Re: Measurement of pitch

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- *From*: John Bailey <john_bailey@xxxxxxxxxxxxxxx>
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On 4 Dec 2006 16:29:27 −0800, matt271829−news@xxxxxxxxxx wrote:

> Hi
>
> At what time in history were the range of frequencies of audible sounds
> first roughly known? Who made the first scientifically accurate
> measurement of the frequency of a sound wave, and when?

"Mersenne's description in his Harmonic universelle (1636) of the
first absolute determination of the frequency of an audible tone (at
84 Hz) implies that he already demonstrated that the
absolute−frequency ratio of two vibrating strings, radiating a musical
tone and its octave, is as 1 : 2. The perceived harmony (consonance)
of two such notes would be explained if the ratio of the air
oscillation frequencies is also 1 : 2, which in turn is consistent
with the source−air−motion−frequency−equivalence hypothesis."The Wave
Theory of Sound, Chapter 1 of Acoustics: An Introduction to Its
Physical Principles and Applications by Allan D. Pierce
http://asa.aip.org/pierce.html

Other tidbits include the contributions of Chrysippus (c. 240 B.C.),
Boethius, Aristotle, Pythagoras, Galeleo, Euler (1707−1783), Lagrange
(1736−1813), d'Alembert (1717−1783) and Newton.

I would have said Rayleigh (The Theory of Sound, 1877) until I
checked.

John

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