Likewise the beautiful theorem which asserts that two permutable substitutions must have a common pole is omitted.

The author follows Jordan, Klein, and Burnside in writing the accented, i. e., the new, variables on the left, and writes the factors of a product in such order that multiplication of substitutions is effected through columns-by-rows multiplication of the matrices.

In spite of the omission of some things that the reviewer would have liked to see included, the book is a noteworthy contribution to a subject that is of increasing importance to students of mathematics. It is well written, though the condensed notation makes it rather difficult reading for the beginner in the subject.

<div align="right">ERNEST B. SKINNER.</div>

MATHEMATICS AT AN ITALIAN TECHNICAL SCHOOL.

THE regular courses in the Italian technical schools are five years long, most of the work being prescribed. The schedule is not exactly the same in all of them, yet the general scheme followed can be understood by following the plan of instruction in any one of them. For this purpose we choose that at Milan (Reale Istituto Tecnico Superiore di Milano), which includes a two-year course in mathematics, physics, and chemistry and also in Italian and two foreign languages as preparatory to the regular three-year courses in mechanical, electric, civil, and mining engineering, architecture, industrial, physical, and electric chemistry, and a four-year normal course. Candidates for admission must have a diploma from a recognized Italian secondary school or equivalent credentials. In mathematics they must be familiar with plane and solid geometry, plane trigonometry, algebra including determinants, theory of equations and graphical processes, and the elements of projective geometry.

The following outline applies to all the students except those in architecture, who have briefer courses in all the subjects mentioned.

During both terms of the first year there are three weekly lectures and one hour of exercises in plane and solid analytic