## DEATH OF PROFESSOR TURNER.

The Patent Office has just met witb a serious and almost irreparable loss in the death of Professor Wm. W. Turner, librarian of that office, and formerly teacher of oriental languages in the Union Theological Seminary, of this city. He died on Tuesday, Nov. 29th, and his funeral was attended by his brother-officers in a body. They had previously had a meeting to express their sympathy and respect, on which occasion the following paper was read by Dr. Foreman, one of the Chief-examiners in the Patent Office:—

"Professor Wm. W. Turner came to reside in this city in the spring of 1852, at the invitation of the Hon. Thos. Ewbank, at that time Commissioner of Patents. He accordingly resigned, in the Union Theological Seminary of New York, his professorship of Hebrew, Arabic, and other oriental languages, which he had for many years filled with distinguished credit. Previous to this, however, he had finished one of his prominent literary engagements, which consisted in translating the 'Latin and German Dictionary of Freund, from the letters D to Z, for the edition of that great work published by Dr. Andrews, in the preface of which his share in the preparation of the work is properly acknowledged.

"His connection with the library of this office began soon after his arrival, and the influence of a master mind was immediately apparent in his success in reclaiming it from the disorder and neglect into which it had fallen. To his great knowledge of books, his untiring assiduity as librarian, and the discreet expenditure of the small fund appropriated, are we now indebted for one of the most complete technical libraries in the world. His education and all the pursuits of his life combined to give him a knowledge of the most minute details of books, not of their literary contents alone, but of the typography, binding, cataloguing, and everything relating to the publication and arrangement of books.

"His aid was constantly in requisition by persons transacting business in the office, for translations from the modern languages; and it was no uncommon thing to witness conversations between him and learned foreigners, who visited the library, in their native languages, whilst upon his desk lay a volume in the Russian or the Persian language, from which he was making translations, or probably from the Hebrew or Arabic, which were long his favorite subjects of study. We do not recall these familiar traits to swell the report of our friend's attainments, but as evidence of his extensive and thorough knowledge.

"In the learned volumes of the Smithsonian contributions to knowledge may be seen the great reliance placed upon Professor Turner's skill in languages by the distinguished officers of that institution. All questions relating to, or memoirs submitted on, the aboriginal languages of North America were confided to his judgment and editorial supervision. As an instance, may be named the 'Dictionary of the Dacotah Language,' which forms an entire volume in the series. More recently, the 'Grammar and Dictionary of the Yoruba' (an African language), in the latest volume of the above contributions, was edited by him; and the published acknowledgement of the institution shows that both of these works, when passing through his hands, became almost new works, in consequence of the labor he bestowed upon them. A similar remark is admissible relative to the new edition of Bartlett's 'Dictionary of Americanisms.'

"One of the labors of his life was the translation of an inscription in very ancient Hebrew, sculptured in Phœnician characters on the sarcophagus of a king of Sidon, disinterred about four years ago on the Syrian coast. The difficulty of this work was so great that but few persons living could undertake it, and only those who were familiar with the language of the old Hebrew Scriptures. Of the small number of versions which have been published, Professor Turner's is regarded as equal to, if not surpassing, any one which has appeared.

"In closing this hasty sketch of the labors and wonderful attainments of our friend, we are very sensible how far it falls short of telling all that has been accomplished by one of the brightest minds we have ever known, coupled as it was with unrelaxing habits of study. To these habits, alas! we feel that we owe his death. An overtasked brain, a year or two since, brought on a complicated organic disease which has hurried him out of existence, before half his hopes were fulfilled or half the plans of his life were accomplished. A few days ago and he was at his post, busy and cheerful; but, to-day, we see the accumulated knowledge of a whole life, the skillfully-trained mind with its wonderful treasures, all turned to dust! We bow before the inscrutable Power which permitted that mind to grow up and flourish, but which has just suddenly destroyed the magnificent fabric, and left nothing in its place but death and desolation."

## SCIENCE AND ART.

Sir David Brewster, the new principal of the University of Edinburgh, in his address at the opening of the Winter Session, on Nov. 2d, said:—"It is necessary to warn you against speculations morally and intellectually degrading. In the blue heavens above, in the smiling earth beneath, and in the social world around, you will find full scope for the exercise of your noblest faculties, and a field ample enough for the widest range of invention and discovery. Science has never derived any truth, nor art any invention, nor religion any bulwark, nor humanity any boon from those presumptuous mystics who grovel amid nature's subverted laws—burrowing in the cavern of the invisible world, and attempting to storm the awful and impregnable sanctuary of the future. The sciences of zoology, botany, geology, and mineralogy, including the structure and physical history of the earth, constitute one the most fascinating studies, and one which even fashion has introduced into many intellectual households, where *aquaria* or *vivaria*, the nurseries of interesting plants and animals, decorate the library and the drawing-room. Studies of this kind, which can be pursued for health or for pleasure, require like preparation for the mind. They are associated too, with many of our wants and amusements, and find frequent and useful applications in the various conditions of life. In no other University in Scotland can these subjects be so favorably suited as in this, amid its magnificent collections in zoology, botany, and mineralogy. There is only one other branch of study to which I am anxious to call your attention. The advances which have recently been made in the mechanical and useful arts have already begun to influence our social condition, and must effect still more deeply our system of education. The knowledge which used to constitute a scholar, and fit him for social and intellectual intercourse, will not avail him under the present ascendancy of practical science. New and gigantic invention smark almost every passing year—the colossal tubular bridge, conveying the monster train over an arm of the sea—the submarine cable, carrying the pulse of speech beneath 2,000 miles of ocean—the monster ship freighted with thousands of lives—and the huge rifle gun throwing its fatal but unchristian charge across miles of earth or of ocean. New arts, too, useful and ornamental, have sprung up luxuriantly around us. New powers of nature have been evoked, and man communicates with man across seas and continents with more certainty and speed than if he had been endowed with the velocity of the race-horse, or provided with the pinions of the eagle."

NEW SHIP CANAL IN CANADA.—Our northern neighbors are not only distinguished for great and bold projects, but also for successfully carrying them out. The public works of Canada, in proportion to the number of inhabitants in the provinces, are, by far, the greatest on our continent. The ship canal which unites Lakes Erie and Ontario is a work without a rival; the great bridge over the St. Lawrence, at Montreal, is the most stupendous work of the kind in the world; and the Grand Trunk Railway, extending from Quebec to Lake Huron, has no peer in any land. In addition to these great works a new one is proposed for uniting Lake Huron, by a ship canal, with the Ottawa river, thence to Montreal, down the St. Lawrence. Such a canal would carry off all the shipping from the upper lakes connecting the great North-west, as it would obviate the long roundabout navigation of Lakes Erie and Ontario. The route of the new ship canal has been surveyed, and the project declared to be practical, at no very great expense. Our railroad lines communicating with the great North-west must look well to their arrangements, or they will find much of their business going by the shorter northern routes in Canada. The Canadian lines of steamers running between Liverpool and Quebec now from a communicate short connection with Europe and our western States.

## TECHNOLOGY AND THE BEAUTIFUL.

In his opening lecture in the University of Edinburgh on the 2d of last month, on the subject—"Technology as a Branch of Liberal study," Professor George Wilson, one of the most distingushed philosophers of the day, said:—"The highest authorities in æsthetics, and the greatest artists, have ever protested against sham adornments, and where they were not fulfilling a purely æsthetic conception, have rejoiced in clothing with grace the most homely things. In so doing they have walked in the way of God. A multitude, perhaps a majority, of created things are not less beautiful than useful. The nodding wheat-stalk, the clusters of the vine-grape, the stately pine, the gnarled oak tree, the granite peak, are as graceful as they are seviceable ministers to our daily industrial wants. A multitude of created things—flowers, and birds, and gems, and stars—are, to appearance at least, simply beautiful; not serving our utilitarian necessities, although it would be folly and impiety to pronounce them useless. The stamp of ugliness nowhere comes before us as the index of utility. Nature hastens as it were on all sides to hide away and put out of sight what is noisome in any way, or unwelcome to the senses. Nay, she does more than conceal offensive things; she changes them, while she uses them, into forms of beauty. The daisies grow thickest over the graves of the dead. The battle-fields of Inkermann and Balaklava have long been distinguished only by the multitude of the flowers that spangle their thick grass. Already Solferino is growing green again, and except that the mulberry will wear in spring a richer foliage, and the silkworms revel more greedily on their leaves, you will look in vain for traces of the awful slaughter. If human industrialism cannot often imitate this divine example, it is want of skill and want of wealth, much more than want of will that occasions the failure."

LAMP-POST LETTER-BOXES.—The street letter-boxes, illustrated on page 26, of the present volume of the SCIENTIFIC AMERICAN, are now being attached to the lamp-posts in this city. This improvement relating to the reception of city letters, has worked admirably in Philadelphia, the city where it was first adopted; and we have no doubt but it will operate equally as well in this city. It is certainly a great improvement over the miserable old method of keeping tin letter-boxes in corner groceries, and other vulgar places. Old Gotham is waking up to new life and vigor. Her city fathers have lately exhibited an immense amount of common sense and enterprise. Street-sweeping machines, lamp-post letter-boxes, Belgian pavement &c., afford abundant evidence that some of them read the SCIENTIFIC AMERICAN and are exercised in a most delightful and healthy manner thereby, for their own good and that of the "dear" people.

THE PROGRESS OF THE TELEGRAPH.—California papers announce that, in March next, San Francisco will be within 10 days' telegraphic communication with the Atlantic States. This will take place by the simultaneous completion, at that time, of the telegraphic lines between St. Louis and Fort Smith, on the Atlantic side, and San Francisco and Los Angelos on the Pacific side, thus cutting off three-and-a-half days at each end, and with the mail facilities, reducing the time of communication between the Atlantic and Pacific cities to about 10 days. It will not be long therefore, before the telegraphic wires will close the intervening gap, and make the communication between the East and the West instantaneous. This, for the interests of the United States, is more important than even the success of telegraphic communication with Europe.

AN URGENT APPEAL.—We appeal to and hope all our readers whose subscriptions expire with No. 26, will not only promptly renew them, but endeavor to induce others to subscribe for at least six months. The SCIENTIFIC AMERICAN is universally recognized as not only the cheapest, but also the best journal of its class ever issued; and we intend to make it, in future, what it now is—the organ of ingenious men, the mirror of the progress of invention and discovery. For $1, this journal can be had for six months; and the numbers issued in that time will make a volume of 416 pages, full of illustrations and choice reading matter. Will not our friends respond to our call, and send along a few additional names, at once