

medals was awarded to Dr. Boucherie, of which only four were conferred in all.

The mode of application is as follows :—Soon after the tree is felled, a saw-cut is made in the centre, through about nine-tenths of its section. The tree is slightly raised by a lever or wedge at its centre, and the saw-cut thereby partially opened; a piece of string is then placed round the cut, close to the outer circumference of the tree, the support is withdrawn, and the saw-cut closes on the string, thereby making a water-tight joint. An auger-hole is then bored obliquely into the saw-cut; a wooden tube is driven into the hole, the conical end of which is attached to a flexible pipe, which is in connexion with a cistern or reservoir, at an elevation of from 30 to 40 feet above the tree intended to be preserved.

When it is necessary to prepare timber in long lengths, a cap is placed at the end of the tree by screws or dogs. The most efficacious solution is composed of sulphate of copper and water, mixed in the proportion of 1 to 100. The strength is easily ascertained, by any intelligent workman, by an hydrometer;—and the cost of such a solution is so trifling, as to offer no impediment to its universal application for the purpose in view.*

It would be difficult to enumerate all the classes to be benefitted by this invention, and the uses to which it may be applied. Railway companies, ship-builders, telegraph companies, and land owners, would alike benefit by it. Post and rail fencing, field gates, wood farm buildings, frame buildings, and dwellings in general, would last many additional years. Mr. R. Stephenson, the President of the Institute of Civil Engineers, in his inaugural address, adverts to the great consumption of railway sleepers by decay, and estimates it at 2,600,000 per annum, costing upwards of £500,000. Taking the resistance

* On comparing the above account of Boucherie's process with that described in the *Canadian Journal* (No. 6, pp. 559-561) and for which a patent was taken out in May, 1856, the two processes appear to be identical so far as the employment of hydraulic pressure is concerned, and if such is the case, this part of the patent is void.

The following is the text of the Patent Law bearing upon this point. "If at the trial in any such action [*for infringement of Patent*,] it shall be made apparent to the satisfaction of the Court. . . . that the thing thus secured by Patent was not originally discovered by the Patentee, or party claiming to be the Inventor or Discoverer in the specification referred to in the Patent, but had been in use, or had been described in some public work, anterior to the supposed discovery of the Patentee. . . . the Patent shall be declared void." 13 and 14 Vict. 79, c. 8.—(*Ed. Can. Jour.*)