Oeuvres complètes de Christiaan Huygens publiées par la Société Hollandaise des Sciences. Tome Quinzième. Observations Astronomiques. Système de Saturne. Travaux Astronomiques, 1658–1666. La Haye, Martinus Nijhoff, 1925. Pp. 622.

This fifteenth volume of the works of Huygens is a model of what can be done for the convenience of readers. A general table of contents (sommaire) containing twelve entries is supplemented by a fuller one (pièces et mémoires) covering eight pages. There are alphabetical indexes to persons and to subject matter. Numerous footnotes contain explanations and cross references. The longer documents appear in the original Latin and in French translation. Facsimile reproductions of parts of manuscripts and original drawings add to the interest of the book. Introductions to the various parts contain information in great detail. Among the mathematical notations of interest are the Cartesian sign of equality (the sign for taurus turned so that the opening is on the left) and the "scratch method" used in extracting square roots.

Huygens' early astronomical observations relate mainly to Saturn, Jupiter and their companions. Huygens and his brother Constantine constructed their own telescopes. The first one, 12 feet in length, promptly revealed a new satellite of Saturn. This instrument and a 23 foot telescope furnished data to solve the enigma relating to the varying appearance of Saturn. Galileo had seen it threefold. Hevelius saw it in three parts. Fontana made drawings widely distorted. Huygens in 1655 drew Saturn as a sphere with two handles or arms on opposite sides and extending in opposite directions. When Saturn was near the sun, in January, 1656, the arms disappeared. Nevertheless, Huygens had a hypothesis which he published in 1656, disguised as an anagram: aaaaaaaccccccdeeeeeghiiiiiiillll mmnnnnnnnnnnnooooppqrrstttttuuuuu. Later in 1656, the handles reappeared and gradually changed so as to confirm his theory. In 1657 and 1658, the rings became somewhat plainer, and in 1659 he published his *Systema Saturnium* in which he explained his anagram as signifying a Latin sentence which is in translation: "It is surrounded by a slender flat ring, everywhere distant from the surface, and inclined to the ecliptic."

<div style="text-align: right">FLORIAN CAJORI</div>

Einführung in die Analytische Geometrie. By A. Schoenflies. Berlin, Julius Springer, 1925. x+304 pp.

This book is volume XXI of the series *Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen,* and in general excellence of treatment is in keeping with the other volumes of the series. The author states in the preface that there is perhaps a greater contrast between the methods of elementary and advanced analytic geometry than those of any other branch of mathematics, and this book will be very helpful to the student who is in this transition stage in his study of geometry.

For the purpose of this review the book will be divided arbitrarily into four parts including respectively Chapters I–V, VI–VIII, IX–XII, and XIII–XVII inclusive; the first two of these parts being approximately