

There is an error in most of our building construction, especially private dwellings, in not having facile access to the roof and narrow pathways along the ridge of the roof to make every part readily accessible. This is much needed even for repair. It is not a difficult proposition, nor costly, and that it is not in common use must be the fault of our house constructors, who do not appear to think of its desirability, nay, necessity. Fancy finicals, etc., we have *in galore*, but a narrow plank walk along the ridge and fixed ladders always in place is far too exceptional. A chimney catching fire is not infrequent, but it is hazardous to approach it, and we must trust to luck. I speak the more feelingly on this subject, as I have these conveniences and know how serviceable they are.

Under the circumstances above detailed what a Godsend it would be if, with a few feet of hose and an available supply of water under pressure at the tap—even though limited in quantity—where a woman or even a child could stand on the ground away from the heat and direct the stream, even through the flames on to the projecting eaves of the roof and underneath and on to the threatened side or roof of the building. With water under 40 lbs. pressure there is no part of an ordinary building that is not accessible—with no risk to life or limb. With the pump and tank in a safe place, as it should be, willing hands could keep up the supply indefinitely. How many homes might thus be saved and dire loss prevented, except in those few cases where the fire may spread so rapidly as to prevent anything being done, even to saving of life. But even here a good water supply would limit the extent of destruction and dictates that the pump and tank should be placed where it would be out of danger.

Everyone knows the difficulty, nay,

danger of washing windows on the outside of upper storeys. Again, the flower garden needs watering, and this labor is apt to fall to the female members of the household, and carrying buckets of water means work that is apt to be minimized to the cost of the plants, but we need not dwell on the advantages accruing from water under adequate pressure that the pneumatic system gives.

It is not likely to be impracticable to put down a driven well beside the underground tank, with a very limited cost for piping, and no risk from frost. To prevent its being placed out of commission in case of fire it would be better to be placed in a small cellar by itself, convenient to all the places to be furnished with water. Water taps could be placed where wanted, being sure to have one on the outside for hose connection. Even with a power pump a hand pump is a good standby, as they are not costly. Pipes for distribution would need to be four feet under to escape frost and laid with sufficient fall (the larger the better) towards the drainage cock, so that the whole water system could be readily emptied if needed, especially in winter, when the house might be unoccupied.

There are many details that may be suggested that need not here and now be discussed, but we think we have outlined practical methods of obtaining water continuously under pressure, against which adverse criticism can not be justly made at a cost for construction and maintenance astonishingly small, and with a possible perfection of result that leaves little to be desired. There is no pet theory advanced and nothing of novelty, for the practical science of to-day would give to those who know it and desire it conveniences that are not sufficiently widely known.