

Our Monhagen Water—Is it Wholesome?—The Opinions of a Scientific Man.

EDITORS OF THE PRESS: Gentlemen—Just at this season there is a little occasional chat on village topics, and once in a time the Middletown Water question is brought upon the tapis, and not unjustly so. If any one question or subject requires priority of attention by the people of the village, it is that of their water, and if only one-tenth of the people using it for potable and culinary purposes knew what it contains or holds in solution, they would not be quite so diffident in the matter as they appear to be.

It is assumed that the water in question has been collected and is being distributed for human consumption; but the general opinion is that it is unwholesome and not fit for such, but to what extent it is unwholesome, or why it should be so, is not shown, therefore the province of this communication is to show the cause of such unwholesomeness.

As there are various descriptions of water, or methods of collecting and supplying it to large towns and cities, it is necessary to consider the conditions of the manner in collecting in each case respectively; but without troubling you with all the various methods of collecting, it will be sufficient for the present to consider that which concerns us most. The Middletown water, if I am rightly informed, is entirely surface water—at all events its quality is evidence of such—collected from the adjacent watersheds, and conducted into a valley where a dam has been constructed at a convenient place, and when filled forms the only reservoir in the system, which is more like a stagnant lake than anything it can be compared with. The unwholesomeness or impurity consists of large quantities of decomposed animal and vegetable matter held in chemical solution, which no system of filtration will remove. I will here observe that the best filter will only remove impurities mechanically suspended, and not those held in chemical solution. This is bad, and is being made worse by the stagnant nature of the pond, produced by a double cause, namely: 1st, The quiescent manner in which the pond is fed from the surface drainage of the adjacent lands, thereby causing no agitation, which is one of the essential elements of preserving pure water. 2d, The very expansive area of the pond compared with its depth, affords all the facilities necessary to evaporation, which is something enormous. I will observe here, also, that none of the impurities pass off in a state of vapor, except when the bottom of the pond or any portion of it which had been covered with water and then left exposed to the atmosphere, in which case we get a polluted atmosphere, another evil. Prof. Chandler states that “organic matter produced by the decomposition of vegetable substances are not especially dangerous,” (but I say that if they are “not especially dangerous” they are *very injurious*,) “but the products of decomposing animal substances are highly dangerous, even when in minute quantities.” See Scientific American, Feb. 17th, 1872, p. 113.

Now a word about the decomposed animal matter in said pond. Within three months from date that pond will be alive with animal matter in the shape of frog spawn, &c., of which great quantities are deposited in shallow water, and just at the season of the year when the pond gets very low before the spawn is hatched. Large quantities remain on dry land and become decomposed, and afterward washed into the pond by the rains or the pond filling up and covering it, in either case the water becomes impregnated with this deadly poison.

The above are some of the evils that exist in the system of the Middletown Water Works, and are such as require the immediate attention of the authorities, or who will say what the effects of an unfavorable summer may produce.

Yours, respectfully,

W.

March 8th, 1872.