

Mr. Corns,—

I have seen water that looks quite clear, but it is a long way from being pure.

I have seen septic tanks applied on some of the steamboats on inland lakes, with the idea of preventing the water in the lake from becoming contaminated.

These are a modified form of septic tank, and, I think, partially successful. They are not entirely successful because they do not have large enough tanks. Even though they are not quite successful, it is certainly better to use them than to flush the sewage straight into the lake, as they save a large amount of solid matter from going into the water that would otherwise be there.

Mr. Wickson,—

At Grand Rapids, Michigan, the Grand river is about a couple of hundred yards wide, by an average depth of about three feet. Below the city the water is naturally very bad, and as many of the towns between Grand Rapids and the lake take their water from the river, I would consider their supply was in very poor condition. It is claimed, however, that this water purifies itself as it went along by being exposed to the sunlight and air.

Would like to know if there is anything in this?

Mr. Corns,—

There is no doubt that the sun and air are two of the best purifiers we have, and some of the solid matter would be deposited on the bottom of the river as the water flowed along, so that ultimately when it had gone a few miles the biggest part of the solid matter would be deposited, and the fresh water running into the river would, so to speak, dilute the water as it went along and freshen it up. Of course, a large amount of purification by oxidation, vegetation and animal life goes on, but these processes are limited and imperfect.

Mr. Wickson,—

You spoke of the solid matter being deposited by sinking to the bottom. Would not that foul the water that flowed over it? I should think the water would pick up microbes.

Mr. Corns,—

There is no doubt that the germs in the solid matter that came out of the filter bed would still be there, as they would not be killed by the bacteria in the water.