the science and distinguished clearly between the theory and the practice of Arithmetic. They called it "Logistic" considered in relation to its principles, but the "Art of Arithmetic" when considered as a collection of rules. Writers on the subject express surprise that the Greeks with their great intellectual activity did not invent our present system of a denary scale, since their method of notation was extremely difficult. "The ingenuity and varied resources of the Greeks," writes a commentator, "were the main causes which diverted them from discovering our simple denary system. Their ingenuity led them beyond the denary scale; the feeble genius of the Hindoos might just reach it without mounting into an excursive flight." We have since learned that this appreciation of the Hindoos is far from doing justice to that people.

Pythagoras, who lived about 600 B.C., was one of the earliest writers on Arithmetic. He regarded numbers as of divine origin, and the essence of the universe; he gave them distinct and peculiar properties designated as Prime and Composite; Perfect and Imperfect; Redundant and Defective; Plane and Solid; Triangular, Square, Cubical, and Pyramidal. He carried his theory to the extent of classing even numbers as feminine and odd numbers as masculine.

Euclid was the first writer on Arithmetic whose works have come down to us. His seventh, eighth, ninth, and tenth books treat on Proportion, Prime and Composite numbers. Dr. Barrow's edition is the only work which includes these books. It is supposed that Euclid was much indebted to Thales and Pythagoras for his knowledge of mathematics. He conducted a school at Alexandria, which was highly celebrated and at which the Egyptian monarch, Ptolemy Lagus studied. This King having asked him if there were not an easier method of learning, the great mathematician made him the following reply which has been handed down to posterity:—"There is no royal road to Geometry."

Archimedes, an eminent mathematican and physicist, made many discoveries in geometry, and found also the law which governs the specific gravities of bodies. He, it is thought, added much to Arithmetical science, but in the few fragments of his writings which are still preserved there is nothing on the subject. At the siege of Syracuse, about 210 B.C., Archimedes by his knowledge of mathematics planned engines of war which worked havoc among the besiegers. When however, the city was captured he was found in his closet solving a geometrical problem. When summoned by a soldier who commanded him to come to Marcellus, the leader of the besiegers, the mathematician asked to be given time to finish his problem and to fully demonstrate it. The soldier taking this answer for an insult instantly killed him. Marcellus felt deeply grieved over this event, and later erected a monument to his memory.

Another mathamatician who flourished about the year 200 B.C. was Erotosthanes; he invented a method of determining prime numbers, which is called Erotosthanes' seive. The distinctions of numbers into plane, solid, triangular, pyramidal, etc., was also made by Nichomachus, who is supposed to have lived near the Christian era.

Diophantus, a Greek, who lived about the middle of the fifth century, wrote thirteen books on Arithmetic, six of which are extant. He is credited with being the first writer on Algebra.

Boethius, lived about the beginning of the sixth century. He wrote a treatise on Arithmetic which, though said to be a copy of Nichomachus, became the classical work of the Middle Ages. The work was entirely theoretical and gave no practical rules of calculation. He dealt mainly with the properties of numbers.

The book in which the Indian or Arabic notation was first introduced was written by Avicenna, an Arabian Physician, who lived in Bokhara about 1000 A.D.

Previous to 1484 all works on the subject of Arithmetic were in manuscript, but in that year Lucas Pacioli, an Italian monk, published his great work *Summa Arithmetica*. The claim that this was the first work containing the use of the Arabic symbols introduced into Europe, is disputed, as his work is said to have appeared at least ten years later than the time of their introduction. It is conceded, however, that his is the first text book on