

broken itself into fragments against the granite like ranks—when it was demoralized and disheartened,—sounds the signal of onset, and every soldier rushed upon the flying foe. The cavalry complete the triumph by the almost total annihilation of the fugitives. Then was Magdeburg avenged. Then God bared the sword of Justice; Protestantism forced to combat, conquered.

The results of this victory were such as might have been expected. Gustavus was joined by the Protestant party, animated by new hopes. And at last, after a series of glorious victories—having slain Tilly—Wallenstein was defeated and Ferdinand humbled on the field of Lutzen, where also fell the heroic Gustavus.

The student of history cannot over-estimate the importance of this battle. Chalons, where the last great Roman saved the world from the savage licence of the Huns; Poitiers, where Charles Martel hurled back the hosts of Mahomet, are names familiar to every school-boy, as marking fearful crises in the history of the world. And Leipsic likewise saved Europe centuries of infinite toil. It proclaimed that truth in God's world is not to be crushed by error, and pointed the devout soul to a Sovereign Providence. It shut forever the accursed temple of Dominic in all the cities of the Teutonic peoples, and quenched the fires of the *Auto' de' fe'*. If the Pope, Chief Inquisitor, persecuted Galileos for discovering that the earth moved round the Sun, when Papal Infallibility declared it did not, and threw the Jesuit experimenter in Balloons into a dungeon for the blasphemy of attempting to navigate the air, it was Leipsic which confined the possibility of such things to Italy and Spain. It gave us science and liberty of thought; the Printing Press and Goethe. Had Gustavus failed at Leipsic, a new Luther must have fought the battles of another Reformation, against a mightier foe, and this era of the world's progress must yet have been an ideal of the yearning, struggling mind of humanity.

THINKING that it would be somewhat interesting to many of our readers, and also beneficial to ourselves, we have thought proper to give a series of articles on some of the most celebrated Colleges. We make a commencement in this issue with Oxford.

### Geology.

Geology is a branch of study which hitherto has generally received but a little of the attention of which it is deserving. This science is most happily adapted to give to the mind both expansion and elevation. As Astronomy opens to us the amplitudes of celestial ubiquity, so Geology opens to us the amplitudes of past eternity.

Geology being largely dependent on an accurate knowledge of other branches of study, such as Chemistry, Botany, Zoology, and Comparative Anatomy, has never attained to a position justifying the application of the term science, until within a comparatively recent period. It has, however, in all ages awakened the attention of many of the profoundest minds. In their conjectures some have come wide of the mark, whilst others have made most happy approaches to the truth. Many of the sages of antiquity entertained the opinion that the world had been subjected to successive destructions and renovations by the action of fire and water. These catastrophes they designated by the terms Cataclysm and Ecyprosis. We learn that the views of Pythagoras, with reference to geologic changes, were very accurate. The geographer, Strabo, anticipated some of the grandest views and principles which are now known and settled on this great subject. The Arabians, Omar and Avicenna, are said to have produced some works of merit in this line of investigation. As far back as the year 1517 the Italian, Fracastero, maintained the correct theory with respect to fossil shells. In 1668 Robert Hooke, in England, held views of geologic change and phenomena far in advance of his time. In America but little was done in this field of inquiry until the commencement of the present century. Since then the amateurs of geologic science have so multiplied that their names would be too numerous to mention.

Though this branch of study is yet but in a state of youth, on some points it can even now speak with much confidence. The fact is established that the crust of the earth is undergoing constant change in harmony with a grand plan of progression. Those parts which now form the tops of mountains once formed the beds of the ocean. The causes of change remaining, we readily infer the future.