logarithms of numbers [100001(1)101000; 14D] and the square roots of integers [1(1)200; 11D], with first differences in each case.

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EDITORIAL NOTE: At present only four existing copies of these extra pages are known to us. Rather extensive inquiry suggests that the copy owned by Mr. Lownes may be the only one in America.

22. INTEGRAL AND FUNCTIONAL TABLES.—(Q15, p. 459).—With reference to tables of  $\int_0^{\sigma} e^{-t^2} dt$ , I should like to draw attention to my paper "An approximate method for calculating heat flow in an infinite medium heated by a cylinder," Phys. So. London, *Proc.*, v. 56, 1944, p. 365, where I have given a rough chart of this integral  $[2\pi^{-1} \int_0^{\omega e^{i\beta}} e^{-t^2} dt]$  for a complex argument [ $\beta = 0(15^{\circ})90^{\circ}$ ;  $\omega = 0(.1).3(.2).7$ , 1], together with formulae for computation in a number of cases.

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23. ROOTS OF THE EQUATION TAN x = cx (Q8, v. 1, p. 203; QR10, p. 336; 17, p. 459).—The NDRC report, Tables for Solutions of the Wave Equation for Rectangular and Circular Boundaries having Finite Impedance (see MTAC, v. 1, p. 438-440) has (in a different notation) the first four roots (i.e. the first four branches of the functions) of the equations  $\tan x = cx$ ,  $\tanh x = cx$ ,  $\cot x = cx$ , and  $\coth x = cx$ , tabulated as functions of the complex variable c. We have obtained expansions of x in powers of c and 1/c (used in preparation of the above mentioned NDRC report) from which one can easily compute values on the other branches or improve the accuracy of the above tables. We also have theoretical material and other types of expansions for the regions about the singularities of the inverse functions. This material is in our possession at the NYMTP, but is as yet available only to certain Government agencies and activities.

A. P. HILLMAN & H. E. SALZER

## CORRIGENDA

V. 1

P. 205, 1. 17, for  $j_{2,s/\pi}$ , read  $j_{2,s}/\pi$ .

- P. 213,  $A_2$  38, 1. 3, add x = 0(.5)12;  $B_2$  4, for 5D, read 4D.
- P. 214, B<sub>3</sub> 13, for  $e^{x_3^2\theta}$ , read  $e^{-x_3^2\theta}$ , and for 4, read .4; B<sub>3</sub> 17, for  $J_1(\frac{1}{2}x_s)e^{-x_s^2t}$  read  $J(\frac{1}{10}x)e^{-x_s^2}$ .
- **P.** 215,  $B_5$  8, add also 5D, = 1(1)8;  $B_7$  22, for =, read or.
- P. 217, C<sub>2</sub> 7, delete  $\leq$  14D; D<sub>1</sub> 7, l. 3, when n = 10, 11, read s = 3, 3.
- P. 221, A<sub>4</sub> 1, delete  $x \ge 21.6$ ; A<sub>5</sub> 1, for  $x \ge 21.6$ , read for each n; A<sub>5</sub> 6, 7, for  $Y_0(x)$ ,  $Y_1(x)$ , read  $Y^{(0)}(x)$ ,  $Y^{(1)}(x)$ , and transfer these two entries as C<sub>3</sub> 8, 9.
- P. 222, A<sub>5</sub> 12, for zeros, read first zero.
- P. 226, A<sub>1</sub> 12, 13, for 5D, read 5S, and for 4D, read 4S.
- P. 227, A<sub>2</sub> 28, for Okaya 2, x, read Okaya 2,  $x^{-1}$
- P. 241, B 5, for  $J_{-1/6}(x)$ , read  $J_{-1/6}(\frac{1}{3}x^{\frac{1}{2}})$ ; and for 41.035, read 41.305.
- P. 245, l. 14, for  $E_n(x)$ , read  $E_n(x)$ .
- P. 251, B 16, read 4D,  $Ki_2(x)$ , SEELIGER, x = .25(.01)1(.05)7.
- P. 284, l. 13, for  $Y_n(x)$ , for, read  $Y_n(x)$  for each n, for.

- P. 289, 1. 4, for 393, read 395.
- P. 414, l. 8, for 1942, read 1941.
- P. 476, Riche de Prony, for Caspard, read Gaspard.

## V. 2

- P. 6, 1. -8, for  $e^{2s}$ , read  $e^{-2s}$ .
- P. 9, 1. 11, for z or, read or s,.
- P. 11, l. -21, for St., read 51.
- P. 15, l. 1, for Tablitsy, read Tablitsy.
- P. 16, l. 32, 4.7, for Sums of Products, read Sums and Products; l. -11, for Gennochi's, read Genpechi's.
- P. 29, 1. 32, for give complex roots, read give complex roots directly as decimals.
- P. 60, 1. -1, for  $\arccos(\sinh y)$ , read  $\arccos(-y/\sinh y)$ .