It is interesting to compare these two marine stations—the first on the New England mainland, looking across to Martha's Vineyard, and the Elizabeth Islands, with the interesting flora of the north Atlantic coast, rich in many red seaweeds; and the second on the shore of Vancouver Island, looking out across the Strait of Juan de Fuca, to Cape Flattery, and the Olympic Mountains of the northwest corner of Washington. Here the marine flora is especially rich in the great kelps so characteristic of the Pacific coast of North America.

## UTAH FUNGI.

Some months ago Mr. A. O. Garrett, of Salt Lake City, issued the first fascicle of twenty-five numbers of Utah fungi under the title of 'Fungi Utahenses.' This fascicle is devoted to the Uredineæ, and it is the author's intention to follow this plan in succeeding issues, so that each will contain specimens belonging at least to closely related groups. Mr. Garrett has modeled his collection upon the pattern so well set by Professor Kellerman in his 'Ohio Fungi.' The specimens are carefully selected, and neatly put up. Each species is accompanied by a reprint of the original description. This distribution should have a large sale, especially among eastern botanists.

## PHOTOGRAPHS OF VEGETATION.

Two years ago the first fascicle of an important work was issued by Gustav Fischer, of Jena, under the simple title of 'Vegetationsbilder.' Since then nine fascicles have appeared, and it is now possible to judge quite accurately in regard to its usefulness. The work is edited by Professor Doctor G. Karsten, of the University of Bonn, and Professor Doctor Schenck, of the Technical High School of Darmstadt. Each fascicle includes six large reproductions (16 by 21 cm.) of photographs of vegetation, each accompanied by a page or two of explanatory text. The first fascicle is devoted to the vegetation of southern Brazil and is the work of Dr. Schenck. The second fascicle, by Dr. Karsten, illustrates the vegetation of the Malayan Archipelago; the third is again by Dr. Schenck, who takes up some economic plants of the tropics, as Thea sinensis. Theobroma cacao. Coffea arabica, etc. Fascicle 4, devoted to tropical and subtropical Mexican vegetation. is edited by Dr. Karsten, while the next, relating to southwest Africa, is from the hand of Dr. Schenck. In the latter the most remarkable is Plate 25, showing a desert, with several plants of Welwitschia mirabilis in the foreground. The sixth fascicle, by Dr. Karsten, contains photographs of six species of monocotyledonous trees, including one plate of a giant bamboo clump (Dendrocalamus giganteus) forty meters high, on the island of Ceylon. Six views of Brazilian strand vegetation, by Dr. Schenck, make up the seventh fascicle, and another half dozen devoted to Mexican cactuses and agaves (by Dr. Karsten and Dr. Stahl) make up the eighth fascicle which closes Series I. of the publication. The second series opens with a fascicle by E. Ule, on Amazonian epiphytes, in which the illustrations and text maintain the high degree of excellence of the first series.

It is to be hoped that this most useful publication will be continued until the vegetation of the more important parts of the world have been depicted and described. It certainly fills a place in the botanist's library that has not hitherto been occupied.

CHARLES E. BESSEY. THE UNIVERSITY OF NEBRASKA.

## SCIENTIFIC NOTES AND NEWS.

WE regret to learn that Lord Kelvin is ill after a surgical operation.

A STATUE of Professor Conrad Röntgen has been placed on one of the bridges in Berlin.

PROFESSOR WILHELM OSTWALD, the eminent physical chemist of Leipzig, will again this year take part in the work of the summer school of the University of California.

DR. FRANK SCHLESINGER has been elected director of the New Allegheny Observatory, and assumed the duties of the office on April 1. The observatory has an endowment fund, and a regular income from the time service, besides owning a large and valuable property in the City of Allegheny, which will become a source of income in the near future. Work has not been suspended on account of lack of funds and much has been accomplished toward the instrumental equipment during the year past. The Keeler Memorial Telescope of 30 inch aperture is now ready to be set up, and the large (Porter) spectroheliograph is almost completed. The 30 inch objective is well under way, and other instruments will be installed during the year under the directorate of Dr. Schlesinger.

OWING to the appointment of Dr. C. H. Wind, director of the Dutch Meteorological Institute, to a professorship in the University of Utrecht, Dr. E. Van Everdingen has been made acting director of the institute.

THE Academy of Sciences of St. Petersburg has awarded its Lomonsoff prize to Professor N. A. Menschutkin for his researches in theoretical chemistry and its Ivanoff prize to Professor P. N. Lebedeff, of Moscow, for his work on light pressure.

THE French Société d'encouragement pour l'industrie nationale has awarded the Lavoisier medal to M. Héroult in recognition of his electrometallurgical researches.

THE Leopoldo-Carolinische Akademie of Halle has awarded the gold Cothenius medal to Professor E. von Leyden, of Berlin, for his services to scientific medicine.

ABERDEEN UNIVERSITY will confer the Doctorate of Laws on Mr. J. T. Merz, author of 'European Thought.'

THE thirteenth 'James Forrest' lecture of the British Institution of Civil Engineers will be delivered by Colonel R. E. B. Crompton on April 10, on 'Unsolved Problems in Electrical Engineering.'

PROFESSOR RICHARD ANDREE, the ethnologist and geographer, long editor of *Globus*, has celebrated his seventieth birthday, in Munich.

PROFESSOR FRANCIS E. LLOYD, Teachers College, Columbia University, has received a grant of \$500 from the Carnegie Institution to aid him in continuing his studies on stomatal action and transpiration in desert plants. He will spend three months at the Desert Botanical Laboratory, Tucson, Ariz., for this purpose. DR. ALFRED ERNST, associate professor of botany at Zurich, has been given the Swiss subvention of \$1,000 for botanical studies at Buitenzorg.

A MEMORIAL tablet for the late Dr. N. S. Davis was presented by the senior medical class of the Northwestern University Medical School, on March 24, in Davis Hall.

WE regret to record the death of Dr. Emmerich Meissl, section chief in the Department of Agriculture at Vienna; of Dr. Richard Sadebach, director of the Botanical Museum at Hamburg, and of Father Timoteo Bertelli, the Italian geophysicist.

THERE will be on May 3 and 4 a civil service examination for topographic draftsman in the Panama Canal work, at salaries of from \$900 to \$1,500.

To secure promptness in the delivery of the reference cards issued by the Concilium Bibliographicum of Zurich, Dr. H. H. Field has placed a stock series in the American Museum of Natural History. Any worker in biology, who does not receive the cards directly from Zurich, by writing to the museum will receive by return mail cards bearing upon such minor subjects as he may indicate, at the same terms as though the delivery were made from Zurich, and with an obvious saving of considerable Communications bearing upon this time. matter should be addressed to the American Museum of Natural History, Department of Books and Publications.

Oxford convocation has passed a decree authorizing the contribution by annual instalments of a sum not exceeding £1,000 towards the expense of printing that portion of the British Section of the International Astrographic Catalogue, which has been carried out at the University Observatory, the Treasury, on the representations of the Royal Society, contributing the other moiety.

MR. ALEXANDER FRY has bequeathed his entomological collection to the British Museum of Natural History.

*Nature* states that the collection of birds' eggs possessed by the British (Natural History) Museum has been largely augmented by the gift of the splendid series brought together by Mr. W. Radcliff Saunders, of High Bank, Tonbridge. This collection comprises close on ten thousand specimens of the eggs of Palearctic species, together with one hundred and sixty-five nests.

THE Crosby Brown collection of musical instruments, in the Metropolitan Museum of New York, to which we have several times referred in recent years, continues to grow. The recently published new edition of the catalogue of European instruments is increased over the previous edition by more than fifty pages and three plates. The total number of instruments is given as about 3,200, besides hundreds of parts illustrating elements and details of construction.

REUTER'S Agency reports some details of an expedition which went to British New Guinea in September, 1903, and has lately returned to England. The expedition was organized by Major W. Cooke-Daniels, an American traveler, and it also included Dr. C. G. Seligmann, Dr. W. M. Strong and Mr. A. H. Dunning. The objects were primarily ethnographical, but studies were also made in other branches of science, and a number of general pathological observations were made.

THE annual dinner of the British Institution of civil engineers took place on March 22, with Sir Guilford Molesworth in the chair.

THE sixth International Congress of Applied Chemistry will be held at Rome next year, probably during the week following Easter.

At the last International Ornithological Congress, which was held in Paris in 1900, it was decided that the next session of the congress should take place in London after an interval of five years, and, as we have already announced, arrangements have been made for holding the fourth congress from June 12 to 17, under the presidency of Dr. Bowdler Sharpe, of the British Museum. The London *Times* states that it has been decided by the organizing committee to divide the congress into general meetings and meetings of sections, of which there will be five, as follows: (1) Systematic Ornithology; Geographical

Distribution, Anatomy and Paleontology; (2) Migration; (3) Biology, Nidification, Oology; (4) Economic Ornithology and Bird Protection; and (5) Aviculture. It is expected that many interesting papers on these various subjects will be forthcoming. The social side of the program is not being neglected. Thus it is proposed to devote one day to an excursion to Tring to inspect the collection of birds belonging to Mr. Walter Rothschild. On this occasion there will be lectures, and the members will be the guests of the owner of the Tring Museum. On the 16th of June the congress will be received by the Lord Mayor of London at the Mansion-house, and the visitors will be shown over the Guildhall by Alderman Treloar. At the close of the proceedings in London, on the invitation of the Duke of Bedford, an excursion will be made to Woburn to view the collection of live animals in Woburn Park, and the following day will be 'spent at Cambridge, where Professor Newton will welcome the members at Magdalene College. Finally, a journey has been planned to Flamborough Head, in Yorkshire, of special interest to continental ornithologists, as affording them an opportunity of seeing the breeding place of so many sea birds, while the season of the year may also allow of their watching the operations of the collectors of the eggs of the guillemats.

An international exhibit of hygiene will, by request of the Italian general health department, be added to the exhibition at Milan, 1906. Many countries will assist in the display, which will have for its object the presentation in a practical manner to the public of the advances made in the field of sanitation during recent years.

MEDICAL journals state that the Hamburg-American line has placed the *Hamburg* at the disposal of the German physicians and their families who wish to attend the International Medical Congress at Lisbon next year. The vessel will be moored at some convenient wharf and will serve as a hotel for the passengers during the congress. After a brief trip to Gibraltar and Madeira the vessel will return to Hamburg. Messrs. Cook & Son have offered to charter a passenger ship for the English members of the congress, to serve as a floating hotel.

WE learn from The British Medical Journal that the proceedings of the Pan-American Medical Congress, held at Panama in January, closed with a meeting of the executive committee at which the following resolutions, proposed by Guatemala and seconded by Peru, were carried: (1) That the next Pan-American Medical Congress arrange (a) for an international American pharmacopoeia; (b) for an international code of sanitation; (c) for an international code on temperance; and (d) as a sequel to the above, for the establishment of sanatoriums for the treatment of alcoholism; (e) for the formation of lectureships on medicine in the required studies of jurisprudence. (2) That there be formed at the next congress a section on tropical diseases. (3) That there be created Red Cross Branches, both civil and (4) Finally, it was resolved that military. encouragement be given to those engaged in the campaign against tuberculosis.

Nature states that after an interval of two years the fifth conference of West Indian agriculturists was held at Port-of-Spain. Trinidad, from January 4 to 13. It was attended by official, scientific, commercial and practical representatives from all parts. In his presidential address, Sir Daniel Morris gave an interesting survey of the great economic change which is in progress. Taken in the aggregate, sugar cultivation must still be regarded as the backbone of the colonial industries, but in some of the islands it has already become of comparatively little or no importance. Trinidad is now a cacao-producing island, its exports of this commodity having risen to the value of a million sterling per annum. Grenada's cacao exports are valued at £250,000 and Jamaica's at £80,000. Cotton growing, too, has been successfully reestablished in several islands, and remunerative prices for the raw cotton are being obtained from Lancashire merchants. The exportations of fruit far exceed in value those of the staple industry. The development of the tobacco, rubber, sisal hemp, fish-curing, and other industries also came under review, and Sir Daniel dwelt upon the importance of agricultural shows and on the provision made by his department for teaching elementary science and the principles of agriculture in the various colleges and elementary schools. Numerous papers were read and discussed. Professor d'Albuquerque, Dr. Watts, Professor Harrison and others supplying valuable information relating to sugar; Mr. Hart, Mr. de Gannes and others, on cacao; Mr. Bovel, Mr. Sands and others, on cotton; and so on. For practical purposes visits were paid to several cacao and sugar estates. Owing to its more than usually representative character the conference is declared to have been the most successful of the series.

## UNIVERSITY AND EDUCATIONAL NEWS.

THE New York *Times* states that Mr. Carnegie since 1900 has given \$2,000,000 for libraries and \$4,500,000 for other buildings and endowments for colleges. The following is a list of institutions to which the money has been given:

Pennsylvania State College	\$150,000
Upper Iowa University	$25,\!000$
Oklahoma University	30,000
Iowa College	50,000
Tuskegee Institute	20,000
Beloit College	50,000
Cornell College	50,000
Mt. Holyoke College	50,000
Yankton College	15,000
Talladega College	15,000
N. C. State Normal and Industrial	18,868
Lebanon Valley College	20,000
Wilberforce University	15,000
Bucknell University	30,000
Berea College	30,000
Agricultural and Mech. College	12,000
Winthrop Normal and Ind. College.	30,000
Washburn College	40,000
Converse College	10,000
Benedict College	6,000
Park College	15,000
Atlanta University	25,000
Tufts College	100,000
Lawrence University	50,000
Marietta College	40,000
Oberlin College	125,000
Fairmount College	40,000
University of Maine	50,000
Bethany College	20,000
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