istry, McGill University, Montreal, Canada, where, in collaboration with Prof. Harold Hibbert, he examined the structure of certain bacterial polysaccharides. He went to the United States in 1930 to become a research assistant to Dr. P. A. Levene on the staff of the Rockefeller Institute for Medical Research, New York, and in 1926 was promoted to the position of research associate. Dr. Carlson was born in Lincoln, Nebraska, in 1913. He pursued his early professional education at the University of Nebraska, from which he obtained the degree of B.S. in chemistry in 1933 and the degree of M.S. in the same field in 1935. A little more than a year was spent at the Iowa State College in biophysical chemistry, after which he transferred to the Ohio State At the latter institution he held a research fellowship in the Industrial Research Foundation, receiving the degree of Ph.D. in March 1939 with a thesis entitled "Physiological Studies on the Synthesis of Dextran by Bacteria of the Genus Leuconostoc".

## Mathematical Tables

The Works Progress Administration of the City of New York is undertaking extensive computation of mathematical tables. The work is sponsored by Dr. L. J. Briggs, director of the National Burcau of Standards, and is intended to give employment to clerical workers in New York. Several tables, including Bessel functions for complex arguments, exponential and trigonometric integrals, and the error function are completed or in active progress. Of the tables under consideration, the most noteworthy is a table of elliptic functions for complex arguments so designed as to cover a period parallelogram in each case.

## Recent Sunspots

Two very large groups of sunspots have recently appeared. The first of these was a big single spot with companions increasing in size; the second group comprised a complex stream. Positions and areas are as follows:

Date on disk	Central meridian	Latitude	Maximum
	passage		area
Aug. 23-Sept. 7	Sept. 1.0	15° S	3000
Sept.4-Sept. 17	Sept. 10.5	15° S	2500

The areas are corrected for foreshortening and are expressed in millionths of the sun's visible hemisphere. An extensive bright eruption associated with the second group was observed at Greenwich on September 8 from 11h. 35m. until about 12h. 30m., the maximum being at 11h. 43m. U.T.

## Announcements

The printed addresses prepared in connexion with the Dundee meeting of the British Association, which include the presidential address by Sir Albert Seward, the addresses of sectional presidents, the first British and American Association Lecture, by Dr. Isaiah Bowman, on "Science and Social Pioneering", and Sir Richard Gregory's address as chairman of the Division for the Social and International Relations of Science entitled "Contacts of Religion and Science", can be obtained, temporarily, from the British Association, Down House, Downe, Farnborough, Kent, price 6d. each.

Owing to the outbreak of war, it has been necessary to postpone indefinitely the general discussion arranged by the Faraday Society on "The Electric Double Layer", which was to have been held September 25-27. It is at present hoped to publish the papers in an early issue of the Transactions.

THE National Emergency Blood Transfusion Service announces that registered blood donors in London and Greater London will be notified when they are required, and until then they need take no action. Donors having group O blood will be called upon first for blood to be stored for national use.

THE Joint Tuberculosis Council will hold a course in radiology at Shire Hall, Castle Hill, Cambridge, during September 20-22. A course in the diagnosis and treatment of pulmonary tuberculosis will be held at the Tuberculosis Office, 352 Oxford Street, Manchester, during October 10-14. Further information can be obtained from Dr. J. B. McDougall, Preston Hall, near Maidstone.

PROF. ALBRECHT SCHMIDT OF Frankfort-on-Main and Prof. Johannes Stark, of the Physikalisch-Technischen Reichsanstalt, Berlin-Charlottenburg, have been awarded the Goethe Medal for Art and Science, and Dr. Karl Frik, director of the Werner Siemens Institute for Radiology in the Robert Koch Hospital in Berlin, has been awarded the Rieder Medal by the German Röntgen Society.

Dr. George W. Corner, professor of anatomy, University of Rochester School of Medicine, New York, has been appointed editor of the *American Journal of Anatomy* in succession to the late Dr. Charles R. Stockard.

THE issue of the Medical Journal of Australia for July 1 is a silver jubilee number containing articles on the progress of medicine, surgery, preventive medicine and medical journalism during the last twenty-five years.

An institute for research in rural hygiene has recently been set up in a farmhouse at Lichtenstein in Bavaria, the birthplace of Max von Pettenkofer, the founder of experimental hygiene in Germany.

The seventh International Congress on Rheumatism will be held in New York, Philadelphia and Boston during June 1-10, 1940. Further information can be obtained from the Ligue internationale contrele rhumatisme, Keizergracht 489, Amsterdam.

According to official statistics, the population of Japan on October 1, 1938, was 72,227,700, or 969,000 more than in the previous year. Tokyo is the most populous city with 6,457,000 inhabitants.