

and

$$\begin{array}{rcccl} 1 & ab \cdot cd \cdot ef & ghi & ab \cdot cd \cdot ef \cdot ghi & \\ & & gih & ab \cdot cd \cdot ef \cdot gih & \end{array}$$

Jordan gives an enumeration of the primitive groups through degree 17 in *Comptes Rendus*, vol. 75, in which the number of primitive groups of degree 9 (excluding the groups that contain the alternating group) is given as eight, while Professor Cole's list contains nine such groups. The group omitted is that of order 1512, as may be learned from Jordan's article on the classification of primitive groups in volume 73 of the same journal.

By these additions the number of known groups of degree 8 becomes 200 instead of 199 as stated in my former note, and the number of groups of degree 9 becomes 258.

UNIVERSITY OF MICHIGAN, *May*, 1894.

FOURIER'S SERIES AND HARMONIC FUNCTIONS.

An Elementary Treatise on Fourier's Series and Spherical, Cylindrical, and Ellipsoidal Harmonics, with applications to problems in Mathematical Physics. By WILLIAM ELWOOD BYERLY, Professor of Mathematics in Harvard University. Boston: Ginn & Co., 1893. 8vo, xii and 288 pp.

THIS book has recently been made the subject of a rather singular review in a leading New York paper, in which a number of curious statements are made. The reviewer begins with the statement that, "notwithstanding its name, so redolent of Helicon, there is mighty little poetry in spherical harmonics." He then, apparently overlooking the greater part of the contents of the book, and even of the title, goes on to give a rather restricted description of the use of spherical harmonics, ending up with the statement that the subject "is of great utility, and, like other utility-mathematics, is tedious, difficult, disagreeable, and unbeautiful." This is rather discouraging to one intending to read Professor Byerly's book, and, at the risk of being thought rash, I shall venture to disagree somewhat from the learned reviewer. No doubt the interest and beauty of a mathematical subject is largely a matter of personal taste, and one may profess a dislike for any subject involving the necessity of developments in infinite series, as he may to the employment of irrationals. But in regard to the subject of partial differential equations, to which this subject properly belongs, the opinions of many would be different from that above cited. The present