for a short time at Nuneaton, where he met a pedlar who practised fortune-telling. By the encouragement and assistance of this man Simpson was induced to make a profession of casting nativities himself, and he soon became the oracle of the neighbourhood. But he was not long in discovering the imposture of astrology, and his conscience, as well as an accident which happened to him in the practice of his art, compelled him to abandon this profession. After a residence of two or three years at Derby, where he worked as a weaver during the day and taught pupils in the evenings, he went up to London and pursued the same course, but with more success. The number of his pupils increased ; his abilities became more widely known ; and he was enabled to publish by subscrip­tion his *Treatise of Fluxions* in 1737. His treatise, as was afterwards acknowledged, abounded with errors of the press, and contained several obscurities and defects incidental to the author’s want of experience and the disadvantages under which he laboured. His next publications were *A Treatise on the Nature and Laws of Chance,* 1740; *Essays on Several Curious and Useful Subjects in Speculative and Mixed Mathematicks,* 1740 ; *The Doctrine of Annuities and Reversions deduced from General and Evident Principles,* 1742; and *Mathematical Dissertations on a Variety of Physical and Analytical Subjects,* 1743. Soon after the publication of his *Essays* he was chosen a member of the Royal Academy at Stock­holm ; in 1743 he was appointed professor of mathematics in the Royal Military Academy at Woolwich ; and in 1745 he was admitted a fellow of the Royal Society of London. In 1745 he published *A Treatise of Algebra,* with an appendix containing the construction of geo­metrical problems, and in 1747 the *Elements of Plane Geometry.* The latter book, unlike many others with the same title, is not an edition of Euclid’s *Elements,* but an independent treatise. Though it can hardly be said that as an introduction to geometry it is preferable to Euclid, yet the solutions of problems contained in it (and in the appendix to the *Algebra* as well) are in general exceedingly ingenious. In his *Trigonometry, Plane and Spherical, with the Construction and Application of Logarithms,* which appeared in 1748, there is a tolerably uniform use of contractions for the words sine, tangent, &c., prefixed to the symbol of the angle. *The Doctrine and Application of Fluxions,* which he issued in 1750, was more full and comprehensive than his earlier work on the same subject, and altogether was so different that he wished it to be considered as a new book and not as a second edition of the former. In 1752 appeared *Select Exercises for Young Proficients in the Mathematicks,* and in 1757 his *Miscel­laneous Tracts on Some Curious and Very Interesting Subjects in Mechanics, Physical Astronomy, and Speculative Mathe­matics,* the last and perhaps the greatest of all his works. From the year 1735 he had sometimes under his own name, sometimes under fictitious names, been a frequent contributor to the *Ladies' Diary,* an annual publication partly devoted to the solution of mathematical problems, and from 1754 till 1760 inclusive he was the editor of it. From first to last Simpson seems to have had his own share of the cares and anxieties of this world, and it is astonishing how under such circumstances he contrived to accomplish what he did. His unremitting application and the want of proper regimen gradually undermined his health, and he died on the 14th of May 1761 at his native village. His name will probably be considered the most illustrious in the long roll of the non-academical mathematicians of Britain.

SIMROCK, Karl (1802-1876), German poet and student of mediæval literature, was born on the 28th August 1802 at Bonn, where his father was a musicseller.

He studied law at the universities of Bonn and Berlin, and in 1823 entered the Prussian civil service, from which he was expelled in 1830 for having written a poem in praise of the July revolution. Afterwards he was per­mitted to lecture at the university of Bonn, and in 1850 he was made a professor of Old German literature. He died on the 18th July 1876.

Simrock established his reputation by his excellent modern rendering of the *Nibelungenlied* (1827), and of the works of Walther von der Vogelweide (1833). Among other works trans­lated by him into the German of to-day were the *Arme Heinrich* of Hartmann von Aue (1830), the *Parzival* and *Titurel* of Wolfram von Eschenbach (1842), the *Tristan* of Gottfried of Strasburg (1852), the *Edda, Beowulf,* and *Heliand.* In the *Heldenbuch* (1843-49) he offered a complete representation of the heroic legends of Germany, partly by means of translations, partly by means of independent poems. Before the publication of this work he had given evidence of an original poetical faculty in *Wieland der Schmied* (1835) ; and in 1844 he issued a volume of *Gedichte* in which there are many good lyrics, romances, and ballads. In 1850 appeared *Lauda Sion,* and in 1857 the *Deutsche Sionsharfe,* col­lections of Old German sacred poetry. Of his republications the most popular and the most valuable were the *Deutschen Volks­bücher,* of which fifty-five were printed between 1839 and 1867. His best contribution to antiquarian science was his *Handbuch der deutschen Mythologie* (1853-55). At an early stage of his career Simrock took a high place among students of Shakespeare by his *Quellen des Shakespeare in Novellen, Märchen, und Sagen* (1831); and afterwards he translated Shakespeare’s poems and a consider­able number of his dramas. Another important book was *Novel­lenschatz der Italiener* (1832). Among the rest of his works may be mentioned *Die Rheinsagen, Das malerische und romantische Rheinland,* and his *Deutschen Kriegslieder.*

See Hocker, *Karl Simrock* (1877).

SIMSON, Robert (1687-1768), mathematician, was the eldest son of a Glasgow merchant, John Simson of Kirktonhill in Ayrshire, and was born on the 14th of October 1687. He was intended for the church, and passed with distinction through the usual course of study for that profession at the university of Glasgow. The bent of his mind, however, was towards mathematics, not theology ; and, when a prospect was opened up to him of succeeding to the mathematical chair, he proceeded to London in order to become acquainted with some of the eminent mathematicians there and to increase his stock of mathematical knowledge. After a year’s residence in London he returned to Glasgow, and in 1711 was appointed by the university to the professorship of mathe­matics. The duties of this office he discharged for half a century. During that time he published several works on pure geometry, and carried on an extensive mathematical correspondence. In 1746 the university of St Andrews, wishing to confer on him an honorary degree, chose, accord­ing to his biographer Dr William Trail, that of doctor of medicine, because in his youth he had made a careful study of botany. He never married, and his long life was spent within the walls of his college. His habits were exceedingly regular, his hours of work and of amusement being rigorously fixed. A studious man of science, he had no relish for the promiscuous intercourse of society, and his manner of living was simple and inexpensive. In person he was tall, with a handsome countenance and an affable manner, and he used always to dress in light- coloured clothes. Though, like some other distinguished mathematicians, he was rather absent-minded, in matters of business he was very circumspect. He was a man of the strictest integrity, ready to do justice to the merits of others, and not too sensible of his own. He enjoyed a long course of uninterrupted health, and was seriously indisposed only for a few weeks before his death, which took place on the 1st of October 1768.

The first of Simson’s published writings is a paper in the *Philo­sophical Transactions* of the Royal Society of London (vol. xl. p. 330, 1723) on the subject of Euclid’s *Porisms,* the nature of which he was the first to elucidate (see Porisms). Then followed *Sectionum Conicarum Libri V.* (Edinburgh, 1735), a second edition