

ceptionally warm spring or summer following an abnormally cold winter is found to be the exception rather than, as is generally believed, the rule. The conditions with respect to precipitation are much more variable than those connected with the temperature. Notably dry or wet seasons are more likely to be followed by nearly normal ones, than by seasons having compensating, or opposite, characteristics.

In *Nature* for January 25th, MacDowall contributes a further note to this discussion. The subject of this inquiry is the sort of relation subsisting between the cold of a given winter and that of the 30 winters preceding. The cold of the winter seasons is measured by the number of frost days from September to May. The results of the study are as follows: (1) The six mildest winters (since 1871) were each preceded by a 30-year group having more than the average of frost days. (2) The six coldest winters were each preceded by a 30-year group having less than the average of frost days. (3) Of fifteen 30-year groups with excessive cold (*i. e.*, over the average), as many as 12 were followed by mild winters, and only 3 by severe winters.

Studies of the sort here referred to are always interesting, but it must be remembered that the results, so far as they go, relate only to a limited area in each case, and that no definite general conclusions can be reached in this matter without much longer and much more accurate series of observations than we now have.

MONTHLY CLIMATE AND CROP BULLETIN.

THE *Climate and Crop Bulletin* of the Weather Bureau for January contains a new feature. This is the addition of a diagram indicating the average daily departure from normal temperature for each day during the month at certain selected Weather Bureau stations east of the Rocky Mountains. These stations are St. Paul, Galveston, Boston, Jacksonville, and Cincinnati. These five cities are believed to represent the general temperature conditions prevailing east of the Rocky Mountains as well as any other like number of stations. Simple graphic representations are always welcome additions in discussions of meteorological phenomena, and this new diagram is certain to meet with

approval on the part of all who make use of the *Climate and Crop Bulletin*.

R. DEC. WARD.

HARVARD UNIVERSITY.

THEODORE POESCHE.

ON December 27, 1899, died in Washington, D. C., Theodore Poesche, one of that coterie of scholars of whom Professor Henry said, no one has ever asked me a question that some of them could not answer correctly. Poesche was born at Zoeschen, near Merseburg, graduated at the University of Halle, and was driven to England for participating in the revolution of 1848.

Coming shortly after to America, he published with the coöperation of Carl Copp, a little book entitled 'The New Rome,' in which a comparison is drawn between the hereditary enmity between Rome and Carthage on the one hand and between England and America. In 1857 Poesche came to Washington, where during forty years he served as statistician in the Treasury. In this capacity he was sent in 1872 to advise Bismarck about the working of our internal revenue system. In 1878 appeared his masterpiece, 'Die Arier,' in which the origin of the blonde Aryans, of whom Poesche was a splendid example, is found in the Rokitno marshes of White Russia. The book is a protest against the Asiatic origin of the blondes and contributed no little at the time to change the prevailing opinion. In all his work Mrs. Poesche was the amanuensis of her husband and occupied a prominent place in the Washington literary circle.

O. T. M.

SCIENTIFIC NOTES AND NEWS.

AT the meeting of the Royal Geological Society on February 16th, Mr. Henry White, Secretary of the United States Embassy, received on behalf of Mr. G. K. Gilbert, the Wollaston Medal.

LORD RAYLEIGH, Professor Ramsay, Dr. W. Hittorf and M. Moissan have been elected honorary members of the German Chemical Society.

THE polling for the election of a member to represent the University of London in Parlia-

ment at last accounts had reached: Sir Michael Foster, 903; Dr. Collins, 662; Mr. Busk, 439.

PROFESSOR MAX VON PETTENKOFER, of Munich, eminent for his contributions to hygiene and sanitation, has been elected a Knight of the Prussian Order Pour le Mérite in the Section of Sciences and Arts.

THE following named medical gentlemen have accepted non-resident membership in the Washington Academy of Sciences: H. P. Bowditch, R. H. Fitz, Boston; A. Jacobi, E. G. Janeway, T. Mitchell Prudden, G. S. Huntington, New York; W. W. Keen, Philadelphia; H. A. Kelley, Wm. Osler, Wm. H. Welch, Wm. S. Halsted, Baltimore; Nicholas Senn, Chicago; P. S. Conner, Cincinnati.

DR. J. B. HATCHER, of Princeton University, whose appointment to the curatorship of paleontology we announced last week, will begin his work at Pittsburg on March 1st.

THE Turin Academy of Sciences has awarded the Bressa Prize of 10,000 lire for the best scientific work published during the past four years to Professor Ernst Haeckel, of Jena.

THE Berlin Academy of Sciences has elected to membership Dr. Wilhelm v. Branco, professor of geology and paleontology in the University.

THE Munich Academy has awarded its great gold medal to the explorer, Eugen Wolf.

THE Academy of Sciences of St. Petersburg has elected Professor Fischer of Berlin, and professor Boltzmann of Vienna, as corresponding members.

THE University of Berlin has conferred an honorary degree of doctor of philosophy on Ignaz Stroof, the chemist at Griesheim.

A BUST of Bernhard von Langenbeck, the eminent surgeon, is to be placed in the great hall of the University of Berlin.

DR. HANS BRUNO GEINITZ, a geologist and paleontologist of distinction, died at Dresden on January 28th in his 86th year.

WE regret also to record, on December 9th, the death of Walter Götze, the botanist, while on an expedition to German East Africa.

THE Highland Agricultural Society has contributed £200 in aid of Professor Ewart's ex-

periments on telegony. A gift of £50 has also been promised by Sir John Gilmour.

A COLLECTION of invertebrate fossils from Tennessee has recently been purchased for the Peabody Museum, Yale University. A rearrangement of many of the specimens in the museum is in progress, and some heretofore inaccessible have been placed on exhibition. The exhibits are to be photographed systematically for an illustrated catalogue.

THE collection of Indian relics which was on exhibition at the Boston Museum for many years, has been presented to the Peabody Museum of Harvard by the heirs of David Kimball. The collection comes from the Algonquins, the Sioux, the Seminoles and the Choc-taws, and was made by the famous explorers, Lewis and Clark, about the year 1840.

THE trustees of the Western University of Pennsylvania have decided to begin the erection of the new building of the Allegheny Observatory. It will be erected in River View Park and cost \$250,000.

THE St. Petersburg Institute of Experimental Medicine has established a laboratory for the study of plague and for the manufacture of plague serum at Cronstadt. The laboratory is surrounded on all sides by water, so that it can be completely isolated.

THE Brooklyn Institute of Arts and Sciences receives \$15,000 by the will of Joseph C. Hoagland.

THE President of the Royal College of Physicians has announced that the annual Harveian Oration would be delivered by Dr. T. Clifford Allbutt, regius professor of physics in the University of Cambridge, that Dr. Archibald Garrod has been appointed Bradshaw Lecturer, and Dr. John Sykes, M.O.H. St. Pancras, Milroy Lecturer for the ensuing year (1901).

THE Washington Academy of Sciences announces that the second of the series of meetings for the exposition of 'Photography as an Aid to Research' will be held at Columbian University at 8 p. m., Thursday, February 15th, when the following topics will be presented: 'Photography as an Aid to the Study of Plants,' by F. V. Coville; 'Photography in

the Study of Animal Physiology and Pathology,' by Dr. D. S. Lamb, and 'Photography as an Aid in Medicine and Surgery,' by Dr. W. C. Borden, U. S. A. These will be illustrated by lantern slides. At the succeeding meetings, to be announced later, the following topics will be presented: 'Photography in the Study of Animals; in Geographic Research and Survey; Geology, Paleontology, Astronomy, Physics, Physical and Criminal Anthropology, Ethnology, Archæology, Literature and History.'

THE School of Pedagogy, New York University, has announced a special course of lectures on Education, to be given on Monday evenings in March, as follows: March 5th, 'Physical and Mental Growth of Children between the Ages of Six and Twelve Years,' Professor Edward R. Shaw; March 12th, 'Education as a Scientific Pursuit,' Professor Edward Franklin Buchner; March 19th, 'A Fundamental Principle of Mental Development,' Professor Charles H. Judd; March 26th, 'Ethics as determining the End of Education,' Professor Samuel Weir.

THE Society of German Men of Science and Physicians will meet at Aachen from the 17th to 21st of September of the present year.

THE New York Academy of Sciences will hold its annual meeting on Monday evening, February 26th. The program includes reports of officers for past year: Election of officers, honorary members, corresponding members and fellows; followed by the Presidential Address, by President Henry F. Osborn, entitled 'The Geographical and Faunal Relations of North America, Asia, and Europe during the Tertiary Period.'

THE third annual meeting of the National Pure Food and Drug Congress will be held in Washington on March 7th and following days. The meeting is regarded as of special importance as it may increase interest in the National Pure Food and Drug Bill now before Congress.

AN International Congress of Ethnographical Science will be held at Paris from the 26th of August to the 1st of September of the present year. There will be seven sections as follows: general ethnology, sociology, psychology re-

ligions, linguistics, sciences and arts and descriptive ethnology. The president is M. Maurice Block and the general secretary is M. Georges Raynaud, rue Mouffetard 82, Paris.

THE fifth annual mid-winter meeting of the Vermont Botanical Club was held at the University of Vermont, January 26th and 27th. The officers of the club were reelected: President, Ezra Brainerd; vice-president, C. G. Pringle; secretary and treasurer, L. R. Jones.

A BILL has been introduced into the Assembly of the State of New York, providing for a biological station with the objects noted in the last issue of this JOURNAL. The management of the institution is under a board of control, consisting of the New York state fish culturist; the president of the board of the commission of fisheries, game and forest of the state of New York; the president of the New York state fish, game and forest league; the chief of the bureau of nature study of the college of agriculture of Cornell University; and the director of the New York state college of forestry, thus making the board of control to consist of five members. The sum of \$10,000 annually is appropriated for the expenses of the station.

AN account was quoted from the London *Times* in last week's issue of SCIENCE of the work done by Italian students in investigating malaria. Dr. Ronald Ross claims that he was done an injustice, as he had anticipated the Italian investigators in following out the life history of the *Hæmamoebidæ* (the group of parasites of which the human varieties cause malarial fever) in mosquitoes.

A VERY valuable machine for cutting minerals, called a *petrotome*, invented by Professor William B. Dwight, of Vassar College, has recently been made accessible for general scientific and commercial uses. Dr. A. E. Foot, of Philadelphia, is to have a large collection of minerals at the Paris Exposition and will exhibit a petrotome in action, to illustrate the best scientific method of cutting rocks and precious stones. Half a dozen large transparent sections have been made by Professor Dwight to be sent to Paris with the machine. One of these is a fossil solidified trunk of a tree. It is seven and a-half inches in diameter and is cut so thin

throughout as to show perfectly the microscopic structure of the wood. Another specimen is of a group of Rubelite crystals embedded in Lepidolite, and a third is a section of transparent green serpentine five by two and a-half inches in size. A petrotome has lately been secured by the Geological Commission of Brazil and one by Yale University for their scientific work.

IN spite of the prevalence of typhoid fever in Philadelphia the death rate is lower than usual. The Bureau of Health has given out the following figures for the past twelve years:

	Deaths.	Rate per 1000.
1888.....	20,372	20.04
1889.....	20,536	19.74
1890.....	21,730	20.76
1891.....	23,367	21.85
1892.....	24,305	22.25
1893.....	23,655	21.20
1894.....	22,680	19.90
1895.....	23,796	20.44
1896.....	23,892	20.17
1897.....	22,735	18.72
1898.....	23,790	19.18
1899.....	23,796	18.78

By a recent decree of the Russian Minister of Education the admission of first-year students by the several medical faculties throughout the empire is restricted to a fixed number. The University of Moscow is limited to 250, Kieff to 200, Charkow to 175, Dorpat to 150, Warsaw to 100, Tomsk to 120, and Kasan to 100. The total number of first-year medical students in Russia must therefore not exceed 1095. This number does not include the students of the St. Petersburg Medico-Military Academy, which may admit 250 first-year students.

ACCORDING to the *Publishers' Weekly*, there were last year published in the United States 176 books in the sciences as compared with 143 in 1898. These numbers do not, however, include educational or medical books, or books in the 'useful arts.'

At a special meeting of the London Chemical Society of London, Professor T. E. Thorp, F.R.S., gave a memorial lecture in honor of Victor Meyer. He said, according to the report in the *London Times*, that as a friend of nearly 30 years' standing, and as one who

studied with him under Bunsen, he had acceded to the request of the council to record its appreciation of the remarkable services rendered by Meyer to the science he cultivated with such assiduity and success. After an account of Meyer in his student days at Heidelberg and of his work as one of Bunsen's assistants, the lecturer told how in 1868 he entered Baeyer's laboratory in Berlin, where his success as a private teacher procured him the position of assistant to Fehling at the Stuttgart Polytechnic. There he made one or two important discoveries, but in less than a year he was called, when barely 24 years of age, to succeed Wislicenus at Zürich. His 13 years' stay there constituted the most fruitful and brilliant period of his career, and before its close he had brought himself within the foremost rank of contemporary investigators. Some idea of his power of work and of the stimulus he gave to others might be gleaned from the fact that during that period the Zürich Laboratory gave close on 130 papers and memoirs to chemical literature. It was at Zürich, too, that he devised his various methods of determining vapor densities and carried out some of his work on the dissociation of the halogens. Pyrochemical problems always interested him, and he expressed the belief that a new chemistry with new and undreamt-of discoveries would disclose itself when vessels were obtained capable of bearing temperatures at which meter could no longer exist and oxyhydrogen gas became an unflammable mixture. In 1882, when continuing a series of University lectures on benzene derivations which had been interrupted by his friend Weith's death, he made what was, perhaps, his most brilliant discovery, that of thiophen, and within about six months of his first observation he was in a position to show by actual preparations that its chemistry was hardly less extensive than that of benzene itself. On the death of Hübner he was called to Göttingen, and in 1888 to Heidelberg, as successor to Bunsen, with the coveted title of Geheimrath and the promise of a new and enlarged laboratory. In conjunction with a number of his pupils he there began the investigation of the conditions determining both the gradual and explosive combustion of gaseous

mixtures, and in 1892 with Wachter he announced the existence of the iodoso-compounds, the study of which led to the discovery of the remarkable substances known as the iodonium bases. The formation and electrolysis of ethereal salts of aromatic acids occupied him from 1894 up to the year of his death, which took place at the age of 49 on August 8, 1897. To the literature of chemistry, either alone or in conjunction with his pupils, he contributed over 300 memoirs and papers. As the director of a large chemical laboratory and as a laboratory teacher he worthily followed in the footsteps of Bunsen. He was an admirable lecturer, clear and vigorous, while as a teacher he had a wonderful power of infusing enthusiasm into his students. His literary ability, combined with his faculty of exposition, made him an admirable writer of popular science articles.

UNIVERSITY AND EDUCATIONAL NEWS.

MRS. THOMAS MCKEAN has given \$250,000 to the University of Pennsylvania towards the cost of the new Law School building.

BOSTON UNIVERSITY receives \$50,000 by the will of O. H. Durrell, of East Cambridge, Mass.

A HALF million dollars will be distributed by Dr. D. K. Pearsons of Chicago, beginning March 1st, among fourteen colleges throughout the United States. Most of the donations are made on condition that the colleges raise a certain amount, generally \$50,000, or an amount equal to the gift, within a given time. The first college to claim its proportion of the \$500,000 is Mount Holyoke College, South Hadley. This college receives \$50,000, and the gift will be made March 1st. Some of the other colleges to become beneficiaries of Dr. Pearson's philanthropy are Yankton College, South Dakota; Berea College, Berea, Ky.; Colorado College, Colorado Springs, Col., and McKenzie College, Lebanon, Ill., which will receive \$50,000. Each has received a former gift from Dr. Pearsons. Dr. Pearsons has already given \$2,500,000 to the cause of education.

THE Baltimore Association for the Promotion of the University Education of Women is prepared to offer a foreign fellowship of the value of \$500 for the year 1900-1901. Preference

will be given in the award of this fellowship to women from Maryland, or women who have identified themselves with educational interests in Maryland.

A SCHOOL of forestry will be established at Yale University under the Sheffield Scientific School. It will occupy the house left to the University by the late Professor Marsh.

THE proposed changes in the examinations for the Mathematical Tripos at Cambridge, abolishing the order of Merit and the Senior Wrangler, have been defeated in the Senate by a vote of 152-139.

PLANS are being made for the establishment of a school for scientific instruction and practical training in agriculture and horticulture, to be situated at Chappaqua, 33 miles from New York city. The students would attend lectures and do work in the New York Botanical Garden, which is easily accessible.

IT is reported in the daily papers that Mr. Alexis E. Frye, superintendent of schools in Cuba, is arranging for a number of Cuban teachers to attend the Harvard summer school.

IT is announced that Rear Admiral William Sampson has been offered and has declined the presidency of the Massachusetts Institute of Technology.

DR. SAMUEL J. BARNETT, professor of physics in Colorado College, has been appointed assistant professor of physics in the Leland Stanford, Jr. University.

DR. EDWARD LEWIS STEVENS, B.A. (La. State University), Ph.D. (New York University), has been appointed president of the newly established Louisiana State Industrial School.

DR. W. WIEN, professor of physics at the University of Giesen, has been called to Würzburg, and Dr. Ludwig Knor of Jena, has been called to the professorship in chemistry in the University of Freiburg, i. B. Dr. Winkler has been made assistant professor of agriculture in the Agricultural Station at Vienna, and Dr. F. R. Kjellmann, professor of botany in the University of Upsala. Dr. Ebermeyer, professor of agriculture and meteorology at Munich, has retired.