

Fite has translated another article by Lebon in which the computation and use of a larger table, with base $30,030 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11$ instead of 2310, are described.*

In the factor tables of Glaisher, the numbers are listed and opposite to each is given the smallest prime divisor of the number. Lebon's idea is to divide the numbers prime to a given base B , *e. g.*, $B = 30,030$, into classes of the form

$$KB + I \quad (K = 0, 1, 2, \dots)$$

according to the values of their residues I with respect to B . The possible prime divisors D less than B are listed, and opposite to each and under each I is placed the characteristic k , if there is any, which specifies the smallest number divisible by D of the class belonging to I . It can then be readily discovered whether or not any other given number in the I -class is divisible by D , since for such a number $K - k$ must be divisible by D .

In the article which is the subject of this review, the characteristics with respect to the base 2310, for prime divisors from 13 to $\sqrt{30,030}$ have been listed, so that the table can be applied to the factorization of numbers between 1 and 30,030. If the characteristics for prime divisors up to 2310 had been given, the table would have been applicable to numbers as large as $(2310)^2 = 5,336,100$. The table described in the article translated by Professor Fite could be used to factor numbers between 1 and $(30,030)^2 = 901,899,900$. The factor tables already published by others, according to Lebon's statement in his introduction, give the factors of numbers from 1 to 10,000,000. All except those by Glaisher for the fourth, fifth, and sixth millions are out of print.

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Serret's Lehrbuch der Differential- und Integralrechnung. Dritte Auflage, neu bearbeitet von GEORG SCHEFFERS. Zwei Bände: I, xvi + 624 pp.; II, xiv + 585 pp. Leipzig, B. G. Teubner, 1907.

SERRET's name, which is in the title of this well known work, bears about the same relation to the edition under review that Webster's name bears to the latest edition of Webster's dictionary.

* "Theory and construction of tables for the rapid determination of the prime factors of a number," BULLETIN, vol. 13 (1906-7), p. 74. The original article appeared in the *Comptes Rendus*, vol. 151 (1905), p. 78.