

the house was shaken by the effect of the steam ascending the tubes. This is the first notice of the power of steam recorded. In 1543, June 17, Clasco De Garoy tried a steamboat of 209 tons, with tolerable success, at Barcelona, Spain. It consisted of a cauldron of boiling water and a moveable wheel on each side of the ship. It was laid aside as impracticable. A present, however, was made to Garoy. In 1650, the first railroad was constructed at Newcastle-on-Tyne. The first idea of a steam engine in England was in the Marquis of Worcester's "History of Inventions," A. D. 1663. In 1710, Newcomer made the first engine in England. In 1718, patents were granted to Savary for the first application of the steam engine. In 1764, James Watt made the first perfect steam engine in England. In 1736, Jonathan Hulls first set forth the idea of steam navigation. In 1778, Thomas Paine first proposed this application in America. In 1781, Marquis Jouffroy constructed one on the Saone. In 1785, two Americans published a work on it. In 1789, William Tymington made a voyage in one on the Forth and Clyde canal. In 1802, this experiment was repeated. In 1782, Ramsep propelled a boat by steam at New York. In 1787, John Fitch, of Philadelphia, navigated a boat by a steam engine on the Delaware. In 1793, Robert Fulton first began to apply his attention to steam. In 1793, Oliver Evans, a native of Philadelphia, constructed a locomotive steam engine to travel on a turnpike road. The first steam vessel that ever crossed the Atlantic was the *Savannah*, in the month of June, 1810, from Charleston to Liverpool.

The Progress of Comfort.—In the first period of the occupation of England by mankind, there is no doubt that, as the flesh of animals served for food, so their skins served for clothes. They had no woollen fabrics to use for such a purpose; they had neither manufactures of their own, nor money, nor any articles of barter, to exchange for the clothing materials made by the nations of the continent who were more advanced in knowledge and comfort. Woollen clothes (first made in the country in 1191,) and those of flax were the early products of advancing knowledge and civilization. Those of silk were not made in England till about the year 1604. Hats were not made in this country till about the year 1510. Shoes were not introduced, of the present fashion, until 1633. As to furniture, the early inhabitants of England employed leaves and dried grass for beds: logs of wood or stone served the office of chairs and tables; the earth was their floor. It was only by gradual degrees that benches and other raised seats were used. The floor was at length garnished with rushes and straw, mixed with sweet scented hay or flowers. Another long interval elapsed—before 1759—carpets were made in England. The beds on which our ancestors slept were often made of straw; even the king's beds were made of it to the year 1234. Linen was first made in England in 1253. English blankets were not made before about 1340. Calico was not manufactured in England till about the year 1762.

Volcanic Eruptions.—There is said to be an identity of origin in earthquakes and volcanic eruptions—a connection more or less intimate in the agency of the one with the other. In the case of Etna and Vesuvius, it is recorded, they rarely return to a state of activity, after an interval of repose, without some antecedent earthquake, the latter usually ceasing as soon as the volcano has once established for itself a vent whereby the elastic vapours can discharge themselves. The earthquake which destroyed Caraccas in 1812, at the same time that the shores of the Mississippi were in sympathetic commotion, was followed in eight days by the memorable eruption of the Soufriere in St. Vincent.

The Crystal Palace.—Several propositions have been made for the appropriation of the surplus fund arising from the great Exhibition. A member of the Executive Committee has published a pamphlet advocating the endowment of Schools of Design. Another proposition is for the formation of a Museum, containing specimens and drawings of all the objects of interest in the Exhibition, and such articles as exhibitors may be willing to contribute, or which may be purchased. The *Illustrated London News* proposes the endowment of a University of Art, Science, and Manufacture, which shall stand at the head of all the schools of design and scientific societies in the country, and thus give an opportunity for the recognition of talent in certain directions which does not now exist, by placing living science on an equal footing with dead literature;—the latter being recognized and rewarded in all the universities; and the former nowhere. The visit of four Canadian Indians of the Iroquois tribe to the Exhibition, created considerable interest and astonishment, for when anything of peculiar interest struck them, a "whoop" of a startling character was raised as an outward sign of their wonder. They were much concerned to find that two figures costumed in the Indian dress, which had been placed by Mr. Catlin upon a large bridge in the United States department, had been destroyed, as stated, by the freaks of a drunken woman; and after looking at the prostrate representations of their compatriots, and ascertaining the cause of their removal from the place of honour, the chief pronounced something like a moral upon the evil influences of "fire water."

Acids are usually sour, easily dissolved in water, turn most blue colours red, readily combine with alkalies and earths, and act powerfully on most metals. Acids are found in all the kingdoms of nature. The phosphoric acid existing in bone, is of animal origin; the citric and oxalic acids are products of vegetation; the carbonic and sulphuric acids are very common in mineral bodies; and the chronic and arsenious acids are found in mineral bodies only. When the name of an acid ends in *ic*, it shows that the base of the acid is combined with the acidifying principles in a higher degree than when the name ends in *ous*; (thus nitric acid is stronger than nitrous;) the former is said to be a perfect acid, the latter an imperfect one.

The Eclipse.—Professor C. W. Hackley, of Columbia College, took accurate observations of the eclipse, from the observatory of that institution, aided by all the requisite apparatus, and he reports as follows;—"The first contact, or beginning of the eclipse, took place at 7h. 35m. 55s., and the last contact, or end, at 9h. 11m. 50s. mean solar time. The time was observed by two chronometers, one keeping sidereal, the other mean time. Both were compared immediately before and immediately after the eclipse, with a sidereal clock, with mercurial pendulum in the transit room, the clock having had its error determined by transit of stars. Thirty-six observations of differences of right ascension of the cusps were made during the first portion of the eclipse, with a filar micrometer, and twelve of differences of declination toward the close of the eclipse, with the same instrument. These will each be as valuable as those of the first and last contact, for determining the accuracy of the longitude, and of the lunar table. The observations were made with an equatorial instrument of six inches aperture. The point of first contact on the sun's disc, was determined by moving one of the parallel wires to the proper distance from the north point of the disc, to pass through the point of contact."

Progress of Science during 1850.—Great progress has been made in meteorology during the past year. Observations are now regularly taken at a number of stations in North America, far distant from each other, which are afterward reduced to tabular form, for the purpose of future reference and comparison.—A Magnetic and Meteorological Observatory has been completed at St. Petersburg, which is to be the central point for magnetic and meteorological observations of the whole Russian Empire.—A movement has been made among scientific men in Europe towards the establishment of a new and universal meridian. Cape Horn has been suggested.—It is proposed to establish a Zoological and Botanical Garden in the neighbourhood of New York. The sum of \$300,000 is to be raised, and two hundred acres of land purchased for the object.—M. Despretz has ascertained by a series of experiments, that almost every solid body in nature is capable of fusion and volatilization.—M. Ulgren has added another article to the list of supposed "elementary substances," which are now 64 in number. The new substance is called *aridium*.—The use of the *pancreas* has been at length discovered. Its juice dissolves fatty substances in the food.—Three new planets have been brought to light. The number of those bodies, as at present known, is 21.—Messrs. Bond have discovered a third ring of the planet Saturn.

Ascent of Mont Blanc.—Chamonix, Aug. 14.—This quiet alpine valley has for the last week been in a most unusual state of activity and excitement. About seven days ago the people learned that three students from the University of Oxford, and an English author, were getting themselves into condition for attempting the ascent of Mont Blanc. Guides and villagers were at once on the *qui vive*, and the adventurous party were regarded with much interest wherever they went. On Tuesday morning, at seven o'clock, all the preparations being complete, the party set out from the Hotel de Londres. It included Mr. Floyd, said to be a son of the general of that name, and cousin of Sir Robert Peel; Mr. Phillips, a third Oxford man, and Mr. Albert Smith, with sixteen guides, sixteen porters, and a number of aspirants for the post of guide who attended the voyagers and their paid party for the purpose of learning the route to the summit of the mountain. After their departure, telescopes were fixed from the windows of the inn, and in other places, to watch the progress of the toilsome ascent, and before six o'clock it was evident the voyagers had crossed the great glacier, and had arrived at their resting-place for the night—on the *Grands Mulets*. Yesterday morning, as soon as the day-light afforded a clear view, the adventurers were again visible by aid of a good glass, and by twelve o'clock were seen making the final ascent. They rested on the summit for about twenty minutes, and then commenced their descent, arriving here last night about seven o'clock. The excitement during the previous twenty-four hours had been very great in Chamonix. Anxious wives and parents having husbands and sons among the party in the snows, and the interest being by no means diminished by the fact that Sir Robert Peel (who had arrived here after the departure of his relative for the ascent) invited nearly all the men remaining in the village, about sixty in number, to an entertainment provided at an *auberge*, where they were sup-