

centuries for the expression of mental power. But he disapproved of the choice of antique or foreign mythological subjects; English art, he said, should take its subjects from the events and personages of national history, from the conceptions of our best standard literature and from the sacred narratives of the Bible.

The importance of moral and intellectual culture to the genuine success of the young artist was unaffectedly impressed. Mr. Weekes prescribed the reading of his great predecessor Flaxman's lectures as the best practical treatise on sculpture in English, but observed in them a want of exact analysis of the reasons for the excellence of those examples and models which he admired. This deficiency will probably be supplied in the future lectures, with a demonstration of the essential principles of sculpture. We understand that the Council of the Royal Academy is making some arrangements to strengthen the teaching of the classes in sculpture; and the addition to its revenue from the bequest of Gibson's whole fortune cannot be more fitly applied.

—*A Monument to Poland.*—The Polish patriots have determined upon erecting a monument commemorative of the struggles of Poland to regain her national independence. The site chosen is in one of the most beautiful districts of Switzerland, on the heights of Rapperswyl, bordering the Lake of Zurich. This memorial will consist of a column of black marble, 28 feet high, standing upon three platforms of granite, each of the latter serving as a step up to the pedestal. On the summit will be an eagle with outspread wings. Historical inscriptions and arms of Poland are to be carved upon four tablets on the lower part of the shaft; and the whole will be surrounded by an iron railing. The work will be completed in the course of the summer. A circular from Count Ladislas Plater, dated Villa Broelberg, near Zurich, April 22, has been issued, in which an appeal is made to all who have the cause of Poland at heart to assist in carrying out this patriotic demonstration.

—We learn from *Nature* that Dr. John Davy, brother of Sir Humphrey Davy, has bequeathed to the Royal Society, in fulfilment of an expressed wish of his illustrious brother, a service of plate, presented to Sir Humphrey Davy for the invention of the safety lamp, to be employed in founding a medal to be given annually for the most important discovery in chemistry made in Europe or Anglo-America.

—Attempts are being made in Italy to raise a subscription for a statue of Raphael, to be erected at Urbino.

—A statue to the French General Duplex, so well known in the last century of history in India, is now in progress at Pondicherry—a tardy tribute.

### Rotany.

—*The Victoria Regia.*—This magnificent plant has thriven to an unprecedented degree during the past summer in the Botanic Garden at Ghent. Several leaves have attained a diameter of nine feet, and have supported a weight of 250 lbs., and one even the enormous weight of 500 lbs. Seven of the gigantic leaves completely covered the basin of 164 feet square, and they were obliged to be removed to make room for the young leaves which continued to develop in the centre. Every four or five days a fresh flower appeared, which lasted only two days, or rather two nights, opening in the morning of a perfectly white color, diffusing about five or six P.M. a very powerful odor of vanilla, closing the next morning at 8 or 9 A.M., opening the same day towards evening, this time of a beautiful carmine, and finally closing the next morning. The magnificent leaves last through the summer; the plant begins to dwindle in October, and dies towards December. About this time the seeds, which have been obtained by artificial fecundation, arrive at maturity. They are sown in January, and appear above the ground in about six weeks. Their infancy is very critical; but once past this period, the young plants grow with astonishing rapidity; the plant in the Ghent Botanic Gardens, unquestionably the finest that has ever been cultivated, arrived at its full development in five months.—*Nature.*

—*A Rare Plant.*—There is at present in the possession of Mr. George Terrey, a builder in Clerkenwell (says a letter in *Gardener's Magazine*), a most remarkable plant, for which the owner has refused considerable sums of money. It is about the size of an ordinary gooseberry bush, and although living and growing bears no semblance of vitality. It has no foliage; but little pellicles of flint bud out of the twigs and stems, which are likewise encircled with rings of flint at every joint. In some places the flint which it appears has exuded from the plant itself, cases the stems like a pipe. The plant looks black and dead, but the twigs instead of being brittle like wood, are tough as leather thongs. It has been suggested that the flints which form so large a component of plant life, has, by some freak of nature, been eliminated from the natural vesicles of the plant and developed outwardly instead. Scientific men from various public institutions and learned bodies have inspected this phenomenon, but

without arriving at any conclusion respecting it, beyond its indubitable singularity.

—*Transplanting in the Night.*—A gentlemen anxious to ascertain the effect of transplanting in the night, instead of by day, made an experiment, says *Bow Bells*, with the following result:—He transplanted ten, cherry-trees while in bloom, commencing at four o'clock in the afternoon and transplanting one each hour until one o'clock in the morning. Those transplanted during the daylight shed their blossoms, producing little or no fruit, while those planted in the dark maintained their conditions fully. He did the same with ten dwarf trees after the fruit was one third grown. Those transplanted during the day shed their fruit; those transplanted during the night, perfected their crop, and showed no injury from having been removed. With each of these trees he removed some earth with the roots. The incident is fully vouched for; and if a few more similar experiments produce the same result it will be a strong argument to horticulturists, gardeners, and fruit-growers to do such work at night.

### Discoveries and Inventions.

—*Invention Relative to Ships' Compasses.*—Having recently noticed the loss of the iron ship *Glenorchy*, in consequence of an unascertained error in her compass, it is right to mention the invention, says the *Globe*, by Mr. W. F. Reynolds, of an instrument, independent of all magnetic influences, for determining the deviation of ships' compasses when at sea. The inventor speaks of it as a simple tool, capable of being readily understood and easily used by an ordinary mariner, without reference to any abstruse calculations, and as reliable and perfect in the practical results of its operations as the methods and formulæ of the mathematical navigator. The only misfortune is that a clear sky is necessary to the use of the instrument, since it involves a reference to the sun, or some other celestial object; and a clear sky is what the mariner cannot always command, and most frequently needs when it is most important for him to know the exact position and direction of his ship. The "Pall-nurus," however, as the instrument is called, will always assist him in clear weather, and the mariner may be saved from going out of his course. It should be added that a means of ascertaining the "healing error," to which the loss of the *Glenorchy* was ascribed, is provided in connection with the instrument.

—*Paper as a Material for Clothing.*—The Japanese paper handkerchiefs are assuredly coming, if the *Globe* be right. The paper collar manufacture has now been extended to less prominent but more important garments, of great strength and flexibility, which can be sewn with a machine, giving seams almost as strong as a woven fabric! The inventor has particularly applied it to the production of petticoats, which are either printed in imitation of the fashionable skirts of the day, or stamped out with open work of such beauty and delicacy as no amount of labour with scissors and needle could imitate. The marvel is that these really beautiful productions can be sold retail at 6d. each! Imitation cretonnes and chintzes for bed furniture are also made, a set costing retail about 5s. The felted material "is so flexible that a curtain may be twisted into a rope and shaken out again, showing as little creasing as a chintz similarly treated." There are also table-cloths embossed with designs of great beauty. This felted paper may in the end have a serious influence on the production of the woven fabrics it is intended to displace. Imitation leather, impermeable to water, is likewise made of it, and produces a cheap and useful covering for furniture, and even serves for shoes.

—*Indicating Localities.*—An ingenious plan has been devised, the *Athenæum* reports, for indicating localities and distances in London. The Thames, from the most eastern point to Westminster Bridge, and a line thence to Hyde Park Corner and Knightsbridge, are considered as an equator, from which it is proposed to measure distances of a quarter of a mile each towards the north and south, and denote them by increasing numbers, similar distances from west to east being denoted by alphabetical letters. Both numbers and letters are to be put up in every street and on every lamp-post, so that a person may readily ascertain in what direction he is going, and how far he has gone. Thus, by observing that he has passed from A 3 to A 4, he may know that he has gone a quarter of a mile towards the north or south of the equatorial line. Similarly, his advance from A 4 to B 4 would show he had gone a quarter of a mile from west to east. Addresses might thus be given with greater precision and distinctness than at present, and many disputes about cab-fares be obviated.

—A large room has been discovered at Herculaneum which must have served for a kitchen. In it was a wooden clothes-press, entirely carbonized; also 14 vases, a candelabrum, and a lamp, all in bronze, several vessels in glass and terra-cotta; a small marble statue of a fawn, and two broken tables, one in marble and the other in slate. These excavations are carried on by means of the grant of \$6,000 by King Victor Emmanuel, made for that object.