

nickel, eight cc. of nitric acid of sp. gr. 1.3, total dilution 200 cc., and a current that gave 0.4 cc. of electrolytic gas per minute. The deposit of bismuth weighed 0.0718 gram. It did not show the presence of any other metal upon examination. In this separation there was no discoloration of the anode. Subsequent experiments were equally successful in the separation, although in several of them the anode was slightly discolored; its weight, however, was not increased more than 0.0004 gram.

We may add that the bismuth was deposited upon platinum dishes weighing from sixty to seventy grams. The metal deposit was, in all those trials that approached success, adherent and regular in appearance. It was washed with warm water, alcohol, and ether. The strength of current indicated in all the experiments given in this communication were with voltmeter and electrolyte in circuit.

While the separation of bismuth from the various metals mentioned is possible if the conditions we have worked out are preserved, we cannot fail to observe that the solution in nitric acid is not nearly so satisfactory as that in which the metals exist as sulphates together with free sulphuric acid. With this last solution Smith and Knerr¹ obtained very excellent results.

CHEMICAL LABORATORY OF
THE UNIVERSITY OF PENNSYLVANIA,
APRIL 27, 1893.

THE WORLD'S CONGRESS AUXILIARY OF THE WORLD'S COLUMBIAN EXPOSITION.

[DEPARTMENT OF SCIENCE AND PHILOSOPHY. GENERAL DIVISION OF
CHEMISTRY].

THE committees in charge of the congress have selected Monday, August 21, as the date of the opening of the congress of chemists to be held in connection with the Columbian Exposition, in Chicago.

The chairman of the committee appointed for co-operation in this congress by the American Association for the Advancement of Science, Chemical Section, is Prof. Ira Remsen, Johns Hopkins University, Baltimore, Md. The chairman of the committee appointed by the American Chemical Society is Dr. Wm.

¹ *Am. Chem. J.*, 8, 206.

McMurtrie, 106 Wall street, New York, N. Y. The chairman of the committee of the World's Congress Auxiliary, on Congress of Chemists, is Prof. John H. Long, 2421 Dearborn street, Chicago, Ill. The various committees have organized by selecting Dr. H. W. Wiley, chief chemist of the Department of Agriculture, Washington, D. C., as chairman, and Prof. R. B. Warder, Howard University, Washington, D. C., as secretary.

The work of the congress has been divided into ten sections and a temporary chairman has been selected for each section, as follow :

Agricultural Chemistry, H. W. Wiley, Department of Agriculture, Washington, D. C.; Analytical Chemistry, A. B. Prescott, Michigan University, Ann Arbor, Mich.; Didactic Chemistry, W. E. Stone, Lafayette, Ind.; Historical Chemistry and Bibliography, H. C. Bolton, University Club, New York; Inorganic Chemistry, F. W. Clarke, Geological Survey, Washington, D. C.; Organic Chemistry, I. Remsen, Johns Hopkins University, Baltimore, Md.; Physical Chemistry, R. B. Warder, Howard University, Washington, D. C.; Physiological Chemistry, V. C. Vaughan, Michigan University, Ann Arbor, Mich.; Sanitary Chemistry, H. Leffmann, 715 Walnut street, Philadelphia, Pa.; Technical Chemistry, Wm. McMurtrie, 106 Wall street, New York, N. Y.

General and special invitations have already been issued to foreign chemists and many replies have been received, indicating a large attendance of chemists from abroad at the congress.

The following distinguished foreign chemists have already promised to present papers to the congress and the list will without doubt be increased many fold before the date of the opening :

Prof. L. G. N. Ernest Milliau, Marseilles, "On Standard Methods of Oil Analysis;" Mr. Farnham Maxwell Lyte, London, "On the Production of Chlorine;" Mr. H. Droop Richmond, London, "On the Accuracy of the Methods of Analyses of Dairy Products;" Mr. Pierre Manhes, Lyon, subject to be announced later; Prof. B. Tollens, Göttingen, "Researches on the Synthesis of Polyatomic Alcohols;" Prof. Ferd. Tiemann, Berlin, subject to be announced later; Mr. H. Pellet, Brussels, "On the Methods of Determining the Percentage of Sugar in Beets;" Mr. H. R. Procter, Leeds, "On the Examination of Tanning Materials;" Mr. O. Kemna, Antwerp, "On the Purification of Water;" Mr. Otto Hehner, London, subject to be announced; Prof. C. A. Bischoff, Riga, subject to be announced; Prof. G. Lunge, Zürich, "On the Method of Teaching Technological Chemistry at Universities and Polytechnic Schools;" Prof. Ludwig Mond, Rome, subject to be announced; Prof. W. N. Hartley, Dublin, subject to be announced; Prof. R. Biedermann, "The influence of Potent Laws on the Development of Chemistry."

This circular is especially intended to reach American chemists,

inviting them to take an active interest in the congress and to be present, or if that is not possible to send papers on some of the subjects indicated in the classification above mentioned.

Chemists specially interested in each of the subjects for discussion are invited to correspond with the chairmen of those sections in regard to the character of the work and of the papers expected. All chemists who expect to read papers at the congress are earnestly requested to send the titles thereof to the chairman of the General Committee, Dr. H. W. Wiley, Department of Agriculture, Washington, D. C., on or before the first day of August. It will be difficult to arrange for a position on the program for the titles of any papers which may be received after that date. The time required for each paper should also be noted so that daily programs can be provided for in advance. In all cases the place of honor on the program will be given to foreign contributors. Papers or addresses can be presented in English, French, or German as the author may select, but where convenient the English language will be preferred.

The committee desires to ask those chemists who propose to attend the World's Congress to make an excursion during the week previous to the meeting to Madison, Wis., for the purpose of attending the meetings of the Chemical Section of the American Association for the Advancement of Science. This will not only be a delightful excursion, as Madison is distant only about four hours from Chicago, but will also enable the participants in the congress to make the acquaintance of the scientific men of the United States and other countries, engaged not only in chemical, but also in other branches of science.

Other attractions in Chicago will be meetings of different chemical societies. Among these may be mentioned the American Chemical Society, the annual meeting of which will begin August 21, and the Association of Official Agricultural Chemists, which will hold its annual meeting in Chicago, beginning Thursday, August 24. The sessions of these societies will be so ordered as not to conflict with the business of the congress. The American Pharmaceutical Association, which has a strong chemical section, will also meet in Chicago at or near this time. The American Institute of Mining Engineers will also hold its

meeting in Chicago beginning on Monday, July 31. It is thus seen that this occasion will bring together the active workers in all branches of chemical science in the United States and enable American chemists to make the acquaintance of distinguished co-laborers from abroad, and the visiting chemists to meet the largest possible number of their fellow-laborers here.

Every possible arrangement will be made for the convenience and comfort of visitors. Intending participants in the congress should address Prof. John H. Long, 2421 Dearborn street, Chicago, Ill., for information in regard to quarters and other accommodations. On arrival in Chicago, visitors should report at once to the Congress Headquarters, Art Institute Building, Lake Front and Adams Street, where full information will be given them in regard to matters connected with their personal comfort. Wherever possible, intending visitors should write a few days before their arrival to the address above mentioned in order that special provision may be made for their comfort when they reach Chicago.

In regard to the climate of Chicago in August much can be said in praise. While warm days may sometimes be expected the situation of the city on the edge of a vast open prairie extending for nearly a thousand miles north and west without a break secures even in the hottest day refreshing breezes which cool the atmosphere and mitigate the heat of summer. The lake breezes also do much to render the climate moderate. No one need be deterred from attending the congress on account of fear of severe heat.

It is especially urged that all chemists who intend visiting the World's Fair take this occasion to do so, by which they can combine the pleasure of visiting the Exposition with the benefit derived from attendance at the congress. To American chemists an especial appeal is made to be present for the purpose of welcoming our foreign visitors and showing them the progress of chemical science in the United States.

HARVEY W. WILEY,

Chief of Chemical Division, U. S. Department of
Agriculture, and Chairman of the Joint Com-
mittees on the World's Chemical Congress.