FORESTRY AND THE SCHOOLS.

By CHAS. L. WOOD, Truro. (Concluded.)

I now wish to deal with the enemies of the forest. Forests have their enemies as have human beings, and one of the worst is man himself. Man seems to think that forests were made to be cut down for his benefit as soon as they acquire a certain height, and not to be left for the betterment of the country. Did the wild Indian of three hundred years ago consider the forest as his enemy? He rather regarded it as his friend; he would not injure a tree unless for fuel, neither would he attack the wild animals unless it was for food.

But the civilized man of today is not satisfied with destroying our wild animals; he must destroy our beautiful forests, that nature has placed here for our benefit. A man today thinks if he has a nice grove of pine or hemlock that he must cut it down and get the big timber off it, but let me ask what does he do with the wood that is not good for lumber? I am sorry to say that he leaves it lying on the ground to go to waste, and thus prove a menace in case of fire.

The greatest enemy to our forests is fire. Every year thousands of acres are destroyed by this great enemy, and it is well worth our while to develop a system of protection. At first sight it might seem foolish to suppose that the vast extent of the Canadian forests could be effectively protected, but when we know that the fires that result from natural causes are few in number, compared with those that originate through the action of man, the matter does not seem to be an impossibility. It is estimated that \$100,000,000 worth of forests young and old, was destroyed by fire in 1908. It is not therefore surprising that timber has doubled in value, during the past few years. In view of this, rented land at \$4.00 per acre, suitable for planting would, if planted with trees, prove a splendid investment for Canada. All people who are best able to judge, realize that if something is not done soon our commercial supremacy in twenty or thirty years, will suffer for the want of timber. In order to guard against this contingency, it is necessary for our government to take immediate measures for the planting as quickly as possible much of the suitable waste or cheap pasture land in the country.

Mr. Fernow, of Toronto University, and head

of the Forestry Department of Canada, has estimated that the whole value of forests in Canada at about three hundred million acres, instead of eight hundred million as was previously supposed. The forests of Eastern Canada containing timber suitable for the European market are about eighty-seven million acres, situated in Quebec, Nova Scotia and New Brunswick. A large portion of these is quite inaccessible; and from what one knows of them, it is not improbable that they will all be eventually destroyed by fire, unless stringent measures be taken for their preservation.

The provincial and dominion governments, with the exception of British Columbia and Prince Edward Island, have established fire ranging systems. Fire rangers are appointed to patrol the woods or forests in the summer months, but more especially in the sporting season. This fire ranging system is only in its infancy, but it is hoped that it may before many years be one means of preserving those great forests, that nature has so bountifully bestowed upon us.

In addition to this system, we could further help preserve our forests by adopting a system of reforestation.

Commissioners should be appointed to survey and set apart all the suitable land for planting trees. The planting of all the waste land should be made compulsory as it is in Germany. We have about three hundred million acres of forest, or about four per cent. of the total area of the United Kingdom.

Besides this great extent of forest there are between six and seven million acres of land that is suitable to the raising of forests. If this seven million acres were planted in forest trees, we would then have a total of ten million acres, and the planting of this seven million acres if done in a proper systematic way would not cost more than \$21,000,000. Further, this system of reforestation would do more than anything else to give employment and prevent men from drifting into the towns and into the ranks of the unemployed.

I come now to the last phase of this important topic, viz., the relation of forestry to Education, and how it may be connected with our schools and colleges. The educational authorities have recognized this great question, and have been turning their attention to the possibility of providing the scientific training that may be necessary. The University of New Brunswick has established