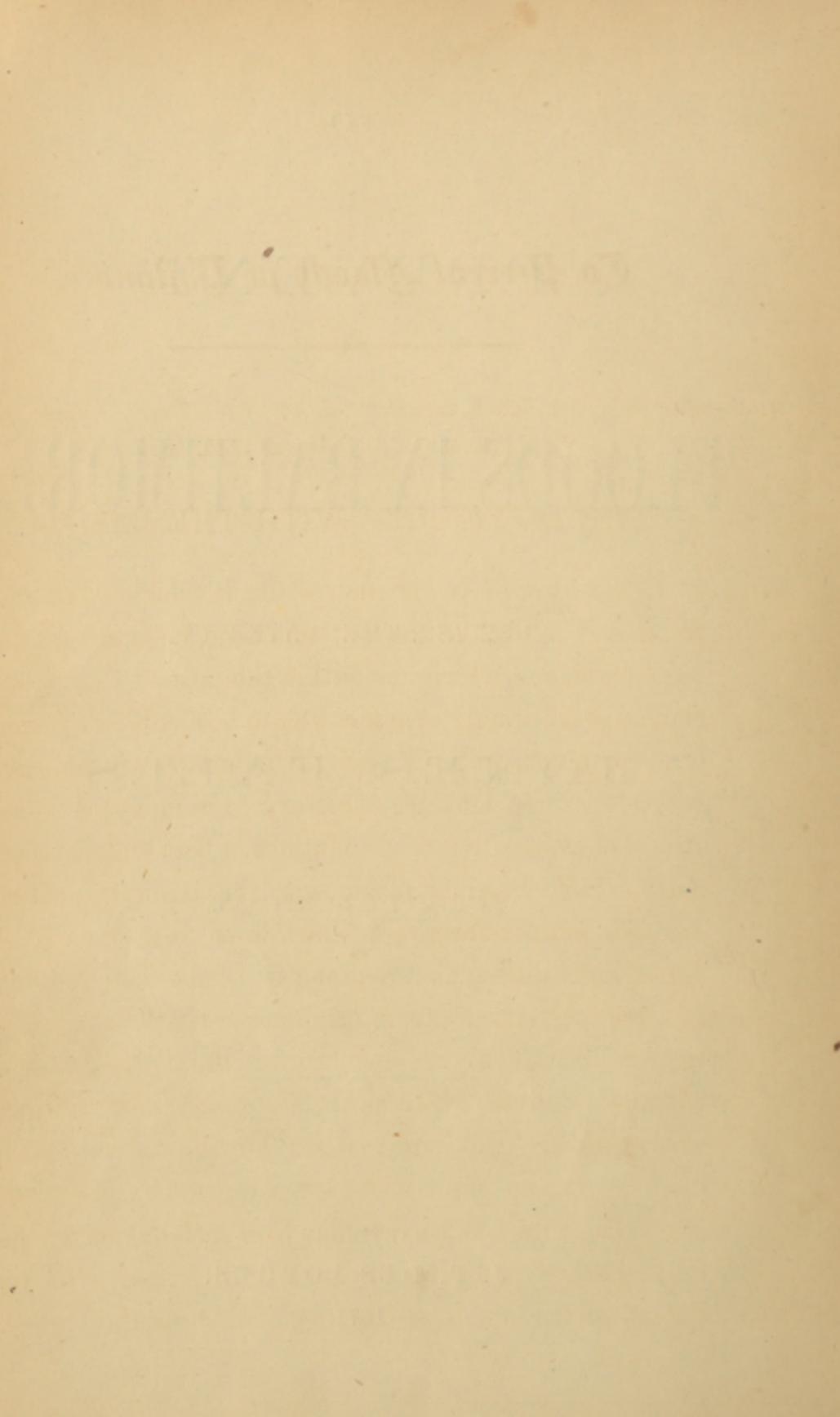


TO  
PREVENT  
FLOODS IN BALTIMORE,  
USE ALL THE WATER IN  
JONES FALLS  
FOR CITY PURPOSES.



BALTIMORE :  
J. P. DES FORGES.  
1871.



## To Prevent Floods in Baltimore.

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*The following Article, on the condition of the Basin, is from the  
BALTIMORE SUN of August 25th, 1871 :*

### THE DIFFICULTY WITH THE BASIN.

THE causes of the offensive stench which is wafted from the head of the basin at this time by every southern breeze, and which has within the past few days become so exceedingly obnoxious as to be a subject of general comment, are well enough understood to indicate what measures may be necessary to remedy the evil. It is well known that accumulations of filth and decayed matter have been gathering into the basin the entire distance from Light street wharf down to the mouth of Jones Falls during the greater part of the last century. It is true the city dredging machines are kept constantly employed, but only in cleaning out the docks and the entrances thereto, whilst the basin proper is left to take care of itself. It is said that the demands of commerce have become so great now that the egress and ingress of the large fleet of vessels that load and unload in the upper harbor would be too greatly interfered with by the use of the mud machines in cleaning out the harbor.

The basin, as is well known, is comparatively a pool of stagnant water, with no current whatever. The filling up process has been greatly accelerated of late years by the accumulation of fruit and oyster packing houses in the vicinity, the waste and offal from which find their way into the basin, until at the present time there is, it is estimated by those who have every opportunity of knowing, an average of several feet of thick black mud covering the original fine gravelly bottom of the basin. Formerly this mud, formed by every description of decayed vegetable matter, calculated to spread the seeds of sickness and death, was only stirred up by the keels of vessels at very low tide, but like all nuisances that are permitted to go unabated, the mud seems to have got the upper hand of the authorities, and now, without regard to the state of the tide, it is stirred up on all occasions. A remedy for the evil was warmly recommended by Captain John H. Cooper, the Port Warden, in his last annual report to the Mayor and City Council, which was deemed practicable by many. He recommends the laying of iron pipes of large capacity across the land from the south branch of the Patapsco, at the Spring Gardens, with branch pipes emptying into the basin at numerous points along Light street wharf. Of course steam machinery would be requisite, in the opinion of Captain Cooper would form a lift to the water to the proper height. This current of fresh and pure water which would drive the accumulations of mud in the basin down to the bar at the mouth of the Falls, where the

mud could easily be taken up by the mud machines without in the least interfering with commerce. It is a well-known fact that below the mouth of the Falls no effluvia arises from the water, no matter how low the tide may be, as the current from the Falls, whenever there are rains, drives all the mud and dirt over on the bar at the opposite side of the harbor, from whence it is taken up by the city machines. At all events, the remedy suggested by Captain Cooper would perhaps not be a very expensive one, and as a sanitary measure might be well worthy the attention of the authorities, to say nothing of the advantages of deeper water in that portion of the harbor.

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#### TO THE EDITORS OF THE SUN.

*Gentlemen:* I make your article in The Sun of the 25th instant on the state of the basin the basis of what I am about to write. The consideration of this subject in connection with the Jones Falls improvement, strikes me as important. May not the flushing of the basin above the mouth of Jones Falls be affected with the water of that stream? The experience of the present season is that the water which is husbanded upon that stream is barely sufficient for the use of the inhabitants of the city at this season of the year. Very soon some additional measure will have to be taken for

the adequate supply of water for our rapidly growing population. The Jones Falls water has been found to be decidedly superior to that of the Gunpowder, on account of its containing a sufficient quantity of lime so to coat the lead pipes as to render lead-poison quite out of the question. Not so with the Gunpowder water. This, then, turns us to Jones Falls as the source for a further supply of water to the fullest extent that this stream may be able to furnish. We are now about to expend millions to keep the surplus water of Jones Falls from drowning out our city.

In view of copiously flushing out the basin and furnishing large additional water for domestic purposes, and at the same time preventing floods in Jones Falls, I suggest that all the water furnished by this stream should be retained somewhere between the outskirts of the city and the head waters of the stream, in dams or lakes constructed for the purpose, at suitable points. This may include the extraordinary freshets of water so much dreaded by our citizens. These freshets are formidable, not so much on account of the quantity of water that passes through our city as the result of any one rain storm, as it is on account of the short space of time in which it passes; therefore these extraordinary floods do not increase the difficulty of retaining it in lakes outside of the city. That it is possible to retain and control the entire waters of Jones Falls throughout the year, none will deny. The practical question is whether the expense of so doing will be warranted, in

view of a large additional supply of water for domestic purposes, the driving of the mud out of the basin, and relieving all apprehensions of floods.

ROSS WINANS.

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TO THE CITIZENS OF BALTIMORE.

Considerations of economy and utility combined will dictate at no distant day, that all the water of Jones Falls be availed of for city purposes. Even now the best interests of the city would be served, by taking immediate measures to store up and control the entire waters of this stream. The number of families having and using baths in their houses, should be increased many fold, and the ready means of bathing should be furnished by the city authorities, for all who do not avail of private baths. The present supply of water for city use, is totally inadequate for this additional demand. This, together with the large amount of water that could be most advantageously used for cleansing the harbor and other portions of the city, would consume the entire waters flowing through the valley of Jones Falls, leaving none to be conducted around the city, or to be spread out in our midst, and thereby furnish an increased area of surface for the emission of poisonous gases or to create floods. In European countries the laboring classes practice bath-

ing much more than here. The people of countries in which the bath is habitually used, anxiously seek it in full confidence of its salutary effects in affording longevity and vigorous health. To be surrounded with a pure and not over damp atmosphere, and to be clean in person, is of the utmost importance to health, comfort, activity of body and mind, buoyancy of spirit and long life.

I extract the following on the subject of bathing, from Chambers's Miscellany :

*Bathing.*—"Here we arrive at the great and almost universally recognized engine of personal purification. Entire immersion of the body in a bath of tepid or warm water, is unquestionably the most effectual means of cleansing the skin from its natural or artificial impurities."

"According to the Jewish dispensation, certain observances to insure personal cleanliness were the subject of religious injunction, and for a similar reason Mahomedans, in eastern countries, have been enjoined to perform ablutions at stated times and seasons. In these Oriental countries, and also in Russia, the use of the warm bath is universal among the richer classes, and the public establishments for bathing are, in some places, on a scale of great splendor. Inattention to cleanliness of apparel seems to render these ablutions indispensable for personal comfort."

*Public Baths*—"The mass of the people having neither the means to purchase, nor the convenience for using

private baths, must, of course, resort to public ones, and for their accommodation, therefore, every town ought to possess one or more establishments fitted up with all proper conveniences for bathing. In this respect, notwithstanding our wealth, our boasted civilization and mechanical skill, we fall infinitely short of the Greeks and Romans, who had not only their domestic, but their public baths, in which the poorest citizen might lave."

"I hardly know any act of benevolence more essential to the comfort of the community, than that of establishing, by public benefaction, the use of baths for the laboring classes, in each of our cities and manufacturing towns. The lives of many might be saved by them. Throughout the vast empire of Russia, through all Finland, Lapland, Sweden and Norway, there is no cottage so poor, no hut so destitute, but it possesses its vapor bath, in which all its inhabitants, every Saturday at least, and every day, in cases of sickness, experience comfort and salubrity. Among the ancients, baths were public edifices, under the immediate inspection of the government. They were considered as institutions which owed their origin to absolute necessity as well as to decency and cleanliness."

Pure air, cleanliness and sunshine are the great antagonists of cholera. Dr. Hall, of Hall's Journal of Health, says: "It does not require large aggregations of impurity for the developments of disease. A neglected sewer, ashpit or cesspool, an unsound soil pipe may be all that is required." Instance, the National Hotel disease.

Sir James Wylie, late physician to the Emperor of Russia, attentively studied the effects of light as a curative agent in the hospitals of St. Petersburg; and he discovered that the number of patients who were cured in rooms properly lighted, was four times greater than of those confined in dark rooms. This led to a complete reform in lighting the hospitals of Russia, and with the most beneficial results. In all cities visited by the cholera, it was universally found that the greatest number of deaths took place in narrow streets, and on the sides of those having a northern exposure where the salutary beams of the sun were excluded.

“The following fact,” says a good authority, “has been established by careful observation: That where sunlight penetrates all the rooms of a dwelling, the inmates are less liable to sickness, than in a house where the apartments lose its health-invigorating influences. Basement rooms are the nurseries of indisposition.” In continuation of the same subject, that beautiful and lovable character, Florence Nightingale, observes, “a dark house is almost always unhealthy, always an ill-aired house. Want of light stops growth, and promotes scrofula, rickets, &c., among the children. People lose their health in a dark house and if they get ill, they cannot get well again in it.”

We find in Ranking's Abstract a sensible article on this subject, by Mr. Grainger, from which we extract the following paragraph: “The most injurious of all the causes operating in the diffusion of epidemic disease, are

the effluvia proceeding from the human body, and especially from the lungs and the skin. The special deleterious agent consists of highly putrescent organic matter, mingled with the expired air and exhalations from the skin." This enjoins, and more particularly when cholera is threatened, especial attention to personal cleanliness, by bathing, which is the most effectual mode of personal purification, and the constant renewing of the air in our living and sleeping apartments, by thorough ventilation. In the autumn of 1849 when the cholera was raging in England, the Board of Health recommended that in every badly ventilated dwelling *considerable* and *immediate* relief may be given, by a plan suggested by Dr. Arnott, *of taking a brick out of the wall near the ceiling of the room, so as to open a direct communication between the room and the chimney.* "I assume," says the doctor, "that your readers know *that fresh air for breathing is the MOST IMMEDIATELY URGENT OF ALL THE ESSENTIALS TO LIFE*, as proved by the instant death of any one totally deprived of it through drowning or strangulation, and by the slower death of men compelled to breathe over again the same small quantity of air."

Assuming that these points are tolerably understood I have to show that the spread of *cholera in this country has been much influenced by the gross oversights referred to.* "All the valued reports and published opinions on cholera, go far to prove that in this climate, at least, any foreign morbid agent or influence which pro-

duces it, comes, comparatively, harmless to persons of vigorous health, and to those who are living in favorable circumstances, but that if it find persons with the vital powers much depressed or disturbed from any cause, and even for a short time, as happens from intemperance, from improper food or drink, from great fatigue or anxiety, *BUT ABOVE ALL from want of fresh air and consequently from breathing that which is foul, it readily overcomes them.* It would seem as if the peculiar morbid agent could as little, by itself, produce the fatal disease as one of the two elements concerned in a common gas explosion—namely, the coal gas and the atmospheric air can alone produce the explosion. The great unanimity among writers and speakers on the subject in regarding foul atmosphere as the chief vehicle or favorer, if not a chief efficient cause, of the pestilence is seen in the fact of how familiar to the common ear have lately become the words and phrases, *malaria, filth, crowded dwellings, crowded neighborhoods, close rooms, faulty sewers, drains and cesspools*, all of which are merely so many names for foul air, and for sources from which it may arise. Singularly, however, little attention has yet been given from authority to the chief source of poisonous air, and *TO MEANS OF VENTILATION, by which all kinds of foul air may with certainty be removed.*

A system of draining and cleansing, water supply and flushing, for instance, to the obtainment of which, chiefly, the Board of Health has hitherto confined its

attention—can, however good, influence only that quantity and kind of aerial impurity which arises from retained solid or liquid filth, within or about a house, but it leaves absolutely untouched, the other and really more important kind, which, in *known quantities*, is never absent where men are breathing—namely, the filth and poison of the human breath, and effluvia from the skin. This latter kind evidently plays the most important part. Now, good ventilation, although few persons, comparatively, are as yet aware of the fact, is easily to be had, and it not only entirely dissipates and renders absolutely inert, the breath and other poison of inmates, however numerous, and even of fever patients, and it will, to a considerable extent, or entirely, neutralize the otherwise ill results of defective drains, or the want of proper drains within our dwellings. Plenty of fresh air, plenty of sun-light, and plenty of clean water, are the three most important requisites to life, health and comfort. Let us strive for these with unremitting diligence.

ROSS WINANS.





