

and Virgil? Why cannot the force of nature go further? There can be no flower without the blossom. We cannot vilify nature, or split a Kepler and Galileo for the sake of glorifying Newton. That is my quarrel with Pope's celebrated epitaph on Newton, which I have quoted at the head of this paper. The knowledge of former ages must not be blotted out to give him a dark ground to stand out on as a brilliant idol. Nature does not move by leaps, but "first the bud, then the ear and then the full corn in the ear." No sun ever rises without the prelude of a twilight. Newton was no Minerva to leap fully armed out of the brain of Jupiter. For we shall see what he owed to the long line of predecessors who labored at the foot hills, and to the long drawn labors of his distinguished contemporaries. For science "widens with the process of the suns."

Isaac Newton was born near the village of Colsterworth, in England, on Christmas Day, 1642, in the same year in which Galileo died. He was so feeble in the early days after his birth, and was of such a diminutive size that his life was despaired of, but the frail casket which held the immortal mind afterwards reached so vigorous a maturity that he attained the age of 85. And as for his intellect, it shattered the locks which barred the secrets of the universe. He was the posthumous son of a farmer in a small way. At school he was far from industrious, according to his own confession, and lacked ambition and initiative, but one day he triumphantly resisted an unprovoked assault from a bigger boy. It is said he so thoroughly thrashed his opponent that he dragged him by the ears and rubbed his nose against the church wall. Thus did the renowned author of the *Principia* in early years illustrate the thoroughness of his work. His opponent in this physical struggle was, however, higher in his classes than young Isaac, which fact stimulated the hero of the church nose-rubbing episode to work so hard that he acquired an intellectual superiority and became head boy of the school. His mother had determined that he had better follow his father's occupation and become a farmer. But it seemed otherwise to the gods, for while young Newton read books under a wide