

a little on these defects to trace the causes whence they proceed.

The sappy part of trees is, as is well known, a crown or circle of white or imperfect wood of a greater or less thickness, and which in almost all trees is easily distinguished from the sound wood, called the *heart*, by the difference of its colour and hardness; it is found immediately under the bark, and surrounds the perfect wood, which in sound trees is nearly of the same colour, from the circumference to the centre. But in those we now speak of, the perfect wood was separated by another circle of white wood, so that on cutting the trunks of them we saw alternately circles of sap and perfect wood, and afterwards a clump of the latter, which was more or less considerable, according to the different soils and situations; in strong and forest earth it is more scarce than in glades and light earth.

By the mere inspection of these cinctures of white wood, which we in future shall term *false sap*, we could perceive it to be of bad quality; nevertheless, to be certain of it, we had several planks sawed two feet in length, by nine to ten inches square, and having the like made from the true sap, we had both loaded in the middle, and those of the false sap