

(d) *Publications.* That the editing and management of the proposed bulletins of the Research Council be placed under the Research Information Service.

(e) *Centralization of Scientific Periodicals.* That a plan for coöperation in the publication of scientific materials be formulated.

(f) *Catalog of Research Information.* That a general catalog of research information be acquired and maintained by the Division.

Moved: That the Interim Committee approve the organization of the Research Information Service, as outlined and the action taken relative to proposed activities of the Service.
(*Adopted.*)

On recommendation of Mr. Leuschner the Acting Chairman of the Division of Physical Sciences, it was

Moved: That chairmen of committees of the American Section of the proposed International Astronomical Union attending the meeting of the Section to be held in Washington on June 23 and 24 for the purpose of discussing reports and instructing delegates, be reimbursed for railroad fare and Pullman expenses with a limit of \$100 in each case and a total limit of \$250.
(*Adopted.*)

The Chairman of the Research Information Service presented suggestions concerning the issuance of publications on the part of the National Research Council, especially of a series of special bulletins.

Moved: That the report on issuing publications be transmitted to the members of the Executive Board and that the report be made a special order for the meeting of the Executive Board to be held on Tuesday, June 10.
(*Adopted.*)

On recommendation of Mr. Yerkes it was

Moved: That an additional sum of \$300 be allotted to the Committee on Psychology from the unappropriated funds of the Council for special study of data regarding men recommended for discharge or for neuro-psychiatric examination.
(*Adopted.*)

On Recommendation of the Chairman of the Research Information Service it was

Moved: To reimburse members of the Research Information Service attending the organizing meeting on May 29 for traveling expenses and to provide for their entertainment at luncheon, with the understanding that the total cost be in the neighborhood of \$50, the amount to be charged to the funds appropriated to the Executive Board.
(*Adopted.*)

The Interim Committee adjourned at 12.50 p.m.

PAUL BROCKETT, *Assistant Secretary.*

MINUTES OF THE MEETING OF THE EXECUTIVE BOARD

AT THE NATIONAL RESEARCH COUNCIL BUILDING, JUNE 10, 1919, AT 9.30 A.M.

Present: Messrs. Bancroft, Flinn, Hussey, Leuschner, McClung, Merriam, Ransome, Stratton, Washburn, Yerkes, and, by invitation, H. E. Howe.

Mr. Merriam, Chairman of the Council in the Chair.

The minutes of the joint meeting of the Executive Board of the National Research Council with the Council of the National Academy of Sciences of May 27 and of the meeting of the Interim Committee of June 3 were approved as printed, with certain amendments, which have been included in the minutes as printed in the PROCEEDINGS.

The Secretary, Mr. Leuschner, reported the following membership of the Pulverizing Committee, which was approved at the meeting of the Interim Committee held on June 3, but which was not transmitted to him by the Division of Engineering in time to be included in the minutes of that meeting:

Committee on Pulverizing, Division of Engineering

Mr. G. H. Clevenger, Chairman, Engineering Division, National Research Council, New York City.

Mr. Paul Avery, Esperanza Mining Company, El Ore, Mexico.

Mr. C. H. Benedict, Calumet and Hecla Mining Company, Lake Linden, Michigan.

Mr. A. L. Bloomfield, Golden Cycle Mining and Milling Company, Colorado Springs, Colorado.

Mr. D. S. Calland, Cia. Real del Monte Pachuca, Pachuca, Hidalgo, Mexico.

Mr. Allan J. Clark, Homestake Mining Company, Lead, South Dakota.

Prof. E. W. Davis, Supt. Mines Experiment Station School of Mines, University of Minnesota, Minneapolis, Minnesota.

Mr. J. V. N. Dorr, The Door Company, New York.

Mr. H. W. Fox, Westport, Connecticut.

Mr. Frank Janney, Utah Copper Company, Garfield, Utah.

Mr. A. H. Jones, Tonopah-Belmont Development Company, Tonopah, Nevada.

Mr. B. F. Morrow, Anaconda Copper Mining Company, Butte, Montana.

Mr. Luther C. Lennox, Colorado Springs, Colorado.

Mr. W. M. Rossberg, Timber-Butte Mining Company, Butte, Montana.

Mr. W. G. Swart, 808 Sellwood Building, Duluth, Minnesota.

Mr. R. B. Yerxa, Miami Copper Company, Miami, Arizona.

Mr. Louis D. Mills, San Francisco, California.

On recommendation of the Secretary it was

Moved: That the members of the Division of Medical Sciences attending the organizing meeting of the Division on Monday, June 9, be reimbursed for railroad and Pullman fare from the General Maintenance fund of the Executive Board. *(Adopted.)*

Moved: That the members of the Division of Industrial Relations attending the organizing meeting of the Division on Wednesday, June 11, be reimbursed for railroad and Pullman fare from General Maintenance funds of the Division. *(Adopted.)*

Moved: That Mr. E. W. Washburn be added to the Committee on Organization of Administration. *(Adopted.)*

The Chairman stated that Mr. Clevenger has been invited by the American Society of Mechanical Engineers to represent the National Research Council and present a paper at its Detroit meeting June 17.

Moved: That the expenses of Mr. Clevenger incident to his attendance on the meeting of the American Society of Mechanical Engineers at Detroit be paid from the General Maintenance fund of the Division of Engineering. *(Adopted.)*

Moved: That the dues of \$100 of the National Research Council to the American Council on Education for the current year be paid from the General Maintenance Fund of the Executive Board. (Adopted.)

Moved: That the salary of Mr. H. E. Howe of the Division of Industrial Relations begin May, 1, 1919. (Adopted.)

Moved: That in accordance with the recommendation of the Bureau of Ordnance, Lieutenant-Commander O. M. Hustvedt represent the Bureau of Ordnance of the Navy on the Committee on Explosives Investigations in place of Lieutenant-Commander T. S. Wilkinson. (Adopted.)

The Chairman reported that Messrs. John Johnston and H. E. Howe had represented the National Research Council at the meeting of The World Cotton Conference at Atlantic City, N. J., May 28, 1919.

The Chairman reported that it was necessary to finance the work of the Intelligence Scales Committee, consisting of Messrs. Haggerty, Terman, Thorndike, Whipple, and Yerkes, Chairman, from the appropriation of \$25,000 from the General Education Board.

Moved: That the experts in psychology employed by the Intelligence Scales Committee be paid at the rate of \$5 an hour. (Adopted.)

Mr. Yerkes, Chairman of the Research Information Service, presented a report on publications which was adopted in the following form:

A joint committee of the National Academy of Sciences and of the National Research Council has agreed that material of permanent scientific value offered to the Research Council for publication shall be placed in the PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES and reprinted for distribution by the Research Council. All other material of the Research Council presumably would be published directly or reprinted as seemed desirable from other periodicals.

The arrangement recommended by this joint committee renders it highly desirable that the form of publication adopted by the Research Council be the same as that of the PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES.

There are obvious reasons why the Research Council should seriously consider the publication of propaganda as contrasted with other types of scientific material, but it is not clear that re-publication of material of scientific value is desirable.

For consideration by the Executive Board of the National Research Council the following proposals are submitted:

(1) That a publication to be known as the *Bulletin of the National Research Council* be established.

(2) That this series shall include the proceedings of the National Research Council and its divisions, publicity and propaganda material, reports of committees, and other special reports.

(3) That the *Bulletin* shall appear irregularly and that within reasonable limits it may vary in form in accordance with the requirements of the material.

(4) That the several bulletins shall be numbered consecutively and shall be so arranged that approximately 500 pages shall constitute a volume.

(5) That the regular subscription price shall be fixed at \$5.00 per volume.

(6) That the bulletins shall be sold separately, except in case of strictly publicity material, at a minimum price of ten cents for numbers of not more than ten pages, and at the rate of one-half cent for each page in excess of ten.

(7) That the size of type page be 27 by 45 picas, as in the PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, and the type number 31 monotype, 11 point, with 2 point leads.

(8) That a distinctive cover be selected for the *Bulletin*, which shall bear on its title page the name "Bulletin of the National Research Council" the volume number, bulletin number, serial number, title and author of the paper, and the date and place of publication.

Moved: That the following bulletins be published by the Council in the manner and edition indicated, and that the Committee be given power to determine the issue of the regular series of full sets and increase the number of copies up to 50%, according to demand.

1. The National Importance of Scientific and Industrial Research by Hale and others, to be printed as *number one* of the *Bulletin of the National Research Council* in an edition of *two thousand copies*.

2. Report of the Patent Committee of the National Research Council, to be printed as *number two* of the *Bulletin* in an edition of *two thousand copies*.

3. Report of the Psychology Committee of the National Research Council, to be published as *number three* of the *Bulletin* in an edition of *two thousand copies*.

4. Some Problems of Sidereal Astronomy by Henry Norris Russell, to be published in the *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES* and reprinted as *number four* of the *Bulletin* in an edition of *one thousand copies*.

5. Refractory Materials as a Field for Research by Edward W. Washburn, to be printed as *number five* of the *Bulletin* in an edition of *one thousand copies*.

6. Industrial Research by F. B. Jewett, to be printed as *number six* of the *Bulletin* in an edition of *two thousand copies*. (Adopted.)

Moved: That all material prepared under the auspices of the National Research Council and printed in other places than the *Bulletin* be collected in the form of reprints and included in a numbered series of papers to be issued by the National Research Council under such title as the Committee on Publication may decide. (Adopted.)

The Secretary called attention to the resolution passed some time ago that all manuscripts for publication should be submitted to the Publication Committee of the National Research Council before being published in any journal.

The Secretary presented a report of the Committee on Administration of Organization on bonus to employes as additional pay to salaries for the past year, providing for an allotment of \$1320 from the unappropriated funds of the Council.

Moved: That the report of the Committee on Administration of Organization providing a bonus for certain employes be approved and that the sum of \$1320 be appropriated for the purpose from the unallotted funds of the National Research Council. (Adopted.)

The report of the Treasurer for the month of May was received and placed on file.

On recommendation of Mr. Washburn, Acting Chairman of the Division of Chemistry and Chemical Technology, it was

Moved: That the report by the Committee on Publication of Compendia of Chemical Literature, etc., to the President and Council of the American Chemical Society, and the recommendations of the Division of Chemistry and Chemical Technology with respect to the Formation of an International Chemical Council be printed in an edition of 100 copies, for use at the meetings in London and that the expenses of the printing be paid from the Maintenance fund of the Division of Chemistry and Chemical Technology. (Adopted.)

The Acting Chairman of the Division of Geology and Geography presented the following report:

At a meeting of the Division held on June 5 and 6, the following temporary committees were appointed.

Funds: Ralph Arnold, Chairman.

Rocky Mountain and Geology Conference: Eliot Blackwelder, Chairman.

Committee on Certain Seismological Investigations: H. F. Reid, Chairman.

Conference Committee on Survey of the Sea: J. Russell Smith, Chairman.

List of Scientific Travelers: Isaiah Bowman, Chairman.

Development of Geographical Sciences: W. M. Davis, Chairman.

The Division passed the following resolution on the coördination in field methods of map-making agencies of the Government which it has referred to the Division of Government Relations.

WHEREAS the several mapping agencies of the United States are making actual surveys by different methods on different scales and with wide variation in accuracy of field work.

WHEREAS the results of actual field surveys are not mutually available to the different map-making organizations because of these differences and a lack of means by which the relative accuracy of the different parts of the field work can be readily ascertained.

WHEREAS such lack of coördination in field methods and degree of accuracy leads to surveys and avoidable expense, the Division of Geology and Geography.

Recommends to the Division of Government Relations that a Committee be appointed representing the several map-making agencies of the Government to arrange a plan of operation by which organizations conducting surveys secure and record their field data in such manner that they may be fully usable by other map-making agencies of the Government interested in the same areas.

To this end their Committee should define

1. The degree of accuracy or "tolerance" in field work.
2. Standard methods of expression which shall discriminate the relative accuracy of determination of the several horizontal and vertical elements.
3. One or more standard scales and projections for field mapping.

It is further suggested that this work may be done by a new committee or entrusted to the recently organized Committee of Aeronautic Mapping if its scope may be broadened.

The Division requests the appointment of a Conference Committee by the Division of Biology on Survey of the Sea, also the appointment of a member of the Division of Physical Sciences on its Committee on certain proposals for seismological investigations offered by Dr. Wood.

The Division requests the National Research Council to prepare for publication a record of the work of scientific men in connection with the war.

In response to the inquiry from the Secretary of the National Research Council, the Division

Voted that the Division of Geology and Geography approve the formation of international associations of geologists and of geographers under the auspices of the International Research Council and recommend that two delegates—a geologist and a geographer—be sent to the conference to be held in Brussels, in July 1919.

It also passed the following resolutions:

That this Division recognizing the high value of the scientific work of "The Inquiry" (preparatory to The Peace Congress) recommends to the Executive Board of the National Research Council the appointment of a committee of the Council to confer at an appropriate time with the Department of State with reference to the publication of the scientific results of "The Inquiry."

Moved: That the request of the Division of Geology and Geography that the National Research Council prepare for publication a record of the work of scientific men in connection with the war be referred to the Research Information Service for investigation and report.

(*Adopted.*)

Moved: That the formation of international associations of geologists and geographers under the auspices of the International Research Council and the recommendation that two delegates, a geologist and a geographer, be sent to the conference to be held in Brussels in July be approved.

(*Adopted.*)

Moved: That the recommendation of the Division of Geology and Geography that a Committee of the Council be appointed to confer at an appropriate time with the Department of State with reference to the publication of the scientific results of "The Inquiry" (preparatory to The Peace Congress) be approved.

(*Adopted.*)

Mr. Hussey, Acting Chairman of the Division of Medical Sciences, presented the following report:

The organization meeting of the Division of Medical Sciences was held in Philadelphia, June 9, 1919. All elected members except five were present. There are three Society nominations which remain to be made, namely those of The American Association of Anatomists, The American Society of Biological Chemists, and the American Neurological Society. Doctors W. W. Keen and F. S. Lee were present by special invitation.

The following officers were elected: Dr. H. A. Christian, Chairman; Dr. R. G. Hussey, Vice Chairman; Dr. Hussey to serve as Acting Chairman until Dr. Christian can make arrangements to take office.

The following members were elected to serve on the Executive Committee: Doctors Simon Flexner, Reid Hunt, W. H. Howell, R. M. Pearce and Colonel F. F. Russell.

The terms of office for the members determined by lot at the meeting, are as follows:

<i>One year term</i>	<i>2 year term</i>	<i>3 year term</i>
George W. Crile	G. C. Huber	H. A. Christian
E. R. Stitt	W. S. Thayer	Wm. H. Welch
Victor C. Vaughan	T. B. Hartzell	Simon Flexner
A. W. Crane	Reid Hunt	Peyton Rous
H. Gideon Wells	F. P. Gay	Howard T. Karsner
David L. Edsall	Joseph Erlanger	Richard N. Pearce
W. H. Howell	Anatomical Society	F. F. Russell
Neurological Society	American Society of Biological Chemists.	

Consideration was given to a communication from the Secretary regarding the International Research Council. The following action was taken

regarding medical interests and representation in international scientific organization: that this Division go on record as being in accord with the sentiments of the resolutions passed at the London meeting regarding scientific relations with men of the Central Powers:

That this Division go on record as stating without qualifications, their approval of the admittance of Neutral Countries to any international organization that may be formed;

That this Division will serve as the American Section of any International Medical Organization proposed. Five delegates were nominated to attend the Brussels meeting.

A committee was appointed to take charge of questions regarding international organization, this committee to be known as the Committee on International Coöperation in Medical Sciences and to be constituted as follows: Doctors Christian, Flexner, Keen (Chairman), Lee, Welch, Colonel Russell and the Acting Chairman of the Division (ex officio); together with the delegates. A meeting of this Committee has been called to be held at Atlantic City, Wednesday, June 11.

The Division meeting adjourned until some date in late September or early October subject to the call of the Chairman.

Immediately following the meeting the Executive Committee met in a short session. It was voted that all existing committees be continued as constituted in the War Organization subject to later action by the Executive Committee.

On recommendation of Mr. McClung, Chairman of the Division of Biology and Agriculture, it was

Moved: That an additional sum of \$500 be appropriated to the General Maintenance fund of the Division of Biology and Agriculture to meet the traveling expenses of members of the Executive Committee in attendance on the meeting held May 31-June 1—and on meeting to be held during the summer, and to provide for incidental expenses of the Division.

(*Adopted.*)

Moved: That the unexpended sum of \$1000 allotted to the Division of Biology and Agriculture for the rodent pest investigation revert to the general fund.

(*Adopted.*)

Moved: That the sum of \$1000 be appropriated for the use of the Committee on Plant Pathology of the Division of Biology and Agriculture to complete its work for the year, this amount to be used in payment of railroad and Pullman fares of committee members to conferences.

(*Adopted.*)

Moved: That the following Committee on Food and Nutrition of the Division of Biology and Agriculture be approved:

J. R. Murlin, Chairman	E. V. McCollum
H. P. Armsby	H. C. Sherman
E. B. Forbes	A. E. Taylor
C. F. Langworthy	A. F. Woods
Graham Lusk	

(*Adopted.*)

The Chairman announced the following initial organization of the Committee on Pacific Exploration:

Wm. Morris Davis, Harvard University, Cambridge, Mass.
Herbert E. Gregory, Yale University, New Haven, Conn.

W. E. Ritter, Scripps Institute, La Jolla, Calif.
 G. F. MacEwen, Scripps Institute, La Jolla, Calif.
 R. A. Daly, Harvard University, Cambridge, Mass.
 Alfred G. Mayor, Director, Department Marine Biology, Carnegie Institution, Wash-
 ington, D. C. (Approved.)

Mr. Mathews, Acting Chairman of the Division of Geology and Geography

Moved: That Mr. J. C. Merriam be asked to serve as a member and Chairman of the
 Committee on Pacific Exploration. (Adopted.)

The Executive Board adjourned at 1.00 p.m.

PAUL BROCKETT, *Assistant Secretary.*

MINUTES OF THE MEETING OF THE INTERIM COMMITTEE

AT THE NATIONAL RESEARCH COUNCIL BUILDING, JUNE 17, 1919, AT 9.30 A.M.

Present: Messrs. Leuschner, McClung, Merriam, and Washburn.
 Mr. Merriam, Chairman of the Council, in the Chair.

Moved: That an allotment of \$250 be made from unappropriated government funds for
 the expense of the Washington branch of the Research Information Service to cover salaries
 and incidental expenses to June 30, 1919. (Adopted.)

Moved: That the Division of Engineering be authorized to apply a sum of about \$50 from
 its maintenance fund in reimbursing members of the Committee on Investigation of Neumann
 Bands attending a meeting to be held in the near future, for railway and Pullman expenses.
(Adopted.)

Moved: That a petty cash allowance of \$100 be set aside from its general maintenance
 fund for the New York office of the Division of Engineering for June, 1919, and thereafter a
 monthly petty cash allowance of \$30 including the balance from the previous month, with
 the provision that a detailed statement of expenditure be submitted to the Treasurer of the
 Council at the end of each month. (Adopted.)

The Committee on the Apportionment of Space in the Navy League Build-
 ing consisting of Messrs. Mathews (Chairman), Leuschner, and Yerkes, pre-
 sented a report on the assignment of rooms, repairs, and alterations, and
 made the following recommendation: That, on the assumption that the furni-
 ture bought from government funds will be available for the use of the Council
 after June 30, an offer be made to the Navy League for the purchase of the
 following equipment at the prices stated:

Awnings.....	\$150.00
Fifteen metal filing cabinets \$30 each.....	450.00
Furnishings in Women's Rest Room.....	40.00
Coal.....	75.00
Shelving.....	40.00
Two double pedestal typewriting desks \$25 each.....	50.00
	\$805.00