

the whole number will be still further increased in later years when this deficiency has been repaired. The total number for whom permanent provision is made is about 190, and no doubt this *maximum* will be reached before many years have elapsed.

In the election of scholars the only qualifying test in scholarship fixed by the trustees is the Oxford Responsions standard. An exception to this rule has hitherto been made in the case of South Africa and one of two Australian colonies; but after this year the test will be everywhere applied, except in Germany, where the selection of scholars was assigned by Mr. Rhodes to the Emperor himself. In all other cases a local committee of selection, usually composed of educational experts and sometimes of a school or university faculty, completes the election from among the candidates who have passed the preliminary test; and these committees are directed to select on the basis suggested by Mr. Rhodes. They are free to apply for purposes of comparison any further educational or other test they think desirable beyond that exacted by the trustees.

For 1904 five states or territories of the American Union failed to qualify a candidate on the Responsions standard, while no fewer than ten failed in 1905. The states thus failing in 1905 were Alabama, Arizona, Arkansas, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah and Wyoming, mostly, it will be observed, the newer western states. Among the colonies Rhodesia has had some difficulty in filling up its annual quota of three scholars, and one scholarship is vacant this year. The organization of secondary schools has barely begun there, and in the meantime Rhodesian boys studying in England, but whose parents are spending their lives in the colony, have been considered eligible. This condition will be modified with the advance of Rhodesian education. The only other colonial community which has yet failed to send a scholar is the northwestern territory of Canada, which furnished a successful candidate in 1904, but none who qualified in 1905. Fifteen American scholarships and two colonial scholarships are therefore

vacant at the present time through lack of duly-qualified scholars. When scholarships have once lapsed through failure of this kind they are not filled up in the succeeding year, but only in the regular cycle of appointment, as any other method would be unfair to prospective candidates for any given year.

THE RESEARCH LABORATORY OF PHYSICAL
CHEMISTRY OF THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY.

SEVERAL changes have taken place in the staff of the Research Laboratory of Physical Chemistry of the Massachusetts Institute of Technology. Professor W. D. Coolidge has accepted a position in the Technical Research Laboratory of the General Electric Company at Schenectady, where he will be closely associated with Dr. W. R. Whitney. To Professor Coolidge has been due in large measure the development of one of the most important lines of work in progress in the research laboratory of the institute—the investigation of the conductivity of aqueous solutions at high temperatures. This research will be continued not only by several investigators at the institute, but also by Professor Coolidge at Schenectady. Mr. Yogoro Kato, who has also been engaged on the conductivity investigation for two years, has accepted a position in the Technical High School of Tokio, where he will have charge of the work in electrochemistry. Dr. Wilhelm Böttger returns as Privatdocent to the University of Leipzig, at which he will conduct one of the laboratory courses in analytical chemistry. In place of these retiring members, the following new appointments to the research staff have been made: William C. Bray, B.A., Toronto '02, Ph.D., Leipzig '05; Guy W. Eastman, S.B., M.I.T. '04; Gilbert N. Lewis, Ph.D., Harvard; Edward W. Washburn, S.B., M.I.T., '05. Mr. Roy D. Mailey has been promoted to the position of research associate. Seven candidates for the degree of doctor of philosophy are now pursuing work in the laboratory. By them and by the regular research workers, the investigations mentioned a year ago in SCIENCE are all being continued, and one new line of work has been entered upon, namely, a study

of the hydration of salts in aqueous solutions. This subject, which constitutes one of the most important as well as one of the most difficult of the unsolved problems relating to solutions, is being attacked by two independent methods by Mr. Edward W. Washburn and Mr. Richard C. Tolman. A series of eight articles describing the researches made in the laboratory during the last two years is about to be submitted to the Carnegie Institution for publication. The research laboratory has been assisted on the financial side by a further grant of five hundred dollars from the trustees of the William E. Hale research fund, by a gift of two hundred dollars from Mr. Samuel Cabot and by one of three thousand dollars from one of the professors of the institute.

*THE AMERICAN SOCIETY OF NATURALISTS
AND AFFILIATED SOCIETIES.*

THE American Society of Naturalists and affiliated societies will meet at the University of Michigan, Ann Arbor, in Convocation week. The Central Branch of the society will meet, but we understand that the Eastern Branch will hold no meeting this year. There will meet in conjunction with the American Society of Naturalists the American Zoological Society, the American Physiological Society, the American Association of Anatomists, the Society for Plant Morphology and Physiology and the American Society of Bacteriologists, the latter society having suspended its rules of meeting only in the eastern states.

THE American Psychological Association and the American Philosophical Association, which have in recent years met with the Naturalists, will meet this year at Harvard University. On this occasion Emerson Hall, the new building for philosophy and psychology, will be formally opened.

*THE NEW ORLEANS MEETING OF THE
AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE.*

THE people of New Orleans have organized local committees to take charge of the arrangements for the meeting of the association, which

will be held from December 29 to January 4. The permanent secretary writes from New Orleans that the local committees are enthusiastic and will work hard for the success of the meeting. That it will be an important and successful meeting is assured, provided the attendance is satisfactory.

The question of railroad rates has not as yet been thoroughly settled, but it seems likely that a one-fare rate will be secured from most of the railroad associations. The opportunity, therefore, to members of the association (especially from the northeast) to visit New Orleans, will be an exceptional one. New Orleans is a most interesting city on account of its historical associations, its cosmopolitan population, its extraordinary natural advantages, the wonderful flora of its parks and surroundings and the many important industries which center at the mouth of the great waterway of the United States.

Members who have not visited New Orleans should take advantage of this chance and members who are familiar with the city will gladly greet the opportunity to revisit it. Nearly all of the sections and affiliated societies will be accommodated in the lecture halls of the Tulane University (which is the state university of Louisiana) with new and well-equipped buildings. It is likely that the meeting of the Social and Economic Section will be held in the board of trade rooms in the central part of the city. The university itself is within easy access of the large hotels by trolley, the time occupied in the journey being about twenty-five minutes. The St. Charles Hotel has been chosen as hotel headquarters and promises of low rates to members are also made by the Grunewald, Cosmopolitan and other hotels. It will be well for members to write well in advance and engage rooms.

The honorary president of the local committee will be President E. B. Craighead, of the Tulane University. The executive president will be Professor George E. Beyer, of Tulane University; secretary, Henry M. Mayo, of the New Orleans Progressive League, and treasurer, Mr. Clarence F. Low, of the Liverpool, London and Globe Insurance Company. The subcommittees are formed as follows: