

this is very improbable, and could only be possible in cases where a river has been completely filled with it."

4. "The refuse from the saw mills, in many places, interferes with the fisheries."

For the next eight years we find little or nothing in the reports of the United States Fish Commissioner regarding the ill-effects of sawdust. In an appendix to his report for 1887, entitled "Fisheries of the Great Lakes in 1885," we find the following expression of opinion from Hugh M. Smith and Merwin Marie Snell: "The fishermen appear to be considerably hampered in their operations by the presence of great quantities of drift wood and sawdust from the mills. At times this debris covers the lake (Michigan) for miles around, and very seriously interferes with the seining and netting. The most disastrous effects, however, are seen on the fish themselves, especially during the spawning season. Spawning grounds formerly existed in this vicinity, but they have been deserted for some years owing to the deposit of sawdust thereon."

On November 29th, 1888, there was started in *Forest and Stream* a very remarkable correspondence, which lasted nearly a year. The general topic was the effect of sawdust upon trout. The writers lived in Canada, the New England States, and some in the west as far as California. Both sides of the question were presented with great vigor. Most of the correspondents were evidently keen sportsmen and close observers of nature, and the only regret one feels in reading through these letters is that some of the men did not test their observations and conclusions by experimenting with sawdust. The following is a typical letter:—

A CENTURY OF SAWDUST.

Editor FOREST AND STREAM.

I was delighted with the intelligent way in which your correspondent "Piscator" handled the sawdust question in your issue of December 27th. It is a comfort to listen when a well-informed person speaks, but in these days of callow pretension experience is usually elbowed back from the front.

In my opinion the famous Mill Brook, of Plainfield, Mass., which has a record of a century as the finest trout water in the Hampshire hills, supplies those very conditions and corroborative data which "Piscator" declares are essential to determine what pernicious effect the presence of sawdust has upon the denizens of mill streams. Here is a water power which carried no less than thirteen manufactories fifty years ago. These included a tannery, a sawmill and factories for making brush and broom handles, whipstocks and cheese and butter boxes, all of which discharged, more or less, sawdust and shavings into the streams, to say nothing of three satinette factories and a felt hat factory, whose waste must have been deleterious to fish life.