LXXVIII. Reply to Mr. M.'s Remarks on Mr. Smyth's comparative table in vol. xxxv. p. 488

Mr. Smyth

To cite this article: Mr. Smyth (1810) LXXVIII. Reply to Mr. M.'s Remarks on Mr. Smyth's comparative table in vol. xxxv. p. 488, Philosophical Magazine Series 1, 36:152, 435-437, DOI: [10.1080/14786441008563221](https://doi.org/10.1080/14786441008563221)

To link to this article: <http://dx.doi.org/10.1080/14786441008563221>

Published online: 18 May 2009.

Submit your article to this journal [↗](#)

Article views: 2

View related articles [↗](#)

LXXVIII. *Reply to Mr. M.'s Remarks on Mr. Smyth's Comparative Table in vol. xxxv. p. 488. By Mr. SMYTH.*

To Mr. Tilloch:

SIR, I SHALL esteem it a favour if you will insert the following answer to the gentleman who signs himself M. in your Magazine for September.

Mr. M. says it is "curious that Mr. S. should presume organ-tuners will continue to tune as their ancestors did before them, till irrefragable arguments are produced to prove the superiority of Kirnberger's temperament." Here, I confess, I stand convicted of inconclusive reasoning. The fact, however, I imagine to be this: an organ, with compound stops, will not admit of the major thirds being tuned sufficiently sharp to ameliorate, in any considerable degree, those greatly tempered chords which are called *wolves*; of which I wish the breed were extinct.

I am glad to find that Mr. M. agrees with me in opinion, that Kirnberger's is one of the *worst* unequal temperaments. Had Mr. M. stated in definite terms his own favourite system, it should have been submitted to examination.

Mr. M. says, "*perhaps* for the organ a 'good *unequal* temperament is preferable to the *Isotonic*.'" I was not ignorant that even for this instrument the *Isotonic* has had its advocates; and Mr. M. presents to my view the names of Couperin, Marpurg, Rameau, Cavallo, professor Chladni, and many other eminent philosophers. Now, not being a philosopher myself, I take the liberty of asking one plain question, which relates solely to the temperament of the organ:—Can any man living *prove*, that there ever was one organ in Christendom tuned according to the *equal temperament*, in consequence of a peremptory order from any one of these gentlemen, and suffered to *remain* in that state? This is coming to the point.

A person disposed to cavil might raise arithmetical and philosophical doubts whether a *real* equal temperament has ever been heard.

I wish Mr. M. would inform us, and explain precisely, *what the system is* which he tunes so dexterously on his harp, by the *melody alone*, without striking consonances. Had his instrument so tuned been intended for melody alone, this mode of tuning might answer the purpose; but, as each of the strings has various relations to other strings, and a temperament of a diatonic interval, too small to produce

436 *Reply to Remarks on musical Temperament.*

duce a sensible effect in melody, will produce a very sensible effect in harmony, I congratulate Mr. M. upon a power which I never had the felicity of seeing exercised by any one person.

Never having heard of such a writer as *Eximeno*, I referred to Dr. Burney's History of Music, and there learn that Eximeno was possessed of eloquence, fire, and a lively imagination; but that his book has been called, in Italy, "a whimsical romance upon the art of music, in which he discovered a rage for pulling down, without the power of rebuilding."

I have annexed, in compliance with Mr. M.'s request, the beats of mean tone temperament in one second. I need not add that, by taking the first decimal, the beats will be obtained for ten seconds, which I would recommend. I have also subjoined the beats of Mr. Marsh's System; and wish to be informed by that gentleman if he has had an *organ* tuned according to this system.

Persons unacquainted with the theory of the beatings of imperfect (that is, tempered) consonances, may object to a table of beats, that so large a number as 80 or 50 in ten seconds cannot be counted. For the information of these gentlemen, I add, that no one can count these beats: in fact, they rather *howl* than beat; but they necessarily result from the temperament of the *slowly* beating consonances by which the temperament is laid.

I remain, Mr. Editor,

Yours, &c.

C. J. SMYTH.

Norwich, Dec. 5, 1810.

P. S.—Please to correct an erratum in my paper, p. 250, second line from the bottom, for *policity* read *policy*.

MEAN TONE TEMPERAMENT.

Beats in one Second.

	480.	S.	III.	4.	Vth.	6.	VI.
C	448-6065	8-366	53-8099	5-5740	4-1755	0	6-9675
B	429-3227	68-1522	C	5-0410	3-9793	80-4716	6-6893
Bb	401-2433	7-4628	0	4-9886	3-7311	0	6-2470
A	375-	6-9675	45-	4-6704	23-4212	0	40-9832
* G	358-8838	6-6883	0	4-4648	3-3422	0	5-5310
* F	335-4110	6-2470	40-2358	4-1755	3-1194	0	45-5763
F	320-9972	50-9832	0	3-9793	2-9916	60-1936	4-9870
E	300-	5-5810	0	3-7314	2-7870	0	4-6704
Eb	287-1053	45-5768	0	23-4212	2-6705	53-8099	4-4735
D	268-3273	4-9878	0	3-3422	2-4943	0	4-1830
* D	250-7784	4-6704	30-0968	3-1194	2-3352	0	34-0761
C	240.	4-4735	0	2-9916	2-2424	45.	3-7314

Mr. MARSH'S

Of the Bogs in Ireland.

437

Mr. MARSH'S SYSTEM.

Beats in one Second.

C	480.	3.	III.	4.	V	6.	VI.
B	451-3838	18-3838	31-4802	2-3802	2-5306	17-7984	15-4250
Bb	48-2557	40-0412	10-6067	3-2066	2-4007	47-0736	14-7447
A	402-7338	16-4028	9-9734	3-0162	2-2478	15-8794	18-7622
*	378-7240	15-4250	26-3800	2-8758	8-0076	14-9330	29-9746
G	437-9272	14-7447	8-8992	2-6912	2-0140	14-1686	12-2794
*	337-9052	13-7622	23-5368	2-5306	1-8994	13-3226	26-7434
F	320-5991	29-9746	7-9397	2-4006	1-7973	35-2398	10-9559
E	301-4859	12-2794	7-4665	2-2478	1-6901	11-8872	10-3023
Elb	286-0449	26-7434	7-0843	8-0076	1-6033	31-4802	9-7755
D	268-9919	10-9559	6-6613	2-0140	1-5081	10-6067	9-1919
*	352-9553	10-3023	17-3199	1-8944	1-4379	9-9734	20-0206
C	240.	9-7755	5-9436	1-7973	1-3456	26-3800	8-2014

LXXIX. *Copy of the Instructions given to their Engineers by the Commissioners appointed to inquire into the Nature and Extent of the several Bogs in Ireland; with further Particulars respecting the Bog of Allen, and its Substrata; accompanied with a transverse Section of Lullymore Bog, reduced from Mr Griffith's Sheet Section. By Mr. WILLIAM FAREY.*

THE secretary of the commissioners appointed to inquire into the nature and extent of the several Bogs in Ireland, and the practicability of draining and cultivating them, is directed by the Board to communicate, for the information of the engineers who may be employed, and of the proprietors of bogs, the mode in which they have been advised to proceed.

“1st.—They propose to divide the Bogs of Ireland into districts, and to assign each district in charge to one or more engineers.

“2d.—Each of the engineers is to provide a sufficient number of assistants, for whose qualifications he is to be responsible.

“3d.—The commissioners think it necessary to direct the attention of their engineers to the particular heads of inquiry contained in these instructions; but it is by no means intended to confine their judgement within these limits; on the contrary, where local circumstances point out a preferable mode of proceeding, the commissioners expect that it shall be fully stated, in addition to the information on the different points which they now suggest.

“4th.—They conceive, that the first steps towards the drainage of an extensive bog, should be to ascertain the