

rightly placed in the second group of the periodic table, thus confirming the generally accepted views of chemists.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

INTERNATIONAL CONGRESS OF ZOOLOGY.

AT the meeting of the International Congress of Zoology at Leyden, in 1895, it was agreed that the Fourth Congress should be held in Great Britain, and that the President should be Sir William Flower, K.C.B., F.R.S. As we have already announced, the Permanent Committee of the Congress accepted an invitation to assemble at Cambridge in August, 1898. Sir W. Flower was compelled to resign on account of ill health and Sir John Lubbock was unanimously selected in his place.

The seat of an ancient University, which counts among its alumni distinguished zoologists from the days of Ray and Willughby to those of Charles Darwin and Francis Balfour, seems to offer a peculiarly fit meeting-place for the Congress on its first visit to the British Islands, and the Reception Committee, including the present representatives of zoological science in Cambridge, offer a cordial welcome to their brethren at home and abroad.

The officers of the Congress are: *President*, Right Hon. Sir John Lubbock, D.C.L., F.R.S.; *Vice-Presidents*, The Vice-Chancellor of the University of Cambridge, Mr. W. T. Blanford, LL.D., F.R.S., Sir W. H. Flower, K.C.B., D.C.L., F.R.S., President of the Linnean Society (Dr. A. Günther), Professor E. Ray Lankester, LL.D., F.R.S., Professor A. Newton, F.R.S., Mr. P. L. Sclater, F.R.S., President of the Entomological Society (Mr. R. Trimen), Sir William Turner, F.R.S., Lord Walsingham, LL.D., F.R.S.; *Treasurers*, Professor S. J. Hickson, F.R.S., Mr. P. L. Sclater; *Secretaries*, Professor F. Jeffrey Bell, M.A., Mr. G. C. Bourne, M.A., Mr. A. Sedgwick, M.A., F.R.S., and a large general committee.

The Executive Committee, appointed by the General Committee at their meeting on November 4th, have now made the necessary preliminary arrangements for the holding of the Congress in August next. The Reception Committee hope to avail themselves largely of the

facilities offered by the several colleges of Cambridge for the accommodation and entertainment of their visitors, while there is assurance that the more suitable of the public buildings of the University will also be placed at their disposal for the same purposes.

The International Congress of Physiology is to meet in Cambridge concurrently with that of Zoology, and certain arrangements will be made in common, though there is no intention of uniting the two Congresses, each of which will retain its distinct organization.

The Secretary has issued an appeal for funds that will be necessary to carry out the purposes of the Congress. Some members of the Executive Committee and others have already intimated their intention to make donations, and a list of these will be found below. Cheques should be sent to P. L. Sclater, Esq., F.R.S., or Professor Hickson, F.R.S., the Hon. Treasurers, at 3 Hanover Square, London, W.

DONATIONS ALREADY PROMISED.

	£.	s.	d.
Right Hon. Sir John Lubbock, Bart, M.P...	50	0	0
Hon. Walter Rothschild.....	50	0	0
A. Peckover, Esq.....	50	0	0
Sir William Flower, K.C.B., D.C.L., F.R.S.	25	0	0
The Lord Powerscourt.....	5	0	0
The Lord Walsingham, F.R.S.....	5	0	0
P. L. Sclater, Esq., F.R.S.....	5	0	0
Howard Saunders, Esq.....	3	3	0
R. Trimen, Esq.....	3	3	0

GENERAL.

HON. CARROLL D. WRIGHT, United States Commissioner of Labor, has received a cable dispatch announcing his election as a member of the Institute of France. He has also been elected an honorary member of the Imperial Academy of Science of Russia.

WE learn from the *Philadelphia Medical Journal* that a portrait of the late Dr. Theodore G. Wormley, professor of chemistry and toxicology in the medical department of the University of Pennsylvania, has been subscribed for by the students of the medical, veterinary and dental departments of the University, and by members of the faculty. It is to be formally presented to the Board of Trustees at the next commencement of the University.

THE subscriptions for the American University Table have been received from Brown University and from the Marine Biological Laboratory through Professor H. C. Bumpus; also from the American Society of Naturalists through the Treasurer, Professor Smith, amounting altogether to \$250. They have been forwarded to Dr. Anton Dohrn.

ACCORDING to the *London Times* Mrs. Louisa C. Tyndall has written the following letter to Sir James Crichton-Browne, the Treasurer of the Royal Institution of Great Britain:

JANUARY, 1898.

DEAR SIR JAMES: As an expression of his attachment to the Institution, with which he was so long connected, and of his sympathy with its objects, my dear husband desired me (at such time as should be most convenient to myself) to present in his name to the Royal Institution £1,000, to be disposed of as the board of managers may see fit for the promotion of science.

I have now the pleasure of remitting to you this sum.

Yours faithfully,

LOUISA C. TYNDALL.

Sir James Crichton-Browne, in acknowledging the communication, says:

DEAR MRS. TYNDALL: I have to acknowledge your letter enclosing a crossed cheque of the value of £1,000. This generous donation to the funds of the Royal Institution, given by your late husband's expressed wish, will be notified to the managers and to the members generally at their next meeting, when a formal acknowledgment of their grateful appreciation of it will be communicated to you. Meanwhile, I trust you will allow me to express my own sense of that original scientific research in which your husband's vivid and penetrating intellect delighted to exercise itself. Revered as your late husband's memory is, and ever must be, in the Royal Institution, this posthumous mark of his solicitude for its welfare will, if possible, deepen the affectionate esteem in which he is held. There is not, I regret to say, in the Royal Institution any worthy presentment of the late Professor Tyndall. You have, I believe, an

admirable bust of him by Woolner, and I should be glad to know if you would feel disposed to afford facilities for having a replication of that made for the Royal Institution.

WE regret to announce the deaths of Arthur Kammermann, astronomer, at Geneva on the 15th of December, at the age of 36 years, and of Dr. Oscar Stumpe, astronomer, at Berlin, aged 35 years.

THE thirtieth annual meeting of the Davenport Academy of Natural Sciences was held January 5, 1898. At this meeting the following honorary members were elected: Professor Henry S. Pritchell, Supt. U. S. Coast and Geodetic Survey, Washington, D. C.; Professor Robert Etheridge, South Kensington Museum, England; Dr. B. E. Fernow, Chief of the Division of Forestry, Washington, D. C.; Dr. John S. Billings, Director of the Consolidated Libraries of New York.

PROFESSOR LUCIEN M. UNDERWOOD, of Columbia University, lectured before the Philadelphia Academy of Natural Sciences on January 8th. The subject of the lecture was 'Our Native Fungi and How to Study Them.' A paper on 'The Law of Regression in Plants' was read by Professor J. C. Arthur before a recent meeting of the Minnesota Academy of Science at Minneapolis.

MR. B. E. FERNOW, Chief of the Division of Forestry, has been called to Hawaii to make a reconnoissance and to report concerning desirable forestry legislation.

BY the will of former Chief Justice John Scott, his estate, amounting to about \$2,000,000, is to be held in trust for the benefit of his heirs until their death, when it is to go to the city of Bloomington for the foundation of a hospital.

DR. HERBERT HAVILAND FIELD writes from Zurich that the Zoological Bibliography has not yet received adequate support in the way of subscriptions in this country and is being conducted at a considerable personal loss. Save by Cornell University, there are no subscriptions either to the Physiological or the Anatomical Cards in the States of New York, Connecticut and New Jersey. The Sandwich Islands are better off, since Honolulu has three full subscriptions, besides several parts. This lack of support is

partly due to the fact that this valuable Bibliography, which is offered in either card catalogue or in sheet form with brief abstracts of the papers catalogued, has not been sufficiently advertised in this country. Although an international undertaking, it is largely due to the enterprise and scientific spirit of Dr. Field, and deserves the warm support of every institution in this country.

It is stated in the *Bulletin* of the New York Public Library that the total number of periodicals and transactions of societies to which the library is subscribing, for the year 1898, is 2,502. Of these 483 are American, 497 British, 595 French, 660 German, 125 Italian, 36 Scandinavian, 27 Belgian, 16 Dutch and 12 Russian. During the calendar year ending December 31, 1897, the total number of volumes received by purchase was 16,098, and by gift, 10,128, making a total of 26,226. The total number of volumes catalogued and accessioned during the same period was 29,792. The number of pamphlets actually received during the year, by purchase, was 10,350, by gift, 40,247, and the total number catalogued and accessioned was 15,274. The total number of cards written during the year was 156,925. In addition to this, 15,404 slips from the printer were written, and for each of these slips five printed cards were obtained. The total number of cards in the Index Catalogue, which was open to readers, on the 31st of December, 1897, at the Astor Branch was about 80,000, at the Lenox Branch it was 27,800. The total number of readers during the year was 103,384, and the number of volumes called for by readers' slips, outside of those taken from the free reference shelves, was 304,466.

IN accordance with the directions of the Pennsylvania Fish Protective Association, the Executive Committee of that body has drafted and forwarded the following letter to President McKinley with respect to the appointment of a United States Fish Commissioner.

PHILADELPHIA, January 13, 1898.

To the President of the United States: The public press has recently announced a contemplated change in the office of the United States Commissioner of Fish and Fisheries. The Pennsylvania Fish Protective Association, fully recognizing the usefulness and

high state of efficiency to which the work of this department of the government has been brought, would respectfully ask that, in making any appointment, due regard should be had to a compliance with the provisions of the statute providing for the proper qualifications of such Commissioner. We are, very respectfully,

E. HAGERT, *President.*

M. G. SELLERS, *Secretary.*

THE Cairo correspondent of the *London Times* writes: "The Egyptian government have abolished the important Fisheries Administration of Damietta and Lake Menzaleh, an antiquated institution under Levantine and native management, in which serious abuses had been discovered. In place of the former mode of collecting the revenue, by a duty on the fish caught, an annual tax is imposed on the fishing boats, and the alacrity with which this tax has been paid would indicate that the change is welcomed by the fishermen, though grave doubts are expressed lest unlimited license to fish uncontrolled by the teaching of science may result in depletion of the fishing grounds of Menzaleh, which comprise an area of 60,000 acres and are the resort of large shoals of salt-water fish. The new measure has involved the dismissal of Dr. J. C. Mitchell, scientific expert to the administration during 18 months and previously professor of zoology at the Ghizeh Agricultural College, who holds very complimentary testimonials from the Ministries of Finance and Public Instruction, also from her Britannic Majesty's Agent. It is to be regretted that government, in the present necessity for economy, cannot utilize his scientific attainments and fluent knowledge of Arabic in some other department. His abrupt dismissal after six years of good service has created an unpleasant feeling amongst the other officials who, like him, have accepted offers made by government, in the reasonable expectation that they were entering a permanent service."

THE Council of the Société d'Acclimatation has decided to issue, in addition to the *Bulletin* of the Society, a monthly journal which it is hoped will become the medium of communication between those interested in the objects of the Society. Great weight will be laid on the department of discussion, and the Secretary will

be glad to publish questions of a scientific or practical nature, the answers to which would not easily be found in existing publications. The journal will also contain announcements of the meetings of the Society.

THE Agricultural Department has issued a Farmer's Bulletin on the subject of forestry for farmers, by Mr. B. E. Fernow, Chief of the Division of Forestry. It contains articles in popular language regarding the growth of trees, the planting of forests, treatment of the wood lots, the cultivation of the wood crop, influence of trees, etc. The publication is a reprint from the year books of the Department for 1894 and 1895, and is issued in the present form because of the large demand for the information contained.

THE *Botanical Gazette* states that the collection of plants and literature made by the late Professor L. N. Johnson, of Ann Arbor, are offered for sale. Professor Johnson was especially interested in algæ, particularly the desmids, and has published a number of papers concerning them.

FROM the same source we learn that the complete herbarium of the late Mr. M. S. Bebb has been purchased by the Field Columbian Museum of Chicago, as also his letters, manuscripts, sketches, drawings, etc. The material of Mr. Bebb's own collecting was always known for its perfect preservation, but aside from the large general collection the special value of this purchase is to be found in the unique collection of salix material.

AT a meeting of the Fellows of the Royal Botanic Society of London held in the Gardens at Regents' Park on January 8th the Chairman, Major Cotton, congratulated the Fellows on the position at present occupied by the Society compared with its position a year ago. At that time the lease of the Gardens was about to expire, and there was an accumulated debt of some thousands of pounds. The debt, with the coöperation of the Council and of some of the leading Fellows of the Society, has since been paid and a new lease for the *maximum* term of 31 years has been promised by the Commissioners of Woods and Forests. The Gardens were opened for study to the students of the medical schools, and with the aid of

the London County Council a school of practical gardening has been established. The Council of the British Astronomical Association were taking steps to erect and equip an observatory in the Gardens. Reference also was made to the great increase in the number of Fellows elected in 1897, there having been more than eighty above the average number of the last ten years. The receipt of a large number of donations to the library and museum was recorded, and a vote of thanks to the donors having been passed the meeting terminated.

AT a meeting of the Institution of Electrical Engineers, of London, on January 13th, Mr. J. W. Swan, F.R.S., the newly elected President, delivered his inaugural address, which took the form of a general review of the rise and progress of electro-chemical industries.

THE first general meeting of the Childhood Society of Great Britain, which was founded in November, 1896, was held in London on January 12th, Sir Douglas Galton, Chairman of the Society, presiding. It was reported that two courses of instructive lectures on the observation, study and training of children had been given. The Committee of the International Congress of Hygiene and Demography, appointed in 1891, having completed their work and issued a full report on 'the scientific study of the mental and physical conditions of childhood, with particular reference to children of defective constitution, and with recommendations as to education and training, based on the examination of 100,000 children,' handed over to the Society the balance of their funds in hand; also the published copies of their report, and all records of preceding work, which formed a most valuable basis of future research now in the possession of the Society. Dr. F. Warner stated that the Society had now records of 1,120 children who appeared to require special care and training, and a report had been prepared showing the grounds upon which the opinion that special care and training were necessary was formed. At the close of the meeting Sir Douglas Galton delivered the opening lecture of the session on 'Measures to be taken for the Care of the Feeble-minded.'

THE last issue of the *Monthly Weather Re-*

view contains an abridgment of an account given in *Das Wetter* of the celebration of the semi-centennial of the Royal Prussian Meteorological Institution. The jubilee festivities were divided into three parts: An address in Memorial Hall by the Director of the Institution, a visit of inspection to the Magnetic and Meteorological Observatories of the Institute, and a banquet in the hall of the Palace Hotel in Berlin. In his presidential address Professor von Bezold sketched the activity of the Institution during the whole period of its existence, showing the important part it had taken in the progress of science. The first Director, Mahlmann, held that office only a short time and was succeeded by Heinrich Wilhelm Dove, who, without controversy, elevated this meteorological institute to the highest position among all similar establishments throughout the world at that time. In the year 1885 the Institute was greatly enlarged and adapted to its new problems by the addition of the appropriate men of science. At the present time there are 188 stations of the higher class, 1,336 thunderstorm stations and 1,844 rainfall stations; scientific balloon ascensions on a larger scale than have hitherto been made also contribute material of the highest value for the study of the physics of the atmosphere. This material is reduced, analyzed and discussed at the Central Institute in Berlin; the distribution of meteorological knowledge is provided for by instruction at the University, given by members of the staff; the experimental investigations are conducted at the Meteorological and Magnetic Observatory at Potsdam. This latter institution, in connection with the astrophysical and geodetic institutions in the same locality at Potsdam, constitute altogether a microcosmos located, as it were, at a definite point on a line extending from the center of the earth outward to the stars. At the close of the address the great golden medal in science was presented to the Director of the Institute, von Bezold: the Order of the Crown (3d class) was given to Hellman, as Chief of the First General Division of the Central Institute; the Order of the Red Eagle (4th class) was bestowed upon Sprung, Chief of the Third or Instrumental Division and Director of the Meteorological Observatory; the Order of the Crown (2d class)

was given to Vogel, Director of the Astrophysical Observatory. Professor Gruhn, of Meldorf; Professor Mohl, of Cassel; Professor Paszotta, of Konitz; the publisher, Alexander Faber, of Magdeburg, and, finally, Friedrich Treitsche, as proprietor of the Mountain Observatory, on Inselsburg, near Erfurt, received the Order of the Red Eagle (4th class).

THE number of applications for patents in Great Britain during 1897 shows an increase of 742 over the previous year and of 5,871 over those received during 1895. The number of patents applied for is not in itself a reliable index of the number of patents that may be issued. In the year 1896 of 30,194, 13,360 were completed, the rest being allowed to lapse after the nine months' protection. The inventions comprise every class of manufacture, but principally engineering.

THE *British Medical Journal* reports that Mr. Jonathan Hutchinson, F.R.S., intends to found a museum in his native town of Selby, in Yorkshire. Mr. Hutchinson has already established an educational museum at Haslemere, near which he has a residence, and here he has already a number of objects to spare, so that he hopes to be able to stock the new museum at Selby very rapidly. The new museum also is intended to be strictly educational, that is to say, it will contain objects calculated to convey knowledge to the less instructed, but at the same time it will not be confined to any particular subjects.

WE learn from the *New York Tribune* that the government at Ottawa has just instituted a change of policy regarding timber regulations applicable to the Northwest and Manitoba. Timber reserves will be maintained. With this object in view, the heavier timber belts will be withdrawn from settlement, and the young trees be preserved to provide a growth for the future. Guardians will be appointed to protect the reserves, particularly in the Turtle and Moose Mountain regions. Fires will be prevented, as far as possible, and the settlers will be restrained from cutting young trees. At the last session of Parliament a fund was voted for the institution of an efficient fire guard, and that will speedily be formed. At the summit

of the reserves mentioned are numerous lakes, and these are to be connected with wide roads, which, when completed, will, it is thought, form an effective obstacle to the progress of conflagrations.

UNIVERSITY AND EDUCATIONAL NEWS.

At the semi-annual meeting of the Board of Trustees of Beloit College it was announced that the College had received a gift of \$25,000 for the endowment of the chair of chemistry, now occupied by Professor E. G. Smith. The donor wishes to remain anonymous. It was also reported that the sum of \$70,000 had been raised toward the \$100,000 necessary to secure Dr. Pearson's gift of \$50,000.

MRS. DANIEL C. EATON has recently given \$2,000, the income from which is to be devoted to a scholarship open to competition by the graduate students of Yale University.

THE following assistants have been appointed in the Sheffield Scientific School of Yale University: C. B. Rice, in physics; W. G. Van Name, in biology; C. H. Warren and W. M. Bradley, in chemistry, and G. L. Bunnell, in zoology.

THE registration of students at the University of Pennsylvania for the year 1897-1898 is 2,834, an increase of 23 over the previous year. A decrease of 38 in the medical school is due to the raising of the requirements for admission. The officers of instruction number 258.

REPRESENTATIVE HAYES, of Lowell, has introduced into the Massachusetts House of Representatives a bill for a State appropriation of \$100,000 to the Lowell Textile School, one-half of the amount to be paid in 1898 and 1900. At the same session Representative Dubuque, of Fall River, introduced a bill for an appropriation of \$100,000 for the establishment of a school in that city upon the same lines as the one in Lowell.

DISCUSSION AND CORRESPONDENCE.

'WILD NEIGHBORS.'

EDITOR OF SCIENCE: A man who has been making books as long as I rarely 'talks back' to the critics. I never did so but once, and that was to rebut misstatements likely to injure the

value of my property. For the same reason I beg leave to reply to your recent notice of my book 'Wild Neighbors' (The Macmillan Co., 1897), first thanking you for such commendation as is given.

Alluding to the fact that in order to round the biographies of the various animals treated, and make them interesting, I drew upon the writings of several 'well-known' naturalists, the reviewer so states this matter as to imply that the whole book is nothing but a mosaic of quotations, 'direct and indirect' (oh, fie!), and later frankly says that it 'offers nothing in the way of new and original matter.' It would be possible to produce an interesting and even valuable book in that way; but, if by the latter phrases quoted above it is meant that the book contains nothing of my own observation, I must protest. The chapter on Gray Squirrels distinctly states that it is wholly personal experience, and I have certainly seen on several occasions each of the other mammals described. As I did not write the book to laud myself, but to set the subject well before the reader, it did not occur to me invariably to put in the big I, yet I have not yet heard any complaint as to stolen goods.

Your reviewer alleges that 'many misleading statements are made,' and in support of this makes a very erroneous one himself. "The reader is told," he says, "that the Eastern Chipmunk (*Tamias striatus*) is now conceded to be the only species ranging between the Atlantic and Pacific coasts, while in reality some twenty-two species and twelve subspecies are now recognized in the United States." The reader is not told (by me) anything of the sort. He is told that the early naturalists, lacking large numbers of specimens, made several distinct species, so-called, of what are now conceded to be only geographical varieties of the single species *Tamias striatus*. There is a sort of sneer in the reviewer's next remark: "Young opossums are said to go about clinging to their mother's tails soon after they are born." That is not altogether a fair way of putting my account of it; but—don't they 'sometimes'? Credible persons say they do—Flower and Lydekker, for instance. Then the reviewer asserts that my 'nomenclature is out of date, a large proportion of the