

from the dust of ages, and transmitted, reanimated, and nourished on the soil of modern Europe.

And what, in the history of Providence, should not be here overlooked, the Arabs, the determined foes of Christianity, were used as the instruments of preserving and transmitting that knowledge which, finally, became the regenerator of Europe. They were made to subserve the purposes of the truth, up to a certain point, when the privilege was transferred to worthier hands. At the period of which I am speaking, it seemed altogether probable that learning and the arts, the power of knowledge and the press, would be transmitted to future ages through the followers of the false prophet. For it was through them that learning revived, and the inventions and discoveries, which so effectually wield the destinies of the world, were divulged.

In less than a century after the Saracens first turned their hostile spears against their foreign enemies, (the Greeks, at the battle of Muta, in 630,) their empire exceeded in extent the greatest monarchies of ancient times. The successors of the prophet were the most powerful and absolute sovereigns on the earth. Their caliphs exercised a most unlimited and undefined prerogative—reigned over numerous nations, from Gibraltar to the Chinese Sea, two hundred days' journey from east to west. And, what is no less extraordinary, within about the same period, after the barbarous act of Omar, which consigned to the flames the splendid library of Alexandria, (640,) the world became indebted to the Saracens in respect to literature and science—though it was nearly two centuries more before they attained to their Augustan age.

The court of the caliph became the resort of poets, philosophers, and mathematicians, from every country and from every creed. Literary relics of the conquered countries were brought to the foot of the throne—hundreds of camels were seen entering Bagdad, loaded with volumes of Greek, Hebrew, and Persian literature, translated by the most skilful interpreters into the Arabic language. Masters, instructors, translators, commentators, formed the court at Bagdad. Schools, academies, and libraries were established in every considerable town, and colleges were munificently endowed. It was the glory of every city to collect treasures of literature and science throughout the Moslem dominions, whether in Asia, Africa, or Europe. Grammar, eloquence, and poetry were cultivated with great care. So were metaphysics, philosophy, political economy, geography, astronomy, and the natural sciences. Botany and chemistry were cultivated with ardor and success. The Arabs particularly excelled in architecture. The revenue of kingdoms were expended in public buildings and fine arts; painting, sculpture, and music, shared largely in their regards. And in nothing did they more excel than in agriculture and metallurgy. They were the depositories of science in the dark ages, and the restorers of letters to Europe.

Had not this course of things been arrested—had not a mandate from the skies uttered the decree, that the Arabian should no longer rule in the empire of letters, how different would have been the destiny of our race! Instead of the full-orbed day of the Son of Righteousness, casting his benignant rays on our seminaries of learning, they would have grown up under the pale and sickly hues of the crescent. The power of science and the arts, printing and paper-making, the mariner's compass and the spirit of foreign discovery, and the power of steam, (all Arabian in their origin,) would have been devoted to the propagation and establishment of Mohammedanism. The press had been a monopoly of the Arabian imposture; and the Ganges and Euphrates, the Red Sea and the Caspian, illumined only by the moon-light of Islam, would have been the channels through which the world's commerce would have flowed into Mohammedan emporiums.

But He that controlleth all events, would not have it so. These mighty engines of reformation and advancement should nerve the arm of truth; the press be the handmaid of Christianity, to establish and embalm its doctrines and precepts on the enduring page; and the control which men should gain over the elements, to facilitate labour, contract distances, and bring out the resources of nature, be the handmaid of the Cross. Otherwise, Christianity had been the twin-sister of barbarism; and Moslemism and Idolatry had been nurtured under the favouring influences of learning, civilization, and the art of printing. It is worthy of remark, that the press, up to the present day, has been confined almost exclusively within the precincts of Christianity.

And not only has Providence so interposed as to consign to the hands of civilization and Christianity, almost the exclusive monopoly of the press, but, under the guidance of the same unerring Wisdom, the future literature, as well as the society and government of the Gentile nations, is likely to descend to them through the purest Christianity. While science and literature are cultivated and honoured by Christian nations, they are stationary or retrograde among Pagans and Mohammedans. This is giving Christianity immense advantages. For nearly the entire supply of books, schools, and the means of education, are furnished through Christian missions. Who but the Christian missionary, form alphabets, construct grammars and dictionaries for Pagan nations, and thus form the basis of their literature, and guide their untutored minds in all matters of education, government, and religion? In these things, how admirable the orderings of Providence! Christianity at once takes possession of the strong holds of society, and gives promise of permanency. For there is all the difference of civilization and barbarism, of religion and infidelity, in the kind of literature a people have. If supplied by the enlightened mind, the pure heart, and the liberal hand of Christianity, it will be as a fountain of living waters.

—H. Reid.

#### LAWS OF HEALTH.

The best beds for children are of hair, and in winter, of hair and cotton.

Young persons should walk at least two hours a day in the open air.

Young ladies should be prevented from bandaging the chest. We have known three cases of insanity, terminating in death, which began in this practice.

Every person, great and small, should wash all over in cold water every morning.

Reading aloud is conducive to health.

#### RAILROADS IN EUROPE.

The London *Times* has recently been publishing statistics of the progress of the different countries, which exhibit these results:—Belgium has 532 miles of railways, 352 of which have been constructed and worked by the State, the remainder by different private companies. The expense of constructing the whole has been £9,676,000 or £18,000 per mile. The annual expenses are 63 per cent. of the receipts, and the profits three and a half per cent. on the capital. In France, there are 1,818 miles of railway under traffic, 1,178 miles in progress, and 577 miles projected. The cost of construction per mile has been £26,832, and the whole expenditure requisite for the completion of the 3,573 miles is estimated at £95,870,735. The average annual net profit on the capital employed does not exceed two and seven-tenths per cent.

In Germany there are 5,342 miles of railway in actual operation. 700 in progress, and 2,414 miles projected. Of the railways in operation, 1,812 miles were within the Prussian territories, and 771 miles in the Dutch Netherlands, the Danish Duchies, and ex-German Austrian provinces, and therefore only 4,571 miles can be considered as strictly within the Germanic confederation. Two-fifths of these 4,571 miles were constructed and worked by the States, the remainder by private Companies. Those in Prussia, however, are all the result of private enterprise. The expense of construction of the 5,342 miles is estimated at £12,500 per mile, being single track only. The working expenses are about fifty per cent. of the receipts, and the net profits are nearly three per cent. In Russia a railway from Warsaw to Cracow, 168 miles in length, is in operation; one connecting Warsaw with St. Petersburg, 683 miles in length; and one of about 400 miles, from St. Petersburg to Moscow, is in progress. A railway for goods from the Volga to the Don, 105 miles in length, is also contemplated. In Southern Russia a line of railway between Kief and Odessa has been surveyed. In Italy no extensive system of railway has yet been executed. A few lines, diverging from the principal cities, such as Naples, Milan, Venice, Leghorn, and Florence, Sardinia, Spain, and Portugal, railways are only in prospective.

By multiplying £1 by \$4.85 we can arrive the cost per mile of some of these roads. It will be observed that the French lines—the highest—cost \$130,135.20 per mile, or nearly three times as much as those of Massachusetts, the cost of which averages \$43,781.00, or about £9,000. If the European lines pay at such an enormous cost, need we be afraid?—*Scientific American*.