approximately. Other dates for summer are from two to five weeks earlier and the dates for winter from three to five weeks earlier. Consequently the "popular" definition represents the facts for this Republic for better, and even that overestimates the lag for the northern provinces.

BERNHARD H. DAWSON

LA PLATA,
ARGENTINA

QUOTATIONS

INTERNATIONAL CONGRESSES

AMONG the many things of value lost through the world war was that informal yet efficient organization known as the International Congress of Applied Chemistry, which was responsible for holding once in three years a scientific conclave, truly international in its attendance, work and publications. Four languages were official—French, Italian, German and English. Representatives on an equal footing came from everywhere and were welcome. Latest accounts of scientific progress furnished the keynote.

How well we remember the last of these international congresses in 1912! There was the gathering in Washington in Continental Hall, where the leader of each national delegation spoke following the playing of his national anthem by the Marine Band. There was a notable afternoon with the President of the United States, the reception, the half-day of sight-seeing and then the special trains to New York where the work of the congress was conducted.

Columbia University and the College of the City of New York fairly swarmed with hundreds of chemists. The meetings, held on the sectional plan according to subject, were open to all and at stated times the congress gathered to hear the principal addresses delivered by representatives of the leading foreign countries. Here we heard the glowing account of the development of the arc process in Norway by Eyde himself. Bernthsen demonstrated that nitrogen and hydrogen could be compelled to combine to form ammonia. Perkin discoursed on synthetic rubber, and the address of Ciamician on photochemistry remains a classic. No one who saw the multitude of products of industrial chemistry which Duisberg brought from Germany will ever forget that occasion in the great hall at City College. Of course there were banquets, sight-seeing, garden parties and receptions, but they were incidental. The congress did real work, as the twenty-nine volumes now on our shelves amply testify.

The International Congress was able to function without a continuous organization and without a paid secretariat and headquarters subject to national influences. The congress decided where its next meeting would be held, selected the man to be responsible at that place and left it to him to form his own organization, work out the details and proceed. The war spoiled the congress planned for 1915, which was to have been in Russia, under the chairmanship of Dr. Walden, the eminent scientist who is the visiting lecturer at Cornell this semester.

It is history that the war gave rise to scientific organizations in several countries, and it is but natural that these should have been the ones to form a new international organization. With the effect of the war still upon them, conditions were at first imposed which prevented the adherence of the former enemy countries to the new union, but fortunately those difficulties have been remedied and any country, the science of which can be represented through a central national body, is welcome.

At first the principal business of the International Union of Pure and Applied Chemistry, which is sponsored by the International Research Council, was the creation of good will and better understandings and beginning anew the promotion of scientific work on a true international basis. Although some committees for scientific work have been formed, it is patent that the union has added little, if anything, to the sum total of scientific knowledge and has devoted itself more to questions of policy and diplomacy through social activities. This has been going on for eight years, but for the last year or two the active members of the union have come to realize that if it is to survive and perform a useful function its program must be changed.

The union is too much restricted in membership and in the number of individuals involved to accomplish its own ends. At present it brings together far too few really to hasten the day of better international relationships. If augmented in numbers it meets too often, and at the basis of it all is the neglect of its real opportunity again to make available the advantages of the world international congress. It is conceivable that some of the work of the union would require the meeting of a small group more frequently than once in three years, provided the union can be looked upon as a sort of nucleus or holding organization to which is entrusted the promotion of chemistry, international so far as the science is concerned. This involves assuming responsibility for a scientific congress to be held very much along the lines of the old international congress.

This subject from time to time has been forcefully brought to the attention of the officials of the union and was discussed at the Washington meeting when Ernst Cohen, the president, stressed the importance of organizing a truly international congress of chemistry along democratic lines. At the recent meeting in Warsaw articles providing for such congresses were pre-

sented and incorporated into new statutes of the union. These articles were passed unanimously, but according to the union's rules must be held over until the next meeting, scheduled to take place in Holland in July, 1928. In order to avoid undue delay a committee has been set up charged with the formulation of detailed plans for such international congresses. It is expected, therefore, that with the adoption of the new statutes the union will be in position to act upon the report of the committee. It seems unfortunate that there should be even a year's delay for many are becoming impatient, and it is already fifteen years since the chemists of the world have gathered together in a congress organized along democratic lines and devoted to science.

We hope that the International Union of Pure and Applied Chemistry will take leadership in this matter and make the most of its opportunities. It would be unfortunate should it be found necessary to set up any other organization. — *Industrial and Engineering Chemistry.*

SCIENTIFIC BOOKS

Handbook of the Echinoderms of the British Isles. By TH. MORTENSEN. 471 pages, with 269 text-figures. Humphrey Milford, Oxford University Press, 1927.

IT is indeed gratifying that the Oxford Press should consider it possible to undertake the publication and general distribution of a large book dealing with a group as little known to the public as are echinoderms. The paper, printing, illustrations and binding are what we have learned to expect from the Oxford Press and are all that could be desired for such a volume. As the author occupies a preeminent position as a student of echinoderms, it is not strange that this handbook is by far the best general account of the group that has ever appeared. Taken as a whole, and considering the purpose in view, the volume is beyond praise. It is attractive in appearance, natural and thoroughly usable in arrangement, reliable in content and exhaustively complete for the area included. The number and quality of the illustrations are notable and enormously enhance the value of the book. Of course, there are some errors of both omission and commission, but they are chiefly of a trivial character or involve matters where there is room for difference of opinion. One detail that invites criticism is the use of capitals for specific names, derived from personal names. This is usual among botanists, but most zoologists long since abandoned it. Dr. Mortensen has, however, clung to botanical custom.

In an interesting preface Dr. Mortensen explains the inception of the book and the reasons for including under the term British Isles an area vastly more extensive than the term usually connotes. The whole Northeastern Atlantic Ocean from Iceland to the Cape Verde Islands is included within the scope of the book so far as the deep water forms are concerned; of course, only those littoral forms are included which are known from the British Isles themselves or may reasonably be expected to occur there. Hence the book will be of service not only in Great Britain but in most parts of Western Europe and, in connection with deep sea work, far to the north, west and south of the British Isles.

The book opens with an admirable general account of echinoderms, covering in a few pages the main features of the structure, development, larval forms and distribution of the group and concluding with a key to the five well-marked classes of Recent forms. Similar treatment of each of these five classes makes up the remainder of the book, some 30 pages being given to the crinoids, 103 to the asteroids, 109 to the ophiurans, 96 to the echini and 88 to the holothurians.

The section dealing with the crinoids, or sea-lilies, treats of a dozen species, actually known from the area under consideration, each of which is figured either wholly or as regards essential parts. The artificial keys, however, include no fewer than 24 species of 20 genera, distributed in 8 families; these additional forms are those which may be expected to occur in the region. The treatment of the crinoids is notable for its freedom from unnecessary technicalities and details, while at the same time it is thoroughly modern and includes the latest available information about these relatively rare animals.

The use of the term sea-star, instead of starfish, is the first thing that catches the eye in the section dealing with the asteroids. This is a natural and sensible change and it is to be hoped that all zoologists will note and adopt it; perhaps it is too much to hope that the inaccurate term "starfish" will disappear at once from literature, but let us hope its days are numbered. The classification of the sea-stars is still in a state of flux, certain of the recognized families and orders being well-defined natural groups, while others are unsatisfactory and artificial. Dr. Mortensen has adopted as simple and usable a system as the complexity of the problem permits, recognizing 3 orders, represented in the British area by 20 families. There are 67 genera and 114 species represented in the numerous and very valuable keys, but only 47 of the species are actually known from the region concerned. Of these, 43 are well figured,