

birth" Signed C. S. Rafinesque]. Fragments of letters from Lexington. By a Lady [pp. 77-79. Deals with social life in Lexington. Signed Lavinia]. A view of some American Universities and Colleges in 1820 [pp. 79, 80. Signed W. M.]. 6. Transylvania University [p. 80. Signed W. M.].

Pages 81-88. Poetry. The Western Muse, or, Original Poetry. Les Rives de l'Ohio. Poeme en deux chants [pp. 81-82. Signed C. S. R.]. Couplet pour Silvie [p. 83. Signed C. S. R.]. A Melody, My Heart is Gone [p. 83. Signed M. T.]. A Melody. The Man I'll Love [p. 83. Signed Virginia]. La Double Aurore. Ode Anacreontique [pp. 83, 84. Signed C. S. R.]. Le Reveil d'Irma. Ode Anacreontique [p. 84. Signed C. S. R. and dated October, 1819]. L'Enfant et l'Epouse Endormis. Romance [p. 84. Signed C. S. R. and dated October, 1819.] Preceptes Moraux. 1. Le Secret d'etre hereux. 2. Amour et Jealousie [p. 84. Signed C. S. R.]. The Blind Lover [p. 85. Signed Milton]. Lines to Maria. Who asked me if I should like to Love in a Cottage [p. 85. Signed Constantine]. To Silvia [pp. 85, 86. Signed J. R.]. Trifles. By Billy Tickler of Frankford [p. 86. Signed B. T.]. Italian Stanzas. Un Consiglio d'Amore [p. 86. Signed Constantine]. Epigrams [p. 87]. The Elysian Dream. To my Sister [p. 87. Signed Eleonora]. To the Sun. To the Moon. On the Loss of a Friend [p. 88. All three signed Eleonora]. One Word and Only One. To Eliza. To Miss M——, who wished to know what she should read [p. 88. Both signed Oscar].

The copy of the work before me bears the autograph of S. S. Haldeman, one of the early members of the Academy of Natural Sciences of Philadelphia. It is known that Rafinesque advertised a copy for sale at \$5.00, stating it to be unique, and it is not unlikely that the present one is that copy, which has been in the Academy's

library for many years, although nothing is known of its history.

WM. J. FOX.

ACADEMY OF NATURAL SCIENCES  
OF PHILADELPHIA.

#### THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.\*

##### I.—OBJECT AND NATURE OF THE CATALOGUE.

THE object and nature of the Catalogue were defined by means of the following resolutions of the 1896 Conference, which were agreed to *nemine contradicente*. The resolutions are re-numbered, but the original numbers are given in brackets:—

1. [12] That it is desirable to compile and publish by means of some international organization a complete Catalogue of Scientific Literature, arranged according both to subject-matter and to authors' names.

2. [13] That in preparing such a Catalogue regard shall, in the first instance, be had to the requirements of scientific investigators, to the end that these may, by means of the Catalogue, find out most easily what has been published concerning any particular subject of inquiry.

3. [17] That in indexing according to subject-matter regard shall be had, not only to the title (of a paper or book), but also to the nature of the contents.

4. [18] That the Catalogue shall comprise all published original contributions to the branches of science hereinafter mentioned, whether appearing in periodicals or in the publications of Societies, or as independent pamphlets, memoirs or books.

5. [25] That a contribution to science for the purposes of the Catalogue be considered to mean a contribution to the mathematical, physical, or natural sciences, such as, for example, mathematics, astronomy, physics, chemistry, mineralogy, geology, botany, mathematical and physical geogra-

\*Scheme of publication approved by the International Conference of 1900.

phy, zoology, anatomy, physiology, general and experimental pathology, experimental psychology and anthropology, to the exclusion of what are sometimes called the applied sciences.

Technical matters of scientific interest shall, however, be included in the Catalogue, but shall be referred to under the appropriate scientific headings. (Rep. Comm., p. 5.)

## II.—THE CONTROL AND MANAGEMENT OF THE CATALOGUE.

The control and management of the Catalogue has been provided for by the Conferences of 1896 and 1898 as follows :—

*Definitions of the International Council, International Bureau, Regional Bureaus, and International Convention.*

[The supreme control over the Catalogue is vested in an *International Convention*, which shall meet at regular intervals.

In the interval between two successive meetings in the Convention, the administration of the Catalogue is vested in an *International Council*, the editing and publication being carried on by a *Central International Bureau*.

The materials out of which the Catalogue is formed are to be furnished to the Central Bureau by *Regional Bureaus*.]

6. That the administration of the Catalogue be entrusted to a representative body, hereinafter called the *International Council*, the members of which shall be chosen as hereinafter provided.

7. That the final editing and the publication of the Catalogue be entrusted to an organization, hereinafter called the *Central International Bureau*, under the direction of the *International Council*.

8. That any country which shall declare its willingness to undertake the task shall be entrusted with the duty of collecting, provisionally classifying, and the transmitting to the Central Bureau, in accordance

with rules laid down by the *International Council*, all the entries belonging to the scientific literature of that country.

[The organizations created for the above purpose are called hereafter *Regional Bureaus*. Each region in which a *Regional Bureau* is established, charged with the duty of preparing and transmitting slips to the *Central Bureau* for the compilation of the catalogue, is called a 'constituent region.' ('98.26.)]

9. In 1905, in 1910, and every tenth year afterwards, an *International Convention* shall be held in London (in July) to reconsider and, if necessary, revise the regulations for carrying out the work of the catalogue authorized by the *International Convention* of 1898.

Such an *International Convention* shall consist of delegates appointed by the respective governments to represent the constituent regions, but no region shall be represented by more than three delegates.

The decisions of an *International Convention* shall remain in force until the next convention meets. ('98.26.)

### *Of the International Conventions.*

10. The rules of procedure of each *International Convention* shall be as follows :

(a) That English, French, German, and Italian be the official languages of the convention, but that it shall be open for any delegate to address the convention in any other language, provided that he supplies for the *procès verbal* of the convention a written translation of his remarks into one or other of the official languages.

(b) That there shall be Secretaries for the English, French, German, and Italian languages. ('98.3.)

(c) That the Secretaries, with the help of shorthand reporters, be responsible for the *procès verbal* of the proceedings of the conference in their respective languages. ('98.4.)

(d) That each contracting body (as hereinafter defined) shall have a vote in deciding all questions brought before the convention.

*Of the International Council.*

11. Each Regional Bureau shall appoint one person to serve as a member of a body to be called *The International Council*.

The International Council shall, within the regulations laid down by the International Convention, be the Governing Body of the Catalogue.

The International Council shall appoint its own Chairman and Secretary.

It shall meet in London, once in three years at least, and at such other times as the Chairman, with the concurrence of five other members, may specially appoint.

It shall, subject to the regulations laid down by the Convention, be the supreme authority for the consideration of and decision concerning all matters belonging to the Central Bureau.

It shall make a report of its doings, and submit a balance sheet; copies of which shall be distributed to the several Regional Bureaus, and published in some recognized periodical or periodicals, in each of the constituent regions. ('98.27.)

Each Contracting Body shall have one vote in deciding all questions brought before the Council.

[Pending the constitution of the International Council a Provisional Committee was appointed.]

*Of the Central Bureau.*

12. The Central Bureau shall be located in London. ('96.24.)

13. The Paid Staff shall consist of—

(i) A General Director who, under the International Council, and in accordance with the regulations of the Convention, shall direct, supervise, and be responsible for all the operations of the Central Bureau.

(ii) Expert Assistants skilled in the literature of various branches of science.

(iii) Such ordinary Clerks as may be necessary.

If the International Council so decide, there shall also be a Consultative Committee, appointed by the International Council, consisting of persons representing the several sciences, and residing in or near London. The Director shall be the Chairman of this committee. (Report of the Royal Society, p. 2.)

*Of International Committees of Referees.*

14. The following recommendations relating to International Committees of Referees are referred for consideration to the International Council when constituted. ('98.22.)

The International Council shall appoint for each science included in the Catalogue five persons skilled in that science, to form an International Committee of Referees, provided always that the Committee shall be as far as possible representative of the constituent regions. The members shall be appointed in such a way that one retires every year. Occasional vacancies shall be filled up by the Committee itself, subject to the approval of the Chairman of the International Council, and a member thus appointed shall hold office as long as the member whose place he fills would have held office.

It shall be the duty of the Director of the Central Bureau to consult the appropriate Committee or Committees, by correspondence or otherwise, on all questions of classification not provided for by the Catalogue Regulations; or, in cases of doubt, as to the meaning of those Regulations.

In any action touching classification the Director shall be guided by the written decision of a majority of the appropriate Committee, or by a minute if the Committee meets.

Provided always that when any addition to or change of the schedule of classification in any one branch may seem likely to affect the schedule of classification of some other branch or branches, the Committees concerned shall have been consulted; and provided also that in all cases of want of agreement within or between the Committees, or of other difficulty, the matter shall have been referred for decision to the International Council.

All business transacted by the Committees shall be reported by the Director to the International Council at their next ensuing meeting.

*Of the Regional Bureaus.*

15. In all countries in which, or wherever, a Regional Bureau is established, as contemplated in Regulation 8 (above), the Regional Bureau shall be responsible for the preparation (in accordance with Regulations hereinafter laid down) of the slips requisite for indexing all the scientific literature of the region, whatever be the language in which that literature may appear.

Each Regional Bureau shall transmit such slips to the Central Bureau as rapidly and as frequently as may be found convenient.

In the case of countries in which no Regional Bureau is established, the Central Bureau, failing other arrangements, shall, upon special mandate, endeavor to undertake the work of a Regional Bureau. ('98.24.)

### III.—OF THE SUBJECT-MATTER OF THE CATALOGUE.

16. The following branches of science shall be included within the scope of the Catalogue, and shall be indicated as follows by the letters of the alphabet in consecutive order as *Registration Letters*.

- A. Mathematics.
- B. Mechanics.
- C. Physics.

- D. Chemistry.
- E. Astronomy.
- F. Meteorology (including Terrestrial Magnetism).
- G. Mineralogy (including Petrology and Crystallography).
- H. Geology.
- J. Geography (Mathematical and Physical).
- K. Paleontology.
- L. General Biology.
- M. Botany.
- N. Zoology.
- O. Human Anatomy.
- P. Physical Anthropology.
- Q. Physiology (including Experimental Psychology, Pharmacology and Experimental Pathology).
- R. Bacteriology.

Technical matters of scientific interest shall be included in the Catalogue, but shall be referred to under the appropriate scientific headings. ('98.14 and Rep. Comm., p. 4.)

17. Schedules shall be approved by the International Council, in which the subject-matter of each of the above sciences is grouped under a convenient number of headings, each of which shall be indicated by an appropriate symbol. ('98.11, 15 and 21.)

In the first instance the schedules prepared by the Provisional International Committee shall be adopted, subject to such minor modifications of detail as may be found to be necessary in preparing the first volumes of the Catalogue. The symbols adopted to indicate the headings shall in the first instance be the numbers used for that purpose in those schedules. ('98. 20, and Rep. Comm., p. 5.)

After the publication of the first issue of the Book Catalogue, the Director of the Central Bureau shall consult the Committee of Referees as to the desirability of making changes in the classification, and shall report thereon to the International Council, who shall have power to authorize such changes to be made as they may think expedient. ('98.25.)

#### IV. OF THE FORM AND ISSUE OF THE CATALOGUE.

18. The International Council is instructed not to issue a Card Catalogue in the first instance, but if the finances permit, a Card Catalogue may be undertaken in future if approved by a special vote of an International Convention.

A Book Catalogue shall be issued in the form of at least one annual volume for each science, but parts may be issued at shorter intervals as the International Council may determine.

The International Council is instructed to proceed to the issue of bi-monthly or quarterly parts only if experience shows that such a course is desirable and financially practicable. (See Rep. Comm., p. 5, and '98.10.)

[Subject to any modifications which the experience of the Central Bureau may show to be desirable, Regulations 19 and 20 are submitted as embodying a scheme of publication.]

19. Since it is desirable to distribute the work of the Central Bureau and the printing of the Catalogue evenly over the entire year, the volumes shall be published in four groups as soon as possible after the first of January, April, July and October respectively.

[As an illustration, the two following schemes have been drawn up for consideration. The first, on the assumption that there will be a smaller number of editors than subjects, distributes the work in cognate subjects over the year.

The second is based on the assumption that there will be a larger staff of editors, so as to enable the volumes on cognate sciences to be published simultaneously.

Scheme 1.—To be published as soon as possible after—

January 1. A. Mathematics. D. Chemistry.  
G. Mineralogy. L. General Biology.  
P. Physical Anthropology.

April 1. B. Mechanics. H. Geology. M. Botany.  
Q. Physiology.  
July 1. C. Physics. J. Geography. N. Zoology.  
R. Bacteriology.  
October 1. E. Astronomy. F. Meteorology.  
K. Paleontology. O. Human Anatomy.

Scheme 2.—To be published as soon as possible after—

January 1. A. Mathematics. B. Mechanics.  
C. Physics. E. Astronomy.  
F. Meteorology.  
April 1. D. Chemistry. G. Mineralogy.  
H. Geology. J. Geography.  
July 1. K. Paleontology. L. General Biology.  
M. Botany. N. Zoology.  
October 1. O. Human Anatomy.  
P. Physical Anthropology.  
Q. Physiology. R. Bacteriology.]

20. The titles to be indexed in each volume shall be those (not having been included in a previous volume) received at the Central Bureau from the Regional Bureaus not less than three calendar months, or such shorter period as the Central Bureau may fix, before the first day of the month in which the volume is to be published.

The first group of volumes shall be issued in July, 1901.

The second, third and fourth groups of volumes shall be issued in October, 1901, and in January and April, 1902.

The first literature to be included in the Catalogue is that of January, 1901.

21. The annual volume for each science shall contain :—

(1) The schedule of that science with the authorized registration symbols (see 17 above).

(2) An alphabetical index to the schedule, with the registration symbols attached. (Rep. Comm., p. 5.)

(3) An Authors' Catalogue.

(4) A Subject Catalogue (see 1 above).

22. The schedules and alphabetical Indices shall be printed either in English, French, German, or Italian, under conditions laid down hereafter (see 40 below). (Rep. Comm., p. 5.)

23. The Authors' Catalogue shall be ar-

ranged according to the alphabetical order of the authors' names, the full titles of the memoirs or books of each author following his name in the order of the registration symbols by which they are indicated.

These titles shall be given in the original language alone if that language be either English, French, German, Italian or Latin.

In the case of other languages, the title shall be translated into English, or such other of the above five languages as may be determined by the Regional Bureau concerned (see 8 and 15 above); but in such case the original title shall be added, either in the original script, or transliterated into Roman script.

The title shall be followed by every necessary reference, including the year of publication, and such other symbols as may be determined. In the case of a separately published book, the place and year of publication, and the number of pages, etc., shall be given. ('98.18 and 25.)

24. The entries in the Subject Catalogue shall be primarily arranged in the order of the appropriate registration symbols in the schedules.

The order of arrangement in the final subdivisions shall in general, be in the alphabetical order of the authors' names, unless the subject demand other treatment. (Rep. Comm., p. 3.)

25. Each entry in the Subject Catalogue shall consist ( $\alpha$ ) of the author's name ('98.18, i); ( $\beta$ ) of the title of the paper, or of a modified title describing the contents of the paper [or that portion of the contents of the paper to which the entry specially refers] better than the title itself (Rep. Comm., p. 4); ( $\gamma$ ) of an adequate reference to the journal or other publication. ('98.18, i.)

The titles or modified titles in the Subject Index shall be given only in English, French, German, Italian or Latin.

If the title of the paper is not in one of these languages, the name of the language in which it was published shall be added, but the title or transliterated title in the original language shall be given in the Author's Catalogue only (see 23 above).

V.—OF THE LIST OF JOURNALS, COMMUNICATIONS TO WHICH ARE TO BE CATALOGUED.

26. Each Regional Bureau shall, before November 30, 1900, furnish to the Central Bureau a list of the Journals, the contents of which it proposes to catalogue. Such Journals to be arranged in a list according to the order of the 17 sciences (see 16 above), which form the subject-matter of the Catalogue.

Journals dealing with science generally are to be placed under a special heading of 'General Science.'

Journals dealing with a limited number of sciences are to be placed under a special heading of 'Several Sciences,' and the sciences with which they deal clearly indicated by the registration letters of Section 16 above.

27. On receipt of the above lists the Central Bureau shall prepare for each of the 17 sciences a list of the Journals (whether special or general) dealing with that science, together with the abbreviated titles which it proposes to use.

Copies of these lists shall be furnished to each of the Regional Bureaus before January 1, 1901, and the abbreviated titles therein given shall alone be used by the Regional Bureaus in the slips (see 15 above) communicated by them to the Central Bureau.

28. A general list of journals indexed in the Catalogue, with the abbreviations to be used as references, shall be issued with the first edition of the Catalogue. A supplement, giving the additions to this list, shall be issued annually with a new edition at the end of five years. (Rep. Comm., p. 5.)

## VI.—OF THE PREPARATION OF THE MATERIAL FOR THE CATALOGUE.

29. On and after January 1, 1901, or as soon after that date as the International Council may decide, the Regional Bureaus shall transmit to the Central Bureau the material to be indexed in the Catalogue, arranged on slips.

Unless otherwise ordered by the International Council—

30. The slips shall be of the character prescribed by the Central Bureau, and (except in the case of titles given in languages which do not employ Roman script) the entries thereon shall be either printed, typewritten or legibly written in Roman script.

31. At the head of each slip shall be given the letter and registration number indicating the science and subdivision of that science under which the material referred to on the slip is to be catalogued.

32. Unless the International Council decide otherwise, for each book or memoir to be catalogued, the Regional Bureau shall supply.

1. At least one copy of the entry for the Authors' Index, containing the material prescribed in Section 23 above.

2. At least one copy of each entry for the Subject Index, containing the material prescribed in Section 25 above, and Section 34 below.

The Regional Bureau shall retain duplicates until the volume containing the entries is published.

33. A paper or book shall be entered in the Subject Catalogue in more places than one only when this is rendered desirable by its scientific contents.

No exact limits to the number of entries to be allowed to single papers can at present be fixed. This must be determined by the Central Bureau, after adequate experience. Until such limits are determined, if the Central Bureau is of opinion that in the returns made by any Regional Bureau the numbers of entries to single papers do not

correspond to the scientific contents, it shall be its duty to intervene; such intervention, however, to be based, not on individual cases, but upon an average. (Rep. Comm., p. 3.)

34. The International Council is instructed to direct the Central Bureau to aim at keeping the total number of entries in the Authors' and Subject Catalogues within 160,000, and not to exceed 200,000 entries without the permission of the International Convention. (See Appendix I.)

[Lists of species (see 16 above) must be reckoned according to the space occupied, as may be arranged by the Central Bureau.]

The Central Bureau is therefore instructed to reject less important entries, if this step is necessary to keep within the limits above laid down.

## VII.—OF THE FINANCES OF THE CATALOGUE.

35. Any Body which establishes a Regional Bureau shall be termed a Contracting Body.

36. The number of copies of the catalogue due to each Contracting Body shall be sent to that Body, or to the corresponding Regional Bureau as such Body may direct, and shall be disposed of by that Body, by gift or sale, at its own discretion.

37. The Provisional Committee referred to at the end of paragraph 11 is instructed to negotiate with the several Contracting Bodies with reference to the sale in their respective regions of copies other than those subscribed for by the Contracting Bodies.

38. The various Contracting Bodies shall distribute the copies of the catalogue due to them in their own constituent regions.

39. Prices shall be fixed for the different volumes by the Central Bureau, and at the request of any Contracting Body, conveyed to the Central Bureau before a date to be fixed by the Central Bureau in any year, different numbers of the different volumes may be supplied to it during that year, pro-

vided always that the total value of such volumes does not exceed the value of the subscriptions received from that Contracting Body.

Unless a request to the contrary is received by the Central Bureau before the date fixed as above provided, the copies of the catalogue supplied in that year to any Contracting Body shall be a specified number of complete sets, *i. e.*, shall contain an equal number of all the volumes allotted to the different sciences.

If any Contracting Body requires a larger number of volumes than are covered by its subscriptions, such volumes may be supplied to it at specified prices to be fixed by the Central Bureau.

40. Any Contracting Body shall have the right to have the schedules and alphabetical indices prefixed to the volumes allotted to it in return for its subscription printed in English, French, German or Italian, as it may prefer.

If no request is made to the contrary, the language of the schedules and indices shall be English. ( 96.29.)

41. The total number of copies of the Catalogue printed in each year shall be in excess of the number allotted to the different Contracting Bodies to an extent to be fixed by the International Council.

The price at which the volumes are supplied to the Contracting Bodies shall be such as to cover the cost of production of such excess volumes, which, if wanted thereafter by any of the contracting bodies, shall be supplied to them at specified prices.

42. If the sale of the Catalogue or of the additional volumes result, in any year, in a profit, this profit shall be allowed to accumulate, and may be used by the International Council to cover a deficit in any other year; provided always that neither the scope of the Catalogue shall be increased, nor the total number of 200,000 entries exceeded,

without the direct permission of the International Convention.

If the Catalogue shows a profit after several years' working, the International Convention shall decide how the profit is to be applied, whether to increase the scope or the bulk of the Book Catalogue, or to the issue of a Card Catalogue.

43. The publication of the Catalogue shall not be undertaken unless the shares taken up cover the estimated cost of the catalogue.

44. The publication, if undertaken, shall be an experiment for five years. All the Contracting Bodies shall agree to continue their subscriptions for five years, and the International Council shall not make contracts extending beyond that period.

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*THE AMERICAN MICROSCOPICAL SOCIETY.*

THE twenty-third annual meeting of the Society was held in New York City, June 28, 29 and 30, 1900. The regular sessions were held in Schermerhorn Hall, at Columbia University, and while the attendance was not large there was no lack of interest and of good papers.

The afternoon session of Thursday was confined to reports of the Curator, Secretary and Treasurer, and to a brief business session whereupon the Society adjourned to accompany Section F of the American Association for the Advancement of Science on a trip to the New York Zoological Garden.

In the evening the Society convened at the rooms of the New York Microscopical Society, 64 Madison Avenue, to listen to the annual address of the President, Professor A. M. Bleile, on 'The Detection and Recognition of Blood,' after which the visitors present were tendered an informal reception by the New York Society.

The morning session of Friday, June 29th, was devoted to the reading of papers after a short business meeting. The read-