4. They should conduct their work not merely by correspondence, but should have at least one meeting, preferably several meetings, occupying an adequate length of time.

The scholars able to do the work exist; it only remains to enable them to organize. For this purpose, the circular issued by Boston University is to serve as a preliminary step. Its aim is to obtain the opinion of the learned public. Thus far it has been sent only to the members of the Philological Association, and it may be stated that out of 67 replies received up to September 16, only 4 questioned the utility of the conference, the great majority being emphatic and even enthusiastic in its advocacy. In a few weeks the circular will be sent to every university professor in the United States and Canada.

The question has several times been asked, why a conference of the English-speaking nations alone would not suffice. The answer may be gathered from what has been said above. The supreme need of the phonetic alphabet, in order to secure its adoption by the public, is authority; and of course the authority of a universal alphabet, adopted by an international commission, would far exceed that of an alphabet devised for one language only. It is desirable to secure the use of the alphabet by the largest possible number of persons at once, in order to impart to it the requisite momentum to carry it into popular Evidently the momentum of an interuse. national alphabet will be incomparably greater than that of a merely national alphabet. Above all, it must be remembered that the sounds of the leading European languages are for the most part nearly identical, and that all the nations are striving to adopt phonetic alphabets. If now each nation does this for itself, we shall be confronted with the dilemma that either needless differences will be permanently established between the languages, or, if there is to be identity of writing to correspond with the practical identity of sounds, certain nations will be forced to abandon their laboriously constructed systems in order to conform to the system of another nation. The obvious remedy, the reasonable, neighborly, courteous method is an agreement by the common consent of all the nations concerned, and now is the time to secure it, while as yet none of the national phonetic alphabets have found any notable degree of acceptance.

The realization of the conference is simply a matter of expense. It means that a dozen or a score of the most eminent scholars shall be enabled to devote the requisite time to it. If the replies to the circular demonstrate that the great majority of the learned public favors the plan, it seems entirely probable, in view of the importance of the subject, that the requisite funds will be forthcoming.

ROBERT STEIN.

U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C.

## AWARDS TO THE COLLECTIVE EXHIBIT OF THE LAND-GRANT COLLEGES AND THE EXPERIMENT STATIONS.

THE collective exhibit of the American colleges of agriculture and mechanic arts and the experiment stations at the St. Louis Exposition, illustrating special features of the instruction work of these institutions and the methods and results of the agricultural experiment stations, was awarded 27 grand prizes, 37 gold medals, 35 silver medals and 35 bronze medals, a total of 135 awards, aside from those made to individual exhibitors. The collective exhibit as a whole received a grand prize; and similar awards were made to the sections of agronomy, in charge of Mr. J. I. Schulte, of the office of experiment stations; of horticulture and forestry, in charge of Professor S. B. Green, of Minnesota; of economic entomology, in charge of Professor C. P. Gillette, of Colorado; of mining engineering, in charge of Professor S. B. Christy, of California; of architecture, in charge of Professor W. H. Lawrence, of Massachusetts; of mechanical engineering, in charge of Professor W. F. M. Goss, of Indiana; of drawing and shop practice, in charge of Professor F. P. Anderson, of Kentucky; and of technical chemistry, in charge of Dr. W. H. Walker, of Massachusetts; to the dairy laboratory, in charge of Professor E. H. Farrington, of Wisconsin; the sugar laboratory, in charge of Dr. W. C. Stubbs, of Louisiana; and the plant laboratory, in charge of Dr. W. H. Evans, of the office of experiment stations.

Gold medals were awarded to the sections of animal husbandry (2), in charge of Dr. H. P. Armsby, of Pennsylvania, and Professor Thomas F. Hunt, of New York; of fertilizers, in charge of Dr. E. B. Voorhees, of New Jersey; of plant pathology, in charge of Mr. F. C. Stewart, of New York; of rural engineering, in charge of Dr. Elwood Mead, of the office of experiment stations; and of veterinary medicine, in charge of Dr. D. S. White, of Ohio; and to the soils laboratory, in charge of Professor M. F. Miller, of Ohio.

Awards of silver medals were made to the section of biological sciences, in charge of Dr. G. E. Stone, of Massachusetts, and that illustrating the inspection work of the stations, in charge of Director M. A. Scovell, of Kentucky; and bronze medals to the sections of home economics, in charge of Miss Maude Gilchrist, of Michigan, and of rural economy, in charge of Professor F. W. Card, of Rhode Island.

Awards were also made to institutions represented in the exhibit as follows: Grand prizes to the Alabama, Connecticut State, Illinois, Louisiana, Minnesota, Missouri (2) New York State, Pennsylvania and Wisconsin experiment stations; to the agricultural colleges of Missouri and Wisconsin universities; to the College of Mining, University of California; to the bureau of education, and to the office of experiment stations, Department of Agriculture. Gold medals to the Arizona, California, Connecticut State, Connecticut Storrs, Maine, New Jersey, New York State (3), Tennessee, Washington and Wyoming (2) Experiment Stations; to the Colleges of Agriculture at Cornell University, the universities of Illinois, of Minnesota, of Missouri and of Ohio, and Purdue University; the agricultural colleges of Michigan, North Dakota, Texas, Utah and Virginia; to the Massachusetts Institute of Technology and the engineering departments of the Mississippi, New Mexico and South Carolina Agricultural Colleges, and the Hampton Normal and Agricultural Institute. Silver medals were awarded to the Arkansas, Connecticut State, Hawaii, Kentucky, Maine, New Jersey, New Mexico, New York Cornell, North Carolina, Utah, Vermont (2) and Wisconsin (2) Experiment Stations; to Hampton Normal and Agricultural Institute; the Kansas (2), Michigan, Rhode Island and Utah agricultural colleges; and the agricultural colleges at the Universities of Maine, Minnesota, Missouri, Ohio and Wisconsin; the Massachusetts Institute of Technology, mining department of Nevada State University, department of architecture of Cornell University, Sibley College of Cornell University and Pennsylvania State College. And awards of bronze medals were made to the Connecticut state, Connecticut Storrs, Florida, Hawaii, Kentucky, Louisiana, Missouri, New York state (2) and Pennsylvania experiment stations, and the office of experiment stations; to the agricultural colleges of South Carolina (2), Iowa, Kansas, Massachusetts, Michigan and Oregon; the agricultural colleges connected with Cornell University, and the universities of Illinois, Maine, Minnesota, Missouri, Nebraska, Ohio (2), Purdue (2), Wisconsin and Wyoming; to the Massachusetts Institute of Technology, and the engineering department of the University of Tennessee.

The exhibit was made with a special appropriation from congress of \$100,000, which was expended under the general supervision of the government board. Its preparation was in charge of a committee appointed by the Association of American Agricultural Colleges and Experiment Stations, to whose labors, supported by the generous collaboration of the colleges and stations, its success was due. It was by far the most comprehensive and typical exposition of the work of instruction and research at these institutions which has ever been brought together, and its location in the Palace of Education secured for the agricultural departments of the colleges and the experiment stations a recognition of their place among the great educational efforts of It impressed itself upon intelthe nation. ligent observers as a worthy and consistent exposition of certain features of education and

research in the relations of science to agriculture and the mechanic arts.

E. W. Allen.

OFFICE OF EXPERIMENT STATIONS, U. S. DEPARTMENT OF AGRICULTURE.

## SCIENTIFIC NOTES AND NEWS.

PROFESSOR ERNEST RUTHERFORD, of McGill University, has been appointed Silliman lecturer at Yale University for 1905. The previous Silliman lecturers have been Professor J. J. Thomson, of Cambridge University, and Professor Charles S. Sherrington, of Liverpool University.

THE newly elected officers of the American Physiological Society are: *President*, Professor Wm. H. Howell, of Johns Hopkins University; *Secretary*, Professor Lafayette B. Mendel, of Yale University; *Treasurer*, Professor Walter B. Cannon, of Harvard University. Additional members of the council are Professor R. H. Chittenden and Dr. S. J. Meltzer.

At the seventh biennial convention of the Society of the Sigma Xi, held in Philadelphia, December 29, 1904, the following officers were elected: *President*, Professor Edward L. Nichols, Cornell University; *Vice-President*, Professor T. H. Macbride, Iowa State University; *Recording Secretary*, Professor William Trelease, Missouri Botanical Garden; *Corresponding Secretary*, Professor H. B. Ward, University of Nebraska; *Treasurer*, Professor L. M. Underwood, Columbia University.

THE Royal Danish Geographical Society has conferred its gold medal on Captain Robert F. Scott, R.N., the leader of the recently returned Antarctic Expedition.

THE council of the Geological Society of London has this year made the following awards of its medals and funds: The Wollaston medal to Mr. J. J. H. Teall, director of the Geological Survey of the United Kingdom; the Murchison medal to Mr. E. J. Dunn, director of the Geological Survey of Victoria; the Lyell medal to Dr. Hans Reusch, director of the Geological Survey of Norway; the Bigsby medal to Dr. J. W. Gregory, lately professor at Melbourne and now professor of geology in Glasgow University; the Wollaston fund to Mr. H. H. Arnold Bemrose for his researches in the geology of Derbyshire; the Murchison fund to Mr. H. L. Bowman for his mineralogical work, while the Lyell fund is divided between Mr. E. A. N. Arber, in recognition of his work in paleobotany, and Mr. Walcot Gibson for his geological work in the Midland Counties of England.

PRESIDENT ELIOT, of Harvard University, has been elected a corresponding member of the Academy of Moral and Political Sciences of the Institute of France.

SIR NORMAN LOCKYER has been elected a corresponding member of the St. Petersburg Academy of Sciences.

DR. GEORGE A. DORSEY, of the Field Columbian Museum, and Dr. Alex Hrdlicka, of the U. S. National Museum, have been elected corresponding members of the Society of Anthropology of Paris.

SIR JOHN BURDON-SANDERSON, who recently retired from the regius professorship of medicine at Oxford, celebrated his seventy-sixth birthday on December 21.

MR. JOHN F. CROWELL, director of the Buffalo Botanical Garden, will visit Panama during February and March as an agent of the New York Botanical Garden, which will undertake botanical explorations in cooperation with the engineers of the Panama Canal Commission.

REUTER'S AGENCY is informed that Mr. J. J. Harrison has left London for Khartum on his second expedition to the Congo. He intends to travel along the west side bordering on the Nile and Ituri district. He hopes to be able to secure an okapi in the forest region. Mr. Harrison has obtained leave in Brussels to bring home some pygmies.

Associate Professor Frederick Starr, of the Department of Sociology and Anthropology, of the University of Chicago, returned on December 28 from three months in Mexico. It was his fifteenth journey to that country.

PROFESSOR RUSSELL H. CHITTENDEN, director of the Sheffield Scientific School of Yale University, has just announced the make-up of