

SPECIAL APPENDED REPORTS

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WATER-POLLUTIONS AS AFFECTING FISHERIES

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Fishery legislation in different countries bears testimony to the importance universally attached to the evil effects of water-pollution upon fish life. Clauses are, as a rule, found embodied in codes of fishery regulations, with the object of directly or indirectly preventing the poisoning and polluting of waters inhabited by fishes. Yet the true relations of the various polluting agencies to the conditions of fish-life are little understood generally, and the nature of diverse injurious influences, the different modes in which foreign matters affect the finny tribes, that is to say, the comparative harmfulness or harmlessness of what are known as deleterious matters, have never been thoroughly and exhaustively tested and investigated. There can be little doubt that many ideas which are prevalent upon this subject have little basis in fact, and it is unquestionable that many well-meant attempts to cope with the supposed evils of river- and lake-pollution have been made without adequate knowledge. The object, of course, is to prevent the wasteful and wholesale destruction of fish, whether by design, or by negligent poisoning of waters: but the question remains to be decided as to what agencies, usually called pollutions, are really harmful to fishes and harmful in such a degree that serious and extensive destruction results. In England the existing laws are extremely severe upon this matter, but no doubt cases continually occur in which it is difficult, if not impossible, to prove clearly that the fisheries are injured, and, as Sir Frederick Pollock has pointed out, offenders may evade the law, or at any rate escape the penalties, if steps have been taken to render innocuous the alleged deleterious substances which have caused the pollution. As the authority named says:

"Dynamite or other explosives must not be used to catch or destroy fish in a public fishery in any part of the United Kingdom, or in the adjacent seas within a marine league of the coast, nor in a private fishery in England, on pain of fine up to £20 or imprisonment, which may be with hard labour, up to two months. The poisoning of any salmon rivers, as well as of any waters where there is a private right of fishery, with "any lime or other noxious material," in order to destroy fish, is an offence punishable with penal servitude up to seven years. Pollution of salmon rivers "to such an extent as to cause the waters to poison or kill fish" (though not intended to have that effect) is punishable by fine on an increasing scale, ending in £20 a day after a third conviction. But the party may escape these penalties, if his act in sending refuse, or whatever it may be, into the river, is not otherwise unlawful, and he can show that, being thus in the exercise of his right, 'he has used the best practicable means, within a reasonable cost, to render harmless the liquid or solid matter so permitted to flow or to be put into waters.' Probably it is not difficult to satisfy justices of this in a manufacturing district; again, if the stuff poured into the river is so noxious that there are not any practicable means at all of rendering it harmless, it is by no means clear whether any penalty is incurred. The person complained of may also, if a decision against him would cost him more than £100, require an action to be brought in the High Court of