

des poissons de la rivière pour empoissonner le lac de la Montagne. Aujourd'hui le lac regorge de poissons morts et tous les jours on est employé à enterrer les poissons qui viennent mourir et s'échouer sur ses bords.

Jo conclus de là, que les poissons tués jadis par la poudre ont été dévorés par des parasites inconnus et que depuis ce temps-là il s'est déclaré une épidémie sur la gente aquatique de nos parages. Les rares poissons vivants que l'on peut prendre à la ligne sont presque tous atteints du mal que l'on reconnaît à une tache, quelque fois deux, une près de l'épaule et l'autre près de la queue.

Dans ces taches se voient à l'œil nu des myriades de petits rongeurs cancéreux qui certainement sont les principaux auteurs du mal. Tout ce que je trouve de poissons morts sur notre grève je le fais enterrer profondément et couvrir de chaux.

Les parasites ne laissent que la peau—l'intérieur du poisson est complètement mangé. Le résultat de tout ceci est, que nous n'avons plus de pêche, que la chair du poisson de notre rivière est dangereuse à la consommation et que de nos rivages s'exale une odeur putride qui soulève le cœur.

Je regrette de n'être pas assez connaisseur pour apporter un remède au mal, et c'est pour nous un grand malheur d'être privés de la pêche qui était si abondante jadis. J'oubliais de vous dire qu'au lac de la Montagne c'est la barbus qui en souffre le plus, dans la rivière toutes les variétés de poissons sont atteintes: carpes, brochets, dorés, achigans, esturgeons. J'ai vu un cadavre d'esturgeon de près de sept pieds de long et pesant à peu près 80 livres, mort, couché sur le dos et atteint sur le ventre de plusieurs des taches dont je vous parlais plus haut, grandes comme des pièces de dix cents, quelques-unes blanches, les autres blanches et rouges; c'est désolant."

Various investigators have described diseases of the integument of fishes due to extremely small parasites belonging to the myxosporidia. These protozoan parasites, as a rule, cause excrescences in the form of pimples and warts, quite unlike the ulcerated and fungus-covered sores due to vegetable affections or to the special morbid condition of organs due to entozoan parasites. There is ground for regarding the unhealthy state and extensive mortality of fishes in the before-mentioned cases as induced by unfavourable conditions and by an environment not merely morbid but toxic and fatal.

About twenty years ago there was a serious mortality extended over a very wide area amongst the sea fishes in the Atlantic ocean, to the north of the Mexican gulf. This mortality was by many authorities attributed to the poisoning of the water by injurious vegetable matters, though others held that some volcanic or subaqueous disturbance had worked the evil. The captain, who first reported the occurrence, said that on his trip from Cedar Key he encountered a wide streak of poisoned water, covered with all varieties of dead fish, of more than a mile in extent, off Indian Pass, between Clear Water and Egmont Light. A very offensive smell arose from it, and a good many bottom fish, such as eels, were floating dead on the surface. A Tampa journal said:—"We opine that this fact upsets the theory of some as to this poisoned water being fresh water from overflow on the mainland, impregnated with poisoned vegetable matter, as there are no streams of any size flowing into the Gulf near where the fish were found."

Possibly this event belongs to the same class as that of the destruction of tile-fish on the eastern coast of the United States. In my special report upon 'Fluctuation in Fish,' published last year, I referred to that occurrence in the following terms:—

'The disappearance of the valuable tile-fish which for three years (1879-82) was very abundant on the north-east coasts of the United States, was attributed by some American authorities to volcanic causes. Almost in a single night this fine market fish was completely destroyed and the vessel, authorized by the United States government to investigate this remarkable occurrence, found the sea for over 150 miles in a direct line crowded with the floating bodies of these dead fish. Between six and seven thousand square miles were covered by this wave of destruction, and the schools of tile-fish appear to have been entirely cleaned out of that region, though stray groups of them have been reported occasionally, yet not to be compared with the millions that for the period named abounded in these waters.'