

The balls to be employed in the experiment are carefully weighed and scrutinized, to prevent deception. The parties are satisfied; the one ball is exactly twice the weight of the other. The followers of Aristotle maintain that when the balls are dropped from the tower, the heavy one will reach the ground in exactly half the time employed by the lighter ball. Galileo asserts that the weights of the balls do not affect their velocity, and that the times of descent shall be equal; and here the disputants join issue. The balls are conveyed to the summit of the lofty tower. The crowd assemble round the base. The signal is given; the balls are dropped at the same instant, and swift descending, at the same moment, strike the earth. Again and again the experiment is repeated, with uniform results. Galileo's triumph is complete; not a shadow of a doubt remained." Thus encouraged by success, and elate with hope, Galileo pursued his way; for a time friends flocked around him, the star of his fame arose, and all seemed bright at Padua, where, for eighteen years, he taught and lectured. Eager crowds flocked to hear him; pupils from all parts of Europe resorted thither to drink in his instructions, and to enjoy the charm of his intercourse. Discovery after discovery flashed across his mind, which added fresh incentive to his labours, and bright lustre to his name. He now began openly to advocate the system of astronomy adopted by Copernicus, demonstrating its truth, and boldly avowing his convictions. Here began his troubles. His heresies reached the ears of the Pontiff at Rome, and his ire was kindled into a flame. A storm cloud began to gather and blacken over the philosopher's head. He is summoned before the Inquisition to answer for his conduct. Bending beneath the weight of years, and careworn with intense study, he

appears; he is subjected to a wearisome trial, and cast into the dungeon, and there endures the tortures of the rack. He is then asked to abjure upon his knees the sublime truths which he had spent a life-time in defending. His courage, for a moment, fails. He recants, at least with his lips; but in the memorable words, which, in that hour of agony, he uttered, "It nevertheless moves," we learn how deeply rooted and unaltered were his convictions, how firm his loyalty to truth. The remaining years of his life were spent alternately in prison and in retirement, where, to the last, with unabated zeal, he pursued his favourite studies. Thus did these men fight bravely their intellectual battle against ignorance, intolerance, and superstition. They rise up before us, in the dim vista of the past, as the martyrs of science. Through toil and trial and suffering, did they follow after truth, proved faithful to their convictions and their God, and by word and deed, paved the way for the dawn of a more auspicious era.

Another influence which contributed to bring about and usher in the same period, was the *Crusades*. The ostensible object of the Crusades was to rescue Jerusalem from the cruel hands of the Mohammedans. The news was flashed abroad that Jerusalem, around which, in the mind of the Christian, so many hallowed associations clustered, was in the hands of the Mohammedans, that the holy sepulchre was being desecrated, that the streets of the holy city were crimsoned with Christian blood. All Europe shook to the centre; the heart blood of all Christendom ran cold. Peter the Hermit went forth from his cloister, and by his fiery eloquence, stirred up the hearts of the people, and called upon them to go forth to the rescue of their brethren. "He traversed Italy, crossed the Alps, from province to province, from city to city. He rode