all that science and mechanical skill can suggest or devise, may have all his efforts completely neutralized by his next-door neighbor erecting one of these abominable privies, or perhaps a whole row of them under his bed-room windows. Of course, a remedy may be provided to a certain extent by the common law against nuisances. But the action of law is proverbially slow, and a legal process cannot restore lost health, or wife or child slowly poisoned. The rich can, in a measure, avoid this trouble by fleeing from the city during the hot weather, and only returning when nature has provided a remedy; but to the poor man and his family there is no such means of escape; he must stay and suffer. I write at this length on the subject, as it has been my misfortune to reside in localities in this city where these abominable pest pits abound, and I know whereof I speak; and my only regret is that I have not an inspired pen to do full justice to a subject that is of far greater importance

than any political scheme for advancing the welfare of our young nation.

The wash basin, when properly fitted in a bedroom, with its accompanying hot, cold and waste water pipes, is a most convenient apparatus. But unless one is prepared to spend the money necessary to secure a first-class job in every respect, wash-basins are better omitted from the bedrooms, since any derangement in the waste pipes from them exposes the occupant of the room to the foul emanations from the sewer during a time when sleep locks up the faculties upon which we depend to detect foul odors and dangers of a more visible kind. A wash-basin should always be well trapped, and the waste pipe leading from it ventilated as described in a former chapter. This should never be omitted, and the ventilator should be fully as large as, if not larger than, the waste pipe to basin and carried direct to the outer air. The space under wash-basins, owing to their position, must, as a general rule, be enclosed, but this should be done in such a manner as will allow the connections, &c., under the basin to be examined without trouble.

Some general directions are necessary as to the care of plumbing apparatus such as are to be found in most dwellings. My first advice is that the different fixtures should be regularly inspected by the head of the household, or some responsible person, and at the first appearance of any derangement advice should be had; by this means expense and annoyance will be saved.

Great care should be taken to insure cleanliness and to ascertain that the different fixtures are in perfect working order. Proper attention should be paid to the flushing of the drains. This is best done by filling the various baths, basins, sinks, &c., and letting the water from them run off at the same time. While the water is running the handle of the closet or closets should be drawn up and let down at least six times. This, in the case of the pan-closet at least, will insure the emptying of the trap under it; merely letting the water run by fastening up the handle is not nearly so good a plan. If a pailful or two of water is thrown suddenly into the closet while waste water from the rest of the apparatus is running, it will be of great benefit, as the object is to fill the house drain as nearly as possible with water, in order that any deposit therein may be carried away into the main sewer.

The traps under the various apparatus should be emptied from time to time by taking out the screw provided for that purpose.

When the common pan closet is used the trunk or ironwork should be thoroughly cleaned by being burnt twice per year and the iron fresh coated with tar by having the closet taken apart and the accumulation of filth that always gathers thereon burnt off and the ironwork retarred or varnished. Neglect of this is the great cause of smell from the closets when the handle is drawn, the foul odor that arises at such times being generally caused by the accumulation of filth in the container or trunk. When the pan closet is used (which should be as seldom as possible, as it is one of the worst articles for the purpose ever contrived) the trunk should

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