

Aurelio Masera, for new processes connected with the textile industry; and to M. Rusconi, for developing the 'Mercer' process in the cotton industry. In addition, gold medals and 400 lire are awarded to Carlo Carloni, for his invention of a mastic called magnesite, as a substitute for red lead for junctions of pipes, also for a bicycle brake; to Demetrio Prada and Co., for extracts used in tanning and for the manufacture of oxygenated water; and to J. Löffler, for introducing into Milan the manufacture of artificial flowers in porcelain. A gold medal and 300 lire is awarded to the Italian Color Manufactory under Max Meyer & Co., and a bonus of 300 lire to E. Tuffanelli, of Milan, for an invention connected with water and gas pipes.

At the Royal Institution on March 2d, Major Ronald Ross delivered a lecture on 'Malaria and Mosquitoes.' According to the *London Times*, he first alluded to the discovery of the parasite of malaria by Laveran in 1880, and the failure of the subsequent attempts to find the parasites in the water and soil of malarious places. He described the theories of King, Laveran, Manson and Bignami that mosquitoes conveyed the disease, and said that it was Manson's theory alone which led to the solution of the problem. Believing that it was the only one of practical value, he undertook to verify Manson's theory, and began work in India in 1895. The task presented many difficulties, but after two and a-half years of failure he at last found the parasites growing in mosquitoes belonging to the genus called *Anopheles*. That was in August, 1897. The following year he completely traced the development of the malaria parasite of birds in the mosquito, and finally, in June, 1898, he succeeded in infecting a number of healthy birds with malaria by the bites of mosquitoes. His investigations had proved that not only the infection itself but the severity of it could be transmitted through the mosquito. Out of 28 healthy sparrows which were used, he succeeded in infecting 22, although he failed to transmit the infection from sparrows to several other kinds of birds. In December, 1898, his investigations were repeated and confirmed by Professor Koch and Professor Grassi, and Drs. Bignami and Basti-

anelli, who also succeeded in infecting healthy men by the bites of mosquitoes in Italy. The investigations had undergone great development since then. The mosquito theory explained all the facts about malaria.

#### UNIVERSITY AND EDUCATIONAL NEWS.

##### AN ASSOCIATION OF AMERICAN UNIVERSITIES.

THE *Chicago University Record* gives an account of the meeting of representatives of certain institutions held at the University of Chicago, February 27th and 28th. The invitation to this meeting was made by the Presidents of Harvard University, Columbia University, Johns Hopkins University, the University of Chicago, and the University of California. There were present representatives of the University of California, the Catholic University of America, the University of Chicago, Clark University, Columbia University, Harvard University, Johns Hopkins University, Leland Stanford Jr. University, the University of Michigan, the University of Pennsylvania, Princeton University, the Federation of Graduate Clubs, and the United States Commissioner of Education.

After a full discussion, it was unanimously voted that the universities represented in the conference organize themselves into an association. A committee was appointed, consisting of President Jordan, President Harper, Professor Pettie, President Conaty, and Professor Newbold, to prepare the constitution of the association. At an adjourned meeting the following articles were adopted:

##### CONSTITUTION.

This organization is called the Association of American Universities.

It is founded for the purpose of considering matters of common interest relating to graduate study.

It is composed of institutions on the North American Continent engaged in giving advanced or graduate instruction.

Its initial membership consists of the following institutions:

University of California.	Clark University.
University of Chicago.	Cornell University.
Columbia University.	Johns Hopkins University.
Harvard University.	Princeton University.
University of Michigan.	

University of Pennsylvania. Leland Stanford Jr. University.  
 University of Wisconsin. University.  
 Catholic University of America. Yale University.

Other institutions may be admitted, at the annual conference, on the invitation of the Executive Committee, endorsed by a three-fourths vote of the members of the Association.

The Association shall hold an annual conference at such time and place as the Executive Committee may direct.

The Executive Committee shall prepare a program for each meeting.

The officers of the Association shall be: President, Vice-President, and Secretary. These three, with two others elected by the Association, shall constitute the Executive Committee.

In each conference each university may have any number of representatives, but each university shall have a single vote.

No act of the Association shall be held to control the policy or line of action of any institution belonging to it.

After the adoption of this constitution, the following officers were elected for the ensuing year:

For the President of the Association—the Representative of Harvard University.

For the Vice-President—the Representative of the University of California.

For the Secretary—the Representative of the University of Chicago.

For the additional members of the Executive Committee—the Representatives of Columbia University and Johns Hopkins University.

At a meeting of the Executive Committee the Secretary was authorized to communicate with each of the institutions concerned, and to secure, if possible, the formal acceptance by each institution of membership in the Association.

It was decided by the Executive Committee to hold the next annual meeting during the last week of February in the city of Chicago. It was also voted that the meeting should not include more than four sessions, and that each university should be asked to suggest topics for discussion. The following topics were proposed: 'Migration,' 'Fellowships,' 'Subordinate Requirements for the Doctor's Degree,' 'The Printing of Dissertations.'

The Chairman of the Committee was authorized to appoint some person to prepare a statement of facts concerning each topic to be discussed. It was decided that one topic should be taken up for discussion at each session. It was voted that the Association should not appoint a representative for the Paris Exposition, and that it should not undertake at present to secure legislation with reference to the protection of higher degrees. The Federation of Graduate Clubs was given an opportunity to present statements in writing on the topics discussed in the Association.

#### GENERAL.

As we announced recently, a school of forestry is about to be established at Yale University. At a meeting of the corporation on March 16th, a gift of \$150,000 for this purpose was acknowledged. The donors are Mr. and Mrs. J. W. Pinchot, and their sons, Mr. Gifford Pinchot, '89, and Mr. Amos. R. Pinchot, '97. The donors also authorized the use of a large tract of land in Pike County, Pa., for a summer school. Mr. Henry S. Graves, '92, has been appointed professor of forestry. Mr. Graves is assistant in the Division of Forestry, Department of Agriculture, of which Mr. Gifford Pinchot is chief.

MR. EZRA WARNER, of Chicago, has given \$50,000 to Middlebury College, for a science building, the erection of which will be begun at once. Mr. Warner graduated from Middlebury College in 1861.

THE Alumni of Haverford College have subscribed \$40,000 for a gymnasium.

It has been decided that the new laboratory for physiology and anatomy at Cornell University, for which \$80,000 was recently given, will be situated in the quadrangle east of Boardman Hall.

THE bequest of about \$2,000,000 by the Russian merchant, Mr. Astrachow for the establishment of a university for women at Moscow, has been accepted by the government. It is proposed first to establish faculties of medicine and of science.

THE Michigan Gas Association at its annual meeting in Detroit, February 22d, raised a fund

of six hundred dollars by individual subscription among the members to defray for one year the expenses, at the University of Michigan, of a graduate student who shall spend his time in research along some line of work connected with gas-making or the better utilization of by-products like coal-tar and ammonia. It is the intention of the association to support permanently a research fellowship at the University.

THE corporation of Yale University has made alterations in the curriculum, enlarging the range of elective studies. The requirement of philosophy in the senior year is abandoned, and the range of electives in the sophomore year is enlarged. In the sophomore year ten subjects are offered of which five must be taken and one in addition may be taken. The subjects are, Greek, Latin, French, German, English, history, mathematics (two courses), chemistry and physics.

ARRANGEMENTS have been made for a course on fish culture in connection with the Cornell University College of Forestry. It will be given during two weeks beginning May 7th at Axton in the College forest in the Adirondacks, and will be under the direction of Professor Barton W. Evermann of the United States Fish Commission. The course will consist in a series of daily lectures, with laboratory work, field excursions to the ponds, lakes and rivers, and visits to the State Hatchery at Clear Water, within a few hours of Axton. One or more lectures will be devoted to the following subjects: 1. Natural reproduction among fishes; manner of fertilization; conditions under which spawning takes place; dangers which beset the eggs, the fry and the young; necessity for artificial propagation; natural and artificial methods contrasted. 2. The species of fishes propagated artificially in America; the spawning time, place and habits of each, especially those native to the State of New York. 3. The Salmonidæ, or salmon trout and whitefish; methods of artificial propagation in detail. 4. The Black Bass and other centrarchidæ; methods of culture. 5. The Shad, Wall-eyed Pike, etc. 6. The care of fish fry. 7. Methods of shipment of eggs, fry, fingerlings

and adults; how plants of fish are made. 8. Pollution of streams and lakes and fish protection. 9. Fish Culture in America, its history and results.

COURSES in Commercial Education will next year be offered in the University of Michigan. (1) Diplomatic and consular education, (2) higher commercial education, (3) preparation for newspaper work, (4) preparation for pastoral work and public philanthropy, (5) instruction in public administration.

ON the recommendation of Señor Barreiro, secretary for public instruction for Cuba, the school of engineering at Havana is to be reorganized.

WE have already announced the resignation of the Rev. B. L. Whitman, president of Columbian University, Washington, which takes effect at the end of the present academic year. The Rev. Dr. Greene has been chosen president *pro tem.* and Professor H. L. Hodgkins (mathematics and physics) has been elected University Dean.

DR. G. W. MYERS, professor of astronomy at the University of Illinois, has resigned his chair to take charge of the department of astronomy and mathematics in the Chicago Institute.

DR. LLEWELLYS BARKER, associate professor of anatomy at the Johns Hopkins Medical School, has accepted the chair of anatomy and neurology at the University of Chicago.

DR. C. R. BARDEEN, associate in anatomy of the University of California, has been appointed professor of this subject in the University of California.

DR. JOHN ASHHURST, Jr., has resigned the chair of surgery in the University of Pennsylvania.

MR. G. T. MOODY, D.Sc., F.C.S., has been appointed one of the Examiners in Chemistry in the College of Preceptors, London, in the place of Professor W. N. Hartley, F.R.S., who has retired.

DR. WILLY BRUHNS, mineralogy and petrography, and Alexander Tornquist, geology and paleontology, docents at the University of Strassburg, have been appointed to associate professorships.