said to have been a young lady of great attractions and considerable talent. Newton delighted in her society, and he presented her with several very ingeniously constructed cabinets. Poverty seems to have been the only bar to the consummation of their happiness. Miss Storey was afterwards married twice, and at the age of 82 she was Mrs. Vincent, living at Grantham. Many stories of Newton's early life were obtained from Mrs. Vincent by Dr. Stukeley. Newton's affection for her never failed; in her old age he frequently visited her and relieved her financial difficulties by generous aid.

About this time Newton constructed a water-clock, which was long used in Mr. Clark's family. In shape it resembled an old-fashioned house-clock; the index on the dial-plate was turned by a piece of wood that was set in motion by dropping water. He constructed, also, a mechanical four-wheeled carriage driven by a handle turned by the person seated in the carriage. Mrs. Vincent is the authority for the statement that Newton early displayed great talent in drawing, and excelled in poetical composition. Some of these boyish verses were remembered and repeated by Mrs. Vincent seventy years afterwards.

When Newton was fifteen years old his mother's second husband died, and she returned, with three children of the second marriage, to Woolsthorpe. Newton was taken from school to assist in the management of the farm. Part of his duty was to accompany an old servant to Grantham to do the weekly marketing. On these occasions he left the marketing to the servant, and retired to the attic of Mr. Clark's house, where he read all the books he could find. During this period he constructed several sun dials; one of these dials was cut on a stone in the wall of his own house; this stone is preserved in the library of the Royal Society, and the letters TON are still visible on it.

Mrs. Smith, observing that her son was likely to be a very unsuccessful farmer, consulted her brother, who was rector of a neighbouring parish. Her brother very wisely recommended that Newton be sent back to the school at Grantham, to prepare for entrance at Trinity College, Cambridge. At school, Newton acquired a fair knowledge of Latin, which was practically the only subject then taught in English schools; he also picked up, without any assistance, some knowledge of mathematics and science, and he read some logic, which was regarded as a necessary preparation for the study of mathematics.

In 1661, Newton entered Trinity College, Cambridge, as a subsizar. During his first year of residence at the university he attempted to read a book on astrology, but could not understand it on account of the geometry and trigonometry. He, therefore, read in order Euclid's "Elements of Geometry," Oughtred's "Clavis" (*i.e.*, Oughtred's key to the mathematics) and Descartes' "Geometrie." Euclid he found surprisingly easy. The Cartesian geometry he mastered by himself, though with considerable difficulty, and it fascinated him so much that he resolved to devote himself to mathematics, rather than to chemistry, as his serious study.

During his undergraduate career, Newton made two splendid discoveries in mathematics. His first great discovery was the binomial theorem, with which every student of algebra is familiar. His second great discovery was the method of fluxions, now known as differential calculus. The oldest professorship