

- (22) The NYMTP found also 37 errors of a unit in the last decimal. All errors of this table are corrected in the sixth printing of Jahnke & Emde.
- (23) Miller has also found 9 errors of a unit in the column b_0 and 4 in b_1 . See also Note (24).
- (24) Miller has also found 17 errors of a unit in the last decimal in the column $\frac{1}{2}rb_0/b_1$ up to $r = 5$. See also Note (23).
- (25) This table of powers (for powers greater than 1) has been completely checked by Miller. All errors are given here. The errors in the powers of 1.68 are due to taking $x^6 = 1.66x^6$, and those in 2.85 to taking $x^{10} = 2.84x^9$. They could have been detected by differencing.
- (26) Note that d is a mean difference, so that the values of the tabulated functions at 1.00 cannot be accurately obtained; for the upper line of each table this value is 1.0987, and for the lower line 0.4551.

L. J. C.

UNPUBLISHED MATHEMATICAL TABLES

Unpublished mathematical tables are listed in RMT 186 (Lehmer); QR 14.

- 32[A].—WILLIAM PITT DURFEE (1855–1941), *Factor Table of the Sixteenth Million*. Unique ms. calculated during the years 1923–1929, and the property of the American Mathematical Society in New York City, since December 1935.

The following description of the ms. was published in *Scripta Math.*, v. 4, 1936, p. 101:

"The table comprises 500 separate sheets, $8\frac{1}{2} \times 14$ inches, each accounting for 2000 numbers, but as the multiples of 2, 3, 5, and 7 are omitted, the actual entries on each sheet number about 416. The entries are in long-hand, in black ink, except that those numbers whose lowest prime factor is 11 have been interpolated in red. They are arranged in parallel columns, three centuries to a column, the last four digits only of each number being written; and opposite each its lowest prime factor. If the number is prime a bar is drawn across the corresponding space in the column of prime factors. The arrangement is thus closely similar to that in the published tables covering the first nine millions (Burckhardt, Dase and Rosenberg, Glaisher).

"At the foot of each column the number of primes for each century is noted, and the total number of primes on preceding sheets, the number on that sheet, and the total. In the lower right-hand margin there are listed the number of entries on preceding sheets, on that sheet, and the total, with a similar notation in red ink for the entries whose least prime factor is 11."

The computations, which were made by the stencil method, have not been generally checked except by the author of the table. However, D. H. L. discovered one error where 15485303 is entered as a prime, when 109 is a factor. The total number of primes in this million is 60,465.

- 33[A].—U. S. DEPT. OF COMMERCE, WEATHER BUREAU, *Table of $(\log e)/x$* , computed by, and in possession of, the Bureau.

The Table of $(\log e)/x$ is for $x = [100(1)999; 6S]$.

L. P. HARRISON

Weather Bureau

MECHANICAL AIDS TO COMPUTATION

- 14[Z].—G. W. KING, "Punched-card tables of the exponential functions." *Rev. Sci. Instruments*, v. 15, 1944, p. 349–350.

G. B. THOMAS & G. W. KING, "Preparation of Punched-card tables of logarithms," *ibid.*, p. 350.

With the rapid increase in recent years of the use of punched-card machines in computations of all kinds, the versatility of the machines has been adapted to many uses.