ALBUQUERQUE, N. M.

The Geological Society of America.—December 30-January 4. President, President Charles R. Van Hise, University of Wisconsin; secretary, Dr. Edmund O. Hovey, American Museum of Natural History, New York City.

ITHACA

The American Philosophical Association.—December 26, 28. President, Professor H. N. Gardiner, Smith College; secretary, Professor Frank Thilly, Cornell University, Ithaca, N. Y.

NEXT SUMMER, AT SOME PLACE TO BE DETERMINED

The Astronomical and Astrophysical Society of America.—President, Professor Edward C. Pickering, Harvard College Observatory; secretary, Professor Geo. C. Comstock, Washburn Observatory, Madison, Wisconsin.

THE ANNUAL DUES OF MEMBERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

The permanent secretary of the American Association for the Advancement of Science begs to call the attention of members to the fact that the annual dues (three dollars) for the year beginning January the first should now be sent to him. The financial year of the association will hereafter end on October 31, and the dues for the following calendar year should be paid as soon as possible after that date. The dues are so small and the membership of the association has become so large that the sending of statements involves an expenditure of time and money, which, so far as possible, should be saved. The office of the permanent secretary must be removed to the place of meeting at Chicago during the last week in December, and the dues should be paid prior to that time. If they are not paid before January 1, there are serious complications in regard to the sending of Science to members. The association can not make itself responsible for sending Science to those whose dues are in arrears, as there are some who may regard the non-payment of dues as equivalent to resignation from the association. The back numbers of Science will be sent to those who pay their dues after January the

first upon the payment to the publishers of postage, so far as the edition permits, but the publishers do not guarantee that this will be done. Should the edition threaten to become exhausted, it will be necessary for those who wish to keep their sets of Science complete to pay for the numbers.

The permanent secretary takes this occasion to remind members of the desirability of assuming life membership in the association. By the payment of fifty dollars at the present time, all future trouble and expense is avoided. The fees of life members are ultimately transferred to the permanent fund, the income of which is used exclusively for the encouragement of research, and those who assume life membership thus contribute materially to the advancement of science. L. O. Howard,

Permanent Secretary

SMITHSONIAN INSTITUTION, WASHINGTON, D. C.

SCIENTIFIC NOTES AND NEWS

An oil portrait of Professor James Mills Peirce, Perkins professor of mathematics at Harvard University until his death in 1905, has been presented to the university by his sister.

The gold medal of the British Institution of Mining and Metallurgy, has been awarded to Sir Archibald Geikie in recognition of his services to geological science. The Consolidated Gold Fields of South Africa gold medal and premium have been awarded to Dr. T. Kirke-Rose for researches on the metallurgy of gold.

Dr. ROBERT KOCH has been promoted to the rank of Wirklicher Geheimer Rath, with the title of Excellency, in recognition of his researches into the causes of the sleeping sickness.

Dr. J. A. Allen, curator of mammalogy and ornithology in the American Museum of Natural History and editor of *The Auk*, has been elected an honorary member of the Deutsche Ornithologische Gesellschaft; he has also been transferred from the foreign to the honorary class of members of the British Ornithologists' Union.

Dr. R. W. Wood, professor of experimental physics in the Johns Hopkins University, has been awarded the John Scott legacy premium and medal for his discoveries in color photography by the Franklin Institute of Philadelphia. The institute has awarded Mr. H. E. Ives of the physics department the Edward Longstreth medal for improvements on the method.

The Walsingham medal of Cambridge University for 1907 has been awarded to E. Mellanby, formerly research student at Emmanuel College, for his essay on the metabolism of creatinin and creatin.

AT a meeting of the London Mathematical Society on November 14, the following officers were elected: President, Professor W. Burnside; vice-presidents, Professor A. R. Forsyth and Professor H. M. Macdonald; treasurer, Professor J. Larmor; secretaries, Professor A. E. H. Love and Mr. J. H. Grace.

Dr. George T. Ladd, emeritus professor of philosophy in Yale University, has returned from Japan to his home in New Haven.

THE Journal of the New York Botanical Garden states that Professor C. F. Baker, for three years past chief of the department of botany in the Estación Central Agronómica, at Santiago de las Vegas, Cuba, has been appointed curator of the herbarium and botanic garden at the Museu Goeldi, Para, Brazil. His special work there will be the further development of the herbarium and garden at Para, and the botanical exploration of some of the most interesting parts of the Amazon valley.

Dr. C. B. Robinson, assistant curator of the N. Y. Botanical Garden, has been appointed economic botanist of the Bureau of Science of the Government of the Philippine Islands.

Professor C. L. De Muralt, of the University of Michigan, has returned from Europe, where he has been supervising the electrification of the Altberg tunnel beneath the Tyrolean Alps.

PROFESSOR ALBERT PERRY BRIGHAM is on leave during the present year. He has spent the summer and autumn in geological field

work under Dr. John M. Clarke, of the New York State Museum, and sailed on November 28 for Genoa, to join his family in Geneva. He will spend the winter in Geneva, and the rest of the year in travel in southern Europe, attending the International Geographical Congress in Geneva in July, and returning to college duties in September.

Professor G. D. Harris, of Cornell University and state geologist of Louisiana, has begun this season's field work in the south. He plans to make a large collection of the recent and Quaternary shells of the gulf border and will collect at Cedar Keys, Tampa, Biloxi, New Orleans and Galveston. Then visiting Jennings and Beaumont and passing westward into Texas, he will complete last winter's study of the Louisiana and Texas oil fields.

Dr. RAYMOND H. POND, who has been studying at the New York Botanical Garden during the past year, sailed for Europe on November 7 to spend several months in visiting German botanical laboratories.

The Hamburg Institute for Ship and Tropical Diseases is sending Drs. Keysselitz and Mayer to German East Africa to study protozoan diseases in man and animals. Their headquarters are to be at Amani.

King Edward has granted to Sir Frederick Treves, Bart., serjeant-surgeon, Thatched House Lodge as a residence. The house is one of the three lodges in Richmond Park.

THE address of the retiring president of the Philosophical Society of Washington will be given by Mr. John F. Hayford, of the U. S. Coast and Geodetic Survey, on December 7. His subject is "The Earth, a Failing Structure."

At a meeting of the fern class of the Botanical Society of Pennsylvania, on November 23, the members present signed appropriate resolutions containing an appreciation of the earnest and fruitful labors of the late Professor Lucien M. Underwood, and the same have been forwarded to Professor N. L. Britton, of the New York Botanical Garden.

WE regret to record the death of Professor Asaph Hall, one of the most distinguished of American astronomers. Born in Goshen, Conn., in 1829, he became assistant at the Harvard College Observatory, and from 1863 was professor in the United States Naval Observatory, carrying on his important researches until his retirement in 1895, when he was appointed professor at Harvard University. Dr. Hall was president of the American Asso-

ciation for the Advancement of Science in

1902.

Dr. George F. Shrady, editor of the *New York Medical Record* since its foundation in 1866 to 1904, and the author of numerous contributions to medical science, died in New York City on November 29, at the age of seventy years.

Professor R. Kossmann has died in Berlin, at the age of 58, from the results of septic infection. He was at first a zoologist and later devoted himself to medicine, particularly gynecology.

Professor Alfred D. Cole, of Vassar College, Poughkeepsie, N. Y., secretary of Section B—Physics—of the American Association for the Advancement of Science has sent the following notice to members of the section:

The annual meeting of the American Association for the Advancement of Science will be held at the University of Chicago, from December 30, 1907, to January 4, 1908. The American Physical Society will meet at the same time and the usual arrangement for joint sessions for the reading of papers will doubtless be made. The joint meeting in New York, a year ago, was one of the most successful gatherings of physicists ever held in the country, and it is hoped that this Chicago meeting will be equally good.

The presiding officer of Section B is Professor Dayton C. Miller, of the Case School of Applied Science, and the address of the retiring vice-president will be given by Professor W. C. Sabine, of Harvard University.

A single program for all sessions will be issued on the opening day of the meeting, and it is desired to send out a preliminary program by December 15. Therefore promptness in sending in titles of all papers to be presented before Section B is urgently asked.

The organization meeting of the Illinois

State Academy of Sciences will be held in the Senate Chamber, Springfield, Ill., on December 7. The preliminary program is as follows:

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10 A.M.—Call to order and election of chairman. Address of welcome, by Governor Charles S. Deneen.

"Advantage of a State Academy," by Professor T. C. Chamberlin, LL.D., University of Chicago.

"History of the former State Natural History Society," by S. A. Forbes, Ph.D., State Entomologist.

Appointment of committees and other business. 2 P.M.—Report of committees.

Symposium (ten-minute addresses), Outlook for Young Men in:

Anthropology, by Geo. A. Dorsey, Ph.D., Field Museum.

Botany, by John G. Coulter, Ph.D., Central Illinois State Normal.

Chemistry, by Wm. A. Noyes, Ph.D., University of Illinois.

Geology, by H. Foster Bain, Ph.D., State Geologist.

Physics, by C. E. Linebarger, Lake View High School.

Zoology, by Herbert V. Neal, Ph.D., Knox College.

8 P.M.—Popular lecture in the Arsenal:

"Greater Steps in Human Progress," by W J McGee, LL.D., director of the St. Louis Public Museum.

On November 21 about one hundred members of the Society of Municipal Engineers of the City of New York visited Columbia University and inspected the buildings and laboratories.

There have been ordered for the earthquake station at the University of Michigan the following instruments: A 200-kilogram pendulum of the Wiechert type and model of 1907; a 160-kilogram Wiechert pendulum of 1907 model for measuring the vertical component of the earth's motion, and a pair of 25-kilogram Bosch-Omori or Strasburg horizontal pendulums of the latest model. These instruments will be installed in the astronomical observatory of the University which is directed by Professor W. J. Hussey.

Rev. Dr. Bonney has presented to the Sedgwick Museum, Cambridge, the whole of his collection of rock slices, consisting of 2,700

specimens, of which the British examples number about 1,300. The latter represent especially the rocks of Cornwall, Charnwood, the Wrekin, the Bunter pebbles, North Wales, Scotland, and the Channel Islands. The European collection contains some 450 specimens collected from different parts of the Alps, Brittany, and the Ardennes. There is also a large collection of specimens from the Himalayas, Novaya Zemlya, Ararat, Canada, Rocky Mountains, Andes, Ecuador, Bolivia, Aconcagua district, Socotra, and the diamantiferous district of South Africa.

THE sixth annual meeting of the South African Association for the Advancement of Science will be held at Grahamstown during the week ending July 11, 1908, under the presidency of the Hon. Sir Walter Hely-Hutchinson.

THE Fourth Congress of the Bohemian Men of Science and Physicians will be held in Prague in the summer of next year.

THE foundation of the Royal Society of Medicine was celebrated by an inaugural dinner at the Hotel Cecil, London, on Tuesday, December 3.

The dinner of the fellows and associates of the British Institute of Chemistry, to celebrate the thirtieth anniversary of the foundation of the institute, took place on November 22 at the Hôtel Métropole, London, Professor Percy F. Frankland, the president, being in the chair. The company, which numbered about 200, included the presidents of the Chemical Society, the Iron and Steel Institute, the Institution of Civil Engineers, the Royal College of Surgeons, the Society of Chemical Industry, the Institute of Actuaries, the Institution of Mining and Metallurgy, the Society of Public Analysts, and the chairman of the Board of Inland Revenue.

An Italian Society of Radiology was founded on the occasion of the Second Congress of Physiotherapy recently held in Rome.

The fourth volume of "Die Karcinomliteratur" (edited by Dr. Sticker, Berlin) shows that during the last five years there appeared 3,395 publications dealing with cancer. Six hundred and seven of these were in English.

Free lectures maintained by the Lowell Institute in the Teachers' School of Science, mainly under the auspices of the Boston Society of Natural History, will be given during the season as follows:

"Field Lessons in Botany," by Mr. Hollis Webster.

"Field Lessons in Zoology," by Mr. Albert P. Morse.

"Field Lessons in Geology," by Professor George H. Barton.

"Laboratory Lessons in Botany," by Mr. Hollis Webster.

"Laboratory Lessons in Zoology," by Mr. Albert P. Morse.

"Laboratory Lessons in Geology," by Professor George H. Barton.

"Laboratory Lessons in Geography," by Professor Douglas W. Johnson.

"Lectures and Demonstrations in Physical Chemistry," by Professor G. N. Lewis.

The British Medical Journal says: "It was stated in this column of the British Medical Journal of October 26 that there is a probability of the Index Medicus being discontinued, and that in view of this contingency it has been suggested that the card system of the Concilium Bibliographicum might be extended so as to cover the ground of medical literature. Reference was made to the fact that a similar plan was tried in Paris some time ago, but did not find adequate support. Dr. Marcel Baudoin writes to point out that during the period of occultation of the Index Medicus, which lasted from 1900 to 1903, its place was supplied by the Bibliographia Medica, published in Paris under the auspices of the Institut de Bibliographie, of which our correspondent was the directing spirit. the reappearance of the Index Medicus, the Bibliographia Medica, finding its occupation gone, joined the snows of yesteryear. In 1906 it was followed by the Institut de Bibliographie, which, as Dr. Baudoin reminds us, was the first effort in that direction. failure of two such meritorious enterprises is not encouraging to further adventures of the same kind. Yet the value of a general index to current medical literature is beyond question, and the need of such a guide through a labyrinth ever growing in vastness and in complexity must necessarily make itself felt more and more by workers who wish to follow the course of medical thought, and are not content to take their references at secondhand."

STATISTICS collected by the United States Geological Survey show that Colorado still outranks any other state or territory in the union, including Alaska, in the production of the precious metals, despite the fact that the gold production of the state in 1906 fell short nearly \$2,000,000 of that of 1905, the precise figures being, output \$23,210,629, decrease \$1,813,344. More than half of the total gold of the state is derived from the telluride veins of Cripple Creek in Teller County. Miguel free-milling ores contribute nearly \$2,500,000. The smelting ores of Leadville, in Lake County, yielded \$1,500,000 and the partly free-milling Gilpin County ores over \$1,000,000. San Juan County and Ouray County both closely approached the milliondollar mark. Important diminution in the output is recorded in Teller and Ouray counties, but this was partly offset by gains in San Miguel and other counties. Siliceous and dry ores formed 67 per cent of the total tonnage and were the source of over 96 per cent. of the The placer output is comparagold product. tively small. The outlook for 1907 does not indicate the probability of great increase, if The production of silver, 12,216,830 ounces, showed an increase of 717,523 ounces. The smelting ores of Lake County led in the output, with nearly 4.000,000 ounces, while in their order Pitkin, San Miguel, Mineral, San Juan, Ouray and Clear Creek counties are next in importance, the first three exceeding the million mark. A higher price increased the value of the product. The increase is due chiefly to the veins of San Juan, San Miguel and Mineral counties. On the other hand, the yield of the Leadville and Aspen deposits diminished. About half of the silver product of the state is derived from siliceous or dry ores, 28 per cent. from lead ores and 17 per cent. from zinc or zinc-lead ores. No great change is expected in the production of silver for 1907. The Geological Survey will publish during December an advance chapter from

"Mineral Resources of the United States, Calendar Year 1906," containing a discussion by Waldemar Lindgren, geologist, of the gold and silver production of the United States in 1906.

UNIVERSITY AND EDUCATIONAL NEWS

The memorial committee of the Alumni Association of the University of Michigan has the satisfaction of seeing the foundations laid of the future Memorial Hall. The contract which has been let calls for the enclosed building only, without the internal furnishings, for \$107,103.00. The university has promised an additional \$50,000 as soon as the sum raised reaches \$132,000.00. The building, which stands on the southwest corner of the campus, will contain, in addition to the Memorial Hall, which is to be lined with tablets, paintings, and statues of famous alumni of the university, accommodations for the entire art collection of the university, a small but convenient auditorium, and accommodations for the Alumni Association, as well as a room for social gatherings.

Professor Cleveland Abbe, of the United States Weather Bureau, has presented to the Johns Hopkins University a collection of books and pamphlets dealing with meteorology.

Dr. Scoffeld, of Benson, Minn., has presented the valuable geological collection that was left him by his father to the University of Minnesota.

The botanical department of Syracuse University has announced several new courses in forestry for next year. Dr. W. L. Bray, appointed to succeed Dr. J. E. Kirkwood, as professor of botany, is interested in forestry, and it is said that the new courses will probably lead to the establishment of a department of forestry.

DOCENTS O. GROSSER and O. Stoerk have been named, respectively, an extraordinary professor of anatomy and extraordinary professor of pathological anatomy, in the University of Vienna.

Dr. Edward Baban has been named titular professor of physiology in the Bohemian University of Prague.