

exempt from execution, practically shields him from civil damages, the expense of an inquiry into the origin of a fire should not work the ruin of the injured party by compelling him, as does the Act referred to, to pay the expense of the investigation.

It is the crime of arson to set-on fire a stack of hay, and probably such to fire a wood pile, but it has never been made such a crime in this country to set fire to square leagues of forest. It is an indictable offence when one, by such negligence as shows him to be reckless or wantonly regardless of consequences, sets fire to any forest or tree on this Crown domain or on private property, *on any creek or river or railway beach or wharf*, so that the same is injured or destroyed. The words in italics taken from section 486 of Sir John Thompson's Criminal Code, seem to limit the range of the offence and to afford to the indigenous tramp or reckless bushwhacker the opportunity to kindle a flame regardless of legal consequences, if he will only keep away from the watercourses. And a further degree of protection seems to be afforded the wrong-doer in a case where the property first destroyed is his own, provided the wrong done was without intent to defraud.

The destruction of the forest by settlers' fires beyond the limits required for tillage, is more than reckless waste. It is crime. It is an invasion of the providential natural economy of the territory the nation is permitted to occupy. It injuriously interferes with terrestrial evaporation,—part of the providential climatic law: it interferes with the distribution of the rainfall, with the preservation of fertility in the soil for the food of future generations; and in view of these copious wrongs is a crime against the Divine Providence. The social crime is equally of portentous enormity. It robs the country of a source of wealth growing in value with every unit of population and which within itself contains a more independently active increment of growth than any other living principle in the economy of the world we live in. The mineral wealth of the country grows not,—only the means for converting it into wealth. The treeless soil is valueless without labor. But the tree wins from air and rain and sun a yearly tribute of nourishment which the falling leaf gives to the soil while the year's ring of wood-growth is enclosed within the bark for the future use of man.

The operation of the system of fire-rangers, paid in part by the Governments in part by the limit owners, is credited with a greater claim for efficiency than it is entitled to. It makes no provision for dealing with the wanton destruction of timber by the settlers themselves, who often look upon a fire which consumes their wood standing as a ready means for preparing the way for clearing and "getting the land into hay." Within a few years past a correspondent of the *Globe* called attention to the danger to forests in a remote part of the Nipissing district by giving location tickets for the settlement of land wholly unfit for cultivation. The worst fires, as a rule, are not those which break out on well timbered

limits, but those which occur where a limit has been worked over a number of years. Lumbermen have been known to retain in their possession when they have had no desire to cut these limits with only a residuum of blasted trees, and instances are not wanting where they have refused to sell such to settlers or jobbers, preferring to see the limit remain a ready victim for the lightning bolt or the wind-wafted spark from a clearing, than to allow any lumbering operations which might reduce the risk of fire.

Mr. Fernow, in his report for the year 1892, presents the draft of a measure for the protection of forest property, worthy, in its main features, [of the consideration of legislators in Ontario and Quebec. It proposes the appointment of a commissioner to organize and super vise, and be responsible, under the provisions of the Act for the protection of forest property against fire. Then follow clauses for the organization of fire service, for the creation of a fire indemnity fund, and for legal proceedings for the prosecution of incendiaries. It suffices here to draw attention to these suggestions for legislation. In many ways the people of the United States are helping the cause of forest protection by the organization of state forestry associations, among which must be noted the Pennsylvania Forestry Association, under the presidency of John Birkinbine, C.E. Its monthly bulletin, *Forest Leaves*, deserves widespread recognition. Chief of all, the labors of the former Secretary of Agriculture, and his successor, Hon. Mr. Morton, the eminent founder of the American Arbor day, and also of our own, and the profound studies and learned discussions of Mr. B. E. Fernow, an accomplished authority on all matters relating to forestry, have advanced the cause of forest protection to that point where its demands now meet with general accord. In Ontario, Mr. Phipps, as Clerk of Forestry, has issued many reports on the subject of planting trees, and on foreign methods of forest management, which have been of great interest to the public. His efforts, however, will only make the indictment stronger against the persons in power, who are responsible for the protection of the greatest endowment the country has, if speedy measures are not devised for the protection of private and public forests from fire.

The forest region is without any system of police, and probably needs none for any other than the purpose mentioned. Private injuries on this score abound, but the injured are too poor "to take the law" on those who are so mean as to break it. Municipal regulation of the season for firing log heaps is allowed, but the history of the country too well establishes that municipal prevention of wrong in this matter, where every municipal officer is more likely than not to excuse the wrong, is an utter farce. The popular conscience has been debauched by the universal incendiarism. No amount of warning or expostulations will be of any avail. Nothing but a vigorous policy will serve to protect, against this incendiarism, what remains of the great forests of Ontario and Quebec.

The Free Grant townships are 153 in number. In most of these the settlers are so widely scattered as to be unable to give each other any help in fighting fire for the purpose of saving "the bush." It is only when fences, crops or buildings are in danger that neighbourly help comes from far and wide. There is no reason, from the settler's point of view, why he should make the least effort to prevent fire from spreading beyond his clearing. As a consequence settlers' fires often run through hemlock, spruce and swamp timber in which the lumbermen have no interest, and for the preservation of which the present system of fire-rangers makes no provision. The hardwood timber is seriously damaged by the destruction of the soil and this means a greater loss to the country than the mere value of the hardwood itself. If the soil were left intact the indigenous growth would in two generations replace the average loss.

The subject invites the interest of the journalists of the country, without whose aid it is useless to look for any remedy in this matter. It must be remembered that the forest interest elects no representative to the legislature. Lumbermen, who make the largest fortunes in the community, when they retire from business invest in Virginia wild lands, Utah silver mines and Texas cattle ranches, or, in their wiser moments, in bank stocks. Not one of our forest kings has ever said in public one word in behalf of all that is comprehended under the word "forestry." The Crown Lands Departments are administered solely with a view to present revenue. The backwoods portions of the constituencies, with the exception of the Ontario districts of Nipissing, Algoma, Thunder Bay and Rainy River, are convenient fields for the exercise of lumbermen's patronage, and the patronage of the local member in securing government grants for poor schools and colonization roads, and all with an eye to—votes. That admiration of Crown Lands in any province suits best the popular opinion which averts for the time the Canadian farmers' nightmare—direct taxation. The tax in the future of increased yearly subventions to the United States for fuel and of increased cost of building timber, deserves consideration, because the ratio of increase is amazingly rapid and likely to become ere many years go by the most burdensome of all charges on the industry of the country.

EN PASSANT.

A rather good story is going the rounds, which illustrates to a T, the penny wise and pound foolish policy that not infrequently characterizes the operations of our Geological Survey. While the Department was investigating the nickel resources of the Sudbury district, one of the largest operators, whose works are ordinarily a sealed letter, took occasion to show a great deal of kindness and courtesy to the officers in charge of the work. Every facility was afforded to inspect the mines and works, and the manager