separately, there was an increase in England and Wales and a decrease in Scotland and the Irish Free State. The estimated population of England and Wales in 1929 was 39,607,000, against 39,482,000 in 1928, an increase of 125,000, or 0.32 per cent. For Scotland the figures are 4,884,000 and 4,893,000, a decrease of 9,000, or 0.18 per cent.; for the Irish Free State 2,943,000 and 2,949,000, a decrease of 6,000, or 0.2 per cent. The marriage rate for En-

gland and Wales during 1928 was 15.8 per thousand living and was the highest since 1921. The number of divorces was 3,396 against 4,018 in 1928, a decrease of 15.5 per cent. The birth rate was 16.3 per thousand of population, against 16.7 in 1928, thus continuing the steady fall of recent years. The proportion of male to female births was 1,043 to 1,000, a close approximation to that in recent and prewar years.

DISCUSSION

AN INTERNATIONAL BOTANICAL ADDRESS BOOK

At the final plenary meeting of the Fifth International Botanical Congress, Cambridge, England, August 23, 1930, it was unanimously resolved that an international address book of botanists should be prepared and published. A committee consisting of Professor L. Diels, director of the Botanic Gardens, Berlin-Dahlem, Dr. E. D. Merrill, director of the New York Botanical Garden, and Dr. T. F. Chipp, assistant director of the Royal Botanic Gardens, Kew, England, was appointed to consummate the project.

The last publication of its kind, Dorfler's "Botaniker Addressbuch," was published in 1909; the need of an up-to-date publication has been increasingly felt in late years, with the rapid growth of botanical science and the necessity for more general communication and cooperation among botanists in different parts of the world.

At meetings of the committee held in London on August 25 and September 4, 1930, it was agreed that:

- (1) The address book should follow the general scheme of Dorfler, but the countries to be arranged alphabetically with a supplementary index by continents.
- (2) The sections under each country should comprise a list of institutions and societies, and a list of botanists, with their surnames and initials, professional qualifications, offices, addresses and the special field of interest of each individual.
- (3) Entries should be made in the language of each country in Roman characters.
- (4) In applied subjects, such as forestry, agriculture and bacteriology, only those working in the botanical aspects of the subject should be included.
- (5) The final compilation of data should be done at Kew.

It was tentatively decided that April 1, 1931, or a later date, if necessary, would be the date for closing the entries.

The committee realized that if the project was to be successfully consummated, the assistance of botanists in each country would be necessary. Accordingly, each member of the committee undertook the responsibility of collecting and collating the necessary data from the various parts of the world. Professor Diels accepted Central and Eastern Europe, U. S. S. R. and most of South America; Dr. Merrill, the whole of North America, the West Indies, other than the British colonies, Colombia, Ecuador, British, French and Dutch Guiana, Venezuela, Paraguay, all of Polynesia, and the Philippines, and Dr. Chipp the rest of the world.

Dorfler's address book had about 12,500 entries. It is estimated that a comprehensive new address book will contain in excess of 20,000 entries. To make it reasonably complete the cooperation of botanists everywhere is desired. If individuals within the areas assigned to me and who desire their names to appear in the new botanical address book will send me a post card giving the data required, I will see that these data are properly compiled and transmitted to the central office at Kew. What is needed in each case is the name and initials of the individual, his or her address, degrees and titles, position and special field of interest. About ninety collaborators have been selected and asked to compile data for specific areas, covering institutions and societies as well as individual names and addresses. Names of many individuals who should appear in the new address book will doubtless be overlooked, hence this appeal to individual botanists everywhere. Please compile the data required on an ordinary post card, in typewriting if possible, and send it to the undersigned; all such supplementary data will be collated with those supplied by the selected collaborators, before transmission to Dr. Chipp at Kew.

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THE WHALING SITUATION

During the past two years the writer has been interested in collecting statistical matter relative to present-day whaling. In a presentation of this subject in the January, 1930, number of the Bulletin of the New York Zoological Society, he introduced sta-

tistics showing the annual world catch as exceeding 20,000 whales. There were no returns then available of later date than 1928.

We are now in possession of statistics on whaling in all parts of the world for the season 1928–1929, showing a catch of 27,566 whales, yielding 1,867,848 barrels of oil. The composition of this catch was: blue whale 13,650, finback 9,132, sperm whale 1,761, sei whale 1,549, humpback 304, other whales 1,170. The species taken in greatest number is the blue whale, constituting nearly half of the total catch. To the above world catch may be added a few gray, beaked, bottle-nosed right and other whales now seldom found. The equipment employed in world whaling during the 1928–29 season was 25 shore stations, 30 floating factories and 237 killing boats attached to stations and factory steamers.

Norwegian whaling in all seas is far in the lead, with a catch of 14,996 whales. British whalers took 8,230 whales. The United States, once leader in the industry, does not figure, as the limited amount of whaling off our west coast and at Alaska shore stations is under Norwegian auspices, as is also that of British Columbia.

Mr. Takahashi, of the Marine Products Company of Tokyo, has supplied certain details respecting whaling in Japanese waters: The gray whale formerly rather common there is now rare, only six having been taken in 1928. Whales being used extensively for human food in Japan, the yield of oil for that country is not included in the above world total of products.

Other countries engaged in whaling in addition to those already mentioned are Denmark and Argentina, with a total of 1,770 whales. Shore whaling stations in South Africa and on islands in the Antarctic are operated by both Norwegian and British companies. At the present time whaling is conducted chiefly in Antarctic waters, where the annual catch of whales is on the increase. The whaling industry in northern waters is declining.

There has been an increase in the number of floating factories operating in the Antarctic, where the fleet is assembling for the Antarctic summer season. It seems probable that with increased equipment the total catch of whales for the 1930–1931 season will exceed that of any season so far recorded.

C. H. TOWNSEND

NEW YORK AQUARIUM, DECEMBER 18, 1930

A SEQUOIA FOREST OF TERTIARY AGE ON ST. LAWRENCE ISLAND

THE recent discovery of the fossil foliage, cones and wood of Sequoia on St. Lawrence Island, in the

Bering Sea, is of exceptional interest from the standpoint of the Tertiary distribution of this genus, and the geographic conditions under which it formerly lived.

Several references in the literature to the occurrence of fossil Sequoia on St. Lawrence Island have not been substantiated up to this time by actual specimens, so far as known to the writer. With the hope of securing material evidence of the occurrence, a request was made last May to Dr. Henry B. Collins, Jr., of the Smithsonian Institution, that he collect any fossil plants encountered during his ethnological investigations there. With the assistance of Captain Edward D. Jones, of the Coast Guard cutter Northland, Dr. Collins visited the locality near the west end of the island on August 14, and collected the specimens which are the basis of this record. Writing to me from Nome on August 20, Dr. Collins makes the following statement:

I have just returned from St. Lawrence Island where I took occasion to look up the fossil plants mentioned in your letter of May 2. From the Eskimos I learned the location of the place they occurred (15 miles east of the N.W. end of the Island), and when the Northland came for me we stopped for a few hours and made a collection. Captain Jones was much interested, for which we may both be grateful, for it would have been difficult to reach the place except with the ship. Along a high bank bordering a lake, outcrops of coal were visible, and associated with these, slides of reddish slate in small blocks. These were very rich in fossil plants. Captain Jones is bringing you what I hope will be an adequate sample, almost one hundred pounds of the rock slabs.

When the Northland reached Oakland on November 23. Captain Jones turned over this collection to me. It comprises some twenty-five slabs bearing abundant impressions of the leafy twigs of Sequoia langsdorfii,1 with a few Sequoia cones and the impressions of several broad-leafed species. There are also some specimens of fossil wood, all apparently of Sequoia, which indicate that the trees represented were of a size comparable to the living redwood, Sequoia sempervirens. The broad-leafed species include a species of poplar, probably Populus richardsoni, and what appear to be species of sycamore and alder. In addition to these slabs, all of which are a dense gray shale, Captain Jones brought me a small piece of light-colored volcanic tuff bearing impressions of Sequoia leaves, which was picked up elsewhere on the island by a native. It is lithologically similar to the matrix in which abundant fossil Sequoias have

¹ This species is not readily distinguished from the living redwood, S. sempervirens, but is considered as distinct because of its geologic antiquity.