

chosen for this experiment. The water was clear and cool, and runs over a gravelly and stony bottom—a typical trout stream, containing a fair number of *salvalino fontenalis*. Primitive forest, or second growth elder, balsam, cedar, and various kinds of hardwood covered the district through which the stream runs.

An hour's fishing in the brook furnished four speckled trout and an eel (*Echelus conger*) for the experiment. Two of the trout had been badly injured in the eye by the fish hook. These along with a frog were placed in a tank about 5.30 p.m. of July 6th, 1900, and the water turned on. The flow was abundant and continuous, the descent from the dam being sufficient to stir up the saw-dust into a gruel-like mixture, as thick as in any mill stream, no matter how much saw-dust may have been thrown into it. The conditions were therefore, as much as possible, like those prevailing in a saw-dust polluted stream.

The tank was not visited until July 11th, when all the animals were found alive, active, and apparently healthy. The frog was lying at the bottom, as he could get no air at the top on account of the cover.

About half-a-pail more of saw-dust, some sand and gravel were added, and the tank again closed.

On July 14th the brook was again visited. All four trout were alive, active and apparently well. The eel escaped as the cover was removed; the frog was dead.

About a dozen earthworms were thrown into the tank, but the trout did not touch them while under observation.

On the 21st of July three-fourths of the water in the tank was emptied out, and the tank, containing the four trout, was brought to the laboratory, St. Andrew's, a distance of about three miles, in a wagon, part of the journey being over a very rough road. On examination the four trout were found to be very lively and so active that they were only captured after emptying out nearly all the water. This ended the experiment, the conclusion being that if fish so sensitive as the trout could live in such a mixture for a whole fortnight without apparent harm, in fact with recovery from severe injuries, then any fresh water fish could live in any mill stream, no matter how badly polluted with saw dust.

Dr. Stafford conducted a post-mortem examination on one