American Historical Review, the Inter-American Bibliographical Review, the Revista Hispanica Moderna, the Revista Iberoamericana of the Instituto Interamericano de Literatura Iberoamericana, the Revista Interamericana of the Instituto de Asuntos Interamericanos, Universidad de Florida, and the other similar publications of the Hispanic peninsula and the Western World.

Comprehensive gathering and systematic publication at regular intervals in one or more journals of this kind will mark a long stride toward help for research and investigation. It will furnish news about studies in process, about their progress, about the finished results.

It all calls for thought and attention, for the matching of mind with mind. It faced us long ago. The need for solution is now all the more clearly proclaimed by the compilation and appearance of Dr. Hilton's handbook. May action and solution come soon.—Harry Miller Lydenberg, A.L.A. International Relations Office, Washington, D.C.

L.C. Subject Headings


Subject Headings has long been known not only as a guide to the cataloging practice of the Library of Congress but also as a general index to its classification schedules. Publication of the present (fourth) edition, listing subjects and references as of Dec. 31, 1940, is of unusual importance. The first volume conforms to the pattern of previous editions and consists of subjects followed by classification numbers and references to related headings. The second volume lists, for the first time, the "refer from" references under the headings to which they refer. Catalogers have been asking for this special section for many years. It is an invaluable guide and timesaver.

Mary Wilson MacNair, editor of all four editions, has earned the gratitude of librarians by her devoted labors in this exacting field and by her willingness to take on a heavy additional burden in order to comply with the request of catalogers for the new section. Miss MacNair is known not only for the high quality of her editorial work but also for her impressive contributions to the cataloging of periodicals. Her retirement, recently announced, is a matter of deep regret to the library profession.

Printing of the first edition of the Library of Congress Subject Headings was begun in 1909 under the direction of the chief of the Catalog Division, the late James C. M. Hanson, under whose editorship Catalog Rules, Author and Title Entries had appeared the previous year. The edition was completed in 1914 under the direction of Charles Martel, who succeeded Mr. Hanson as chief of the Catalog Division; and it was under his supervision that the second edition appeared in 1919, the third in 1928.

David J. Haykin, chief of the Subject Cataloging Division, says in his introduction to the fourth edition:
Whatever measure of logic and consistency has been achieved in the headings is due to the continuity of oral tradition which stems from J. C. M. Hanson, who was chief of the Catalog Division from 1897 to 1910; Charles Martel, chief from 1912 to 1930, and their associates in the Catalog Division; and the occasional written instructions issued by them. The failures in logic and consistency are, of course, due to the fact that headings were adopted in turn as needed and that many minds participated in the choice and establishment of headings.

The eminent scholarship which distinguishes the subjects assigned to the literature of history, philology, and the fine arts reflects the strength of these classes in the Library of Congress. It is open to serious doubt, however, whether the scientific, technical, and industrial headings have kept pace with the development of the United States as a great industrial power.

Examples of the many subjects dating back to the first edition which should be broken up are:

- Cotton growing and manufacture
- Gas manufacture and works
- Paper making and trade
- Textile industry and fabrics
- Local subdivisions lend an amusing angle to subjects of the catch-all variety, as in the heading "Cotton growing and manufacture — Great Britain — Lancashire." A divorce of plantation from mill is advised in this case. The awkward combination is also a source of confusion in the choice of direct or indirect local subdivision, since "Cotton growing" calls for indirect subdivision, "Cotton manufacture" for direct.

The National Advisory Committee for Aeronautics adopted the term "Airplanes" in 1917; *Industrial Arts Index* followed in 1919; *Engineering Index*, in 1921; and I note the spelling "Airplanes" in the *Aeronautical Index* for 1939, compiled by the Division of Aeronautics, Library of Congress, and published in 1943 by the Institute of the Aeronautical Sciences. "Aeroplanes" is still used in the present edition of *Subject Headings*. The old spelling recalls the days when the roar of the mail plane overhead brought children's excited shouts of "Oh, Mother! The air-y-o-plane!" Their elders were not guiltless of transposing the letters of "aeroplane." There were even those who said "a-er-y-o-plane" in a determined though slightly confused effort to do their duty by that queer e.

In my opinion, the Library of Congress heading "Propellers, Aerial" (TL705-708) should be changed to "Airplane propellers" (or "Airplanes—Propellers"), and references from "Aerial propellers," "Air propellers," "Air-ships," and "Flying-machines" canceled.

The heading "Cracking process" in the January 1944 supplement raises the question as to why this material is being separated from its main subjects. Since 1916 *Chemical Abstracts* has used "Cracking" subheads under the three subjects "Petroleum refining," "Hydrocarbons," and "Gasoline manufacture." (The subheads first appeared under "Petroleum refining" in 1909; under "Hydrocarbons," in 1913.) Chemists and engineers look for material on the cracking process under these subjects.

"Offset printing" is another example of separation of material from the subject with which it is associated. "Printing, Offset" is used by *Chemical Abstracts, Engineering Index*, and *Industrial Arts Index*.

The subject "Heating, Hot-air" appears in the fourth edition. "Why 'Hot-
The subjects "Psychiatry" and "Pediatrics" have not yet been adopted. The old heading "Children—Employment" is still used for child labor; "Employers' liability," for workmen's compensation; "Hygiene, Public," for public health; "Domestic economy," for home economics; "Steam-boilers—Incrustations," for boiler scale.

The simple term, not the involved, is the one that becomes established in American usage. There can be no question as to choice between the library of the Department of Labor heading "Labor, Compulsory" and the Library of Congress subject "Service, Compulsory non-military." (The Library of Congress does not refer from "Labor, Compulsory").

"Science is exact. Industry is exacting," said E. J. Crane, editor of Chemical Abstracts, in an address delivered after receiving the Chemical Industry Medal on Nov. 5, 1937. In the course of the address he told of the matters which the Nomenclature Committee of the American Chemical Society took into consideration in its recommendations for names of deuterium compounds. On the basis of the committee's report, Chemical Abstracts adopted the subject "Water, Heavy" for deuterium oxide. Industrial Arts Index, which follows the Library of Congress practice of using subdivisions under subjects as well as inversions, adopted "Water—Heavy water," placing the subject in its proper alphabet in the company of "Water—Bacteriology and Water—Composition," rather than with the group including "Water, Underground." A reference should be made, however, from "Water, Heavy," the term under which it appears in several scientific sources. The Library of Congress has adopted the subject "Deuterium oxide" and refers to it from "Water, Heavy" but not from "Water—Heavy water."

Again, in his introduction to the 1942 subject index to Chemical Abstracts, Mr. Crane outlines his general policy: "The indexing of subjects, as opposed to word indexing, has been emphasized. This avoids omissions, scattering, and unnecessary entries." . . . "For insects our authority has been Common Names of Insects Approved by the American Association of Economic Entomologists. For bacteria the classification given in Bergey's Manual of Determinative Bacteriology, fifth edition, has been followed as far as possible, with numerous cross references. . . . Engineering Alloys by Norman E. Woldman and Albert J. Dornblatt (American Society for Metals, 1936) has been used for reference."

The nomenclature of Chemical Abstracts, Quarterly Cumulative Index Medicus, Engineering Index, Industrial Arts Index, International Index, and Agricultural Index cannot be ignored when new scientific, technical, and industrial subjects are being formulated or old ones revised. If the scientist and engineer are not to find the library catalog speaking an alien language, its subject headings must not disregard their terminology.—Helen K. Starr, James Jerome Hill Reference Library, Saint Paul.

2 Crane, E. J. "Introduction to Subject Index, 1942." Chemical Abstracts 36:7763, 7769.