

law of the genesis of the scale

Ramsay

PLATE IV. OSCILLATION AND VIBRATION.

Fig. 1 - The [pendulums](#) in this illustration are suspended from [points](#) determined by the [division](#) of the [Octave](#) into [Commas](#); the [comma-measured chords](#) of the [Major key](#) being **S**, 9, 8, 9, 5; **T**, 9, 8, 5, 9; **D**, 8, 9, 5, 9. The [pendulums](#) suspended from these [points](#) are tuned, as to [length](#), to swing the [mathematical ratios](#) of the [Diatonic scale](#). The longest [pendulum](#) is F, the [chords](#) being properly arranged with the [subdominant](#), [tonic](#), and [dominant](#), the lowest, [center](#), and upper [chords](#) respectively. Although in "Nature's Grand Fugue" there are 25 [pendulums](#) engaged, as will be seen by reference to it, yet for the area of a single [key](#) 13 [pendulums](#), as here set forth, are all that are required. It will not fail to be observed that thus arranged, according to the **law of the genesis of the scale**, they form a beautiful curve, probably the curve of a falling [projectile](#). It is an exceedingly interesting sight to watch the unfailing [coincidences](#) of the [pendulums](#) perfectly tuned, when started in pairs such as F4, A5, and C6; or started all together and seen in their manifold manner of working. The [eye](#) is then treated to a sight, in this solemn silent [harp](#), of the order in which the [vibrations](#) of [sounding instruments](#) play their sweet [coincidences](#) on the [drum](#) of the delighted [ear](#); and these two "art senses," the [eye](#) and the [ear](#), keep good company. Fig. 2 is an illustration of the correct [definition](#) of a [Pendulum Oscillation](#), as defined in this work. In watching the swinging [pendulums](#), it will be observed that the [coincidences](#) [[Scientific Basis and Build of Music](#), [page 104](#)]

See Also

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