two pendula of exactly the same length and weight. I give to one of these a tip, and it commences to vibrate. Soon the other will commence to swing in harmony with the former; the motion will gradually be transferred from the first to the second; the first pendulum will come to rest, and the other will have increased its arc of vibration until its motion shall equal that of the former. Soon, however, in like manner as before, the motion of the second will cease, and the first will again, little by little, swing back and forth until it shall have taken up from the second the motion formerly lost. Thus we will have motion and rest succeeding each other—a transference of motion between two bodies which are not directly in contact. Such transference of course requires that the two bodies shall have exactly the same vibratory periods.

In the same way, if we have two tuning forks of the same pitch placed apart, the vibrations of one will be taken up by the other, and the two will sound forth the same note alternately, the vibrations of the forks being sent back and forth across the intervening space. It is necessary, however, that the two tuning forks shall vibrate exactly in the same manner. A small piece of wax attached to either will destroy the experiment.

Let all the tones of a piano be sounded at once, and let the mass of vibrations contain those corresponding to the sound of a particular tuning fork. This fork will cut them out of the complex and vibrate itself. Behind it we shall then have all the vibrations, minus those cut out by the tuning fork. To apply this to our tree, we may regard the molecules of which it is composed as so many tuning forks of different pitch, which select from the heterogeneous mass of vibration of the ether those with which each separately can sympathize, while all other vibrations, either too rapid or too slow, are rejected—reflected. About the tree then we have a state of most complex agitation. It may be likened to a perfect erash of music bursting from two orchestras playing different melodies This music is sifted, analyzed, by the tree; chords upon chords are climinated from the tangled