one-sided view of scholarship and learning which attaches a value only to such knowledge as bears more or less directly upon practical life. Until a comparatively short time ago, the higher study of philology (with the exception of Latin and Greek), archeology, and the like, received but little encouragement in this country; and it is due to this fact alone, that while, in the fields of medicine and the natural sciences, American scholarship has made such rapid strides as to be quite on a par with European nations, in other fields we are still in a state of dependence upon Germany, France, England, etc., and do not hold that rank which is our due. But there are clear indications that a change will soon make itself felt. Such facts as the introduction of Sanscrit in all those higher institutions of learning which aim to stand in the first rank; the creation of new chairs for Semitic languages, Zend, Persian, and archeology;[1] the contemplated fitting-out of expeditions to Egypt, Italy, and Assyria, — are important symptoms, which must not be overlooked. They indicate that a broader conception of scholarship is beginning to prevail, which recognizes the equal importance of all higher studies as such. Whether the field be one which is limited to a few specialists, or one which attracts a large number, is of no consequence whatever from this point of view. To return, therefore, to the point whence we set out, it is a matter of congratulation for the American oriental association to find that oriental pursuits are beginning to receive that recognition which they merit; for there can be no doubt that it is due in some if not in a great measure to the silent influence which that society exerts, that studies bearing on the ancient and modern civilization of the orient, in the widest sense of that word, are rising into greater prominence. And we have no doubt that this influence would be even stronger and more directly felt in the future, if some means were adopted by which the intelligent public could obtain at least a general view, from time to time, of the progress which is being made in these fields of research, so that it may judge for itself of their importance. It might be well for the president of the association to assign to several members the task of presenting at each meeting a summary of what has been done in the various departments of oriental pursuits, the important publications which have appeared, the important discoveries made, and the important projects contemplated. The carrying-out of such a plan would not only make the meetings even more interesting and profitable to the members than they already are, but would bring the society into that greater prominence which it deserves, and, we may add, *needs;* for it must not be forgotten that an association of this nature exists not only for the purpose of forming a union among those whose sympathies and interests naturally bring them into contact, but that it has a distinct mission to perform, — the advancement of those pursuits which come within its scope. Every step, therefore, taken with this end in view, is not only perfectly legitimate, but will, no doubt, redound to the credit of the society.

With its ranks increased by the younger men who have chosen to devote themselves to oriental studies, the American oriental association can look forward to a still more auspicious future.

M. J., Jun.

[1] Yale, Columbia, Princeton, and the Universities of Pennsylvania and Michigan are moving in this direction, and others will no doubt soon follow.

## *NOTES AND NEWS.*

As announced in the Johns Hopkins university circulars for July, 1886, it is proposed to give a special course in Assyriology during the month of January, 1887. The regular Shemitic courses in Hebrew, Chaldee, Arabic, Ethiopic, Syriac, etc., will be interrupted, and all the time exclusively devoted to Assyriology, now universally recognized as being of primary importance for the scientific study of scripture. Paul Haupt, Ph.D., university of Leipzig, professor of the Shemitic languages in Johns Hopkins university and professor of Assyriology in the University of Goettingen, Germany, will teach Assyrian daily from 3 to 4 P.M. In addition to Professor Haupt's classes, individual instruction will be given three or four hours daily by the fellows in Shemitic languages, Messrs. Cyrus Adler and E. P. Allen, assisted by other advanced students in Assyriology. The hall of the Oriental seminary will be open as a reading-room for those who follow the course. There they will find all the books necessary for the study of Assyrian and the cognate languages, and some advanced students will usually be present to facilitate the access to the exceptionally well equipped Shemitic library, and to furnish any other aid that may be desired. The Oriental seminary possesses duplicates of the most important Assyriological works. Additional copies, as well as the rare publications of Botta, Place, Layard, and others, on Assyrian antiquities, are accessible in the reading-room of the Peabody institute, five minutes' walk from the building of the Oriental seminary. No tuition-fee will be charged. Professors and students of other institutions, as well as clergymen, are invited to attend, and arrangements will be made by which they may easily obtain temporary lodgings, pro-

vided an early intimation is received of their intention to come. Letters may be addressed to the registrar of the university.

— Since Koch devised his now well-known method of cultivating micro-organisms on plates coated with gelatine, great advances have been made in bacteriological research. Especially is this true of that branch which deals with bacteria in drinking-water. Dr. Frankland has found, that, in the storage and filtration to which London water is subjected, the number of micro-organisms is reduced ninety-five per cent. Dr. Bolton has shown that the spores of anthrax remain alive in distilled water for ninety days, and in polluted well-water for a year, while the bacilli themselves were very short-lived. The comma bacillus of Koch, as is known, will reproduce itself in water. The importance of these observations is evident when it is considered, that, regarding the germ theory as true, zymotic diseases may be spread by means of water thus impregnated with their germs.

— Hydrophobia is said not to be known in Lapland. To determine whether this was due to any peculiarity in the dogs of that country, or to some other cause, two dogs were brought to Paris, and inoculated by Pasteur. They both contracted the disease.

—The state boards of health in convention at Toronto passed a resolution to the effect that it is the duty of boards of health to notify the boards of neighboring states of the existence of contagious diseases within their borders, and they also pledged themselves to issue such notification.

— Mrs. Woerishoffer of New York has just donated twenty-five thousand dollars to the New York academy of medicine, in memory of her husband, recently deceased.

— The theory which has recently been advanced by M. Verneuil, that tetanus had its origin in the horse, is being strongly combated by a number of medical authorities. In support of his theory, Verneuil directs attention to the rarity of this disease at sea. M. Saint-Vel, among others who do not accept this explanation of its origin, states that tetanus is quite frequent in Oceanica, although on many of the islands there are no horses. He also gives a number of instances where the disease developed on shipboard after the receipt of injuries. Altogether, we fear that M. Verneuil will have considerable difficulty in demonstrating the equine origin of tetanus.

— That training-schools for nurses are growing in popularity is shown by the fact that they are being established all over the country, and are largely attended. The authorities of the school on Blackwell's Island have just awarded diplomas to twenty-four women who have completed the prescribed course of instruction, and passed satisfactory examinations.

— A restrictive policy in professional and educational matters is never wise. Tulane university, the medical school of Louisiana, is largely dependent for its medical students upon other states, and one inducement offered to its graduates has been the opportunity of obtaining positions on the staff of Charity hospital in New Orleans. In making an appropriation of ninety thousand dollars to this hospital, the legislature provided that only Louisianians should be permitted to compete for these positions. Such a measure can have but one effect; that is, to reduce the number of students at the university.

— In order to prevent the chafing of those portions of the body on which bed-ridden patients rest, and thus to prevent bed-sores, various methods have been devised. The air-bed and the water-bed are well adapted to this purpose, but are expensive, and not always to be obtained. Dr. Smith of Indianapolis recommends the employment of rubber tubing of about three-quarters of an inch in diameter. This can be coiled into any desirable size, and, if soiled by the discharges, can readily be cleansed. Should the parts be inflamed, cold water could be passed through the tube, and thus the heat be reduced. As rubber tubing is cheap and easily procurable, the suggestion is an admirable one.

— A correspondent of the *Medical record* writes that suicides are greatly on the increase in France, and that the Paris morgue is filled with them. In one day seven persons who had taken their own lives were received at this depository for the unknown dead. In 1884 the number of suicides in France was 7,572. Hanging seems to be the favorite method of self-destruction: next in order come drowning, shooting, suffocation by coal-gas, and poisoning. 1,394 suicides were of persons aged from forty to fifty years; 1,508, from fifty to sixty years; and 2,255, from sixty years onward.

— The results of the exploration of the North Sea by the Prussian vessel Drache in 1881, 1882, and 1884, are summarized from the official monographic report in the July number of the *Annalen der hydrographie*, with the reproduction of several charts. The salinity at the surface shows the highest percentages (3.50+) in the central area, and a belt of lower values (under 3.00) leading out from the Baltic, around the southern end of Norway. The surface chart of absolute specific

gravity, at existing temperatures, not reduced to a standard, shows the same distribution of values. But descending to thirty or more metres of depth, — all depths being, in true German scholarly fashion, expressed in metres, — an arm of distinctly dense, salt water (3.52+) is seen under-running the lighter water near the Norwegian coast, and approaching the Baltic. The horizontal and vertical variation of temperature is presented in numerous diagrams, and a table contains a condensed statement of the various physical results of soundings.

— Among recent devices patented in this country is a magazine fire-arm provided with a cooling-chamber surrounding the rear portion of the barrel, connected by suitable pipes with a water-reservoir in the stock. At each discharge of the weapon, a pump forces a current of water from the reservoir through the cooling-chamber, thereby preventing the barrel from heating.

— In strong contrast to this country, France is said to be almost entirely without free dispensaries, there being but three in the city of Paris.

— Several sections of an embankment on the North-western state railway, India, were recently washed away, leaving the rails, with their iron sleepers, festooned in the air, like suspension-bridges, the ends of the rails being held together by the fish-plates. Until the floods subsided, so that the embankments could be rebuilt, the mails were carried over these sections of suspended track in hand-cars, the carriers walking on the sleepers, and pushing the cars up the steep inclines, and riding with the mail-bags on the down-grades, sometimes dashing through the torrent beneath.

— Anhydrous aluminium chloride is now prepared by the following process: aluminium alloy is heated in a retort to between 200° and 300° C., hydrochloric-acid gas is then passed over the heated alloy, and the vaporized aluminium chloride thus obtained is condensed. The right to this process is owned by the Cowles electric smelting company of Cleveland, O., who use it in connection with the reduction of aluminium from clay in the electric furnace.

— A series of articles on the prevention of fire, which first appeared in the columns of an architectural journal, has recently been published in revised pamphlet form by the author, William Paul Gerhard, under the title 'The prevention of fire.' Though written chiefly with reference to hospitals, asylums, and other public institutions, much may be found in the pamphlet that applies equally well to churches, schools, factories, hotels, and even to dwelling-houses.

— The 'Index to the literature of explosives,' part i., by Charles E. Munroe (Baltimore, *Friedenwald*, 1886), is intended to embrace not only such articles as treat of the composition and of the chemical and physical properties of explosives, but also of their manufacture and use in the arts. This part contains the titles of papers appearing in such periodicals as the indexer has been able to review from the date of first issue. Four hundred and forty-two volumes have been thus reviewed for this part. Many other titles of papers have been collected, but the indexer has not yet had access to complete sets of the periodicals from which they have been gathered. A large number of titles of separate publications, treatises, text-books, and the like, have also been collected. It is hoped that it will be possible to eventually publish these, together with a 'subject' and 'author's' index to the entire list.

— During the spring of 1886, Ticknor & Co. began the publication of "Ye olden time series, or, Gleanings from the old newspapers, chiefly of Boston and Salem," with brief comments by Henry M. Brooks of Salem, Mass. In this series there are now ready, vol. i., 'Curiosities of the old lottery;' vol. ii., 'Days of the spinning-wheel in New England;' vol. iii., 'New England Sunday;' vol. iv., 'Quaint and curious advertisements;' and the present vol. v., 'Literary curiosities.' Among those to come are volumes on 'Some strange and curious punishments;' 'New England music in the latter part of the eighteenth and in the beginning of the nineteenth century;' 'Travel in old times, with some account of stages, taverns, etc.;' and 'Curiosities of politics among the old federalists and republicans.'

— The forthcoming volume of the 'Encyclopaedia Britannica' will get down as far as *sia*, and will contain an unusual number of important articles. That on Shakspeare by the editor, with a bibliography supplied by Mr. H. R. Tedder, will attract most attention. Mr. Matthew Arnold writes upon Sainte-Beuve, Mr. James Sims on Schiller, Mr. Rossetti on Shelley, Professor Minto on Sir Walter Scott, Madame Villari on Savonarola, Mr. Saintsbury on Rousseau, and Mr. J. S. Reid on Ruhnken. Of the art articles, M. Hymans contributes that on Rubens, and Professor Middleton that on schools of painting. Russia falls to Prince Krapotkine and Mr. Morfill, and Scotland is treated by no fewer than five writers. Of the scientific articles, that on Rotifera is by Professor Bourne of Madras; that on series, by Professor Cayley; seal, by Professor Flower; and Schizomycetes, by Professor Marshall Ward.

— The *Athenaeum* is authority for the state-

ment that the life of Charles Darwin, by his son, which will be published before Christmas, will contain an autobiographical chapter dealing chiefly with the great naturalist's religious opinions.

— Mr. William Saunders of London, Ontario, has been appointed chief director of the Dominion experimental farms of Canada, and has in consequence given up the editorship of the *Canadian entomologist*, a monthly journal which he has conducted for many years. The former editor, Rev. C. J. S. Bethune of Port Hope, will succeed him.

— An international railway exposition and congress will be held in Paris from May to October, 1887, when a railway jubilee of the fiftieth anniversary of railroads in France will be celebrated. John W. Weston, editor of the *American engineer*, Chicago, has been appointed commissioner-general for the United States.

— Lieut.-Col. W. T. McLeod sends us a brief account of the weather of two summers as observed by him at Nassau on the Bahamas. It would seem from the frequency of heavy rains, thunderstorms, and tropical cyclones, to be quite unlike the mild winter climate of the islands that invalids seek to enjoy. The following description of a passing cyclone reveals the characteristic reversal of its central winds: 'On Thursday, Aug. 19, 1886, at 9 A.M., the barometer began to fall, and continued to do so gradually up to 12 o'clock noon on Sunday, Aug. 22. From this hour it fell rapidly up to 4 A.M. on Monday, to the extent of 7-10 of an inch. The barometer remained steady for half an hour, and then rose as rapidly to its previous height. During this depression a severe gale raged. At about 6 P.M. the sun went down in a yellowish patch, with a purple haze. The cloud-masses were blown out into rain-film. The rain fell and the wind blew in gusts from the east, and continued to blow from east to south-south-east, up to 3.45 A.M. on Aug. 23, with increasing force. A lull occurred, and, as the barometer shot upwards, the wind shifted and blew furiously from west-south-west from 4.30 A.M. up to 7.30 A M. During this gale several lives were lost and schooners wrecked. Lightning accompanied the gale.

— At a meeting on Oct. 19, of the committee of the subscribers to the British school of archeology at Athens, according to *Nature*, Professor Jebb said the school had been erected and paid for, Mr. F. C. Penrose had been appointed director, and a provisional income of £400 a year for three years had been raised, but additional funds were required. Prof. C. T. Newton, in urging the importance of having a great school of archeology, suggested that there should ultimately be raised a special fund for the payment of the travelling expenses of the students at Athens. On the motion of Professor Jebb, a managing committee was appointed.

— Messrs. Whittaker & Co. have issued a book by Mr. William Anderson, "On the conversion of heat into work, a practical hand-book on heat-engines."

## *LETTERS TO THE EDITOR.*

****Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

### The deepest fresh-water lake in America.

IN the issue of your journal of the 27th of August are contained some remarks on Crater Lake in Oregon, and its remarkable depth. The perusal of these remarks leads me to say a few words with regard to another lake in the extreme eastern portion of the continent, which, though far from approaching that mentioned, has nevertheless a depth, as well as some other features, which are quite exceptional. I refer to Lake Temisconata in the Province of Quebec.

This lake is situated very near the axis of the divide between the waters of the St. Lawrence and those of the St. John, its outlet by the Madawaska River forming one of the main tributaries of the latter stream. Its total length is twenty-eight miles, about eighteen of this having a general direction a little east of south; while the remainder, forming the more northerly position, trends to the north-east nearly at a right angle with the former. The breadth varies from one to three miles. Throughout its length and on both sides, the land is usually high, forming numerous ridges and promontories projecting into the lake, but just at the angle referred to one of these, known as Mount Wissick or Mount Essex, rises almost precipitously to a height of 550 feet, while the opposite shore is here quite low. The height of the lake above tide-water is, by aneroid, about 400 feet; the distance of the upper end from the St. Lawrence being thirty miles, while the length of its actual discharge, by way of the Madawaska and St. John to the Bay of Fundy, is 288 miles.

Having had occasion to spend some time about the lake during the last summer in connection with the work of the Canadian geological survey, and having heard incredible stories as to its depth, means were taken to ascertain the truth by a number of soundings at points which seemed to promise the best results. Of these, three, taken near the foot of the lake, gave a depth varying from 215 to 225 feet; farther north a depth of 410 feet was reached; and midway between Mount Wissick and old Fort Ingalls, 500 feet. It seems probable, however, from the statements of reliable parties, that even this depth is at some places considerably exceeded.

In the case of Crater Lake, if one may judge from its name, its depth is no more than one might expect from the conditions of its origin; but in the case of Lake Temisconata there is absolutely nothing of a volcanic character, and the whole depression is evidently the result of simple erosion. That that erosion