2. Leopoldina, Halle, v. 31, 1895, p. 102. Brief note.
3. Ober-Realschule in Kiel, Jahres-Bericht, 1894-95, Kiel, 1895.
4. J. H. Eckardt, Aus der Schuljungenzeit. Erinnerungen an den Buchwaldschen Hof, Kiel, 1911. Reported by Dr. Danielson.

R. C. A.

100. A New Factorization of $2^{n}+1$.-In a letter dated 20 Dec. 1948, Amé Ferrier (b. 6 May 1896), Principal of Collège de Cusset, Allier, France, sent us the following communication:
"J'ai établi successivement:
(i) que $N=\frac{1}{3}\left(2^{67}+1\right)$ est composé [9.X.48], en appliquant la reciproque de la contraire du theorème de Fermat. Lehmer ayant établi qu'aucun nombre $2^{n}+1$ pour $n<150$, n'a de diviseur inférieur à 4600000 , il en résultait que $N$ n'a que 2 facteurs premiers.
(ii) que l'un des diviseurs est $536 n+1$, l'autre $536 n+403$.
(iii) enfin [21.XI.48] que

$$
2^{67}+1=3 \cdot 7327657 \cdot 6713103182899 . "
$$

This completes the factorization of $2^{n}+1$ up to $n=70$. Mr. Ferrier is the author of the work on prime numbers which we reviewed $M T A C, \mathrm{v} .3$, p. 95 ; see also v. 2, p. 341.
101. Newman's Mathematical Tracts.-When we wrote our Note about Francis William Newman (1805-1897), and mathematical tables which he had computed and published ( $M T A C$, v. 1, p. 454-459), we knew of only the first edition of his Mathematical Tracts, Part I, 1888, ii, 1-80 p. and Part II, 1889, iv, 81-139 p. Through information furnished to us by Dr. Alan Fletcher we learned that Bowes \& Bowes had in 1912 published a reprint of these two parts of the Tracts, in a single volume, now out of print. Brown University has recently acquired the last copy in stock.

> R. C. A.
102.-Tables of $x \tan x$.-Mr. John Todd of King's College, London, has reminded us that we omitted to refer to Englund's table (MTAC, v. 2, p. 20) in our Editorial Note, MTAC, v. 3, p. 296.

## QUERIES

30.-Girard and Snell Tables.-D. Bierens de Haan, Bibliographie Néerlandaise Historique-Scientifique des Ouvrages Importants . . . sur les Sciences Mathématiques et Physiques, Rome, 1883, lists two mathematical tables by these authors. The first published work of Albert Girard (15951632), editor of the works of Simon Stevin, was Tables des Sinvs, Tangentes E゚ Secantes, selon le raid'de 100000 parties. Avec un traicté succinct de Trigonometrie. . . . The Hague, Elzevir, 1626, 120 p., of which there is a copy in Library of Congress. Second editions corrected and enlarged (132 p.) in French and Latin were also published by Elzevir in 1629. There is a copy of this French edition in the New York Public Library. The last published book of Willebrord Snell (1580 or 1581-1626), before his death, was Canon Triangulorum, hoc est sinuum, tangentium et secantium Tabulae, ad taxationem
radij 100000,00 . Leiden, $1626,181 \mathrm{p}$. Of this work there is a copy in the Columbia University Library. Where may other copies of these works be inspected? Exactly what is given in the tables? Are they in any way indebted to those of Pitiscus in 1600 and 1608 (or 1612)?

> R. C. A.

## QUERIES-REPLIES

39. Some Clothoid or Euler Spiral Tables (Q 26, v. 3, p. 146).Since this query was published Brown University has acquired a copy of Klothoiden-Abstecktafeln by Walther Schürba of Brünn, Czechoslovakia, published in Berlin, by Volk und Reich Verlag, 1942, 143 p. $16.5 \times 23 \mathrm{~cm}$. L. J. C. has informed us that there is also a copy of this volume in his library. In the preface Schürba states that he was led to prepare his work by becoming acquainted with Prof. Dr. Leopold Örley, Übergangsbogen bei Strassenkrümmungen, Berlin, 1937, where "the first useful practical laying out of the clothoid was recommended." Since Lehmer published his article in 1904, 33 years before Örley, Schürba's "first" is highly erroneous. The use of the clothoid with some tables is indicated in Joseph Barnett, Transition Curves for Highways, Washington, 1938. More elaborate discussion occurs in T. F. Hickerson, Highway Surveying and Planning, New York, 1936, p. 156-183, etc. So also in Arthur N. Talbot, The Railway Transition Spiral, sixth ed., New York, 1927, except that he used the chord definition and his tables were developed on this basis.
R. C. A.

## CORRIGENDA

V. 1, p. 198, l. 12-13, and v. 3, p. 268, 1. 12, delete: $\mathrm{K}\left(86^{\circ} 48^{\prime}\right)$, for 4.2744 , read 4.2746 ; also all references in this connection to errors in Jahnke \& Emde, Tables of Functions, 1909, 1933, 1938, 1943. P. 273, 1. - 8, for $(k-1) b=s$, read $(k-1) b=\pi s$.
V. 2, p. 230, 1. 23, for Dr. K. G. Macleish, read Mr. R. D. O'Neal; p. 398, col. 2, 1. 17, delete 230,; p. 400, col. 1, 1. 34, add 230,.
V. 3, p. 358, 1. 11, for $\binom{p}{j}$, read $\binom{q}{j}$; p. $376,1 .-8$, for machines, can, read machines can; 1. -7 , for machines and, read machines, and; p. 383, for Nichola Begonich, read Nicholas Begonich; p. 392, 1. 5 and 15, for Bartholomevv, read Bartholmevv; 1. 10, for Fawcit, read Fawcet; 1. 11, for Favvcit, read Favvcet; p. 396, 1. 11, for Lincoln Cathedral, read Lincoln Cathedral; 1. 26, for cse, read csc; 1. - 17, for fables, read tables.

