

standing that the number of some of their coats was less than the years which had passed since that period ; and at which we must not be surprised, not only because we can never, by the number of ligneous coats, find the age of trees within three or four years, but also because the first ligneous coats, formed after that frost, were so thin and confined, that we cannot very exactly distinguish them.

It is also certain, that it was the portion of the trees that were in sap in the hard frost of 1709, which instead of coming to perfection, and converting itself into wood, became more faulty. Besides, it is more natural to suppose, that the faulty part must suffer more from sharp frosts than sound wood : because it is not only at the external part of the tree, and therefore more exposed to the weather, but also because the fibres are more tender and delicate than the wood. All this at first appears to wear but little difficulty, yet the objections related in the history of the Academy of Sciences, 1710, might be here adduced ; by these objections it appears that in 1709, the young trees endured the hard frost much better than old. But as these facts are certain, there must be some difference between the organic parts, the vessels, the fibres, &c. of the sappy part of
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