state.....Two professorships of Practical Art in woven fabric and me tals have recently been established at Marlborough House, with a view of directing the studies of the pupils in classes, affording assistance to manufacturers and workmen who may seek it, and giving information to the public by lectures, &c., on the examples collected in the museum.....Mr. Macgillivary, the eminent naturalist and professor of Natural History in the University of Aberdeen is dead..... The Plymouth Public Free School has been reported by the Inspector of Schools for the British and Foreign School Society, as fit for a model School for the West of England...... A paper published at Malmo, Sweden, says that Madame Jenny Lind Goldschmidt has deposited in the hands of trustees four hundred thousand rixthalers for the purpose of founding girls' schools in Sweden.

## UNITED STATES.

## MONTHLY SUMMARY.

The Brooklyn Board of Education, at their last meeting, adopted a resolution, directing all the school houses under their jurisdiction to be ventilated, by keeping the doors and windows open during recess. Ventilation is too much neglected in public buildings generally, and we should be glad to see the example of the Brooklyn authorities followed elsewhere. ..... The free evening schools throughout the city, by direction of the Board of Education have been opened, and will continue open for the term of fourteen weeks. The rules of the Board prohibit the reception in these schools of any pupils whose daily avocations admit of their attendance upon the public or ward schools, and no corporeal punishment is allowed...... The new York Teachers' Association have issued an Educational periodical entitled "The New York Teacher," under the direction of twelve corresponding editors, and one resident editor, Mr. T. W. Valentine, Albany. This publication is designed to supply the place of the "District School Journal," discontinued for want of funds.

## Literary and Scientific Entelligence.

## MONTHLY SUMMARY.

At the opening of the British Association at Belfast, Colonel Sabine delivered an address on the objects and proceedings of the association, taking a view more particularly of the progress of science during the past year. He adverted to the subjects noticed by the council in their request to the general committee, in reference to the communications between the parliamentary committee and the government. One of the most important subjects for consideration at the present meeting, he said would be the necessity of again urging on the government the formation of a station in the southern hemisphere for astronomical observations. Among other topics of public interests to which he alluded was the probable advantage to science of having it directly represented in parliament. To that plan he decidedly objected, as scientific men ought not to have their attention disturbed by political controversy. The address, which occupied an hour and a half in delivery, was listened to with great attention, and was much cheered. A large number of highly interesting papers on science and political economy were read in the different sections during the week, and the meetings passed off with great eclut. Dr. Hamilton, in the Zoological section, read "Remarks on some of the marine birds which produce guano on the coasts of Peru and Bolivia, with reference to the Lobos Islands." This paper excited much interest, both on account of the recent question as to the sovereignty of the Lobos Islands, and on account of the importance of an increased supply of guano. After much matter of historical and geographical interest, the author gave his reasons for expressing his belief that large deposits of guano might still be found if the government would undertake the search, as yet there remained a large portion of the Pacific unexplored, principally that lying between Valparaiso and the Isthmus of Panama...... The Scientific Association of France commenced its annual Congress a week or two ago at Toulouse. The proceedings though interesting are of less public importance than those of the British Association ...... The Liverpool Free Public Library and Museum was opened October 18. The museum will not be opened for some months. From 9,000 to 10,000 volumes have been received into the library shelves, and the librarian and his assistants are busy in preparing the catalogue. The workmen are busily engaged in fitting up the glass cases for the reception of Lord Derby's museum. The large cases are to be arranged round the room, and the smaller ones down the centre. In one of the rooms the model of Liverpool is to be placed. The Derby museum contains 661 specimens of mammalia, mounted, and 607 in skin; 11,131 birds mounted, 7,700 in skin, making a total of 20,049 specimens, exclusive of a large collection of eggs, a considerable number of rep-

tiles, fish &c .... Mr. Monckton Milnes, M.P., quaintly observed, at the opening of the Manchester Free Library, that four hundred years had elapsed since the invention of printing, yet books were not in circulation all over the globe; while the use of tobacco had become universal within fifty years of its introduction .... The Directors of the New Crystal Palace have, it is said, set apart £10,000 for the sculptural and architectural decorations of the edifice now rising from the grounds at Sydenham .... A congress of shorthand writers has just been held at Munich.... The French Government are about collecting and publishing all the popular poems of France.....A. W. Pugin, the celebrated architect is dead. Her Majesty has granted £100 per annum to his widow in consideration of her husband's eminent abilities...... At a meeting of the N. Y. Historical Society, the librarian read a communication from John G. Shea, Esq., concerning the discovery and first exploration of the Mississippi river. It is supposed the first white men who ever saw the "great father of waters," were Cebaza De Naca, and the three survivors of Narvaez's band, who traversed the continent from Florida to California, in the year 1537. A few years later came the expeditions of De Soto, the monk De Niza, and Muscosa, by whom a great portion of the country West of the Mississippi was explored. In 1639, the Jesuit missionaries in Canada heard of the great river, and in 1641, they planted the cross at the outlet of Lake Superior. In 1673, Jollyet and Marquette were sent out to explore the river, and ascertain whether it ran to California, and opened a way to China. Marquette wrote a journal of his voyage and drew a map, which is now deposited in the library of St. Mary's College at Quebec. The Jesuits never published Marquette's journal, but Thevenot issued an edition of it, omitting any notice of the object of the expedition..... At the annual sitting of the French Academy, the prize for poetry, a gold medal worth 2000fr., was awarded to Madame Louise Collet, on the theme of 'The Colony of Mettray,' where the reform of convicts by classified labour is attempted. The prize of 2000fr. for eloquence was awarded to M. Paradol, of the Normal school, for a 'Eulogium on Bernardin St. Pierre. The first Montyon prize for history was a warded to M Emile de Bonnechose, to whose work ' On the Four Conquests of England, reference has been made. The Gobert historical prizes, founded by Baron Gobert, were awarded, the first to M. Thierry, for his work 'on the Merovingian Kings;' the second to M. Henri Martin, for the recent volumes of his 'History of France.' Among the other prizes the most noticeable were, to M. Barnard, for his translation of Hegels's 'Lectures on Æsthetics,' and to M. Jules Barni, for an 'Analytical Examination of the Philosophy of Kant.' M. Boulay-Paty received 2000fr. for his collection of poetry entitled 'Sonnets,' and M. Jasmin an extraordinary prize of 3000fr. for poetry in the Provençal dialect. The report on the prizes for virtue was read by M. Vitet, the first of 3000fr. being awarded to a poor woman, aged 70, at Velencinnes, who had for forty years devoted herself to the support of her old mistress who had fallen into poverty. The sitting was concluded by the reading of Madame Collet's prize poem. The Report, by M. Villemain, Perpetual Secretary of the Academy, read previously to the announcement of the prizes, was a masterly piece of eloquence, and criticism, eliciting the warm applause of the distinguished audience. A brief analysis of the works honoured with prizes was given in the Report.

Wonders of the Universe .--- What mere assertion will make any one believe that in one second of time, in one beat of a pendulum of a clock a ray of light travels over 192,000 miles, and would therefore perform the tour of the world in about the same time that it requires to wink with our eyelids, and in much less than a swift runner occupies in taking a single stride ? What mortal can be made to believe, without demonstration, that the sun is almost a million times larger than this earth ?---and that although so remote from us, a cannon ball shot directly towards it, and maintaining its full speed, would be twenty years in reaching it, yet it affects the earth by its attraction in an appreciable instant of time ? But what are these to the astonishing truths which modern optical inquiries have disclosed, which teaches us that every point of a medium through which a ray of light passes, is affected with a succession of periodical movements, regularly recurring at equal intervals, no less than five hundred millions of millions of miles in a single second ? That it is by such movements communicated to the nerves of our eyes that we see-nay, more, that it is the difference in the frequency of their recurrence which affects us with the sense of the diversity of colour. That, for instance, in acquiring the sensations of reddess, our eyes are affected four hundred and eighty-two millions of millions of times; and of violet, seven hundred and seven millions of millions of times per second ! These are, nevertheless, conclusions to which any one may most certainly arrive who will be at the trouble of examining the chain of reasoning by which they have been obtained .- [Sir John Herschell.

Gigantic Telescope at Wandsworth.—There is at present in course of construction on Wandsworth-common, a singular-looking structture, consisting of a plain tower with a long tube slung by its side, surrounded by a wooden boarding to keep off intruders. This large tube encloses a new monster telescope on the a chromatic principle in process of