subgroups cannot involve two operators whose orders are powers of prime numbers and whose product has an order which is a power of another prime number. In particular, a solvable group cannot involve two such operators.

The second question to which we referred above is as follows: Is there a group which is not the product of some one of its possible sets of non-conjugate Sylow subgroups? It is well known that a necessary and sufficient condition that a group is the direct product of its Sylow subgroups is that we arrive at identity by forming the successive groups of inner isomorphisms, but no general criterion as regards whether a group is a product of a set of non-conjugate Sylow subgroups seems to have been found.

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THE MATHEMATICS OF MAHĀVĪRĀCĀRYA.

The Ganita-Sāra-Sangraha of Mahāvīrācārya with English Translations and Notes. By M. RANGĀCĀRYA, M.A., Rao Bahadur, Professor of Sanskrit and Comparative Philology in the Presidency College, and Curator of the Government Oriental Manuscripts Library, Madras. Sanskrit text and English translation. Madras, Government Press, 1912. 27+325 pp.

IT was announced at the Fourth International Congress of Mathematicians, at Rome, in 1908, that Professor Rangācārya had for a number of years been engaged in the laborious task of translating a work of great importance in the history of mathematics, the Ganita-Sāra-Sangraha of Mahāvīr the Learned. Now, after four years more, the work has been brought to completion, and the mathematical world is the debtor to Professor Rangācārya for his arduous labor and to the Government Press for publishing the volume that is before us.

We have so long been accustomed to think of Pataliputra on the Ganges and of Ujjain over towards the western coast of India as the ancient habitats of Hindu mathematics, that we experience a kind of surprise at thinking that other centers equally important existed among the multitude of cities of that great empire. We have known for a century, thanks chiefly to the labors of such scholars as Colebrooke and Taylor,