

teredo cannot attach itself, offer only an insufficient protection : these coverings are likely to be injured either by mechanical means, such as the action of the water, or by being dissolved by the water. Just so soon as a point of surface of the wood is uncovered, be it ever so small, the teredo, still microscopic, penetrates into the interior. Covering wood with sheets of copper or zinc, or with nails, is a too expensive process, and only protects the wood so long as they form an unbroken surface.

2. Impregnation with inorganic, soluble salts, generally considered poisonous to fish and animals, does not protect wood from the attacks of the teredo.

3. Although we do not know with any certainty if among exotic woods there may not be found these which will resist the teredo, we can affirm that hardness is not an obstacle which prevents the mollusc from perforating his galleries ; the ravages observed in wood of guaiacum and mamberlak prove this.

4. The only means which can be regarded with great certainty as a true preservative against the injury to which wood is exposed from the teredo, is the oil of creosote ; nevertheless, in employing this means care is necessary that the oil be of good quality, that the impregnation be thorough, and that such woods be used as will absorb oil readily.

The conclusions arrived at by our Commission are confirmed by the experience of a large number of engineers in the Netherlands, and also in England, France and Belgium. M. Crepin, a celebrated Belgian engineer, expresses himself thus, in a Report on experiments tried at Ostend, under date of February 5, 1864 :

"The result of our experiments now seems decisive, and we think we can draw from them this conclusion : that soft woods, well prepared with creosote, are protected from the attacks of the teredo, and are in a condition to assure a long duration. The whole matter, in our opinion, is reduced to a question of thorough impregnation with good creosote oils, and the use of such woods as are adapted to the purpose. It has been found that resinous woods are impregnated much better than other varieties."

Mr. Fourtier, a French engineer at Napoleon-Vendu, in a report dated March 3, 1864, makes a resumé of experiments con-