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(b. Kent, England, 1546 [?]; d. London, England, August 1595)

mathematics.

Digges was the son of Leonard Digges of Wotten, Kent, and his wife, Bridget Wilford. He received his mathematical training from his father, who died when Thomas was young, and from [John Dee](#).

Digges was the leader of the English Copernicans. In 1576 he added “A Perfit Description of the Caelestiall Orbes” to his father’s *Prognostication*. This contained a translation of parts of book I of Copernicus’ *De revolutionibus* and Digges’s own addition of a physical, rather than a metaphysical, infinite universe in which the fixed stars were at varying distances in infinite space. He had already published his *Alae seu scalae mathematicae* (1573), containing observations on the new star of 1572 that were second only to those of [Tycho Brahe](#) in accuracy. Digges hoped to use these observations to determine whether the Copernican theory was true or needed further modifications, and he called for cooperative observations by astronomers everywhere.

In addition to his astronomical work Digges included a thorough discussion of the Platonic solids and five of the Archimedean solids in his father’s *Pantometria* (1571). He also published *Stratitoticos* (1579), a treatise on military organization with such arithmetic and algebra as was necessary for a soldier. To this work he appended questions relative to ballistics that were partially answered in the second editions of *Stratitoticos* (1590) and *Pantometria* (1591). He was able, on the basis of his own and his father’s experiments, to disprove many commonly held erroneous ideas in ballistics but was not able to develop a mathematical theory of his own. These appendixes constitute the first serious ballistic studies in England.

Digges was a member of the parliaments of 1572 (which met off and on for ten years) and 1584 and became increasingly active in public affairs. He was involved with plans for the repair of Dover harbor for several years and served as muster master general of the army in the [Low Countries](#). Apart from his continuing studies in ballistics, his scientific writings cover only a decade; and his promised works on navigation, fortification, and artillery never appeared.

BIBLIOGRAPHY

I. Original Works. Digges’s writings include “A Mathematical Discourse of Geometrical Solids,” in Leonard Digges, *A Geometrical Practise Named Pantometria* (London, 1571, 1591), trans. by his grandson Dudley Digges as *Nova corpora regularia* (London, 1634); *Alae seu scalae mathematicae* (London, 1573); “A Perfit Description of the Caelestiall Orbes,” in Leonard Digges, *Prognostication Everlasting* (London, 1576, most later eds.); and *An Arithmeticall Militare Treatise Named Stratitoticos* (London, 1579, 1590). For his nonmathematical publications and reports in MS, see the *Dictionary of National Biography*, V, 976–978.

II. Secondary Literature. F. R. Johnson, in a letter to the *Times Literary Supplement* (5 Apr. 1934), p. 244, gives information on the dates of Thomas’ birth and Leonard’s death. The *Dictionary of National Biography* is inaccurate on Thomas’ early years, but the account of his later life is useful. For his parliamentary career see J. E. Neale, [Elizabeth I and Her Parliaments](#) ([New York](#), 1958).

Digges’s works are discussed in F. R. Johnson and S. V. Larkey, “Thomas Digges, the Copernican System, and the Idea of the Infinity of the Universe in 1576,” in *Huntington Library Bulletin*, no. 5 (Apr. 1934), 69–117; and F. R. Johnson, *Astronomical Thought in Renaissance England* (Baltimore, 1937). For a different interpretation of Digges’s infinite universe see A. Koyré, *From the Closed World to the Infinite Universe* ([New York](#), 1957), pp. 34–39. For the ballistics see A. R. Hall, *Ballistics in the Seventeenth Century* (Cambridge, 1952); and for the military treatise H. J. Webb, *Elizabethan Military Science* (Madison, Wis., 1965).

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