usual potentialities for the development of a future continuous supply of forest products; and

WHEREAS, This region is blessed with precious international historic values, rare scenic qualities and unique recreational facilities within easy reach of one hundred million residents of both Canada and the United States; and

WHEREAS, This area affords an unusual opportunity to preserve, perpetuate, restock and increase various species of wild life of invaluable economic and esthetic importance to both nations: and

WHEREAS, Within this region two neighboring areas with similar public purposes were set aside by the respective governments in 1909 and designated, respectively, as the Quetico Provincial Park and the Superior National Forest; and

WHEREAS, Citizens of the friendly Province of Ontario have invited the cooperation of our people in protecting and augmenting the public values of this forested lakeland region; and

WHEREAS, Legislation seeking to develop a uniform plan of treatment and protection for this entire region will be of inestimable value to both Canada and the United States and will expedite the fruition of ideals and plans which the Webster-Ashburton treaty solemnly affirmed and for which the Quetico Provincial Park and the Superior National Forest were set aside; and

WHEREAS, Pending final and definite word as to the wishes of the Province of Ontario and subsequent negotiations, with the consent of the province, of a treaty between the Dominion of Canada and the United States providing for uniform treatment of the entire region, and pending further studies and final determination of desirable boundaries for the Superior National Forest and its future uses, immediate steps should be taken to extend and better protect the Superior National Forest and to protect the lands and waters in and adjacent to that portion of the area herein designated, lying within or contiguous to the United States, for the several purposes hereinbefore enumerated: therefore,

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled: That all public lands of the United States situated north of township 60 north in the counties of Cook, Lake and Saint Louis, in the State of Minnesota, including the natural shore lines of Lake Superior and of the lakes and streams forming the international boundary so far as they lie within this area, are hereby withdrawn from all forms of entry or appropriation under the public land laws of the United States, subject to prior existing legal rights initiated under the public land laws, so long as such claims are maintained as required by the applicable law or laws.

## THE ECLIPSE OF MAY 9, 1929

THE Manila correspondent of the New York Sun writes that a total eclipse of the sun will occur there on May 9, 1929, and the Hamburg Observatory has already arranged to have an observing party in the Philippines on that date. It is expected in Manila that other parties will come from the United States and Europe.

Full information was forwarded by Father Miguel Selga, S.J., director of the Philippine Weather Bureau and the Manila Observatory, to the astronomers' meeting in Leyden. Two factors warrant the expense of sending parties, Father Selga says; first, the great probability of clear weather, and second, the duration of the total eclipse over accessible and convenient observation points.

The plane of total eclipse extends across the middle islands of the Philippines, the Visayan group, through the tenth and two thirds of the eleventh degrees of north latitude. On the western coast the duration of the total eclipse over this area will be 3 minutes 54.5 seconds; this in the vicinity of Dumaran Island, Palawan. On the eastern coast at good vantage points the duration will range between 3 minutes 42.3 seconds to 3 minutes 28.7 seconds. The longest duration of any eclipse is only about 7 minutes and such eclipses are infrequent, even speaking astronomically.

There will be places outside the Philippines, in Sumatra and Siam, for example, where the eclipse may also be observed, and while Father Selga is little familiar with the accommodations that may be found there, he thinks some of the foreign parties may choose those points. He believes, however, that all American parties should choose the Philippines, to which end he has prepared the bulletin of information on living accommodations, sites, etc., appended to his scientific data.

He says that under no circumstances should astronomers be discouraged from trying to see the eclipse of May 9, 1929, in the Philippines. He has traced back the weather on May 9 at four convenient observation points during a period of twenty-five years and finds that the chances are very great that May 9 next year will be dry and clear. The date is prior to the change of the monsoon, and, while at that season of the year there are nearly always some clouds floating about during the day, at the afternoon hour of the eclipse the sky is almost certain to be clear. He selects eastern coast points, fronting the open sea. If there are clouds they will be hovering around the mountains to the west.

## A CENTRAL STATION FOR EXPERIMENTS IN MINING

THE Senate Committee on Mines and Mining has been asked by the Chamber of Commerce and Commercial Club of Salt Lake City to endeavor to bring about the enactment of legislation to provide increased appropriations for maintenance of existing mining experiment stations throughout the United States and to establish a central experiment station at Salt Lake City.

It is suggested that legislation be enacted as follows:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled: That there is hereby authorized to be appropriated, out of any money in the treasury not otherwise appropriated, for the expenses of mining experiment stations of the Bureau of Mines, for the fiscal year ending June 30, 1929, the sum of \$327,000, in addition to the sum of \$173,000 already appropriated, making a total of \$500,000 for the fiscal year ending June 30, 1929; and the sum of \$500,000 for each fiscal year thereafter.

**Provided:** That of the amount appropriated for the fiscal year 1929, \$350,000 shall be expended for the maintenance of the seven existing mining experiment stations at Tuscaloosa, Ala.; New Brunswick, N. J.; Minneapolis, Minn.; Rolla, Mo.; Salt Lake City, Utah; Tucson, Ariz., and Seattle, Wash.; \$50,000 shall be used for the establishment and maintenance of a mining experiment station at Berkeley, Calif.; \$50,000 shall be used for the establishment and maintenance of a mining experiment station at Berkeley, Calif.; \$50,000 shall be used for the establishment and maintenance of a mining experiment station at Reno, Nev., and \$50,000 shall be used for the establishment and maintenance of a mining experiment station at Reno, Nev., as authorized by the Act approved March 3, 1915 (U. S. C., Title 30, Section 8);

That the secretary of the treasury be, and is hereby, authorized and directed to enter into a contract or contracts for the erection and completion of a plant suitable and necessary for the investigations of the Bureau of Mines in Salt Lake City, Utah, the said plant to be placed on a site acceptable to the secretary of the treasury and donated to the United States Government for that purpose; the said plant to cost, complete, with the necessary railroad sidings, plumbing, lighting, heating, ventilating and other general service equipment, not to exceed the sum of \$1,000,000.

## THE INTERNATIONAL COMMISSION ON ILLUMINATION

THE Bureau of Standards is one of seven organizations represented in the United States National Committee of the International Commission on Illumination, the others being the American Gas Association, the American Institute of Electrical Engineers, the Illuminating Engineering Society, the National Electric Light Association, the American Physical Society and the Optical Society of America. There are similar national committees in nine other countries—Austria, Belgium, France, Germany, Great Britain, Holland, Italy, Japan and Switzerland.

Plans are now practically complete for the seventh plenary session of the commission. This will be the first meeting of the commission on this side of the Atlantic and is being made the occasion for an International Illumination Congress, including a tour for foreign delegates to New York, Boston, Philadelphia, Washington, Cleveland, Chicago, Detroit and Niagara Falls, attendance at the annual convention of the Illuminating Engineering Society of the United States at Toronto, Canada, and special sessions of the commission at Saranac Inn, New York, from September 22 to 27.

The bureau is particularly concerned with projects of the commission affecting standard methods of photometry, international standards of candle-power, specifications for colored signal glasses and regulations for the lighting of schools and factories. Reports on these subjects have been prepared for presentation at the commission sessions.

## THE SOCIETY OF CHEMICAL INDUSTRY

THE Society of Chemical Industry is holding this week in New York an international meeting of British and American chemists arranged by the New York Section of the Society of Chemical Industry. A group of chemists and chemical engineers from England arrived in New York on Monday, September 3, and American members of the society met their British colleagues. An address of greeting was made by the chairman of the American Section, Mr. L. V. Redman.

Among the British visitors expected at the New York meeting are: Francis H. Carr, president of the Society of Chemical Industry; Sir Alexander Gibb, president of the British Institution of Chemical Engineers; Professor J. Thorpe, president of the British Chemical Society; Dr. J. A. Cranston, of the University of Glasgow; J. A. Reavell, vice-president, Institution of Chemical Engineers; Professor Hinchley, the Honorable Secretary of the Institution of Chemical Engineers, and Dr. R. T. Colgate, chief chemist of the Huntley and Palmer Company, Reading, England.

Technical meetings were to be held at the Chemists Club, 52 East 41st Street, on Tuesday, September 4, and Thursday, September 6. There was included the presidential address by Mr. Francis H. Carr. On Wednesday, September 5, the visitors were escorted by their American colleagues on a trip visiting some of the important chemical industries in New York and its neighborhood. Friday was taken up by a trip to West Point. The annual banquet of the American Section of the Society of Chemical Industry, at which the foreign visitors were guests of the Americans, was held at the Hotel Commodore on Thursday evening.

On Tuesday evening, September 4, Dr. Robert A. Millikan, of the California Institute of Technology, received the "Messel Medal" of the society, in honor of his work on the structure and relations of atoms.