ing the tablet were two sons of Sir Joseph Hooker (neither of whom went into scientific work), and the present director and assistant director of Kew.

The inscription on the tablet reads as follows:

This tablet records the association with Halesworth of Sir William Hooker and of his son, Sir Joseph, who in succession became the directors of the Royal Botanic Gardens, Kew. Sir William Hooker lived in Halesworth from 1809 to 1820, and here Sir Joseph was born in 1817. Erected, 1930.

Those attending the exercises visited the house and room where Sir Joseph was born.

C. STUART GAGER

INTERNATIONAL SOCIETY OF EXPERIMENTAL PHONETICS

THE first Congress of the International Society of Experimental Phonetics was held at Bonn from June 10 to 15, 1930. Over 100 people attended. Addresses and demonstrations referring to all parts of the science of speech were presented.

Dr. Gutzman (Berlin) gave a striking demonstration of a Röntgen speech film in which the movements of the larynx, hyoid bone and tongue appeared with great clearness. This will shortly be combined with a speaking film so that the movements of the organs can be seen and the speech be heard at the same time. The possibilities of this method for the investigations of speech from a linguistic point of view can not be overestimated. It is also adapted to purposes of instruction, for example, of the deaf.

W. Lenk (Vienna) demonstrated a speech film apparatus suitable for laboratory use in scientific investigations. The speech may be recorded not only in the constructed form necessary for reproduction but with lengthened waves adapted to measurement. Dr. Moses (Cologne) showed that speech records vary according to the character of the person. Professor Scripture (Vienna) gave a presentation of the puff theory of the vowels. F. Janvrin (London) presented the results of an experimental analysis of a record of verse spoken by John Galsworthy himself.

Professor Isserlin (Munich) discussed aphasia; Dr. Berger (Münster) presented phonetic investigations of the Lombard Test; Dr. Kaiser (Amsterdam) showed registrations of pathologically altered voices. Dr. Hegedüs (Gödöllö) showed curves from experimental investigations on the melody of Hungary. Dr. Peters (Tartu) presented an analogous result from Esthonia.

In a paper on speech atoms and speech molecules Professor Scripture demonstrated that speech consists of a series of minute portions which for the purpose in hand can be treated as constant; these he termed "speech atoms." The combination of speech atoms into larger units such as words, sentences and so on he termed "speech molecules," according to the definition that a speech molecule is any portion of speech spoken as a unit. He showed that speech atoms influence one another when combined into molecules; the forces that act were termed "intramolecular forces." The fact that a speech atom in the latter part of a molecule can influence atoms that preceded it was considered to be a proof that each molecule was present as a whole at some time previously in the unconscious mind.

The exhibition included various oscillographs, film apparatus, graphic registration apparatus, harmonic analyzers and numerous other devices. An account of the proceedings will be published as a separate volume.

At a meeting of the council, the secretarial bureau was definitely located at 73 Welbeck Street, London, W.1, and arrangements were made to send the following publications free of charge to the members: *Zeitschrift für Experimentalphonetik, Bulletin of the International Society of Experimental Phonetics, Bulletin de la Société Internationale de Phonétique Expérimentale* and *Sprachneurologische Mitteilungen.* The membership fee was fixed at 10 shillings per annum.

Professor Hugo Pipping (Helsingfors) has been made an honorary member of the society.

THE INTERNATIONAL HORTICULTURAL CONGRESS

AT the last session of the International Horticultural Congress, on August 15, Dr. M. J. Sirks, honorable secretary, presented the report of the committee on nomenclature, whose resolutions included the following:

A list of names valid at the time it is made should be drawn up and should be good for, say, six years. It is imperative that this list should follow strictly the rules of botanical nomenclature so far as species and botanical varieties are concerned, and that the names of plants generally accepted as conformable to the rules at the time of the making of the list should alone be used. All personal preferences and individual usage must be sunk if not in conformity with these rules. This list should be used universally in catalogues, horticultural literature, and gardens for a fixed period. An international committee should be appointed to revise this list in the light of botanical research at intervals of six years. Such alterations as are admitted at these revisions should be shown thereafter in catalogues for the next period with the superseded name as synonym.

It was added that so far as possible names of horticultural varieties should consist of a single word; the employment of not more than three words is per-

mitted as a maximum. Varietal names already in use for one variety of one kind of plant should not be used again for another variety of that kind, even though they may be attached to a different species.

The committee also decided that where personal names are used to designate varieties the prefixes, Mr., Mrs., Miss and their equivalents should be avoided; that excessively long names and words difficult to pronounce should be avoided; and that the articles "A" and "The" and their equivalents should be avoided in all languages where they do not form an integral part of the substantive—*e. g.*, Colonel, not The Colonel; Giant, not The Giant; Bride, not The Bride. Existing names in common use, it was stated, should not be altered to conform to these rules, but attention should be paid to them in all new names proposed.

It was suggested that the starting point for nomenclature of horticultural groups should be some recognized horticultural monograph; or an *ad hoc* list of varieties drawn up by a recognized body of specialists in the particular group; or, where such bodies do not exist, by some recognized society which shall be specially charged with the work.

SCIENTIFIC AND TECHNICAL SOCIETIES

ONE of the most outstanding phases of modern life is the banding together of those with a common interest and cause into associations and societies for mutual benefit. Scientific and technical men have not been slow to see the value of this pooling of interests, and the outcome has been the forming of hundreds of such societies with the general object of fostering, protecting and promoting the various professions represented.

The Handbook of Scientific and Technical Societies and Institutions of the United States and Canada has recently appeared in a second edition revised and considerably enlarged, presenting 793 societies and institutions in the United States devoted to science and its technologies, and 91 in Canada. The section for the United States was compiled by the Research Information Service of the National Research Council, and that for Canada by the National Research Council of Canada. Detailed indexes for both sections, giving the subjects covered by the societies, their research funds, publications, changes of names, etc., make the book usable from many different points of view. In the body of the publication, the secretary's name and address, number of members, times of meetings, dues, etc., give a fairly complete summary of the activities and purposes of the societies.

The purpose of the book, as stated in the preface, is "to present a ready guide to those scientific and technical societies, associations and institutions in the United States and Canada which contribute to scientific knowledge or further research through their activities, publications or funds." The tendency has been towards a broad interpretation of these requirements, several small and, perhaps from a scientific standpoint, less important societies having been included in an attempt to cover the ground as thoroughly as possible. The emphasis, in fact, is frankly on making the publication inclusive rather than exclusive.

Those who are looking for information on university or governmental organizations will not find it here. A very few outstanding bodies, such as the Smithsonian Institution, the National Advisory Committee for Aeronautics, the Scripps Institution of Oceanography, have been included as having more than the usual university or governmental interests. The general rule, however, has been to omit organizations directly under such control.

CELEBRATION BY THE MISSOURI BOTANICAL GARDEN

THE three hundredth anniversary of the first use of Cinchona will be celebrated at the Missouri Botanical Garden, St. Louis, on Friday and Saturday, October 31 and November 1, 1930.

The program opens at 10 o'clock with a trip through the conservatories, chrysanthemum show, and an exhibition of books, pictures, crude materials and drugs pertaining to Cinchona.

The address of welcome, at 11:30, will be given by Dr. George T. Moore, director of the garden. This will be followed by a symposium on the history of Cinchona; the speakers and subjects being as follows: "The Drug," by Professor Leo Suppan, St. Louis College of Pharmacy; "The Chemical," by Dr. Edward Kremers, University of Wisconsin; "The Medicinal Use," by Dr. George Dock, Pasadena, California.

At one o'clock there will be a luncheon at the garden followed by lectures at two o'clock on: "The Cinchona Industry of Java," by Dr. M. Kerbosch, director, Government Cinchona Estate and Cinchona Experimental Station, "Tjinjiroean," Pengalengan, Java; "The Pharmaceutical Preparations of Cinchona," by Dr. Wilbur L. Scoville, Detroit; "Minor Alkaloids of Cinchona Bark," by Dr. Frederic Rosengarten, Philadelphia; "The Cinchona Alkaloids in Medical Science," by Dr. Torald Sollmann, Western Reserve University, Cleveland, and "The Present Conception of the Action of Quinine in Malaria," by Dr. Kenneth F. Maxcy, University of Virginia.

The banquet, given by the trustees, to be held at