

at Frauenburg, where he officiated as priest, that the conviction first took root in his mind that the system of astronomy endorsed by the Church as orthodox, was radically false. That system was, that our earth is the centre of the universe, and that the heavenly bodies revolve around it in circles, at a uniform rate. Copernicus first questioned it, then doubted it, and set to work, upon mathematical principles, to prove its fallacy. He maintained that the sun is the centre of our system, and that the planets revolve around it. He gave to us the germ of our present system of astronomy, and opened up a pathway along which our modern astronomers are marching to unfold yet more fully, the grandeur and glory of the universe in which we dwell. But how dare he avow his convictions, convictions so opposed to those of the church of which he was a devout follower? How brave the reproach and ridicule which the publication of his views would be sure to entail? For twelve long years he brooded over them in silence. He waited patiently and hopefully, and it was not until age was silvering his locks, and furrowing his brow, that he mustered up courage, and ventured to give them to the world, too late, however, to enjoy his well earned triumph, for it was when lying on his death-bed, life fast ebbing away, that a copy was brought to him, to assure him that his life-long labour was not all lost, but alas! he only seemed to know it.

Another intellectual hero of the same type, was Galileo. He was born at Pisa, in the year 1564, and when a mere youth displayed an absorbing passion for physical science. So far did he go in the pathway opened up by his predecessors, that he is by some regarded as the father of experimental science. He must have early thrown off the shackles by which the Schoolmen were fettered, and seen

in nature, the grand field in which discovery was to be made, and science advanced. But he does not pursue the even tenor of his way long, ere difficulties arise, and fears disquiet. It was not long ere, by his fearless investigation and bold questioning of tenets hoary with age, tenets stamped by the Church as infallible, that he provoked hostility. Already might be seen the foreshadowings of that storm-cloud which, in a few years, burst upon him with merciless fury, darkening his last days, and sending him with sorrow to the grave. It had been affirmed by Aristotle, and received into the Church as infallible, that if two bodies be taken, the one twice as heavy as the other, the heavy body would reach the ground in one-half the time occupied by the lighter. Galileo, by careful observation and experiment, came to a different conclusion. He affirmed that both would descend in the same time; that the weight of a body did not determine the time occupied in falling. He openly avowed his conviction, and had the courage to challenge his opponents to a fair trial. They consented, and the day is fixed. The scene is thus described by an eloquent writer. "On the day appointed, the disputants repaired to the tower of Pisa, each party, perhaps, with equal confidence. It was a crisis in the history of human knowledge. On the one side, stood the assembled wisdom of the universities, revered for age and science, venerable, dignified, united and commanding. Around them thronged the multitude, and about them clustered the associations of centuries. On the other, there stood an obscure young man, with no retinue of followers, without reputation or influence or station. But his courage is equal to the occasion. Confident in the power of truth, his form is erect and his eye sparkles with excitement. But the hour of trial arrives.