Science vs. *Superstition.*—Science has gone down into the mines and coal-pits, and before the safety-lamp, the gnomes and genii of those dark regions have disappeared. But, in their stead, the process by which metals are engendered in the course of ages; the growth of plants which, hundreds of fathoms underground, and in black darkness, have still a sense of the sun's presence in the sky, and derive some portion of the subtle essence of their life from his influence; the histories of mighty forests and great tracts of land carried down into the sea, by the same process which is active in the Mississippi and such great rivers at this hour, are made familiar to us. Sirens, mermaids, shining cities glittering at the bottom of the quiet seas, and in deep lakes, exist no longer; but in their place, science, their destroyer, shows us whole coasts of coral-reef constructed by the labours of minute creatures; points to our own chalk cliffs and limestone rocks, as made of the dust of myriads of generations of infinitesimal beings that have passed away; reduces the very element of water into its constituent airs, and re-creates it at her pleasure. Caverns in rocks, choked with rich treasures shut up from all but the enchanted hand, science has blown to atoms, as she can rend and rive the rocks themselves; but in those rocks she has found, and read aloud, the great stone book which is the history of the earth, even when darkness sat upon the face of the deep. Along their craggy sides she has traced the foot-prints of birds and beasts, whose shapes were never seen by man. From within them she has brought the bones, and pieced together the skeletons, of monsters that would have crushed the noted dragons of the fables at a blow. The stars that stud the firmament by night are watched no more from lonely towers by enthusiasts or impostors, believing, or feigning to believe, those great worlds to be charged with the small destinies of individual men down here; but two astronomers, far apart, each looking from his solitary study up into the sky, observe, in a known star, a trembling which forewarns them of the coming of some unknown body through the realms of space, whose attraction at a certain period of its mighty journey causes that disturbance. In due time it comes, and passes out of the disturbing path; the old star shines at peace again; and the new one, evermore to be associated with the honoured names of Le Verrier and Adams, is called Neptune! The astrologer has faded out of the castle turret-room, and forebodes no longer that because the light of yonder planet is diminishing, my lord will shortly die; but the professor of an exact science has arisen in his stead, to *prove* that a ray of light must occupy a period of six years in travelling to the earth from the nearest of the fixed stars; and that if one of the remote fixed stars were "blotted out of heaven" to-day, several generations of the mortal inhabitants of this earth must perish out of time, before the fact of its obliteration could be known to man!—[London (Literary) Examiner.

Death of Horace Twiss, Esq.—We announce with regret, the sudden death of Mr. Horace Twiss, a gentleman who for many years enjoyed a considerable reputation as a politician, a lawyer, and a literary man. Mr. H. Twiss was for many years a member of parliament, and filled a subordinate official position in the government of the Duke of Wellington. As a parliamentary speaker he was impressive, and, as a politician, consistent. Mr. Horace Twiss achieved considerable distinction in the literary world. His *Life of Lord Eldon*, although, of course, much of the interest lies in the original materials, is a biographical work of great ability and skill. He also contributed largely to the leading periodicals, especially the *Quarterly Review*. Many of the articles in the *Times* were attributed to him, and for some years he regularly wrote the summary of parliamentary intelligence which appeared in that journal.

Death of Samuel Maunder, Esq.—We have to announce the death, on Monday week, of this excellent man, and meritorious writer. Mr. Maunder was the brother-in-law of William Pinnock, (who married his sister,) and who was so justly celebrated for the course he opened and pursued with such ardour in regard to books for educational purposes. Pinnock's Catechisms will never be forgotten when education is treated of; and in their production Maunder was the true workman, to whom the youth of England were chiefly indebted for their instruction; and also for those of a historical kind, which were no less skilfully and admirably edited.

Decomposition of Light by the Eye.—A correspondent sends us the following:—"On closing the eyes, after having looked steadfastly at a sheet of white paper held in the sun for about half a minute, and covering them without pressure, to exclude extraneous light, (a silk handkerchief held in the hand will answer the purpose,) the figure of the paper remains visible for some time. At first it is generally white, and then gradually changes through the colours of the spectrum. All the colours are seldom seen at the same trial; and it rarely happens when one or more are missed that they afterwards appear. Thus, when the change is from green to red, yellow or orange are seldom seen. The change from white generally commences with a light indigo or blue, and terminates with red, or some compound of it—but sometimes with a deep blue or violet. The colours are generally seen at the edges of the figure first—though this is not always the case; and when they once appear, they often remain mixed up with those that succeed. Many curious modifications and confused mixtures of colours will be perceived at times; but it seldom happens that the colours develope themselves, in the first instance, contrary to their order in the spectrum, although when the last has appeared they occur in various ways. This is a phenomenon which I have not seen noticed anywhere: and it would seem to arise from the retina decomposing the light that falls upon it, surrendering the rays in the order of refrangibility."—[Athenæum.

Terrific Theory.—Professor Silliman mentions the fact, that in boring the Artesian wells in Paris, the temperature of the earth increased at the rate of one degree for every fifty feet, towards the centre. Reasoning from causes known to exist, he says:—"The whole interior portion of the earth, or, at least, a great part of it, is an ocean of melted rock, agitated by violent winds, though I dare not affirm it, is still rendered highly probable by the phenomena of volcanoes. The facts connected with their eruption have been ascertained and placed beyond a doubt. How, then, are they to be accounted for? The theory, prevalent some years since, that they are caused by the combustion of immense coal beds, is perfectly puerile, and is entirely abandoned. All the coal in the world could not afford fuel enough for a single capital exhibition of Vesuvius. We must look higher than this; and I have but little doubt that the whole rests on the action of electric and galvanic principles, which are constantly in operation in the earth."

Beautiful Microscopic Appearance of Duckweed.—Did those persons who are anxious to banish the Duckweed from their stagnent pools ever examine the stem of this little plant under the microscope? If not, I promise them a treat which will both astonish and delight them. In warm weather, and examined with a good light, they will find the beautiful campanularia, or bell-shaped animalcula, attached to the stem of the Duckweed in great abundance. This compound creature consists of a stem, branching in every direction like a bunch of grapes, the end of each branch terminating in a bell-shaped, living, and distinctly organized being. The edge of the bell is fringed with most delicate ciliæ, by which a current is kept up around the animalcules, and small particles of decomposing vegetable matter brought constantly within reach of its mouth. Do you doubt its life? Just touch the stand of your microscope never so gently, and in an instant, quicker than thought, every bell will shrink and collapse upon the stem of the Duckweed; and again, when the motion ceases, spread out their delicate and beautiful bells, to perform their destined duty—the purification of stagnent water, the preservation of human life.

Etching and Engraving in Black Marble.—An interesting feature connected with the manufacture of black marble, is the depicting, by the application of an acid, representations of figures, flowers, Egyptian hieroglyphics, and other objects upon a polished surface. The method employed in doing this kind of engraving is similar to that pursued with respect to copper—viz., by first tracing with wax or varnish upon the marble the object intended to be represented; then, when the preparation is perfectly set, with a point marking in the finer parts of the figure. It is then covered with an acid, which bites off the polished surface of the marble which was not covered with the preparation, leaving those parts which were covered standing in slight relief; the wax is then cleared off. Thus it will be seen that any one with a knowledge of drawing could practise this part of the art; not so, however, with regard to another style of engraving on marble, which I will mention, and which is peculiarly English, such productions from abroad being unknown. There is no preparation of wax, or application of acid used here, the entire process is done by gravers' points and diamonds, hence called the "diamond engraving." It must be observed, that for effect in this work the artist is confined to a most limited space—viz., from a black polished surface to a grey ground, the natural color of the marble before it is polished.—[The Builder.

The Mystery of the Pyramids.—It is remarkable that after some thousand years of ancient inquiry, and at least a century of keen and even toilsome research by modern scholarship, the world knows little more of the pyramids than it knew when the priesthood kept all the secrets of Egypt. By whom they were built, for what, or when, have given birth to volumes of researches: but to those questions no answers have been given worth the paper they cost in answering. Whether they were built by Israelite slaves or Asiatic invaders, for sacrifice or sepulture, or for both, or for the glory of individual kings, or for the memory of dynasties, or for treasure houses, or for astronomical purposes, or for the mere employment of the multitude—workhouses having probably found their origin in Egypt—or for the rough ostentation of royal power, all are points undetermined since the travels of Herodotus. But that they must have cost stupendous toil there is full evidence—the great pyramid covering 13 acres—exhibiting a mass of stone equal to six Plymouth breakwaters, and rising to a height of 470 feet, or 15 feet higher than St. Peter's spire, and 119 feet higher than St. Paul's. [Blackwood's Magazine.