## MATHEMATICAL TABLES—ERRATA

By offering the means for improving available tables it is hoped that the Errata, listed or discussed under this heading from time to time, may serve a very useful purpose. The total unreliability of a table will occasionally be indicated. All readers knowing of errors in tables are invited to send a list of them to the Editor for publication. The Committee desires to become a clearing-house for all information of this kind. In RMT **75** we have already given references to lists of errors in tables by Rhaeticus, 1596 and 1613; and in RMT **88,** to errors in a work by Stutz, 1933.

For convenience in reference the Errata lists will be numbered consecutively.

**1.** E. GIFFORD, *Natural Sines to Every Second of Arc and Eight Places of Decimals*, second ed., Manchester, 1926. Corrections of more than one in the eighth place are followed by three "corrections" of unity in the eighth place.

| Page | ′ | ″ | Correct figure | Page | ′ | ″ | Correct figure |
|---|---|---|---|---|---|---|---|
| 3 | 25 | 33 | 3213 | 264 | 57 | 11 | 6876 |
| 16 | 31 | 08 | 4874 | 272 | 15 | 06 | 0585 |
| 25 | 06 | 09 | 4097 | 277 | 08 | 56 | 4251 |
| 39 | 24 | 06 | 9784 | 286 | 36 | 37 | 7629 |
| 47 | 44 | 01 | 6750 | 292 | 36 | 29 | 0404 |
| 52 | 31 | 59 | 7998 | 303 | 24 | 09 | 4105 |
| 54 | 54 | 09 | 5349 | 303 | 24 | 52 | 7391 |
| 67 | 04 | 26 | 7475 | 305 | 45 | 49 | 4293 |
| 71 | 42 | 05 | 1103 | 307 | 01 | 09 | 5644 |
| 77 | 40 | 27 | 0634 | 309 | 22 | 25 | 3305 |
| 84 | 59 | 12 | 9609 | 319 | 08 | 53 | 8797 |
| 91 | 07 | 38 | 6319 | 327 | 21 | 46 | 2241 |
| 91 | 08 | 08 | 0359 | 333 | 25 | 27 | 7580 |
| 91 | 09 | 18 | 3118 | 333 | 25 | 28 | 7856 |
| 93 | 22 | 18 | 7933 | 333 | 25 | 29 | 8131 |
| 100 | 34 | 57 | 9565 | 335 | 47 | 59 | 7785 |
| 110 | 17 | 29 | 4976 | 336 | 50 | 02 | 1289 |
| 110 | 19 | 51 | 0334 | 337 | 00 | 57 | 9207 |
| 113 | 48 | 52 | 0434 | 338 | 13 | 14 | 8399 |
| 115 | 03 | 59 | 6351 | 338 | 16 | 49 | 6309 |
| 118 | 33 | 39 | 0751 | 340 | 30 | 19 | 3666 |
| 126 | 54 | 48 | 5539 | 343 | 06 | 52 | 5677 |
| 133 | 09 | 38 | 0330 | 345 | 29 | 18 | 8202 |
| 142 | 35 | 09 | 2245 | 346 | 30 | 24 | 5396 |
| 142 | 39 | 27 | 6846 | 348 | 59 | 24 | 5559 |
| 155 | 48 | 41 | 1005 | 350 | 10 | 54 | 2404 |
| 156 | 52 | 37 | 3978 | 355 | 08 | 17 | 0581 |
| 160 | 30 | 46 | 9739 | 357 | 25 | 32 | 6899 |
| 165 | 20 | 39 | 3441 | 359 | 40 | 18 | 4595 |
| 165 | 20 | 46 | 6456 | 359 | 41 | 12 | 7812 |
| 166 | 38 | 52 | 3486 | 359 | 46 | 09 | 0398 |
| 171 | 27 | 27 | 0675 | 359 | 47 | 49 | 4797 |
| 185 | 40 | 39 | 0522 | 365 | 42 | 09 | 9062 |
| 186 | 59 | 26 | 9678 | 365 | 49 | 55 | 9394 |
| 202 | 37 | 52 | 4374 | 367 | 01 | 41 | 5699 |
| 204 | 52 | 23 | 5472 | 367 | 08 | 39 | 3681 |
| 216 | 56 | 58 | 7118 | 369 | 21 | 51 | 8343 |
| 217 | 02 | 39 | 0871 | 369 | 21 | 52 | 8575 |
| 224 | 17 | 48 | 4212 | 370 | 32 | 53 | 1701 |
| 239 | 42 | 29 | 7599 | 371 | 45 | 28 | 5498 |
| 254 | 15 | 05 | 8475 | 372 | 50 | 23 | 3085 |
| 258 | 58 | 32 | 8628 | 372 | 50 | 24 | 3314 |

| Page | ′ | ″ | Correct figure | Page | ′ | ″ | Correct figure |
|---|---|---|---|---|---|---|---|
| 372 | 50 | 25 | 3543 | 442 | 37 | 56 | 7261 |
| 372 | 50 | 26 | 3772 | 442 | 37 | 57 | 7397 |
| 372 | 56 | 58 | 3301 | 442 | 37 | 58 | 7534 |
| 373 | 09 | 05 | 8496 | 442 | 37 | 59 | 7671 |
| 374 | 17 | 00 | 5837 | 444 | 57 | 33 | 6501 |
| 377 | 48 | 35 | 9392 | 445 | 02 | 22 | 5123 |
| 381 | 28 | 57 | 9804 | 445 | 02 | 25 | 5523 |
| 383 | 41 | 27 | 1553 | 445 | 02 | 28 | 5923 |
| 383 | 45 | 42 | 6278 | 448 | 32 | 38 | 3488 |
| 383 | 45 | 43 | 6493 | 448 | 33 | 09 | 7492 |
| 384 | 50 | 06 | 2790 | 448 | 34 | 28 | 7686 |
| 385 | 03 | 14 | 0595 | 449 | 43 | 39 | 8396 |
| 387 | 28 | 23 | 8273 | 449 | 48 | 09 | 2793 |
| 388 | 33 | 28 | 1896 | 451 | 07 | 33 | 9192 |
| 388 | 34 | 42 | 7302 | 457 | 09 | 31 | 6172 |
| 392 | 11 | 16 | 8798 | 459 | 22 | 13 | 3889 |
| 400 | 30 | 46 | 4898 | 461 | 48 | 29 | 1100 |
| 405 | 22 | 19 | 2193 | 466 | 31 | 42 | 0292 |
| 408 | 51 | 02 | 0362 | 469 | 01 | 37 | 4527 |
| 416 | 18 | 35 | 0400 | 473 | 49 | 27 | 3699 |
| 418 | 30 | 14 | 9596 | 481 | 02 | 44 | 4551 |
| 418 | 36 | 48 | 6308 | 485 | 44 | 25 | 6908 |
| 426 | 53 | 12 | 7274 | 485 | 49 | 03 | 8505 |
| 427 | 08 | 43 | 4104 | 487 | 09 | 38 | 2283 |
| 427 | 09 | 45 | 3814 | 495 | 20 | 14 | 7003 |
| 429 | 20 | 57 | 8505 | 497 | 48 | 37 | 3717 |
| 435 | 20 | 34 | 8821 | 498 | 51 | 25 | 3878 |
| 435 | 21 | 52 | 0285 | 499 | 02 | 12 | 2394 |
| 436 | 31 | 33 | 5244 | 499 | 05 | 59 | 5676 |
| 436 | 37 | 59 | 1269 | 499 | 08 | 03 | 2881 |
| 437 | 41 | 49 | 4494 | 104 | 15 | 19 | 2955 |
| 438 | 52 | 51 | 9460 | 201 | 20 | 15 | 6973 |
| 440 | 12 | 03 | 2370 | 413 | 49 | 06 | 3946 |
| 441 | 25 | 27 | 4299 | | | | |

W.P.A. Project No. OP 165-2-23-1250 at Philadelphia, Pa., 1941, under the sponsorship of the U. S. Coast and Geodetic Survey, L. G. SIMMONS, Senior Geodetic Engineer, in charge. Compare RMT **77**.

I have checked all of the errors here listed as well as 1126 other eighth-place unit errors found by the Coast and Geodetic Survey, with the copy of the second edition of Gifford's *Natural Sines* in the Library of Brown University. The result was to find that the following five listed errors were not errors at all:

| Page | ′ | ″ | Survey | Gifford |
|---|---|---|---|---|
| 303 | 24 | 52 | 7391 | 7391 |
| 374 | 17 | 00 | 5837 | 5837 |
| 405 | 22 | 19 | 2193 | 2193 |
| 440 | 12 | 03 | 2370 | 2370 |
| 466 | 31 | 42 | 0292 | 0292 |

All of the entries listed in the Errata above (+1126) were also checked with the *Eight-figure Table of the Trigonometrical Functions* by J. T. PETERS. In this way six cases were found in which the "Correct figures" of the Coast and Geodetic Survey were called into question. These are as follows:

| Page | ° | ′ | ″ | Survey | Gifford | Peters |
|---|---|---|---|---|---|---|
| 104 | 17 | 15 | 19 | 2955 | 2954 | 2954 |
| 201 | 33 | 20 | 15 | 6973 | 6974 | 6974 |
| 367 | 61 | 01 | 41 | 5699 | 5799 | 5700 |
| 413 | 68 | 49 | 06 | 3946 | 3947 | 3947 |
| 427 | 71 | 09 | 45 | 3814 | 3184 | 3813 |
| 445 | 74 | 02 | 28 | 5923 | 5823 | 5922 |

R. C. A.

End-figures are missing sin 1°44′41″ and 42″, namely: 0 and 5 respectively.

L.J.C.

Sin 36°, *for* 0.587 78255, *read* 0.587 78525.

F. W. HOFFMAN, 689 East Ave., Pawtucket, R. I.

2. H. BRIGGS, *Trigonometria Britannica*, trigonometry by H. GELLIBRAND, Gouda, 1633.

| | for | read |
|---|---|---|
| tan 6°.24. | 0.10934 01888 | 0.10934 11888 |
| tan $35°\frac{100}{100}$ | 0.72654 45280 | 0.72654 25280; tan 36° is correct |
| sin 64°.49 | 0.90221 . . . | 0.90251 . . . |

J. T. PETERS, *Siebenstellige Werte der trigonometrischen Funktionen von Tausendstel zu Tausendstel des Grades*, Leipzig, 1918, p. [iii]; also English edition, New York, 1942, p. [iii].

tan 19°.29 *for* 0.35099,90945 *read* 0.34999 90945

tan 77°.34 to 77°.67, 34 entries where the first digit should be 4 instead of 9.

AMELIA DE LELLA, *Five Place Table of Natural Trigonometric Functions to Hundredths of a Degree*, New York, 1934, Preface.

3. A. J. C. CUNNINGHAM, *Binomial Factorisations*, v. 1, London, 1923; see UMT 1.

P. 243, in the table for which $(1/10)(n^2+1)$ is a prime, col. 11, *for* 4683 *read* 9683.

P. 244, in the table for which $(1/13)(n^2+1)$ is a prime, *omit* the entry 671; and *for* 3930 in col. 4, *read* 2930.

L. EULER, "De numeris primis valde magnis," 1764; see UMT 1.

193 is given as a divisor of $82^2+1$, whereas it divides $81^2+1$; $1068^2+1$ is said to be equal to $5^5 \cdot 73$, instead of the correct factorization $5^6 \cdot 73$; $1080^2+1$ is said to have 773 as a factor, whereas 773 divides $1090^2+1$, and $1080^2+1$ is a prime. These errors remain uncorrected in the later editions of this paper, even in Euler's *Opera Omnia*, s. 1, v. 3, 1917.

J. W. WRENCH, JR.

4. L. J. COMRIE, editor, *Barlow's Tables* . . . , fourth ed., London, 1941. See RMT 82.

P. 5, cube root of 197, *for* 5.8186497, *read* 5.8186479.

In the first edition, 1930, p. 25, the difference following $\sqrt{10n}$ for 1156 should be 46494, not 45494.

L.J.C.

## UNPUBLISHED MATHEMATICAL TABLES

The list of unpublished mathematical tables, on which we shall later make report, is long, but this list can doubtless be greatly extended. We hope that anyone knowing of such tables in public or private hands, will acquaint us with the facts. The Committee desires to become a clearing-house for all information of this kind. It believes that the dissemination of such information is highly desirable, and may render notable services.

1. JOHN WILLIAM WRENCH, JR. (1911– ) *Complete factorization of integers of the form of* $n^2+1$ *for* $1 \leqq n \leqq 16{,}200$. Ms. in possession of Dr. Wrench, and a film copy in the Library at Brown University.

There is also a portion of the table, $n \leqq 10{,}000$, in the Library of Yale University where the table was part of a doctoral dissertation (1938).

The first table of this kind was given by L. Euler, "De numeris primis valde magnis," Acad. Sci. Petrop., *Novi Commentarii*, v. 9 (1762–3), 1764, p. 112–117. (For 3 other editions see D. H. Lehmer, *Guide to Tables in the Theory of Numbers*, National Research Council, 1941.) The range of