

floras of common genera in New Zealand, Tasmania and Southern Chile, and between Brazil and Equatorial West Africa are numerous common tropical genera and even species. Perhaps most remarkable is the presence in South America of two species of

Araucaria, primitive conifers, found elsewhere only in Australia.

Du Toit's theory of Continental Drift is the only plausible explanation of the present distribution of plants, especially in the Southern Hemisphere.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

FINAL REPORT ON THE REVISION OF THE CONSTITUTION BY THE SPECIAL COMMITTEE ON REVISION OF CONSTITUTION AND BYLAWS

YOUR special committee on revision of the Constitution and Bylaws submits herewith a proposal for a new Constitution. This document is the result of long-continued study, which began in 1939.

The committee first consisted of Livingston, Long and Moulton. Dr. Long resigned in 1942 because of pressing duties connected with national defense and the war. The Executive Committee accepted his resignation with regret and subsequently named Dr. O. W. Caldwell to succeed him. Throughout its long period of study, the special committee has held many sessions and has employed both correspondence and consultation by telephone. Many suggestions and proposals have been received and considered, some of which were brought forward by members of the Secretaries' Conference at its Dallas session.

In submitting this report, your special committee formally moves:

1. That the Executive Committee accept the report and instruct the special committee to submit a later report on the revision of the Bylaws.

2. That the Executive Committee approve the proposed new Constitution and refer it to the Council for action at the approaching Cleveland meeting of the Association.

3. That the Executive Committee recommend to the Council that the proposed new Constitution be presented at a general session of the approaching Cleveland meeting, with the Council's recommendation that it be adopted as an amendment to the Constitution of 1919, according to the provisions of Article Eleven of that Constitution.

Respectfully submitted,

BURTON E. LIVINGSTON, *Chairman*

O. W. CALDWELL

F. R. MOULTON

July 24, 1944

Unanimously approved by the Executive Committee at a meeting held August 6, 1944.

REVISED CONSTITUTION

ARTICLE I—OBJECTS

The objects of the American Association for the Advancement of Science are to further the work of sci-

tists, to facilitate cooperation among them, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress. The Association is a non-profit scientific and educational organization. It aims to conduct meetings and conferences of those interested in the various branches of science and education, to produce and distribute publications, to administer gifts and bequests as prescribed by the donors thereof, to provide support for research, to arrange awards for the accomplishment of scientific work, to cooperate with other organizations in the advancement of science and to engage in such other activities as shall have been authorized by the Council.

ARTICLE II—MEMBERS

Section 1. The membership of the Association shall consist of Annual Members, Life Members, Sustaining Members, Honorary Members and Emeritus Members. Admission to each of these five classes of membership shall be in accordance with the provisions of Section 2 of this Article and with such relevant rules as the Council shall have prescribed. The Council may establish additional classes of membership.

Section 2 (a). Annual Members. Any person, institution or organization may be admitted to annual membership. Each Annual Member shall have such rights and privileges and shall pay such annual dues as the Council shall have prescribed.

(b). Life Members. Any person making to the Trust Funds of the Association a life-membership contribution of such amount as the Council shall have prescribed may be admitted to life membership. Each Life Member shall be exempt from the payment of annual dues and shall have all the privileges of an annual member throughout life.

(c). Sustaining Members. Any person making to the Trust Funds of the Association a sustaining-membership contribution of such amount as the Council shall have prescribed shall be the founder of a Sustaining Membership, which shall bear his name and shall be maintained in perpetuity as a trust. Each incumbent of a sustaining membership shall have all the privileges of a life member. The first incumbent of a sustaining membership may be either the founder himself or another person named by him, as he may choose. On the death or resignation of an incumbent, the Executive Committee shall name another person to hold the membership throughout life.

(d). *Honorary Members.* Any person may be admitted to honorary membership under such conditions as the Council shall have prescribed. Each Honorary Member shall be exempt from the payment of annual dues and shall have all the privileges of an annual member throughout life.

(e). *Emeritus Members.* Any individual annual member may be admitted to emeritus membership under such conditions as the Council shall have prescribed. Each Emeritus Member shall be exempt from the payment of annual dues and shall have all the privileges of an annual member throughout life.

Section 3. Fellows. Any person who shall have made a meritorious contribution to science may become a Fellow of the Association, under such procedures for nomination and election as the Council shall have prescribed.

ARTICLE III—OFFICERS

Section 1. The officers of the Association shall be (a) General Officers, elected from among the Fellows by ballot of the Council, and (b) Administrative Officers, elected by the Executive Committee as prescribed in Section 3 of this Article.

Section 2. General Officers. The general officers of the Association shall be a President Elect, a President, a Retiring President, and a Vice President for each Section. The term of office of the general officers shall be one year. The term of office of the President Elect and of the Vice Presidents shall begin on the January fifteenth following their election. At the close of the one-year term of the President Elect he shall become President, and at the close of the one-year term of the President he shall become Retiring President. In the event of a vacancy in the office of President, the President Elect shall become President. In the event of a vacancy in the office of President Elect, the Executive Committee shall make a *pro tempore* appointment to hold until the vacancy shall have been filled by ballot of the Council. In the event of a vacancy in the office of Vice President, the Executive Committee shall fill the vacancy by appointment.

Section 3. Administrative Officers. The administrative officers shall be an Administrative Secretary, an Assistant Administrative Secretary, a General Secretary, a Treasurer, and a Secretary of each Section. The term of office of each administrative officer shall be four years, or a shorter term if so determined by the Executive Committee. Unless otherwise determined at the time of his election, his term shall begin on the January fifteenth following his election. The Administrative Secretary, the Assistant Administrative Secretary, the General Secretary and the Treasurer shall be elected by the Executive Committee. The Secretaries of the Sections shall be nominated from among the Fellows by the respective Section Committees and elected by the Executive Committee. In the event of a vacancy in the office of an administrative officer, the Executive Committee shall fill the vacancy for the remainder of the unexpired term. Additional administrative officers may be authorized by the Council, to be elected or appointed according to such rules and for such terms as the Council shall have determined in each instance.

ARTICLE IV—COUNCIL

Section 1. Control of all affairs of the Association is vested in the Council, which shall have power to review and to amend or rescind its own actions and all actions taken by the Executive Committee or by other agents to whom powers are delegated by this Constitution or shall have been delegated by the Council. The Council shall enact such bylaws as it may deem desirable, each of which shall remain in force until amended or rescinded by action of the Council.

Section 2. The Council shall consist of (a) the President Elect, the President, the Retiring President, the Vice Presidents, the Secretaries of the Sections, the Administrative Secretary, the General Secretary, the Treasurer and the eight elected members of the Executive Committee; (b) one Fellow elected by each Division of the Association; and (c) the representatives of affiliated organizations, as provided for in Article VII, Section 2, of this Constitution. Each council member shall serve until his successor shall have taken office. The President shall be chairman of the Council; if the President shall be unable to serve as chairman at any session, the council members in attendance shall elect a chairman for that session. Twenty members of the Council shall constitute a quorum for the transaction of business.

Section 3. There shall be an Executive Committee of the Council, which shall execute such commitments as the Council may direct and shall make recommendations to the Council. Subject to this Constitution, to the bylaws, and to specific actions by the Council, the Executive Committee shall have power to act for the Council when the Council is not in session. At each annual meeting of the Association the Executive Committee shall render to the Council a report on actions taken by the Committee for the Council. The Executive Committee shall consist of thirteen members: the President Elect, the President, the Retiring President, the Administrative Secretary, the General Secretary, and eight Fellows elected by ballot of the Council, two each year for a term of four years. At any election of members of the Executive Committee, not more than one Fellow serving his fourth consecutive year as an elected member may be reelected. In the event of a vacancy in the office of an elected member of the Executive Committee, his successor for the remainder of the unexpired term shall be elected from among the Fellows by ballot of the Council at the next annual election. Six members of the Executive Committee shall constitute a quorum for the transaction of business. The Retiring President of the Association shall be chairman of the Executive Committee; if he shall be unable to serve at any session of the Committee, the committee members in attendance shall elect a chairman for that session.

Section 4. There shall be a Finance Committee, consisting of the Treasurer, the Administrative Secretary, and four members elected by the Executive Committee, one each year for a term of four years. The Finance Committee shall advise the Treasurer regarding purchases and sales of securities for the Association. Upon request of the Executive Committee, the Finance Committee shall make recommendations to the Executive Committee re-

garding financial questions. The Finance Committee shall report its actions annually to the Executive Committee. The Chairman of the Finance Committee shall be one of its elected members, appointed by the Executive Committee to serve throughout his term of membership in the Finance Committee. Any vacancy in the Finance Committee shall be filled by the Executive Committee. Four members of the Finance Committee shall constitute a quorum for the transaction of business.

Section 5. The term of office of each of the eight elected members of the Executive Committee and of each of the four appointed members of the Finance Committee shall begin on the January fifteenth following his election or appointment, and each shall serve until his successor shall have taken office.

Section 6. The Council may establish additional committees, each of which shall include at least two members of the Council and shall stand until discharged. Such additional committees shall report to the Council at each annual meeting unless otherwise directed at the time of their establishment.

ARTICLE V—SECTIONS

Section 1. The Association shall consist of fifteen Sections, designated as follows: Mathematics (A), Physics (B), Chemistry (C), Astronomy (D), Geology and Geography (E), Zoological Sciences (F), Botanical Sciences (G), Anthropology (H), Psychology (I), Social and Economic Sciences (K), History and Philosophy of Science (L), Engineering (M), Medical Sciences (N), Agriculture (O), and Education (Q). Additional sections or subsections may be established by vote of the Council. Each member of the Association may designate the section in which he wishes to be enrolled and may designate one additional section in which he is interested.

Section 2. The Vice President for a Section shall be *ex officio* chairman of that Section.

Section 3. The affairs of each Section shall be managed by a Section Committee consisting of (a) the Chairman and the Secretary of the Section; (b) other members of the Council who are primarily enrolled in the Section; and (c) four Fellows, one elected each year by the Section Committee for a term of four years. No person shall serve concurrently in more than one Section Committee. If an elected member of a Section Committee shall have resigned or died, his successor for the remainder of the unexpired term shall be elected from among the Fellows by the Executive Committee from nominations made by the Section Committee. One-third of the members of a Section Committee shall constitute a quorum for the transaction of business.

Section 4. The Section Committee of each Section shall promote the work of the Association in its own field and may organize subcommittees for that purpose. It shall arrange such section programs as it shall deem desirable for meetings of the Association, either separately or in cooperation with other sections of the Association or with independent societies. With the approval of the Executive Committee, a Section Committee may arrange section meetings to be held at places and times other than those of Association meetings.

ARTICLE VI—DIVISIONS AND BRANCHES

Section 1. Regional Divisions and Local Branches of the Association may be authorized by vote of the Council, for the purpose of promoting the work of the Association in their respective territories.

Section 2. Each Regional Division or Local Branch shall elect its officers for such terms as it shall prescribe and shall hold its meetings and conduct its affairs as it shall deem desirable, subject to the relevant provisions of this Constitution and of the Bylaws of the Association, and to such special provisions as the Council of the Association shall have established.

ARTICLE VII—AFFILIATED AND ASSOCIATED ORGANIZATIONS

Section 1. To facilitate cooperation between the Association and other organizations, and among the latter, the Council may elect an organization to be an officially affiliated or an officially associated academy or society.

Section 2. Each organization elected to be an Affiliated Society shall be entitled to name one Fellow of the Association to represent it in the Council; if it has more than one hundred members who are Fellows of the Association, it shall be entitled to name an additional Fellow of the Association to represent it in the Council.

ARTICLE VIII—MEETINGS

Section 1. The Association shall hold an annual meeting each year at such time and place as the Council shall have determined. Other meetings of the Association or of its sections may be authorized by the Council.

ARTICLE IX—PUBLICATIONS

Section 1. Summarized Proceedings of the Association and Directories of its Officers and Members shall be published at such times and in such manner as the Council shall have directed. By authorization of the Council, the Association may arrange for the production and distribution of journals, books, and other publications.

ARTICLE X—FUNDS

Section 1. Funds of the Association shall be classified as Current Funds, Investment Funds, and Trust Funds.

(a) *Current Funds* shall include all dues of annual members, all receipts from publications and all other funds received in the continuing operations of the Association.

(b) *Investment Funds* shall include all gifts and bequests received without special restriction concerning the use to be made of principal and income, and all other funds designated by the Council as investment funds. Investment Funds shall be invested in securities or other properties or held in cash while awaiting investment. Both principal and income of Investment Funds may be used for any purpose, but only after specific appropriations by the Council.

(c) *Trust Funds* shall consist of all life-membership contributions, all sustaining-membership contributions, all funds appropriated by the Council for establishing special life memberships, all gifts and bequests accepted with

specific restrictions prohibiting their allotment to either Current Funds or Investment Funds, and all other funds designated by the Council as Trust Funds. Trust funds shall be invested in securities or other income-producing properties, or held in cash while awaiting investment. The principal of every trust fund shall be maintained in perpetuity unless otherwise originally provided by the donor thereof or by the Council. Income from any trust fund shall be used only after special appropriation by the Council. Income from trust funds received as gifts or bequests may be appropriated only for purposes prescribed by the donors thereof, and income from other trust funds, except individual life-membership contributions while the contributors thereof are living, may be appropriated only for the support of research unless otherwise prescribed by the Council when the funds were established. It is provided that income from individual life-membership contributions may be appropriated by the Council for any purpose so long as the respective contributors are living.

Section 2. The Administrative Secretary shall be custodian of all Current Funds, which he shall collect and disburse under the direction of the Executive Committee. He shall collect life-membership and sustaining-membership contributions and shall transfer them to the Treasurer for allocation to Trust Funds. Every check issued by the office of the Administrative Secretary shall bear two signatures, those of the Administrative Secretary and the Assistant Administrative Secretary or those of the Treasurer and either the Administrative Secretary or the Assistant Administrative Secretary. The Administrative Secretary, the Assistant Administrative Secretary and the Treasurer shall be bonded in favor of the Association for such amounts as the Executive Committee shall have determined.

Section 3. The Treasurer shall be custodian of all Investment Funds, all Trust Funds, and all other funds placed in his charge by action of the Council. He shall administer gifts and bequests in accordance with such provisions as shall have been made by the donors thereof. Unless otherwise directed by the Council, he shall sell securities from the investment portfolio of the Association, and purchase securities for the investment portfolio, in accordance with such advice of the Finance Committee as shall have been formally recorded in the minutes of its meetings. He shall collect the income of all funds in his charge and shall dispose of it as directed by the Council. Every check issued by the office of the Treasurer shall bear two signatures, that of either the Treasurer or the Chairman of the Finance Committee and that of either the Administrative Secretary or the Assistant Administrative Secretary.

ARTICLE XI—RATIFICATION AND AMENDMENTS

Section 1. This Constitution shall become effective one month after it shall have been ratified in accordance with the procedure established for amending the Constitution of 1919. It shall invalidate the Constitution of 1919 and all amendments thereto.

Section 2. To become effective, any proposed amendment to this Constitution of 1944 shall be approved by the Executive Committee, published in the official journal of the Association at least one month prior to an annual meeting of the Association, and ratified either (a) by a nine-tenths vote of the Council members present in a Council session of that meeting or (b) by a two-thirds vote of the Council members present in each of two Council sessions held at consecutive annual meetings of the Association. Ratified amendments shall be published promptly in the official journal of the Association and shall become effective one month after ratification.

OBITUARY

PHILIP FOX

A COLORFUL career came to a close in the death of Philip Fox on July 21, 1944. He had been an observational astronomer, a popularizer of astronomy and other sciences, and an army officer in three wars.

Born in Manhattan, Kansas, on March 7, 1878, he grew up in that state and was graduated from Kansas State College in 1897. He continued for a year as graduate assistant in engineering and afterwards was commandant and teacher of mathematics in St. John's Military School in Kansas. In 1901, although he held both B.S. and M.S. degrees from Kansas State, he entered Dartmouth College as a senior to get the experience of undergraduate life in New England. Here he came under the tutelage of Edwin B. Frost and became interested in astronomy as a life work. At Dartmouth also at this time was his distinguished cousin, Ernest Fox Nichols, professor of physics, under whom Fox studied and also served for a year

as graduate assistant after receiving the bachelor's degree from Dartmouth in 1902.

In 1903 Fox began his astronomical career at the Yerkes Observatory, where he was to remain for the next six years, with a year out for study at the University of Berlin and the Potsdam Observatory. At Yerkes his main duties were with the Rumford spectroheliograph which had been developed by Hale. Besides routine observations Fox published a series of papers on prominences and other solar phenomena; later his comprehensive monograph on the rotation of the sun appeared as a publication of the Yerkes Observatory.

In 1909 Fox was called to be director of the Dearborn Observatory and professor of astronomy in Northwestern University, a post he held for twenty years. Many of the present generation of astronomers are unaware of the great influence exerted by S. W. Burnham on American astronomy. Working for the