sharp seventh

Ramsay

dividing itself by 2 or 3 or 5, etc., up through the whole geometrical series of numbers, not keeping fixed at one thing; but while the whole length is vibrating the fundamental partial, it keeps shifting the still nodes along its length, and sometimes longer and sometimes shorter segments are sounding the other partials which clothe the chief sound. It has been commonly said that "a musical sound is composed of three sounds," for every ear is capable of hearing these three, and with a little attention a few more than these; but many will be startled when told that there are twenty-five sounds in that sound. Eighteen of them are simply the octaves of the other seven, all of these seven except one having one or more octaves in the sound. Four of the seven also are very feeble, the one which has no octave being the feeblest of all. Two of the other three are so distinctly audible along with the chief partial that they gave rise to the saying we have quoted about a musical sound being composed of three sounds.¹ If the three most pronounced partials were equally developed in *one sound*, it could not be called one sound - it would decidedly be a *chord*; and when in the system they do become developed, they form a chord; but in the one sound they, the partials, having fewer and fewer octaves to strengthen them, fade away in the perspective of sound. The sharp seventh, which in the developed system has only one place, not coming into existence until the sixth octave of the genesis, is by far the feeblest of all the partials, and Nature did well to appoint it so. These harmonics are also sometimes called "overtones," because they are higher than the fundamental one, which is the sound among the sounds, as the Bible is the book among books. [Scientific Basis and Build of Music, page 59]

"Dividing the octave into twelve semitones is a near approach to the mathematical quantities, and this saves the musical artist from *errors in tone* - at least to any extent; but it does not save from *errors in judgment*. In the case of G#, for example, not one of the reasons given for the use of the *sharp seventh* in the minor scale is a correct one. A touch of nature makes the world akin, and a touch of the Law of Duality balances everything in music." [Scientific Basis and Build of Music, page 99]

given to this scale, as the D of A minor would be a comma too low; it would make a 9-comma interval between D and E, the seventh and eighth, where the minor mode has an 8-comma one. So its two new notes are thus found in the relative and sub-relative majors. This is the way of their mutual providing in the region of the #s; the **# seventh** of the major is given to be the **#** second of the minor, and the comma-higher second of the sub-relative becomes the seventh of the minor; and then we have a true written representation of what Nature has done. [Scientific Basis and Build of Music, page 113]

See Also

seventh sharp