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JULY-AUGUST 1960, Vol. 51, No. 6

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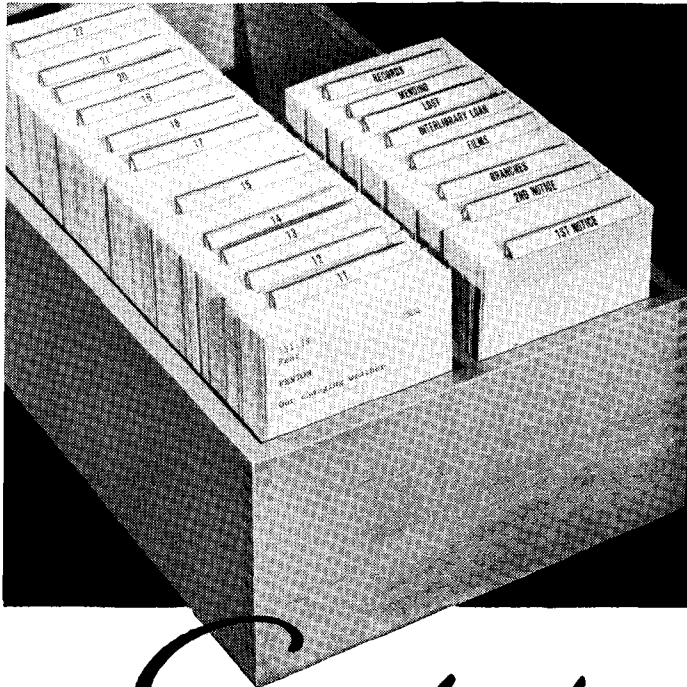
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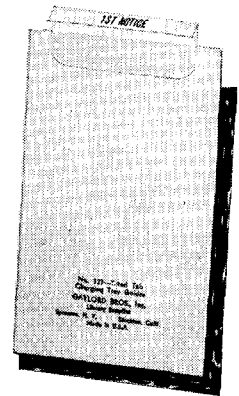


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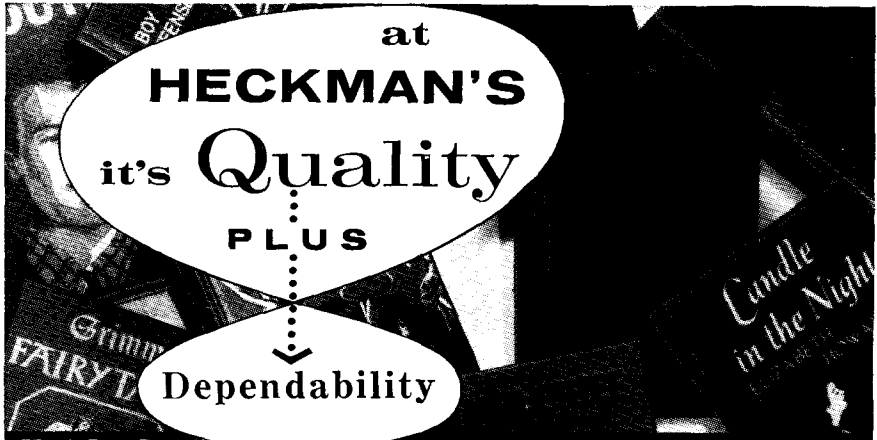
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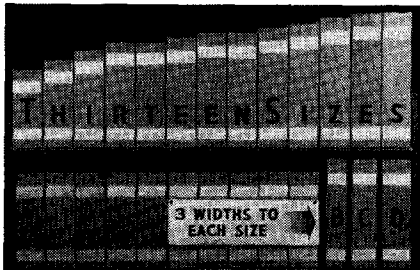
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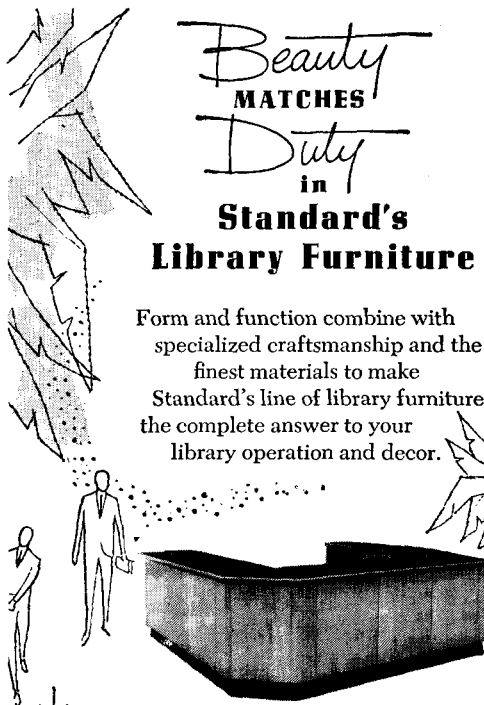
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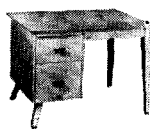
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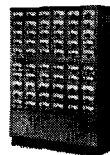
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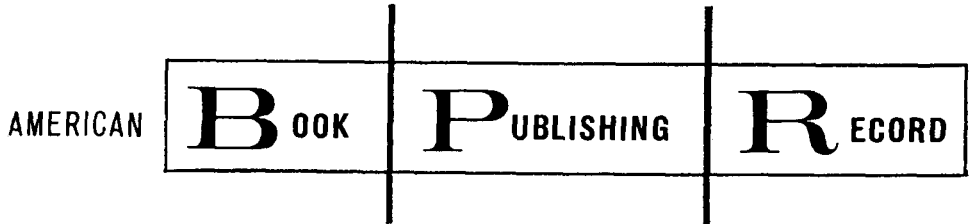
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Official Journal
Special Libraries Association

Volume 51, No. 6

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The Special Libraries Association has been a part of such advances for a half century. Our founders, through their willingness to work for SLA, started a tradition. Like a chain letter, it has multiplied until now nearly half of our members work in a Division, Chapter or Committee to maintain the Association's strong, complex, unique organization.

To keep in step with the quickening pace, we must make time occasionally to conserve and direct our strength. We need to search out the answers to crucial questions. What are our most important activities? What future developments will affect them? What goals must we set in order to be an even stronger Association in 1970 than we are now?

WINIFRED SEWELL



*Winifred
Sewell*

*President
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SLA's President, 1960-1961

AS A MEMBER of Special Libraries Association, Winifred Sewell needs no introduction. As an active participant nationally and internationally in the field of pharmaceutical literature and abstracting, she needs no explanation. As a librarian she needs no apologies.

Winnie is a graduate of the State University of Washington at Pullman. There she majored in English and languages, although she was almost enticed into chemistry. After graduation she moved east to New York and obtained her B.S. in L.S. from the Columbia University School of Library Service in 1940. However, this was not the end of Winnie's formal education. She continued taking courses in science and languages, including Russian, for another ten years. Winnie has more than the equivalent of a Ph.D., but all at the undergraduate level. She is convinced that the rewards of a career in a scientific library are much greater for librarians with a scientific background.

Before assuming her present position, Winnie worked full-time in the Columbia University Libraries for four years and then at the library of the Wellcome Research Laboratories for four years. Since 1946 she has been Senior Librarian at the Squibb Institute for Medical Research in New Brunswick, New Jersey.

Professionally her activities have been many and varied. In the past year, aside from being Vice-President of Special Libraries Association, she taught the course on Pharmaceutical Literature and Librarianship at Columbia University last summer and has been an active member of the Ad Hoc Committee for Revision of the U. S. Patent Office Steroid Code and of the Fédération Internationale Pharmaceutique Commission on Pharmaceutical Abstracts, which met in Berne last September. Recently she served as chairman of an industry committee of the Pharmaceutical Manufacturers Association to gather information on drug discoveries made in the United States and Europe.

As a member of Special Libraries Association she has served as an officer and as committee chairman in both the New York and the New Jersey Chapters. Winnie was active in organizing the Pharmaceutical Section and served as its first Vice-Chairman.

In 1952-53 she was Chairman of the Section. From 1948 to 1960, except for one year as assistant editor, she edited the Section's monthly publication, *Unlisted Drugs*. She has been chairman of the Section's Committee to Study Pharmaceutical Abstract Publication and of the Contact Committee on Pharmaceutical Literature Control. On the national level she has been a member of numerous committees.

In conjunction with her professional activities Winnie has also found time to contribute articles to publications of the Medical Library Association and the American Chemical Society as well as to *Special Libraries*.

Winnie's hobbies are as varied as her professional interests. She enjoys hiking and has sandwiched hiking trips in the Rockies, the Cascades and the High Sierras into her itinerary when she visits her family home in the State of Washington. Switzerland's Alps provided her with a new territory for hiking after last summer's FIP meeting. Although her car has curtailed her bicycling jaunts, she has biked through New England, Old England and Brittany. Her other interests include the theater, bowling, bridge and ball games.

At her charming converted carriage house in Highland Park, New Jersey, two more hobbies are on display. One is a wall decorated with maps collected during her travels here and abroad; the other is an enormous garden.

Winnie's quiet competence in many fields, her organizational ability and her record of achievements assure a successful year for Special Libraries Association.

WILMA F. KUJAWSKI

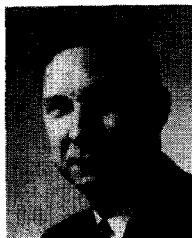
SLA Executive Board 1960-1961

First Vice-President and President-Elect

EUGENE B. JACKSON received his B.S. from Purdue University, a B.S.L.S. and M.S.L.S. from the University of Illinois and studied in the ASTP Program in Mechanical Engineering at Texas Technological College. After gaining experience in a variety of university, public, U. S. Army and aeronautical libraries, Mr. Jackson was appointed Chief of Aeronautical Intelligence, National Advisory Committee for Aeronautics in 1950 and two years later was made Chief of NACA's Division of Research Information. He joined General Motors Corporation as Librarian of its Research Laboratories in Warren, Michigan, in 1956 and three years later organized the first Conference on Technical Literature Activities for the company. He is active in domestic and international documentation activities in aeronautics and automotive engineering and has served in an advisory capacity to various federal organizations. Mr. Jackson attributes much of his success to a series of outstanding supervisors, including Rachael Schenk, John MacKenzie Cory and Ernest Miller, to the challenges offered him in the Technology Department of the Detroit Public Library back in 1942 and to early SLA assignments with Thelma Hoffman, Gretchen Little, Marie Goff and Robert Sale as colleagues. He has been active on numerous Association committees, the most important being Chairman of the Translation Center Committee, Association Director, President of the Cincinnati Chapter and Chairman of the Science-Technology Division. The role the librarian plays in research is most important, he feels: "Research reports are the record of millions of dollars spent in investigations in government, universities and industries. Active participation of special librarians and their encouragement of participation by scientific-oriented 'documentalists' in the utilization programs based on these reports is the only way to avoid expensive duplication and misdirected efforts." For relaxation Mr. Jackson enjoys square dancing with his wife (also an SLAer and librarian on the engineering staff of General Motors), bowling and camping.



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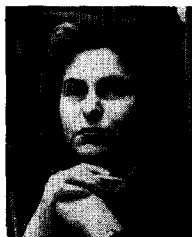
Maxwell

PAUL L. KNAPP began his library career as a page in the Kalamazoo Public Library where he began to learn librarianship from the bottom up. After graduating from Western Michigan University he earned his A.B. in L.S. at the University of North Carolina where, he recalls, Susan Grey Akers, then Director of the Library School, "had the vision to see the special library future and was willing to accept science-trained persons into librarianship." After two years as Chemistry Librarian at the University of Cincinnati, Mr. Knapp worked at the University of Illinois while studying for his A.M. in L.S. The Director of Libraries there, Phineas L. Windsor, taught him a valuable lesson by "demonstrating the value of collecting seemingly strange publications for future research." Following positions with the Technology Department of the Toledo Public Library, Owens-Corning Fiberglas Corp., the University of Nebraska and Drake University, he was employed by The Ohio Oil Company to organize and be Librarian of its new Research Center in Littleton, Colorado.

Mr. Knapp has been President of the Colorado Chapter and in February of this year was Chairman of the "Forum on the Abstracting and Indexing of Petroleum Exploration and Production Literature," sponsored by the Petroleum Section. He believes "SLA must consider a broadening of scope which expands beyond the traditional library service and encompasses the total information production, indexing, search and dissemination process. Much dynamic work is being pursued by other groups and associations which will depreciate the prestige and position of SLA if it lets others carry out studies which it should be conducting." Mr. Knapp enjoys training and showing dogs, fishing, hunting, golf, tennis and hiking and has been active in YMCA work.

Secretary

MRS. JEANNE B. NORTH recalls that as a child she created subject card indexes to magazines and that one of her favorite Christmas presents was a file for clippings. After earning a Special Certificate in Aeronautical Engineering from Cornell University and a B.S. from the State University of Iowa, she studied for her B.S.L.S. at Columbia University School of Library Service. Following positions as Junior Liaison Engineer with Curtiss-Wright Corporation in Buffalo and as Junior Liaison Engineer with Wilson Chemical Feeders, Mrs. North joined United Aircraft Corporation in 1948 as Roving Librarian. One year later she was made Reference Librarian and in 1957 Head Librarian. Her previous principal activities in SLA include being President of the Connecticut Valley Chapter, Chairman of the Metals Division and Chairman of the Special Libraries Committee. She readily admits that "Much of my adult professional enthusiasm has come from the stimulating contact with friends in Chapter and Division activities. In providing a forum for new ideas and a court of professional opinion, SLA is both a stimulus for forward thinking and a moderating influence on untried proposals." Mrs. North is also active in the Society of Technical Writers and Editors and is currently serving as its Secretary.



Treasurer

OLIVE KENNEDY is a graduate of Skidmore College with a library science degree from Columbia University. Prior to becoming Librarian for the Offices of Messers Rockefeller in New York City in 1951, she held library and research jobs with the New York State Department of Taxation and Finance, "Business Week," McGraw-Hill Publishing Company, the National Electrical Manufacturers Association and Amos Parrish & Company. Miss Kennedy has served on the Association's Finance, Convention, Headquarters Personnel and Constitution and Bylaws Committees and has been President of the New York Chapter and editor of the "News." She is a theatergoer, likes to travel and collects miniature vases. Miss Kennedy has commented: "The special librarian should take the initiative in his organization to promote SLA through his personal and professional activities. In the same manner, the Association, through its membership, can contribute to development of research in many areas."



Directors



SARA A. AULL came to the University of Houston Library as Reference Librarian with a varied background in the Dayton and New York public libraries, the Lansing and New York public schools, the U.S. Foreign Economic Administration Library and the Public Relations Department of the Association of American Railroads. Special librarians Hazel B. Macdonald and Elizabeth O. Cullen were very helpful during her Washington assignments and when she arrived in Texas she remembers that "Members of the Texas Chapter invited me to join SLA. Their friendliness, professional attitude and the purposefulness of their meetings and projects sparked my interest." Miss Aull helped plan the Institute for Special Libraries in Houston and has just completed a term as President of the Texas Chapter. She believes the Association is worthwhile because "it uses the accumulated experience in librarianship to facilitate new techniques and methods for making easily available the

heritage of the past and current contributions of research workers." An avid traveler, Miss Aull is a graduate of Lenoir Rhyne College with a library science degree from Columbia University.

MRS. ELIZABETH R. USHER earned her B.S.L.S. at the University of Illinois Library School after graduating from the University of Nebraska, where she held her first library job. Her first special library position was at the Cranbrook Academy of Art where the Director, Albert Christ-Janer, encouraged her interest in art librarianship. She joined the staff of the New York Metropolitan Museum of Art in 1948 and in 1954 was made Assistant Librarian. Mrs. Usher has acted as Chairman of the Museum Group of the New York Chapter as well as of the Museum Division and in 1957-58 was President of the New York Chapter. She thinks the "cooperative exchange of information and research materials" is one of SLA's principal contributions. An enthusiastic golfer, Mrs. Usher also enjoys cooking and listening to stereo records in her leisure moments.



EDITOR'S NOTE: For biographical sketches and photographs of Executive Board Directors who are continuing in office, see *Special Libraries*, September 1958, page 290: Alvina F. Wassenberg and Donald Wasson; and *Special Libraries*, September 1959, page 287-8: Lorraine Ciboch and W. Roy Holleman.

SLA Sustaining Members

The following organizations are additions to the lists of Sustaining Members published in previous 1960 issues of *Special Libraries* and represent new applications received through June 15, 1960.

AMERICAN CAN Co., Barrington, Illinois
SUN OIL Co., Philadelphia, Pennsylvania

Correction: The listing for General Electric Company was given incorrectly in the April 1960 issue. It should have been:

GENERAL ELECTRIC COMPANY, Schenectady, New York

Picture Research at the Library of Congress

DR. EDGAR BREITENBACH, Chief, Prints and Photographs Division
Library of Congress, Washington, D. C.

I AM WELL AWARE that there are misconceptions in the minds of the public about the Prints and Photographs Division of the Library of Congress. Because of the reputation the book collection enjoys, many people expect to find picture files that are equally all-embracing, covering all subjects whether current or historical, American or foreign. Actually, the Division is seldom in a position to supply up-to-the-minute needs as it is basically an archive that receives material after it has lost its newness. Furthermore, we do not provide a general iconographic service because our collection concentrates on original source material; it does not include clippings from either books or periodicals. In the field of source material, because of the overwhelming quantities in which photographs are produced, we obviously have to limit ourselves and exercise selective policies as to what we shall collect.

While on the one hand picture researchers often request material we cannot supply, on the other hand they are all too often unaware of the actual wealth of our collection. Much material of potentially great value to the public is thus neglected. Over the years the Division has acquired numerous special collections dealing with a wide variety of subjects. These have been admirably described by Paul Vanderbilt in his *Guide to the Special Collections of Prints and Photographs in the Library of Congress*, published in 1955. Unfortunately, this most useful bibliographical tool is not sufficiently used.

The collection of the Prints and Photographs Division is a conglomeration of seemingly heterogeneous materials. There

are drawings, including architectural drawings, old master drawings, preparatory sketches for prints, original book illustrations and political cartoons. We have thousands of fine prints produced in all media and ranging in time from the late Middle Ages to the present day. The majority of our large number of historical and popular prints are invaluable documents of the American past. Finally, there is a vast body of photographs and photographic negatives, indeed so many that we can only make a rough estimate of their number.

In its composition, the Prints and Photographs Collection is probably unique; at least I have not come across another of similar make-up. The material was acquired in various ways, either as the result of planned action or automatically through copyright or the generosity of donors. The result is a body of pictures as colorful as any European collection of much older tradition. Our collection, despite its heterogeneous contents, has grown organically at a surprising pace until it has now reached a staggering size.

Beginning of the Division

The history of the Division as an administrative unit began in 1897, the year the Library moved from its cramped quarters in the Capitol to a new home of its own. In this monumental building, designed in the style of the High Renaissance and lavishly decorated with mosaics, mural paintings and sculptures by prominent American artists, the Division of Prints, as it came to be known, was assigned for its exhibitions a splendid gallery and a corner pavilion on the front facing the Capitol. A long hall along the side of the building housed the collection;

Paper presented before the Picture Division, June 1, 1959, at the 50th SLA Convention in Atlantic City, New Jersey. (Abridged)

at the end of the hall was a second corner pavilion where a reading room was installed. There was immediate access to a stack area for the books on art and architecture, the class "N" of the Library's classification schedule.

For its period, the layout of the Division was quite advanced. Except for having lost one pavilion, we are still in the same spot after 60 years, and though in the meantime our needs have changed a great deal, we nevertheless enjoy daily the aesthetically pleasing features of our stately quarters. For its growing collection of negatives, the Division now has an air-conditioned stack area in the Annex built in 1939.

The art collection, transferred in 1897 from the Capitol, numbered 833 books and some 54,000 prints and photographs. The breakdown of the latter figure reveals that there were some 33,000 photographs, 7,000 engravings and etchings, 4,000 photogravures and only 5,000 lithographs. Since nearly the entire collection was derived from copyright deposits, the surprisingly low figure for lithographs indicates that most of our present holdings were transferred from auxiliary copyright repositories at a later date. This accounts also for the gaps in our collection which we are now trying to fill.

The number of items that had been acquired through purchase was quite small. There was the St. Mémin Collection of about 400 American portraits, which the artist had executed by means of a method combining engraving and silhouette making, and a fine collection of 860 photographs of California and Nevada published by George S. Lawrence and Thomas Houseworth in 1865. The only noteworthy donation antedating 1897 is the splendid photographic survey of Turkish institutions, some 2,250 pictures which Sultan Abdul Hamid II presented in 1893.

So much for our modest beginnings. The first bold policy statement contained in the *Annual Report* of 1898 was mainly dictated by necessity:

The first consideration in the Art Department will be those of classification, cataloging and

preservation. Whatever comes as graphic art, however trivial or even questionable, will be preserved as elucidating the manners and customs of our day. It is not for us, but those who come after us, to estimate the importance of what we now acquire and put away. There can be no vital criticism upon its value until after a century of experience and change.

This acquisition policy is followed by an equally courageous statement dealing with cataloging methods:

Every print is thoroughly described in books of record. It is also entered by its title and class, its publisher and artist, on as many different cards alphabetically arranged, so that its history and description can be immediately furnished.

It is hoped in time to have a catalogue of the entire collection, more especially if the accessions do not exceed the present rate of 12,000 a year. We have now on hand 64,587 prints.

Two years later, in 1900, the original collection of 54,000 pieces had passed the hundred thousand mark. Cataloging was no longer the most pressing problem; it had been superseded by the elementary need for more storage receptacles.

On matters of processing, the *Report* of 1900 states modestly that, "Cataloging on cards has now begun, but as yet it covers only the Hubbard Collection." It never went beyond a straight author catalog for the etchings and engravings. The copyright material kept on arriving in an ever-increasing amount, while at the same time its documentary value was diminishing. For current accessions a record book was kept up, but, with the very small staff, which until 1946 serviced the books on art and architecture in the divisional reading room in addition to the prints, there was no time to catch up with the older copyright deposits transferred from various governmental agencies.

The series of copyright photographs from the 1870's to the 1920's, numbering three-quarters of a million, remained unorganized until a few years ago. Whatever arrangement was devised for the commercial prints in the early part of the century was abandoned during the 1930's when appreciation of this kind of material was at its lowest ebb. In recent years we have made strong efforts to sort these prints into subject categories.

A new building usually attracts donations. In 1898, the year following the opening, the newly created Division of Prints received from the estate of Gardiner Greene Hubbard a distinguished collection of prints by old masters and American artists of the 18th and 19th centuries. The collection included a special group of pictures dealing with the Napoleonic era. Mr. Hubbard also willed the amount of \$20,000 to be made available to the Library after his wife's death, which occurred in 1909. It was stipulated that the income from this endowment be used for additions to his collection. Since the annual amount is modest in terms of present prices and since, moreover, the National Gallery of Art is building up a collection of old master prints through the generosity of Lessing Rosenwald, we are now using the money exclusively for the purchase of American prints.

A. J. Parsons, 1899-1911

The acquisition of the Hubbard Collection gave impetus to the development of the Division's holdings in the fine arts field, a course that was followed for more than 40 years. Shortly after Herbert Putnam became Librarian of Congress in 1899, the first chief of the Division, Arthur Jeffrey Parsons, was appointed. He was a scholar thoroughly acquainted with prints. During his first year in office he prepared the catalog of the Hubbard Collection, which was published in 1905. Though his personal interest centered in the fine arts, his concept of the scope of the collection was in many respects identical with ours today. "We must distinguish," he said in one of his reports, "and make readily available what may have historical, biographical or topographical interest, or be instructive as examples of processes." In the gallery of the Division he started a vigorous exhibition program, which included not only old masters but also American art. Much of the latter, he said, would illustrate the progress of our art from crude to finished stages. And he added, "We shall endeavor to show the history of political thought and as many



Library of Congress

The Reading Room of the Prints and Photographs Division

as possible of American portraits from the Colonial to the present days."

The accessions made under Parsons' administration bear witness to this policy. Current events are reflected in pictures dealing with the Klondike gold rush, Alaska and the Philippines. The Japanese conflict with China is documented by a collection of cartoons. Drawings made for a Japanese encyclopedia and the magnificent series of engravings illustrating the victories of the Chinese Emperor Ch'ien Lung indicate the Library's interest in Far Eastern affairs. The Yudin Collection added much valuable material on Siberia, while the picture files of the American Colonization Society contained many rare views of Liberia and West Africa, so prominent in the news today.

Despite these world-wide interests typical of the era of Theodore Roosevelt, national history was not neglected. Long before the Brady negatives were acquired, Mr. Parsons had 2,000 prints made to augment his portrait collection. In the field of fine arts he acquired architectural drawings by William Thornton, a curious collection dealing with the development of equestrian statues, numerous restrikes of French and Italian old master prints and German facsimile reproductions. Almost

annually Mr. Parsons bought large quantities of photographs of works of art which, in the days before the inexpensive picture books, were made available on loan to schools and private groups. In 1911, the year he was forced to resign because of ill health, the collection numbered 340,000 pieces. In Mr. Parsons' obituary four years later, Dr. Putnam paid him the following well-deserved tribute: "When he took charge of the Division, it was without distinction in material, service or repute. It has now a certain distinction in all three."

R. A. Rice, 1911-1925

Parsons' successor, Richard A. Rice, had already reached retirement age when he entered the service of the Library. At the time of his death in 1925, still in office, he was nearly 80. A graduate of Yale who had subsequently studied at German universities, Richard Rice could look back on a distinguished career as Professor of History of Art at Williams College. Since the retirement annuity he received from the Carnegie Corporation was too small to live on, he was forced to seek further employment. The Library's offer of the position of head of the Division of Prints, carrying an honorarium of \$2,000 a year, was a bargain for the Library and a boon for Professor Rice.

The development of the Division under the administration of Professor Rice was steady rather than spectacular. As one reads through the *Annual Reports* of those years, it becomes evident that he made strong efforts to improve the collection of fine arts books. Rare source material and many early illustrated books were acquired. Among the additions to the picture collection were the Civil War drawings by Forbes and Waud, the Brady daguerreotypes, political cartoons by Raemaker, quantities of posters, including American Art Nouveau posters of the 1890's which Frances Benjamin Johnston collected, political posters from the First World War and a fine collection of British railroad posters that had started the vogue for travel posters. In 1917 Joseph

Pennell presented his collection of Whistleriana as the first installment of his generous bequest, which culminated in the transfer of his entire estate to the Library 20 years later when Mrs. Pennell died.

In his *Annual Report* of 1923, Dr. Putnam expressed the need for an adequate remuneration to Professor Rice for his services. After his death two years later, the Librarian clearly recognized that without an entirely new approach to the salary problem it would be impossible to find an adequate successor. Two propitious events aided the solution. One was the Coolidge endowment for a Chair of Music, the income from which was designed to fill the gap between the then low government stipend and the salary a specialist in the field could expect. The other was the bequest of Joseph Pennell, who died in 1926. Dr. Putnam thus felt encouraged to appeal to foundations and individuals to endow chairs in several subject fields. In 1927 the Carnegie Corporation endowed a Chair of Fine Arts, and two years later Leicester B. Holland became its first incumbent.

L. B. Holland, 1929-1943

Dr. Holland was an architect by training, a scholar in the field of early American architecture by inclination and by profession a teacher of art history. Although the name of the Division was changed from the Division of Prints to the Division of Fine Arts in recognition of the Carnegie gift, there was no break in policy. As Chief, his duties were the same as those of his predecessors, i.e., to develop the picture collection as well as the collection of books in the field of art and architecture.

Among Dr. Holland's many achievements his most noteworthy accomplishment was the creation in 1931 of the Pictorial Archives of Early American Architecture, a collection of photographic negatives and prints to which soon were added the measured drawings, data sheets and photographs of the Historic American Buildings Survey. This outstanding project, carried out through the joint efforts of the

National Park Service, the American Institute of Architects and the Library of Congress, ended in 1940, but thanks to Congress was reactivated two years ago. The collection now consists of some 27,000 measured drawings and 30,000 photographs relating to 7,500 buildings.

Dr. Holland's second great achievement is the Cabinet of American Illustration, which he created with the help of William Patten, art editor of *Harper's Magazine* during the 1880's and '90's. This collection consists of several thousand original drawings made in the preparation of book illustrations during the latter part of the 19th and early 20th centuries. We are still adding to this collection whenever we find suitable material.

Dr. Holland recognized the importance of 19th century American lithographs before the value of such material was generally appreciated. As far back as 1931 he organized an exhibition of Currier and Ives prints, and year after year he reported the number of prints discovered among old copyright deposits. He added steadily to the collection of fine prints, particularly by American artists. When the income from the Pennell bequest became available in 1938 and, in accordance with Pennell's will, a purchasing committee was set up, the collection of fine prints grew at an accelerated pace. Today the Pennell Collection consists of nearly 6,000 prints. We are concentrating our efforts on the acquisition of contemporary graphic art, both foreign and American. Since funds are ample, this collection is gradually becoming the outstanding one of its kind.

The long administration of Dr. Putnam came to an end in 1939. The new Librarian, Archibald MacLeish, soon introduced reforms that affected the Library as a whole. He restored the principle of the undivided book collection. Henceforth the Divisions were based on form rather than content, i.e., their holdings were either materials not in book form, such as prints, photographs, manuscripts, maps or music, or were written or printed in Oriental characters. The application of this rule led

in 1947 to the transfer of the custodial responsibility for the books on art and architecture to the Stack and Reader Division, which is in charge of the general book collection. It also led to another change of the Division's name; since 1944 it has been known as the Prints and Photographs Division.

The *Annual Report* of 1940 gives 552,000 as the total number of items in the Division's collection. Today the Prints and Photographs Division estimates its holdings at between three and four million pieces. This unprecedented growth is for the most part accounted for by the acquisition of photographs which Mr. MacLeish and his successor, Dr. Luther H. Evans, encouraged and is, above all, a tribute to the work of Paul Vanderbilt who was in charge of the Division from 1947 through 1950.

Paul Vanderbilt is a man of vision, but during his administration the world situation was such that, amid ever-growing post-war demands upon the Library, the needs of the Prints and Photographs Division could not be granted the highest priority. The Library administration was and is fully aware of the Division's situation, however, and it is hoped that it will be possible to give the Division additional support in the near future.

Selected Photographic Collections

To give an idea of the wealth of material, here is a partial list of the photographic collections acquired in the 1940's and '50's.

AMERICAN NATIONAL RED CROSS (62,000 negatives) acquired in 1944. A detailed record of the Red Cross as an organization; extensive coverage of specific disasters in the United States, relief work abroad between 1917 and 1923.

BAIN COLLECTION (about 120,000 glass negatives) acquired in 1948. American personalities (1898-1916), sports events, New York scenes.

MATHEW B. BRADY COLLECTION (10,000 negatives, 300 lantern slides, and 160 stereoscopic transparencies) acquired in 1943. This famous collection of Civil War pictures has been referred to as the most valuable of its kind in America.

BRADY-HANDY COLLECTION (about 10,000 negatives) acquired in 1954. Pictures taken by Mathew

B. Brady and his nephew, L. C. Handy. Of particular importance are the portraits of Members of Congress taken during and immediately after the Civil War, of Presidents and their wives, Cabinet Members and other leading citizens.

CARPENTER COLLECTION (about 20,000 negatives and photoprints) acquired in 1951. Photographs made mostly between 1910 and 1925 to illustrate popular books on geography. Regions and countries covered include the Near East, North Africa, Alaska, Central and South America and the Far East.

FARM SECURITY ADMINISTRATION (272,000 negatives and 150,000 mounted photoprints) acquired in 1944. A *comprehensive survey of life in America during the 1930's*.

ARNOLD GENTHE (about 20,000 negatives and 8,500 photoprints) acquired in 1943. Genthe was one of the great American artist photographers; in the beginning of this century he recorded life in San Francisco, Central America and Japan.

HARRIS AND EWING COLLECTION (300,000 negatives) acquired in 1955 and 1958. A vast portrait collection of leading figures in political and social life between 1905 and 1945, as well as Washington news pictures.

JACKSON COLLECTION, DETROIT PUBLISHING COMPANY (35,000 glass negatives and 20,000 photoprints) acquired mostly in 1949. The company was one of the largest and most active general publishers of photographs in America between 1898 and 1914.

FRANCES BENJAMIN JOHNSTON COLLECTION (about 20,000 negatives and photoprints) acquired in 1953. The life work of the first prominent woman photographer in America, 1864-1952.

NATIONAL PHOTO COMPANY (78,000 glass negatives) acquired in 1947. Washington news service pictures made during the administrations from Wilson to Hoover.

OFFICE OF WAR INFORMATION (50,000 negatives) acquired in 1944. Life in America during the war years, with emphasis on war production.

WASHINGTON PRESS PHOTO SERVICE COLLECTION (about 50,000 negatives) acquired in 1952. Commercial studio portraits made between 1938 and 1944, including portraits of members of the 76th Congress. U. S. Government officials, diplomats, Army and Navy officers, et cetera.

WITTEMANN COLLECTION (75,000 photoprints and photo-reproductions) acquired in 1953. Early 20th century views of locally notable buildings, business establishments and scenic spots made for reproduction on postcards.

Control Methods

Many of the collections came to us with their own control systems, which, though

often far from perfect, enable us to make use of the material.

Large parts of our copyright deposits are now arranged by subjects. This system works well as long as the subject matter is simple; it becomes unsatisfactory when in addition to the obvious subject matter, a picture contains an abstract meaning. In such instances we prefer individual cataloging. As an example, consider a commercial poster of the 1870's. There is a mountainous Western landscape with a railroad line on either side. One railroad, named Monopoly, is in disrepair, the other, Competition, is well kept. From the latter people are unloading boxes with the name of a shirt manufacturer. There is, of course, an artist's name and the name of a lithographic firm. If we place this print in a drawer labelled "Advertisements—clothing," all other aspects would be lost. In a collection such as ours, which has archival functions, the other facets are too important to be neglected.

In addition to this self-indexing file, we use the lot-cataloging method. Pictures issued as a series or collected in order to illustrate a central theme are cataloged on standard size cards, which are entered in the catalog under as many subject headings as the case requires. The majority of the collections described in Mr. Vanderbilt's *Guide* have been treated in this manner.

The third method, individual cataloging, is applied to most of our fine and historical prints and drawings. Since the 19th century American lithographs are of special importance to our reference work, we plan to revise our catalog in the near future. The number of subject headings will be greatly increased, and whenever an artist's signature appears on a print his name will be entered in the catalog. This practice, unfortunately rarely applied to the large collections of 19th century American lithographs, will be the first step towards the compilation of *oeuvre* catalogs of native printmakers. For too long a time now, the use of the mere subject approach has been a factor leading to the neglect of the people who designed the prints.

Division Services and Projects

The bulk of our reference service is carried on by letter; we have a great many requests for photoduplication. The number of visitors to the Division is comparatively small, but those who do come are often engaged in lengthy projects. In special cases we give them the privilege of access to our stack material.

Although the fine arts books are no longer served in the Division reading room, the Chief of the Division, in his capacity of senior recommending officer for art and architecture, is still charged with building up the book collection. We are acquiring current scholarly publications and source material on a world-wide scale without restrictions. For retrospective material, i.e., titles two or more years old, our funds are, however, extremely limited. I assume it will interest art librarians to learn that the collection of 833 art books transferred in 1897 from the Capitol has grown to about 130,000. Most of these books are available on interlibrary loan.

In order to attract more fine arts students to the Division (they used to come in large numbers when we served art books in our reading room), we are trying to develop scholarly tools for research which do not exist elsewhere. We have mounted the Gernsheim Corpus Photographicum, a file of over 25,000 photographs of old master drawings combining the holdings of many of the European collections. As soon as funds become available, we intend to have a subject index made in addition to the artists' index, which is almost completed.

Ever since the Division was first established, it has been engaged in a lively exhibition program. Although the Library now has an Exhibits Officer who is responsible for over-all programs and for technical details, exhibitions originating in the Prints and Photographs Division are still prepared by our staff. Some of these exhibitions are shown only at the Library, but as a rule they are circulated later in the United States by the Smithsonian Institution Traveling Exhibition

Service and abroad by the United States Information Agency. Both contemporary graphic art and historical prints are included in this program.

Once a year we invite American print-makers to submit to a jury prints made during the preceding year. The best entries are chosen for the National Exhibition, now in its 18th year. A catalog of this exhibition, which the Library circulates throughout the country, is published annually.

Other publications include an oeuvre catalog of the work of Charles Fenderich, a Swiss-American portrait lithographer who was active in Philadelphia and Washington during the 1830's and 40's, and a checklist of Brady negatives, scenes from the Civil War and portraits of many of the leading participants, to appear in 1960.

Over the past 20 years the collection has grown at an enormous rate. In the future we must be at once more systematic and more selective in our acquisitions. The task of preserving the pictorial record of the American past cannot be ours alone but must be shared with the picture collections of many other institutions. We stand ready to accept files of national or international scope or specialized collections concerned with non-scientific subjects. Regional files, on the other hand, are best kept in institutions devoted to local history.

Midwest Inter-Library Center

The Midwest Inter-Library Center, 5721 Cottage Grove Avenue, Chicago 37, Illinois, welcomes teletype requests for its materials, all of which may be borrowed under the terms of the Interlibrary Loan Code. Special libraries may be especially interested in the Center's collection of chemical and biological journals. This collection includes all of the titles in the *List of Titles Abstracted by Chemical Abstracts, 1956* and in *Biological Sciences Serial Publications. A World List: 1950-1954* that are not in an MILC member library. At the present time, new titles from the annual supplements to the *Chemical Abstracts* list are not being ordered. The chemical journals start with the 1957 issues, the biological journals with 1958 issues.

A Survey of Special Library Education

ELIZABETH W. OWENS, Librarian

Union Electric Company, St. Louis, Missouri

Chairman, Scholarship and Student Loan Fund Committee, 1957-1959

THE RULES GOVERNING the Special Libraries Association scholarship awards make it clear that the scholarships are to be granted to college graduates who desire to enter the special library field or those working in special libraries who wish to continue their professional training. The awards, made on that basis, are to be used for graduate work at any of the ALA accredited library schools in the United States and Canada. The scholarship rules do not make service in a special library obligatory, although many members of the Association have felt that such a stipulation should be added. Up to this time, the Association has been fortunate in that all but one of its scholarship winners and most of those who have used the Loan Fund have taken special library jobs.

When processing the scholarship applications, the committees have been besieged with the same questions, "Which schools give the best special library training?" "Which accredited school does SLA prefer?" "Why are so few special library courses offered by the accredited library schools?" Along with the questions came statements that some library school educators actually discouraged the prospective student's interest in the special library field. To obtain a true picture of the situation, a questionnaire asking for the number of special library courses and the names of the instructors was sent to the directors of all the library schools on the ALA accredited list during the spring of 1959.

The first tabulation of the results of the questionnaire, made by Clara G. Miller, Librarian of the Imperial Oil Ltd. of Toronto, and a member of the 1957-59 Scholarship and Student Loan Fund Committee, are shown below:

Schools surveyed	32
Schools replying	31

No courses	5
One course	9
Two courses	2
Three courses	5
Four courses	4
Five courses	1
Six or more	5
Schools using practising special librarians as instructors	14
Detailed information of courses offered, the names of instructors and comments of Directors follow:	

ATLANTA UNIVERSITY

"We do not offer any courses in special librarianship. We have a unit in our course, Libraries and Librarianship, on special librarianship which is a general survey of the different types of special libraries and their general purposes and types of services which they offer. We do not think that any such courses will be offered in the near future. We do encourage students to do term papers and to do individual research on special aspects when they have a definite personal interest in such subjects."

(Mrs.) Virginia Lacy Jones, Dean

UNIVERSITY OF CALIFORNIA (Berkeley)

Bibliography of Science & Technology

—Melvin Voight

Bibliographic Organization & the

Retrieval of Information—Melvin Voight

CARNEGIE INSTITUTE OF TECHNOLOGY

Literature of the Sciences and Technology

—Daniel R. Pfoutz

Documentation of Scientific Literature

—Kenneth Fagerhaugh

Administration of Science & Technology Libraries

—Kenneth Fagerhaugh

CATHOLIC UNIVERSITY OF AMERICA

Special Library Administration—Dr. Karl Baer

Reference & Bibliography in the Natural Sciences

& Technology—Dr. Karl Baer

Medical Reference & Bibliography

—Dr. Estelle Brodman

Theological Seminary Library Administration

—Rev. Bernard Theald

SPECIAL LIBRARIES

UNIVERSITY OF CHICAGO

Special Librarianship—Marion James
Library Services in the Social Sciences

—Marion James

Rare Book Librarianship—Howard Winger
Library Services in Science & Technology

—Herman Henkle

Seminar in Special Problems in Cataloging &
Classification—Ruth French Strout

The last named course deals with cataloging &
classification in special libraries.

This listing does not include any of the required
courses in special subjects areas. These actually
deal with special libraries but are required of all
students:

Interpretation, Evaluation and Use of Library
Materials in the Social Sciences—Edward Strable
Library Materials in the Humanities

—Ruth French Strout

Library Materials in the Natural Sciences

—Herman Henkle

COLUMBIA UNIVERSITY

LS s220B Medical Literature—Thomas Fleming

LS s220C Music Literature & Librarianship

—Dr. Catharine K. Miller

LS R220G Business & Economics Literature

—Janet Bogardus

LS s220T Theatre Librarianship

—George Freedley

LS 220E Engineering Literature

—Russell Shank

LS s220A Legal Literature & Librarianship

—Miles A. Price

LS s220P Pharmaceutical Literature & Librari-
anship—Winifred Sewell

"There are no courses at the School of Library
Service on 'special librarianship' *per se*. The
courses listed above are courses in special areas
that we offer more or less frequently. Some of
them are given almost every year, for example,
Business and Economics Literature. Others are
given every two or three years, e.g., Legal
Literature, as the demand accumulates. Others
are offered when the demand for such a course
is brought to our attention by members of the
profession, e.g., the new course in Theatre Li-
brarianship to be offered in the 1959 summer ses-
sion for the first time.

"Most of these courses are basic to our so-called
'special programs' in which students interested in
special library fields may register. In addition to
this core course, when available, the student may
register for relevant courses in other parts of the
University, in his special field, in place of certain
of his library school courses—the library school
courses being reduced to a required minimum in
such a student's case.

"We have among our special programs two
basic ones that are not accounted for in the
course listed above. One is the special program
for *science librarians*. The courses in science litera-

ture (LS 131) and advanced science literature
(LS 231) are taken by all students in the program
as well as courses outside SLS, although 131 is
also taken as a regular literature course by any MS
candidate in the school.

"Special programs for the MS degree combine the
basic professional curriculum with courses which
give training for a special type of library, library
work, or age group. A student with a mature
interest and background in other special fields of
library service may apply for acceptance in a
program to be arranged individually by the Dean
as a faculty adviser or by a faculty member desig-
nated by the Dean. Possible special programs in-
clude preparation for work in theater libraries,
art libraries, business libraries, other special sub-
ject fields, rare book librarianship, or for adult-
education posts in libraries."

(Mrs.) M. E. Herman, *School of Library Service*

TEXAS WOMAN'S UNIVERSITY

The Special Library—Miss Maninelli

"We believe our literature and bibliography
courses in subjects are applicable to special librari-
anship."

D. Genevieve Dixon, *Director*

UNIVERSITY OF DENVER

97-464 Special Libraries (advanced administra-
tive course)—Isobel Anderson

97-480 Studies in Librarianship (an opportunity
for individual investigation & study in
the field of special librarianship)

—S. Baillie

97-471 Field Work (in one of the many special
libraries in Denver)—S. Baillie

97-413 Literature of the Sciences (this is of
particular use to the person working in
scientific research libraries)

—D. Ralph Hopp

"With the courses listed, we can offer about
as full a program as that offered in the few schools
which are able to list courses particularly for
special librarianship. About fifteen from a total
of seventy-five graduates go into the special li-
braries field each year from the University of
Denver, and we would have every reason to be-
lieve that they are as well prepared as those
leaving other programs designed particularly for
the special librarian."

Stuart Baillie, *Director*

EMORY UNIVERSITY

"We offer no courses in Special Librarianship.
We offer a program leading to the M.S. degree in
Chemistry Librarianship. It is under the direction
of the head of the Chemistry Department and of
the director of the Division of Librarianship. We
offer courses in medical librarianship during the
summer quarter. Students may also choose to do
directed study in this area."

Evalene P. Jackson, *Director*

FLORIDA STATE UNIVERSITY

"We offer no courses in Special Librarianship. Our enrollment is too small to permit."

Louis Shores, Dean

UNIVERSITY OF ILLINOIS

Literature of Science & Technology

—Mrs. Frances B. Jenkins

Maps & Cartobibliographical Aids—R. C. White
Bibliography of Science & Technology

—Mrs. Frances B. Jenkins

Biological Literature & Reference Work

—Lyle E. Bamber

Medical Literature & Reference Work

—Mrs. Frances B. Jenkins

"Your letter of inquiry concerning the courses available in the library school in special library work raises, as you undoubtedly are aware, questions which have been bruited about for some time. Let me try to state for you the position which most of the library schools have held for some time.

"We have discovered that most of our students are not precise concerning their objectives. In a few instances where students have the background to qualify for a teaching certificate then it seems pretty clear that they will go into school librarianship; students who have strong undergraduate preparation in chemistry are very likely to have such good opportunities to use this background that they will go into a form of science library. In general, however, students' previous training does not so clearly direct them.

"Another important fact is that we have discovered that one year is only time to give a basic foundation in librarianship. We have been attempting over the years to distill out the fundamental principles upon which our profession is based and to impart these principles to the students. These, we believe, established a firm foundation for a career in librarianship.

"We also believe that the principal distinction between types of libraries has to do with the book collection and the purposes of the readers. We are also convinced that knowledge concerning specialized subjects is not gained in library school but must be based on study which either precedes or follows library training.

"These are the reasons then why one does not customarily find a course in special libraries under such a title in the current library school catalogs.

"Nevertheless, we insist that we prepare for special librarianship at Illinois.

A. We have one member of the faculty who possesses her Ph.D. in biochemistry and has had extensive experience in special libraries. This member of the faculty is equipped to counsel those students who show an interest in special library work and will often direct a student into that field.

B. In all of our courses it is possible for a student to exploit any specific interest to a very consider-

able extent. In our administration course, which is a general one, the student specifically interested in music librarianship, for example, can do all of his projects in that course with the music library in mind. Again, through all of our program we develop the comparative approach, discussing any given point in its relationship to several types of libraries where such a distinction has any meaning.

C. In addition to all of this you will find upon consulting our catalog that we have several courses which are in special subject areas. We also have a special projects course called Advanced Studies in Librarianship in which a student may, under close direction, carry out a detailed investigation of a problem in special libraries in general or in even more specialized areas, such as Art & Architecture, Agriculture, Chemistry, Physics, Law, Music, etc. These problems can be either bibliographical or administrative.

"Thus you see while we do not have a course in 'How to be a Special Librarian' we have a rich group of offerings which permit highly specialized development of a particular interest, all of which must be based, however, on a strong general training in librarianship."

Harold Lancour, Associate Director

INDIANA UNIVERSITY

L.S. L526 Science Bibliography & Documentation

—Haynes McMullen, Richard Snyder

L.S. L555 Administration of Special Libraries

—Haynes McMullen

"Mr. Haynes McMullen is currently President, Indiana Chapter, S.L.A.; Mr. Snyder is at the head of all science libraries at Indiana University."

Margaret I. Rufsvold, Director

UNIVERSITY OF KENTUCKY

"We offer no courses in Special Librarianship."

Edward Judson Humeston, Jr., Head

LOUISIANA STATE UNIVERSITY

Special Libraries—Dr. Ruth M. Baldwin

MCGILL UNIVERSITY

Special Libraries—Beryl Anderson

UNIVERSITY OF MICHIGAN

230 Documentation of Scientific Literature

—Anthony Kruzas

232 Logic of Mechanizing Information for Research (including Coordinate Indexing)

—C. D. Gull

278 Special Libraries—Mary Duncan Carter

279 Business Information Services

—Rose Vormelker

280 Medical & Technical Libraries

—Anthony Kruzas

Special bibliography courses elected by students who are preparing for library work in a subject area are:

- 150 History & Literature of Chemistry
—Philip J. Elving
- 262 Bibliography of Music Literature
—William Weichlein

UNIVERSITY OF MINNESOTA

- 156 Special Libraries—Frank O'Leary
"Also our literature courses and our independent study courses and 18 of 45 credits at the graduate level in non-library courses provide a total of 24 graduate credits that may be focused for preparation as a special librarian."

D. K. Berninghausen, Director

UNIVERSITY OF NORTH CAROLINA

- Legal Method—Daniel H. Pollitt
Legal Bibliography—Mary Oliver
*Seminar in Special Libraries (currently in Medical Librarianship)—Myrl Ebert
* "This course is set up so that on demand or when instructors are available, a course on any type of special librarianship may be offered."

Lucile Kelling Henderson, Dean

UNIVERSITY OF OKLAHOMA

- Academic & Research Libraries—Arthur McAnally

GEORGE PEABODY COLLEGE FOR TEACHERS

- L.S. 523 A,B,C Special Problems in Librarianship
—Dr. FitzGerald & Staff (in connection with Peabody College, Division of Music; Vanderbilt University, Divinity School; Vanderbilt University, School of Medicine)

PRATT INSTITUTE

- Special Libraries—Elizabeth Ferguson

RUTGERS UNIVERSITY

- Science & Technology Literature—George Bonn
Business & Economics Literature—George Bonn
Documentation—Ralph Shaw
Seminar in Special Libraries—George Bonn

SIMMONS COLLEGE

- 131 Research & Bibliographical Method in Subject Fields—Mary R. Kinney
S204 Special Library Field Experience—summer
—Ruth Shaw Leonard
214 Seminar in the Organization & Administration of Special Libraries
—Ruth Shaw Leonard

"Other seminars are sometimes available. The above courses listed are individuated to the specific subject with which the student is concerned."

Kenneth R. Shaffer, Director

"The Simmons plan may be said to be unique in that it offers a program, not an elective course in Special Libraries. In fact, one-half of the required twenty year-hours (forty semester hours) is devoted to courses carefully integrated to make a balanced preparation for special library positions.

Courses in the first semester are the same for all Master of Science candidates. Students enrolled in the Graduate Program in Special Librarianship concentrate on their objective during the second semester and the summer following."

Ruth Shaw Leonard

(*Special Libraries*, May-June 1950, p. 158-9)

UNIVERSITY OF SOUTHERN CALIFORNIA

- Bibliography of the Natural Sciences—Chase Dane
Technical Libraries—Leroy Linder
Bibliography of the Bio-medical & Physical Sciences—Leanown Mosley
Government Publications—Leroy Linder

SYRACUSE UNIVERSITY

- Cataloging of Audio-Visual Materials
—John C. Allen
Modern Book Production—Carl H. Melinat
Workshop for Journalism Librarians
—Evelyn E. Smith

UNIVERSITY OF TEXAS

- 382L Science & Technology
288K Seminar in Library Administration: Special Libraries
384K Information Storage & Retrieval Systems

"I suspect that a good many library schools may be doing more for special librarianship than can be reflected in 'special' courses. As you doubtless know, the A.L.A. accredited schools have to offer a general program or they won't be accredited. We think we have a pretty good program for certain types of special librarianship, even if we can offer only a 'few' courses. Every degree candidate takes certain basic courses, regardless of his area of specialization. . . . Then in the second semester, usually, of graduate study he begins to take the 'special' courses. To bolster his subject background, we not only permit but insist that related, supporting courses in other schools and colleges be taken. . . . After the student has completed all course work, he may choose an internship lasting from six to eleven months in an outstanding library in his field of major interest. For instance, a graduate student in bio-chemistry chose John Crerar and spent about a year there; another, also a master's degree holder in bio-chemistry, chose the Squibb Institute for Medical Research; three others, interested in medical libraries, were sent to Emory University to take a special course in medical bibliography; from there they went to Tulane to serve a six-months internship; another, a music and fine arts major, served his internship in the Fine Arts Division of the Denver Public; another, with a master's degree in government, served her internship in the library at the Public Affairs Clearing House in Chicago. Following completion of the internship, the student prepares a report in lieu of the regular research thesis. . . . I have gone into some detail because I feared it might be misleading if only 'special' courses are taken as evidence of what library

schools—certainly this one—are doing in an effort to provide sound training for special librarians. It is tremendously difficult to find qualified teachers in certain areas of special librarianship.”

Robert R. Douglass, Director

UNIVERSITY OF TORONTO

Special Libraries—Clara G. Miller

“We offer one elective course in Special Librarianship, but *all* the required subjects contribute to the needs of a special librarian.”

Bertha Bassam, Director

UNIVERSITY OF WASHINGTON

511 Library Materials in the Humanities and Social Sciences—Dorothy Bevis

512 Library Materials in Science & Technology—Dorothy Bevis

540 Advanced Legal Bibliography—Marian Gallagher

541 Selection & Processing of Law Library Materials—Marian Gallagher

542 Legal Reference & Research—Marian Gallagher

543 Law Library Administration—Marian Gallagher

“School of Librarianship offers the degree of Master of Librarianship. The bachelor’s degree, required for entrance, may be taken in any major field. . . . Applicants for entrance to the law librarianship program, which leads to the Master of Law Librarianship degree, must hold the Bachelor of Laws degree from an accredited American law school.”

Irving Lieberman, Director

WESTERN MICHIGAN UNIVERSITY

“We offer no courses entitled Special Librarianship.

“We offer in addition to the basic professional courses an opportunity for concentration in a special library field through the course 712 Professional Field Experience. Toward the end of the student’s preparation he may be assigned to a special type of library (we have used General Motors, Upjohn, and the Neurological Hospital V.A. Library at Fort Custer so far) where he will spend a specified period of time, possibly two or three weeks, and work according to schedule but will also prepare a research project or paper under the joint direction of his Graduate Advisor and the Supervising Librarian of the designated special library. The project or paper will be completed after the period of observation and participation is over. We will be sending a student to the Music & Drama Department of the Detroit Public Library this spring semester on this same type of program. The specific organizational & administrative problems of special libraries are handled in the general administration course.”

Alice Louise Le Fevre

WESTERN RESERVE UNIVERSITY

512 Special Libraries—Rose Vormelker

514 Hospital Library Service—Clara Luciosi

520 Music Libraries—Elsa Posell

528 Literature of Science & Technology—Helen Focke

572 Machine Literature Searching—James Perry & Allen Kent

574 Language Engineering—James Perry & Allen Kent

576 Library & Industrial Applications of Micro-recording—Robert Booth

582 Special Studies in Documentation—James Perry & Allen Kent

590 Law Library Administration—Evelyn DeWitt

524 Documentation—Helen Focke

527 Government Documents—Helen Focke

523 Periodicals & Serials—Helen Focke

Proposed for 1959-60, a course in Medical Librarianship—Helen Focke

UNIVERSITY OF WISCONSIN

208 The Special Library—J. J. Boll

The comments of the Directors are of particular interest when compared with the remarks made in 1950 by Ruth Shaw Leonard, the distinguished Associate Professor of Librarianship at Simmons College. In the May-June 1950 issue of *Special Libraries*, p. 157, Miss Leonard wrote:

“A survey of articles and conferences on library education shows that special library education is a perennial subject and that there is little consistency in viewpoint toward it except that of disagreement.

“Many defend the thesis that special librarianship cannot, or need not, be taught at all—that training can be acquired properly only through experience. Others believe that intensive academic preparation in subject fields—law, chemistry, music or whatever the appropriate subject field may be, plus general library education is adequate.

“Successful development of special library education is also impeded by the fact that the library educator and the special librarian continue in their failure to understand each other. The library educator’s own training and experience is general and he has usually had comparatively little contact with special libraries other than the departmental library in universities and in public libraries. On the other hand, the special librarian often fails to see beyond the horizon of his own particular organization and has had little in common with the experience of the educator in the library profession. Added to these reasons is the lack of textbooks on special library administration and very little organized literature on the characteristics and philosophy of special librarianship.”

The 1959 survey shows that while there is still wide disagreement between some library educators and special librarians, some real progress has been made in the past

decade. A number of the schools have expanded their special library programs and nearly all offer some courses. It is encouraging that many of the Directors are cognizant of the need and would offer more courses if competent instructors were available. The number of outstanding special librarians who are teaching the courses is gratifying. Besides those listed, a number of others are teaching in universities that offer library courses at the undergraduate level.

One of the biggest aids to education for special librarianship has been the publication by Special Libraries Association of the excellent text book, *Technical Libraries*, and *Contributions Toward a Special Library Glossary. Inside Special Libraries*, issued by

the Illinois Chapter of SLA is excellent. The articles in *Special Libraries* and the publications of the various Divisions of SLA have been invaluable to teachers. Perhaps the most encouraging advance has been the appearance of such outstanding articles as Irene M. Strieby's "Company Library" in the May-June 1959 issue of the *Harvard Business Review* and Sam Sass' "Industrial Libraries Come of Age" in *Management Review*, March 1957.

Special librarians are working hard to train more special librarians. What a boon to the library profession in general if all of the library schools would cooperate by including in their curricula fuller programs for the education of special librarians.

Collegiate Training for Library Technicians

LUCY J. MADDOX, Director and Instructor
Library Aide Program, Ferris Institute, Big Rapids, Michigan

PROFESSIONAL LIBRARIANS for many years have categorized library work into two kinds, clerical and professional. Today there are an increasing number who are recognizing the fact that the business of a library can be more accurately divided into three levels of skills: the clerical who can file, type, use business machines and do general duties requiring supervision; the library technician who can catalog, file, order, accession, work with bibliographies and answer simple reference questions; and the professional. High schools and business colleges are adequately training for clerical positions, and the schools of library science are training the professional, but few schools are offering courses designed to meet the needs of the library technician.

Ferris Institute in Big Rapids, Michigan, has recognized the need for trained library

aides, technicians or assistants, and acting on this need, the college initiated a Library Aide Program in the fall of 1959. This program is offered by the Collegiate Technical Terminal Division, and upon successful completion of the course, an Associate of Applied Science Degree is awarded.

The curriculum is as follows:

FIRST YEAR	QUARTER HOURS
Introduction to Library	3
Book Selection and Order Procedures	3
Library Reference	3
Communication Skills, 1, 2 and 3	9
Typewriting, Elementary and Intermediate	6
Elementary Shorthand	4
Man and Society, 1 and 2	6
Biological Science 1	4
Principles of American Government	3
Personal and Cultural Appreciation, 1 and 2	6
Health and Physical Education	3
Continuing Orientation	1
	51

Reprinted from the February 1960 SLA Michigan Chapter *Bulletin*.

A college student in the library technician training program offered by Ferris Institute gains practical experience at the charge-out desk



	QUARTER HOURS
SECOND YEAR	
Classification, Cataloging, Filing	3
Circulation, Maintenance, Preparation of Library Materials	3
Library Problems	2
Library Practice	4
Intermediate Shorthand	4
Voice Transcription	2
Office Machines, 1 and 2	4
Biological Science 2	4
Physical Science, 1 and 2	8
Principles of American Government 2	3
Electives in Literature and History	11
Introduction to General Psychology	3
	51

An analysis of the curriculum reveals that 21 quarter hours of library science, 20 quarter hours of secretarial science and 61 quarter hours of general education are required. Thus it can be easily ascertained that a well-rounded program of specific skills and general education, both important for background for library technicians, is offered. Much of the training in library science is practical rather than theoretical; students are required during their second year of training to work in various types of libraries, and many of the regular classes are supplemented by laboratory experiences.

Ferris Institute instituted the Library Aide Program only after the needs of the library field had been carefully surveyed. It was on the basis of investigations by professional librarians that the school identified the library technician level of training as one of the areas that could help alleviate the national shortage of competent library personnel.

It is expected that the majority of students enrolling in the Library Aide Program will be recent high school graduates. The program is also open to more mature adults who wish to train for a specific vocation.

The aim of the program is to prepare students to aid the professional librarian. The techniques taught are basic to all types of libraries, and the instruction is flexible enough to make it easy for the graduate to adapt his knowledge and skills to specific library situations.

Students are instructed concerning the relative position of an aide on a library staff. Emphasis is constantly put on the fact that one of the abilities of an aide is to work under the supervision of a professional librarian, but the amount of supervision necessary, compared to that required to train a beginner with no library training, should be much less, thus releasing the professional for professional duties. The aide is trained, however, in simple supervisory techniques so that he may be able to supervise members of the clerical staff. Students are made aware that their training will not be such that they can be employed as substitutes for professional librarians.

Advisory board members have enthusiastically endorsed the Library Aide Program as an effective means of training library technicians. At present it is the only program of its type in Michigan. As librarians become increasingly aware of its existence and true purpose, there is an accompanying support developing from professional librarians.

Recruiting Librarians with Advanced Training in Specialized Fields

THIS RECRUITMENT STUDY attempted to answer two questions: 1) For what reasons do individuals with advanced subject or professional training become librarians? 2) How may these data be applied in recruiting in graduate schools today?

Names of 537 individuals were selected from among the persons whose biographical sketches in *Who's Who in Library Service* (third edition) showed that after graduation from college but *before* either library education or library employment, they had taken subject or professional training in another field. Of the 308 respondents to a questionnaire addressed to these individuals, 95 per cent included that, as graduate students, they had had in mind a vocational objective. In two-thirds of these cases, the objective was a teaching career.

In stating why they decided not to follow or to continue in the work for which they had been preparing as graduate students, the respondents identified some 15 different reasons. The reasons given most frequently were: lack of employment opportunities in the chosen field (29 per cent); general dissatisfaction or incompatibility with the field and its objectives (14 per cent); unsatisfactory working conditions (11 per cent); feelings of personal unsuitability (10 per cent); length and expense of educational preparation (9 per cent); and the feeling that librarianship was actually a continuance in the same general type of work (9 per cent).

Respondents mentioned some 30 reasons to explain their choice of librarianship. Those given most often were: employment opportunities in libraries (31 per cent); work experience in libraries (28 per cent); liking for books and reading (24 per cent); opportunity to make use of a particular educa-

tional background (22 per cent); and influence of librarians (22 per cent). Other reasons cited by as many as 10 per cent of the group were: interest in libraries; personal qualifications; opportunities for advancement; liking for people; and opportunity to be of service.

Employment opportunities in the library field had been noticeably more important to individuals who had specialized in law (45 per cent), philosophy and religion (39 per cent), and education (39 per cent) than to the group as a whole. Liking for books and reading was mentioned more frequently by persons with backgrounds in the humanities than by respondents whose subject specialties were in other fields. The wish to utilize previous academic training was indicated more often by respondents whose graduate work was in fine arts (38 per cent), science (34 per cent), philosophy and religion (33 per cent), languages (28 per cent) and law (25 per cent).

Holders of the doctorate in a subject field gave as their principal reason the opportunity offered in library work for use of educational background (30 per cent). Persons with a master's or first professional degree cited employment opportunities in the library field (34 per cent) more often than any other reason, while to individuals who had not received a graduate degree in their field of specialization, library work experience was the outstanding reason given (32 per cent).

A larger proportion of women (39 per cent) than men (26 per cent) mentioned employment opportunities. Also, this reason had been the most compelling one for respondents who chose a library career during the depression years (37 per cent). Work experience, on the other hand, had been of considerable importance to persons who had entered the profession in the 1920's (53 per cent).

Among the 308 respondents were 95 who indicated that the decision to become a li-

Summary of a study conducted by the Recruitment Committee of the Georgia Chapter, during 1958-59. A full report (63 p.) is filed with the Georgia Chapter at Box 577, Emory University Branch, Atlanta 22, Georgia.

brarian had been made during the period of graduate or professional study. The five major reasons for choice of librarianship were: influence of librarians (29 per cent); educational background (28 per cent); liking for books and reading (25 per cent); employment opportunities (23 per cent); and work experience (18 per cent).

In efforts to recruit graduate students in universities for the library profession, three general conditions should be taken into account: 1) shortages currently exist in certain other fields requiring specialized personnel, and employment prospects in these fields are good at the present time; 2) from the present study it appears that a large proportion of the graduate students who later become librarians have in mind a vocational goal, more often than not teaching; and 3) it appears also that for most individuals the decision to become a librarian was made more often *after* the period of advanced study.

Recognizing the above conditions, it seems probable that, for the time being at least, fewer persons with advanced training in another field will turn to librarianship because of a dearth of employment prospects in the type of work chosen originally. Thus, it is more likely that changes will be based on elements in the profession that have a positive appeal. That such elements do exist was suggested by the voluntary expression of satisfaction in library work made by many respondents. The problem of recruitment then may be largely one of bringing librarianship to the attention of graduate students.

Finally, the replies revealed that the several elements comprising librarianship appeal in varying degrees to different individuals. The variety of work in certain library positions and the breadth of background desirable for these may appeal strongly to some persons; others may be attracted chiefly by positions requiring a highly specialized background. To be effective, therefore, it would seem that any general recruiting appeal must reveal the varied opportunities available in all types of libraries and all kinds of library work. At the same time, it must be sufficiently specific for each individual to identify elements in the profession that will make it congenial to him.

SPOTTED

● In his presidential address at the opening of the Fifth Annual Meeting of the Library Association, September 5, 1882, Henry Bradshaw, the Cambridge University Librarian, remarked: "A librarian is one who earns his living by attending to the wants of those for whose use the library under his charge exists; his primary duty being, in the widest possible sense of the phrase, to save the time of those who seek his services."

● A good librarian has also been defined as a professional person who likes books and people. Cannibals may not be bookish but they certainly do like people. ● Have you ever wondered how many of the books published last year will still be read one hundred years from now? Perhaps there is a clue in the fact that of all the new books published in 1859, the five still found on library shelves are Darwin's *Origin of Species*,

Dickens' *Tale of Two Cities*, Eliot's *Adam Bede*, Mills' *Essay on Liberty* and Tennyson's *Idylls of the King*. ● During the last months of World War II, important German State documents were removed from Berlin and stored in castles, schools and mines throughout the country. When the Allies began to close in, the German High Command ordered the papers destroyed. The files of the General Staff were indeed destroyed, but an archivist of the Foreign Office, Dr. Johannes Ullrich, was determined to preserve Foreign Office records so far as possible. Enlisting the support of colleagues and in the process repeatedly risking his own life, he managed to keep the bulk of the records safely hidden until the Allies arrived. In due course the documents Dr. Ullrich saved from destruction were sent to England for examination by experts. Many were used as evidence in the Nuremberg war-guilt trials, and the secret records dating from 1918 and earlier have revealed that Imperial German gold supported the Bolsheviks in their revolution. Dr. Ullrich fared less well than the papers he saved for he spent the next ten years as a prisoner of war in the Soviet Union. He is now archivist in the West German Foreign Office in Bonn. ● The index of a 1959 edition of a textbook on pediatrics contains the entry, "Birds, for the."

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The Use of Data Processing Equipment for the Control and Circulation of Magazines

RONALD J. BOOSER, Technical Information Service, 1-14
Laboratory Engineering Administration, Locomotive & Car Equipment Department
General Electric Company, Erie, Pennsylvania

A MODERN LIBRARY or information service has three alternative ways to handle incoming magazines: 1) put them on the shelves and let the personnel come into the library and read; 2) circulate title pages or other similar items to interested personnel; or 3) circulate the magazine to interested personnel. The procedure here described was developed for use with the third method.

With the use of IBM tabulators and sorting machines, the library of the Locomotive & Car Equipment Department of the General Electric Company, Erie, Pennsylvania, was able to simplify its magazine circulation system and add much to the readily available information on the magazines it handles.

The system made possible the following accomplishments:

1. Provide better service
2. Reduce clerical time needed to circulate magazines
3. Speed magazine circulation
4. Give immediate details on magazines stored in the library
5. Reduce time needed for ordering periodicals
6. Enable an over-all picture of circulation to be readily available
7. Produce circulation records not previously available
8. Change circulation slips readily
9. Estimate binding, subscription and storage costs and needs

The Problem

The circulation of magazines in any appreciable quantity represents a chore. As library service was expanded to include lit-

erature searching and new magazines were added to keep up with the changing interests of the departments served, the number of magazines circulated grew at a fantastic rate. At the same time physical changes of the plant restricted library space.

The Technical Information Service, which is responsible for circulation, found itself in a corner piled high with magazines.

Another major problem is the changing interest on the part of individuals who change positions or move to different locations. For example, if an engineer receiving ten magazines on circulation changed his position, we would have to 1) change addresses on the magazines he wished to keep; 2) drop his name from those he no longer wanted to see; 3) add his name to new magazines he wished to see; and 4) repeat the procedure for his replacement and for the man whom he displaced. With the previous circulation system using preprinted slips, this was difficult. If a large supply of slips was on hand, these changes might go on for months. If only a small supply of slips was kept, frequent reprinting was necessary.

The Approach

With the problem defined, the next step was to list the characteristics of an ideal circulation system. These are:

1. Ease of change
 - a. Personnel leaving
 - b. Personnel interest
 - c. Personnel address (plant)
2. Ability to be printed
 - a. Change should be incorporated immediately

- b. Forms should not need cutting
- c. Forms should be cheap
- 3. Attachment to magazine
 - a. Must be small
 - b. Must withstand mail treatment
 - c. Must not hinder mail operations
- 4. Other characteristics
 - a. Ease of retrieving other information
 - 1. Magazines received by one person
 - 2. Magazines received by one group (unit)
 - 3. All magazines received by library
 - 4. Complete circulation list
 - b. Statistical data
 - 1. Disposition of magazine (how library keeps magazine)
 - 2. Frequency of magazine
 - 3. Vendor
 - 4. Date library collection begins
 - 5. Cost per year

While this listing seemed extremely comprehensive, it was evident that all the information was useful and needed for maximum library efficiency. After exploring a number of avenues without developing a feasible system, the problem was presented to a procedures automation specialist with the thought that it might be solved by some tabulating scheme. A system using standard punched cards was developed.

Details of the System

Before the details of the system could be worked out, it was necessary to decide the information required to direct a magazine through the mails and back to the library. The following items were deemed necessary:

1. Name of magazine
2. Client's name
3. Client's plant address
4. Client's position on list (first, second, etc.)
5. Client's list (in case more than one copy of the magazine was circulated)
6. Client's component or subsection number
7. A return to library notice

Any needed information about a particular circulation could be derived from these items. On the other hand, they cover only part of the list of necessary system characteristics. Therefore, it was decided to have

two files of cards. The first would be a complete circulation list containing all information necessary for circulation. The second would contain all financial and statistical information. The basic unit for both lists was the IBM 5081 Standard Card. Since it contains 80 vertical lines of 12 punches each, 80 columns of letters or numerals can be used. The circulation listing must have the previously described seven items to be workable.

First, a magazine to be circulated, must be identified. For this purpose a code number was assigned to each magazine. The first column on the card is used to identify it, either by language or as a special publication:

COLUMN 1

- 0 — English
- 1 — German
- 2 — French
- 3 — Spanish
- 4 — Indian
- 5 — South African
- 6 — Russian
- 7 — Other
- 8 — Pamphlets
- 9 — Government publications (U.S.)

The next four columns (2 through 5) are used to identify the particular magazine.

COLUMNS 2-5

- 0010 (ACTA Polytechnica)
- 0020 (Advanced Management)
- 0030 (Advertising Requirements)

When originally setting up the system, ten spaces were allowed between successive listings. This permits ready incorporation of new magazines as they may be added to the library subscription list.

The next step was to list the client by name and plant address. This was done by starting with the first initial in column 6, the second initial in column 8 and the last name in column 10. This resulted in proper spacing of initials and name as shown below:

```

6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
C  A  B  U  R  K  H  A  R  D
R  J  G  R  E  A  N  E  Y
      C  O  N  T  R  O  L  E  N  G  N  G
  
```

It will be noted that the last line contains the title of the magazine itself, and that it starts in the tenth column. This permits alphabetical sorting by the IBM sorter.

Columns 26 through 29 identify the plant address. Column 26 is the floor, and columns 28 and 29 the building number (for example 1-14). The card containing the magazine title must have "Library 1-14" as the last address so a magazine will be returned to the library at the end of its circulation. To accomplish this L-I-B was listed in columns 24-25-26 and 14 in columns 28-29. Thus it printed:

For client's cards — C A BURKHARD 1-14
 For library cards — ACTA POLYTECHNICA
 LIB 14

So far the magazine and its destination have been identified. Next, the client is placed in a group by listing his component number in columns 32 through 36. Five columns were required since component numbers in this plant contain five digits.

Reference to the original seven points shows that five have been taken care of: 1) name of magazine; 2) client's name; 3) client's plant address; 6) client's component number and 7) return to library notice. It is still necessary to know the listing on which the client appears and what position he has on the list. To do this columns 48-49 were assigned to indicate the listing to be used, the first list being 01, the second 02, etc. Two digits are necessary because the library receives as many as 20 copies of certain magazines. The position of the client on the list is shown in column 51. Here the return to the library card is always the last or number 9 card. In starting the new system an effort was made to have no more than five clients on any one listing; however this could not always be done.

One more factor requiring consideration was that magazines are issued at different frequencies. For example, one month could bring five weekly issues of *Railway Age*, one issue of *Machinery* or two issues of *Machine Design*. To accommodate variation, column 53 was used to differentiate frequency of issue:

COLUMN 53

- 1 — Monthly
- 2 — Weekly
- 3 — Bimonthly
- 4 — Semimonthly
- 5 — Quarterly
- 6 — Irregular

As a matter of information for the library staff, column 55 was used to indicate the final disposition of the magazine when returned from circulation:

COLUMN 55

- 1—Keep one year
- 2—Keep two years
- 3—Keep indefinitely
- 4—Bind
- 5—Scrap

Thus columns 32-55 give the information called for by items 4 and 5, for example:

Column 32 33 34 35 36
 6 7 4 9 0

Column 48 49 50 51 52 53 54 55 56 57
 0 1 — 3 — 2 — 4 — —

This indicates that a person in component 67490 receives copy 1 and is third on the list for a weekly magazine that the library binds. The information transferred to the cards is now sufficient to print a circulation list, such as the following:

01900	CA BURKHARD	1 14	67490	08	1 2 4
01900	RJ GREANEY	1 14	67480	08	2 2 4
01900	JD ALRICH	4 14	73010	08	3 2 4
01900	AO VELL	5 6	63020	08	4 2 4
01900	WJ SIMSON	2 42	62030	08	5 2 4
01900	RAILWAY AGE	LIB 14		08	9 2 4

So far the use of the cards for circulation lists has been considered. With proper handling, however, they can be of much wider use. If they are run through a sorter set for column 51, all the library cards will appear under number 9. Sorting these by columns 5 through 2 will give an alphabetical listing of all magazines circulated. If the other batch of cards is sorted alphabetically by columns 10 through 20, the result will be a list of all clients who receive magazines and the magazines they receive. Other sortings of this type will yield the following information:

1. Magazines circulated
2. Magazines bound (or scrapped, etc.)
3. Complete circulation
4. Personnel who receive magazines
5. The various magazines seen by different groups

There are other lists available, but the point is that all this is a sideline to the original adventure of improving circulation.

Additions are made once a month by having new cards punched. These are added and

the lists for the next month printed on strips of 1 x 3 inch gummed-back labels. A sufficient quantity are printed to take care of one month's circulation only. This eliminates checking in the magazines. The strips are attached by running them through a letter moistener.

Thus far all the characteristics of the ideal circulation system have been met with the exception of the last three: vendor, date of collection and cost per year.

Fifty-five of the 80 columns on the IBM card have been used. Since the remaining information is required only on the library (column 51 number 9) cards, these are run through a duplicator. The following information is then added:

1. Who pays for the magazine
2. Vendor of magazine
3. Year library begins its collection
4. Cost per year for magazine

This is done by using the following code. Columns 57 through 61 show the charge number of the person or group that orders or pays for the magazine. This information was necessary because the library only pays for magazines it circulates or orders for itself. Other subscriptions are handled through the library but are billed against the component requesting them. Columns 64 through 66 show the vendor by code:

COLUMN			
64	65	66	
0	0	1	Stechert-Hafner
0	0	2	Moore-Cottrell
0	0	3	Simmons Boardman
0	0	4	McGraw-Hill
0	0	5	American Chemical Society
0	0	6	Association of American Railroads
0	0	7	Independent
0	0	8	Government publications
0	0	9	Free

Columns 70 and 71 show the last two digits of the year. Finally, the annual cost of the magazine appears in columns 76 through 80. For *Railway Age* the columns are:

Column	57	58	59	60	61
	6	7	4	9	0
	Component charged				
Column	64	65	66	70	71
	0	0	3	9	8
	Simmons		Began		
	Boardman		1898		

Column 76 77 78 79 80
 0 1 0 0 0
 Cost \$10.00

When completely punched, a run of the reproduced cards would appear as follows:

```
01900 RAILWAY AGE
LIB 14 08 9 2 4 67490 003 98 01000
01920 RAILWAY GAZETTE
LIB 14 02 9 2 4 73010 001 44 01500
```

Application

IBM cards containing these items have more than doubled the amount of information that can be supplied to library clients. Sorting the library cards (new reproduced cards) by vendor gives a list of all magazines obtained from any one source. With a little adjustment, the machine will total the cost to each vendor, thus furnishing a check on the vendor's yearly invoice. Since all subscriptions pass through the library, each section must be billed for the magazines it receives. This is done by sorting the cards according to component charged, printing them up and totaling the amount each time the number changes. Other uses are:

1. Cost of periodicals per year to the department
2. Cost of periodicals per year to any component in the department
3. Number of periodicals received per year
4. Periodicals circulated and to whom they went
5. Number of periodicals stored, bound, discarded, etc.
6. Magazine circulation per month
7. Estimated binding cost per year

Many more items using different sorting routines could be mentioned. These, however, will suggest themselves according to the needs of individual libraries. This IBM system enables our library to control the circulation of magazines better than ever before, if for no other reason than that the machines do all the adding to keep the figures in balance. The best feature of the system is that it is flexible enough to encompass new changes as they occur. The new system has met with wide approval throughout the department.

Planning the New Library: Thiokol Chemical Corporation's Reaction Motors Division Library

WILLIAM A. WEISER, Systems Analyst

Thiokol Chemical Corporation, Reaction Motors Division, Denville, New Jersey

THIOKOL CHEMICAL Corporation was founded in 1929 by Bevis Longstreth to develop and market synthetic rubber and related products. From this humble beginning, in which synthetic rubber was first produced commercially in America, the Corporation expanded and diversified until its products are now marketed by three operations: chemicals, rocket and specialties. Today there are over 9,000 employees in nine locations. Corporate sales in 1959 were almost 190 million dollars. Thiokol common stock was admitted for trading on the New York Stock Exchange December 10, 1958.

Reaction Motors, Denville, New Jersey, was merged with Thiokol in May 1958 and is presently a division of the rocket operations. Thiokol rocket operations have supplied motors for the Nike-Hercules, Sergeant, Matador, Farside, X-17 Missiles and the X-15 Aircraft. The latter will be the first manned vehicle designed to carry a human being to the fringes of outer space.

In 1958 all the rocket plants were taxed to capacity, and thus construction of additional facilities in four of the locations was vigorously undertaken. The effect of corporate expansion was evidenced at Reaction

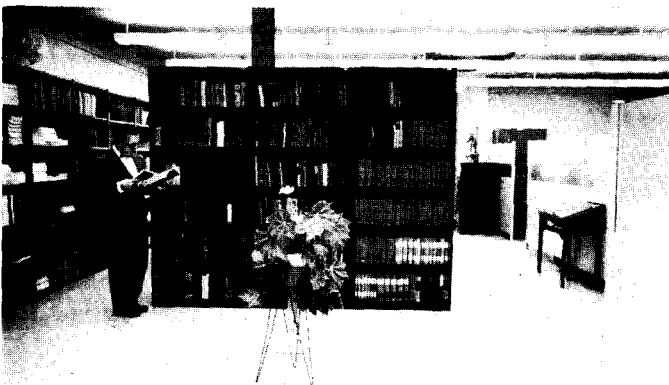
Motors Division by a decision in the summer of 1958 to construct a two-story addition to add 54,300 square feet to the administration building.

In the short period 1955 to 1960, Reaction Motors increased from 671 employees to 1,850. Professional-technical employees, such as engineers, chemists and physicists, increased by 71.4 per cent over the same five year span.

Background of Reaction Motors Library

Prior to the move to the new building in August 1959, the library occupied 900 square feet of floor space and was located in the research building. Although the library facilities were adequate in 1955, the burgeoning of the missile industry and the resultant increase in the number of employees at Reaction Motors Division left us, in the short space of three years, without adequate space for stacks, reading areas and library employees. Usable working area was at a premium.

Although cramped for physical facilities, some worthwhile tasks were accomplished prior to the move. A professional librarian



View of the book and journal stacks from the entrance after passing the receptionist.

The banks of five-drawer files in the report area as seen from the work area of the librarians.



was added to the staff of three non-professionals in January 1958.

A vendor catalog file was set up in the engineering group for the use of engineers and designers. The unit, which is located in the engineering building, is administered by library personnel on a part-time basis. The catalogs are stored in ten legal-size, four-drawer file cabinets. The filing system is a modification of C.A.D.O. and is particularly slanted to meet the needs of engineering personnel. In addition to the subject index, there is a manufacturers' file and a local representative file.

In 1958 it was decided to create a subject heading list. This required the review of approximately 13,500 catalog cards. Taking a composite listing from the subject indices of *Library of Congress*, *NACA*, *ASTIA* and others, a list of approximately 4,760 subject headings was created, which was specifically patterned to reflect the missile industry in general and Reaction Motors in particular. This list also included other general classifications and supplanted the previous method of cataloging by the *ASTIA* coding system, which was not sufficiently descriptive or detailed. Employees are now able to use the card catalog without assistance.

All the books were cataloged in the standard fashion using the Dewey Decimal Classification. *Library of Congress* cards were ordered, where appropriate, for all acquisitions. An efficient and economical hand-operated stencil was used to reproduce catalog cards for acquisitions not covered by *Library of Congress* cards.

New withdrawal and periodical record

cards were designed and printed. This permitted the posting of records more efficiently and provided ready access to more detailed information.

The acquisitions list was updated and modified after a survey of users revealed the need for a revision. To secure the maximum quantity discount, the majority of periodical subscriptions were placed with one agency. This resulted in approximately \$400 in savings the first year. All renewals are now made once a year, with additions and deletions prorated to the one renewal date. This saves excessive bookkeeping and paperwork.

Seven additional journals were scheduled for binding, and back issues were secured to complete the more valuable runs of periodicals. This specific action was a direct result of employees' suggestions brought to light by a periodical survey.

At no additional cost and to assist in satisfying the requirements for four-drawer file cabinets in other areas of the division, 36 five-drawer, letter-size file cabinets were substituted for 43 four-drawer, letter-size cabinets and a large safe in the library. The most important result of this maneuver, however, was the gain in 100 square feet of floor space without decreasing the amount of file storage.

Last, but not least, a procedure for the screening and destruction of out-dated reports was established. In the first effort over 2,000 reports were destroyed. Eventually, when realistic retention dates are established and an approved microfilming program is complete, the bulk of reports will be reduced by 50 per cent.

Research for the "Ideal" Library

As the proposed move of the library into the new building would not occur for a year, it was decided to undertake an extensive survey of every source of information that would help in planning the new library area. Preliminary investigations were published internally in April 1959. Several of the sources covered were:

1. *Textbooks and periodicals.* Information from these included operation of libraries, their purpose, organization, functions, space and equipment. Included in this source was SLA's *Technical Libraries—Their Organization and Management* and many articles from the "Planning the New Library" series in *Special Libraries*.
2. *Employees.* A literature survey of individuals in several areas of the division and their comments were incorporated in our proposals for improvement of the library services.
3. *Industrial and research libraries.* Four research libraries in the geographical area were visited. In every case the people contacted were extremely courteous and helpful. The exchange of ideas and guided tours of each facility proved to be a most fruitful source of information in terms of projecting a composite picture of what should be the ideal industrial research library.
4. *Conference with employees.* The ideas and comments of library users, who represented areas of interest such as research, engineering and product planning, gave us the opportunity to incorporate the needs of specific groups into the plans.

Allowances for expansion, based on five-year personnel and sales forecasts, were also included in the plans.

Research for the new library paid multiple dividends. The following proposals were accepted and incorporated into the new facilities. 1) A technical librarian was hired in November 1959; 2) A separate work area for library personnel was created; 3) A quiet study room was included; 4) A Verifax copying machine was located in the library; 5) Additional reference texts were purchased; 6) New equipment included

reading tables, side chairs, storage cabinets, magazine racks and study carrels.

Moving the Library

It had been determined beforehand that all relocations to the new building could be handled most flexibly and economically by company employees. Arrangements, therefore, were made with the plant engineering department. To cause a minimum of inconvenience to users, it was decided to move the library on a weekend. Cartons were delivered to the library on Friday morning. By Friday afternoon, the contents of stacks, bookcases and desks were packed. File cabinets were transported with the contents intact. Plant engineering arrived on the scene with stake trucks and all padded equipment. Fortunately, no closed vans were necessary as the weather was good. Work on Friday also involved the knock-down, transportation and set-up of the shelving units in the new area.

Additional shelving, which had been ordered and stored in the new area, was assembled at this time, permitting us to leave behind several sections of old and obsolete wooden shelving. On Saturday morning the material to be shelved was delivered first. Library personnel assisted in unpacking and reshelving this material. While they were thus engaged, the balance of desks, file cabinets and miscellaneous equipment was delivered. The shelving of books and periodicals was not completed on Saturday and had to be finished Sunday. On Monday the li-



The general reading room.

brary employees were able to unpack their desks in minimum time, and the library was again in operation.

The New Location

The library occupies 1976 square feet in the new building—more than double the old space. It is located on the first floor in the center of the building, with an entrance of double doors off the main corridor. This space is considered the most central location to the heaviest users. To the right of the entrance are five and one-half-foot partitions with frosted glass separating the file and work area from the rest of the library. All the file cabinets containing the collection of 25,000 reports are behind the partitions nearest the entrance. At the far end of the room and adjacent to the work area is the quiet reading room, which takes advantage of the windows and has ceiling-to-floor soundproof partitioning.

The balance of window space beside the quiet reading room, which is the farthest point from the entrance, is devoted to a general reading area. The stacks are located between the general reading area and the entrance and also run the length of the wall opposite the library offices. An area inside the entrance to the left is occupied by a librarian-receptionist.

The library has suspended semi-indirect fluorescent lights, which offer well diffused indirect lighting of approximately 100 foot candles at desk height. The 10-foot high ceiling is composed of white painted Fiberglas panels. Pale blue venetian blinds grace the window area.

The window wall and, at the opposite end of the room, the entrance wall of cinder-block construction are spray-painted white, intermixed with flecks of gray and light brown. The floors are tan asphalt and match the tan of the five and one-half-foot partitions. The ceiling to floor partitions of the outer parallel library walls and quiet reading room are pale green.

The office equipment including the study carrels are grey with chairs upholstered in green imitation leather. The desk and table tops are a dark grey composition, which



The quiet reading room. These carrels are to be replaced with others affording more privacy.

makes them easy to clean and glare-resistant. The furniture is steel and conforms to standards established by Reaction Motors Division. All the hues are subdued and create a pleasant and restful atmosphere. The telephones are inter-connected by a buzzer system for transferring calls between receptionist and work area.

A former multi-board, free-standing display proved too cumbersome to use and occupied too much space. This item was eliminated, and a bulletin board was placed on the wall to the left of the entrance. This allows us to display the book jackets of current acquisitions and also notices of articles or books written by employees.

On order, but not received as yet, are periodical display racks, which will be located near the entrance. The study carrels that were received do not have sufficient partition height to provide privacy and are being replaced.

Operation of the New Library

Since our move to the new location, we have undertaken and completed several projects. With our increased facilities we were able to re-absorb several smaller "libraries" that had been created in other areas due to our previous lack of space.

We completed a survey of a selected sample of 125 library users in which we asked for comments on the library's 250 periodical subscriptions. This report proved helpful in many areas, including retention of material, deletion or addition of peri-

odicals and circulation. Surplus periodicals resulting from the survey were sold or destroyed.

The library is presently assisting the metallurgy department in the establishment of a vendor catalog file.

In the near future the library will issue a Table of Contents Bulletin, which will contain reproductions of the contents pages of selected periodicals. This booklet will be reproduced and printed at Reaction Motors

Division at a small cost in comparison to commercial publication. A small brochure describing the library, how it operates and the services it offers is also being prepared for internal distribution.

Various automatic and semi-automatic systems (excluding computers) that can be used for the storage and retrieval of information are presently being investigated. These and many other projects will keep us busy for some time to come.

VITAL STATISTICS FOR THE THIOKOL CHEMICAL CORPORATION'S REACTION MOTORS DIVISION LIBRARY

Total square foot area	1976
Staff	5
Professional	2
Nonprofessional	3
Employees served at location	1850
Services extended to other areas	Corporation
Average number of users per day	50-100
Volumes and bound and unbound periodicals as of February 1960	6000
Current periodical subscriptions	250
Vertical file drawers	211
Date of completion	August 1959
Special Facilities: microfilm reader, Microcard reader, Verifax copier	

Developments in Photoreproduction

LORETTA J. KIERSKY, Librarian

Air Reduction Co., Inc., Murray Hill, New Jersey

Chairman, Committee on Photographic Reproduction

AN EXTENSIVE display of equipment, accessories, supplies and services was presented at the Ninth Annual Meeting and Convention of the National Microfilm Association, held April 19-21 in New York City. Eight papers were presented at the Library Program meeting. They covered the use of microfilm in libraries, educational institutions, archives and in publishing. The papers are to be published at a later date in the Association's Proceedings.

Among equipment demonstrated was the new reader-printer manufactured by Docu-

mat, Inc., Belmont, Mass. Microfilm, either 16mm or 35mm and in roll, strip or unit format, may be viewed on the reader. When a button is pushed, the machine automatically produces a positive enlargement. A print may be obtained in about 45 seconds at a cost of about 7½ cents. A 200-foot roll of paper permits 180 exposures. Size of the page print is 8½ x 11 inches with an image area of 7 x 9¼ inches. Three lenses are available with magnifications of 15x, 24x and 35x. The manufacturer claims the copies will remain permanently white. A separate

card holder with a pressure ring assures positive positioning of cards. Size of the machine is 13 x 30 x 26 inches. It weighs 68 pounds. The price is \$850.

Two previously introduced reader-printers, both manufactured by Minnesota Mining and Manufacturing Company, were also displayed. Thermofax Filmac 100 produces 8½ x 11 inch enlargements. It is 17 x 16 x 25¼ inches high and weighs 86 pounds. The price is \$629. Thermofax Filmac 200 produces 18 x 24 inch enlargements. Its greatest use has been to produce prints of microfilmed engineering drawings or maps. It weighs 300 pounds. The price is now \$929. Both machines were formerly known as the 3M reader-printers.

A new machine named the "Universel" has been introduced abroad. By means of it, any document may be reproduced in photocopy format or as a microfilm enlargement. It will automatically produce enlargements on slow-printing paper in ordinary light. The manufacturer is O. L. de Beauvais, Paris, France. When a microfilm enlargement is wanted, a sheet of slow-printing paper is placed under the screen with the sensitized side facing the lens. Depending upon the density of the negative, it is exposed between 40 to 60 seconds. After exposure, the sheet is inserted into the slot of a developer. The enlargement emerges a few seconds later. Photocopies may also be made on this machine. Procedure is similar except the printing paper is placed against the document to be reproduced. Cost of the machine, exclusive of tax and shipping charges, is 1700 new French francs (about \$350).

The long awaited micro-opaque printer has not yet been released from the "test kitchen." Two models are expected to be made available soon: one fully automatic and one non-automatic. At present, page prints of Microcard frames may be obtained by writing directly to Microcard Corporation at West Salem, Wisconsin. The Microcard number must be included with the request. This number is shown over the trade mark on the Microcard. A typical number, for example, might be FO 52 181.

Highlighting the recent NMA meeting was the Department of Defense demonstra-

tion of microfilmed engineering drawings. One project of this Department has been concerned with standards and specifications for microfilming systems, specifically engineering documents, and including the insertion of the microreproductions in the aperture of the punched card. The proposed standards and specifications, prepared jointly by the military and industry, will be of interest to all concerned with information retrieval. One result of the project is to standardize 35mm microfilm as the size best suited for the storage of engineering data. Two of the proposed standards are: Mil — M — 9868 Requirements for Microfilming of Engineering Documents, 35mm, and Mil — STD — 804 Formats and Coding of Tabulating and Aperture Cards for Engineering Data Micro-Reproduction system. Such standardization represents progress in providing the user with standards for quality, interchange of data with a minimum of effort, compatibility with other systems and also the up-dating of equipment and manufactured products such as the aperture card.

A project completed by the U. S. Patent Office last February makes available a listing of microfilm patents in the 56,000 subclasses of the Patent Office's Manual of Classification. Any interested library may purchase the eleven reels of microfilm from the Library of Congress for \$56. Twenty-one libraries throughout the country hold printed copies of U. S. Patents. These are arranged only by number but not by subclass. The microfilm listing now makes subject searches possible. Once the searcher has found the subclass numbers of the patents of interest, the patents themselves may be selected for review. The microfilm now eliminates the need for correspondence directly with the Patent Office in Washington to obtain subclass numbers.

Notes Librarians Like to Receive Department

"To: Chief Librarian—

"I wish to extend my thanks to the library staff for their very thorough cooperation during my current literature search.

"I have been literally buried in an avalanche of information thanks to their efforts."

News From SLA Headquarters

Convention Notes

Registration at the Cleveland Convention, June 5-8, totaled 1,280.

The SLA Professional Award was granted posthumously to Rose Boots for her efforts in establishing the SLA Scholarship and Student Loan Fund and her continual interest in its growth.

The H. W. Wilson Company Chapter Award was presented to the Indiana and Rio Grande Chapters for the best projects promoting special library service in the community.

Heart of America Chapter won the Membership Gavel for a 20 per cent increase in membership during the past year.

SLA Hall of Fame medallions were given to Pauline M. Hutchison and Ruth Savord. Dorothy Bemis and Florence Bradley were not present to receive their awards.

The contribution of \$2,000 to the SLA Scholarship and Student Loan Fund from the H. W. Wilson Foundation was announced.

At the Annual Business Meeting the membership approved a motion to "retain the \$50,000 limit on the General Reserve Fund and that any funds received from interest or any other source hereafter be added to the general funds of the Association, and that the present excess over \$50,000 be added to the general funds of the Association."

The Executive Board at its June 9 meeting approved plans to publish a membership directory in the fall.

Conference on Science Manuscripts

The Conference, made possible through a grant from the National Science Foundation to the History of Science Society, was called to consider the problems of collecting and preserving manuscript records, papers and biographical data of American scientists in various branches of science. . . .

The speakers emphasized the importance of encouraging and persuading scientists to preserve their papers, the desirability of es-

tablishing some standards to guide them in deciding what to preserve and how and where the records should be deposited, the need of preparing and making widely available guides or catalogs to such records, and encouraging historians to make greater use of existing, as well as forthcoming, manuscript collections.

The final discussion was concerned with establishing a continuing body or commission through which the objectives of the Conference might be achieved. . . .

The Executive Committee will assemble, edit and prepare for publication the papers and proceedings of the Conference. It is hoped these may be available in published form some time in 1961. The Committee will also summarize the results of the Conference and proposals for further action in a report which will . . . be available it is hoped in the early winter of 1960. . . .

Because of its interest in libraries, archives and the preservation of records, Special Libraries Association should continue its representation in the Conference or with such body or organization which is established to carry out its objectives. Several of the speakers, for example, stressed the importance of scientific research in industrial organizations and the importance of preserving the records, biographies and papers of scientists in these organizations. This would seem to be an area within which the SLA and some of its members, at least, might effectively serve to help achieve the objectives of the Conference on Science Manuscripts.

WALTER W. RISTOW
SLA Representative

Translations Center

Two grants have recently been made by the National Science Foundation to the SLA Translations Center. The first, for \$24,000, is for continued support of the Center; the second, for \$34,105 is for support of a Survey of Translation Activities in Universities, Societies and Industry in the Fields of Science and Technology.

This Works for Us . . .

Linedex Panels for Periodical Routing

In our company where many of the staff are frequently moved from one department to another, we had to find a way to keep the library's periodical routing records up-to-date. With the help of our business procedures group and Remington Rand Limited, we have at last found a satisfactory solution.

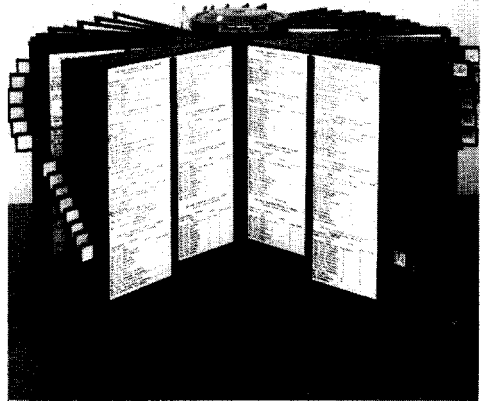
Suppose a staff member wishes to have several periodicals routed to him. . . . First of all he would check those titles on the periodical checklist. Each title on this list has a number beside it. These numbers are circled on a numbered card. The man's name is typed on the bottom of the card with his location written in pencil. This 8 x 5 inch card is then filed in a Remington Rand Mobile Kardex.

The next step is to arrange for the man's name to appear on the routing lists for the periodicals he wishes to see. There may be several copies of each title to take care of the many employees at different addresses. The name is typed on a series of cardboard strips. Each strip is added to the lists in a Linedex panel under the title of the periodicals requested. The name will then appear with others at the same mailing address.

At regular intervals the Linedex panels are sent to our service bureau where they are photo-copied by the Xerox process. The copies are cut down the centre line and returned with the panels to the library. The sheets are then cut to form separate routing slips for each title. These slips are filed by title and replaced as new copies are made from the panels. More copies are kept for weekly publications than for those issued less frequently.

When a person is transferred to another department or district, the strips are moved so that his name will appear at the new location. If he no longer wishes to see certain periodicals, the strips are removed from the panel. In the same way his name can be added for new titles. The next time the panels are sent to the service bureau to be photo-copied, the transfers, deletions and

additions will be copied for the new routing slips. The out-of-date slips will then be discarded.



Graetz Bros. Limited

The Linedex panels that hold easily changeable data for routing periodicals

We began this new system with a trial of 12 panels. When we found it satisfactory, we increased the number of panels to 72 to take care of all periodical routing. It was so successful in the Montreal library that the company library in Toronto then introduced the same system.

The following supplies are needed:

1. Periodical checklist: a numbered list of periodicals available for routing. This list is checked by the individual employee.
2. Numbered card: a record of the individual's request for periodicals to be routed.
3. Mobile Kardex: a Remington Rand file which holds the numbered cards.
4. Linedex inserts: perforated sheets on which names and also titles of periodicals are typed. These are separated into single strips and inserted in the panels in the form of a routing slip.
5. Linedex panels: Remington Rand metal frames (15½ x 9½ inches) which hold the inserts. These are kept in a rotary stand.

BEATRICE SAUNDERS, Chief Librarian
The Bell Telephone Company of Canada
Montreal, Quebec

Have You Heard . . .

Standards and Status in Academic Libraries

The status of the college and university librarian according to the accrediting standards of regional and professional associations is discussed by Dr. Fritz Veit in an article in the March *College and Research Libraries*. Assuming that academic status is the librarian's goal, Dr. Veit's comparative analysis shows that the standards of all regional accrediting associations, except the Northwest Association, specify faculty status for head librarians. Only the Southern Association, however, states that the whole library staff should be included in the faculty. Of the professional associations, only the American Association of Law Schools clearly states that faculty status should be accorded to the head librarian, although in the standards of several associations the connection of the specialized library with the central university library is noted. In such cases the general library personnel policies are expected to prevail, and according to a recent ACRL University Libraries Section survey, over one-half of the United States colleges and universities have given academic recognition to their professional library staffs.

Research Firm Expands

The Planning Research Corporation, 1333 Westwood Boulevard, Los Angeles 24, California, has announced the establishment of a new biomedical operations research service to plan, program, analyze and assess research programs in the biological, medical and paramedical fields. The corporation also offers planning and research assistance in such fields as international economics, area development and redevelopment, inventory and equipment management, personnel, electronic data processing, government administration and finances, market research, transportation and distribution and military systems.

Solid State Abstracts on Cards

A leaflet describing a new technical abstracting service for solid state physicists and elec-

tronics engineers is available from Cambridge Communications Corporation, 238 Main St., Cambridge 42, Massachusetts. Abstracts of papers on the theory, production and use of solid state materials and devices (including semiconductors, magnetics and dielectrics) are printed on 3 x 5 inch index cards to provide a cumulative, multiple-entry index to the solid state literature. Approximately 5000 cards will be supplied during the first year of publication.

Special Libraries in Russian

According to a recent Soviet publication, *Special Libraries* appears to be read by, or at least familiar to, a good number of Russian librarians. The publication in question is *Inostrannye Periodicheskie Izdaniia po Bibliografii i Bibliotekovedeniiu v Bibliotekakh Moskvy i Leningrada: Svodnyi Katalog*, which may be translated as "A Union List of Foreign Bibliographic and Library Science Periodicals in Moscow and Leningrad Libraries." Published in Moscow in 1959, the list shows holdings up to 1955 and reveals that *Special Libraries* is available in no less than 19 libraries in the two cities—3 in Leningrad (the Academy of Sciences Library, the Leningrad Public Library and the Leningrad University Library) and 16 in Moscow (including the Lenin Library, Moscow University Library and the library of the Moscow State Library School). By contrast, *American Documentation* is held by only 3 libraries in the area, and *College and Research Libraries* can be perused in only seven. Even the *Library Quarterly* lags behind, with holdings in 15 libraries. In general, however, the Soviet librarians seem to be subscribing to an astounding number of our professional bibliographic publications—another evidence of the importance placed on documentation and information-processing activities in the Soviet Union.

ROSEMARY NEISWENDER, Assistant Librarian
The RAND Corporation, Santa Monica, Calif.

(Reprinted from the *Southern California Chapter Bulletin*, February 1960.)

Maryland Offers Tuition Aid

The University of Maryland has announced a tuition aid plan to pay out-of-state tuition to the University of North Carolina at Chapel Hill for any qualified Maryland resident seeking a Master of Science in Library Science degree. The aid amounts to \$175 per semester or \$117 per summer session with a total cash value of up to \$625 and is available for three semesters or four summer sessions. For further information write Howard Rovelstad, Director of Libraries, University of Maryland, College Park, Maryland.

California Union List of Newspapers

A Union List of Newspapers in California Libraries, representing holdings of 175 libraries in the state, is now available for use in the Union Catalog Section of the State Library in Sacramento. The list, on cards, contains information on three categories of newspapers: foreign, including those in the English language, of all dates; newspapers published prior to 1900 in the United States, its territories and possessions (excluding California); and newspapers published in California at any time.

In Memoriam

PAUL S. ALLEN, librarian of the central library of Standard Oil Company (New Jersey) since 1948, died on May 2, 1960.

Letters to the Editor

May we remind members of the Special Libraries Association of an important deadline. The closing date for submitting periodical holdings for *New Serial Titles'* ten-year cumulation is September 30, 1960. Librarians who have not participated before now may still send their lists for inclusion in the cumulative volume, which is due to be published in the Fall of 1961.

In order to make *New Serial Titles* as valuable as possible for locating periodicals held by special libraries, members of the Association are urged to take advantage of this opportunity.

Information and forms for submitting titles may be obtained from the Editor, *New Serial Titles*, Serial Record Division, Library of Congress, Washington 25, D. C.

ANNE McCANN, Chairman
Science-Technology Resources Committee
Science-Technology Group, New York Chapter

May I comment and give some further information on certain points in Dr. Warheit's paper in the February 1960 *Special Libraries*.

We have used a Dagmar Reader for nearly three years now and cannot agree that it "takes some mechanical skill to set up the reader" or that "the magnetised film (fiche) holder leaves something to be desired". Our junior assistants can do the former without difficulty, and the fiche holder is a neat method of "holding and turning the page". The fact that the International Documentation Centre "favours" the Huggins reader should not be emphasised as this organisation is simply a commercial firm.

It is not very difficult to make enlargements from Microcards. If they are good Microcards, an acceptable black on white enlargement can be made by using the "Card adaptor" (which we have designed for the Dagmar microfiche reader), a sheet of glass and some document copying paper. The paper is placed face upwards under the glass on the table top *after* the image from the card has been focussed thereon, an exposure of 10-15 seconds and normal photographic processing produces good results.

A brief description of the adaptor appeared in the *Library Association Record*, vol. 61, no. 10, October 1959, p. 260.

MR. L. L. ARDERN, Librarian
Manchester College of Science & Technology,
Manchester, England

The National Science Foundation urges all U. S. scientific and technical information centers to cooperate in a survey being conducted by Battelle Memorial Institute for the Foundation. The survey is intended to locate all information centers in the United States serving the physical and life sciences and technologies and to collect factual data relating to their activities and services.

The Foundation will use the survey results to prepare a national directory of information centers and to relate the activities of the centers to the total U. S. scientific and technical information program. Information concerning location, subject coverage, scope of collection, and types of services available, etc., will be gathered by questionnaire.

The value of the survey and directory will depend upon the completeness of coverage. NSF, therefore, requests that any activity which identifies itself as an information center should send its name and address to Mr. William H. Bickley, Battelle Memorial Institute, 505 King Avenue, Columbus 1, Ohio.

CLYDE C. HALL, Public Information Officer
National Science Foundation, Washington, D. C.

A recent article in *College and Research Libraries* concerned itself in part with the cover-to-cover translation program for Russian journals. This article was representative of a school of thought which, in my opinion, leans toward an intramural approach to the subject.

I daresay no one still questions the necessity for scientists to know what their Russian counterparts are doing; but American scientists—*unlike* many of their foreign counterparts—are, for all working purposes, unilingual, i.e., they are so much more at home in English that much valuable time would be wasted reading the foreign language. It could be argued that this shouldn't be so, that lingual skills should be developed, but the *fact* is that our scientists must know what the Russians are writing and they can't read Russian.

There are three major possibilities for getting the information to our scientists: 1) Selected translations; 2) Abstracting and 3) Cover-to-cover translation.

Our own firm had a long and involved experience with both abstracting and selection of translations from the Technical Oil Mission Reels. In our experience, there were required a vast body of consultants, who got bogged down in months of communication. We ran the risk of omitting important material because one reviewer did not recognize it as such. The program required an inordinate amount of pinpointed promotional material, making for very high charges to customers because of the minute circulation of such articles, and was less than a success financially. To my mind, such a program is but one faltering step ahead of doing all translation on a custom basis.

There are many advocates of abstracting, most of them with a vested interest just as the writer of this letter has a vested interest. It is my opinion that a program of abstracting Russian journals would be wasteful, inefficient, and would actually cost more money overall than does the cover-to-cover translation program already developed. What are the requirements of an abstracting program? First, high-caliber and well-paid scientist-translators and second, reviewers or, as an alternative, the use of the translator also as a reviewer.

As is well known, there is a dearth of such translators (we estimate—no more than 500 throughout the world who can do high-caliber Russian-English scientific translation).

Let us assume a four-page article. It would take a half-hour of the translator's time to read this article, even if it were then decided not to make an abstract at all, in which event it would be a waste of time and money. If it were decided to abstract it in, let us say, a Chemical Abstracts style, i.e., something more detailed than a *précis*, such an abstract would take a minimum of one hour to write. A total time of an hour and a half has now been expended, whereas the entire translation could have been performed in the same time; but instead of the complete translation, you have only an abstract.

Now let us assume a subscribership has been developed for such abstracts. Ten scientists working in various firms find that abstract 1 has only whetted their appetites, and they want the entire article in translation. They now go out into the market, and each one gets a different translation of

this same article, at prices ranging up to ten dollars per Russian page. The over-all cost in money and manpower is staggering. It has been estimated that the cost of producing one thousand words for 600 subscribers under the *program* that is now run costs about \$60. It should be perfectly obvious that no more than three people could be served for the same money under the abstracting program I have outlined. I grant immediately that not all 600 are interested in any one article; but surveys show that the range is certainly above three and is very often over 100.

Librarians, of course, can complain about the niggardliness of management and tight budgets. This has nothing to do with the economics of abstracting vs. cover-to-cover translation. Managements not currently alert to the needs and economics of this program (and there are fewer and fewer of them) should be so alerted.

Another complaint is that there is *too much* literature. Again, although information retrieval is probably one of the most important problems of the 1960's, this complaint has little to do with whether cover-to-cover translation is more economical than abstracting.

The most important aspect of what has been developed so far is that now there is a *program*; thousands of man hours of thought—on the part of government officials, officers of this company as well as other companies, and many consultants—have been spent on this problem. In the studied opinions of all these people, there is no better method for disseminating as much information to the scientific community. There are now some 83 Russian journals being translated on a cover-to-cover basis. These represent the cream of the Russian scientific periodical literature, and the translations are getting more and more current and developing ever-increasing circulations. This *program* has put at the fingertips of English-speaking scientists the work done by their Russian counterparts, in a language they can read immediately. Since almost the entire subscribership is composed of libraries rather than of individuals, *readership*, it has been estimated, is from 50 to 100 times larger than subscribership, whereas the total expenditure of government in subsidizing this program runs well under two million dollars. It is my estimate that if the problem were met in any other way, the cost to government and industry would be treble what it is now—and this without the completeness of coverage that serves everyone, including scientists working in limited areas of research.

EARL COLEMAN, President
Consultants Bureau Enterprises, Inc., New York

For a biographical study of Jack Spurling (1871-1933), British marine artist, I would like to hear from anyone possessing facts or other pertinent material.

MRS. HELEN W. RODGERS, Librarian
The Babcock & Wilcox Company
161 East 42nd Street, New York 17

Off the Press . . .

Book Review

GUIDE TO REFERENCE MATERIAL. A. J. Walford, Editor. London, The Library Association, 1959. 543 p. \$12.15. R. R. Bowker Co., U.S. distributor.

Since the last supplement of John Minto's *Reference Books* appeared in 1931, reference librarians and library students on two sides of the Atlantic have awaited the publication of a new standard authority in the field of British reference bibliography. Though this dark age was made less onerous over the years by the comprehensive presence of C. M. Winchell's frequently supplemented *Guide to Reference Books*, Dr. Walford, a Fellow of the British Library Association, has performed a universal service to his profession in compiling this *Guide to Reference Material*.

It would be impossible to appraise this book without noting its striking similarity, in both form and substance, to Miss Winchell's *Guide*. Indeed, if they are to complement each other in furnishing the best reference material in two possible worlds, it is hoped that their respective supplements will be issued in an alternate sequence.

Acknowledging the established position of the Winchell *Guide*, Dr. Walford has set forth a comprehensive, annotated listing, by Universal Decimal Classification of reference books and bibliographies, which emphasizes current materials and those distinctly British in origin. Although constantly apparent throughout the *Guide*, this feature is not always consistent because there are numerous entries from American, French and German sources, especially in the rapidly developing fields of the technologies, where the exclusion of such authority would certainly diminish the usefulness of the *Guide*.

Bearing in mind this criteria of giving first place to British reference materials, the real importance of the *Guide* lies in the currency of its nearly 3,000 main entries. Barring any immediate revision of the Winchell *Guide*, with its total of 7,500 entries including its supplements, an active reference department should not miss the opportunity of checking for material cited in this book through 1957. The editor indicates that the *Guide* will be regularly supplemented with periodical, initial listings in the *British Library Association Record*. The Association forecasts a revision every five or six years.

In addition to major reference works and bibliographies, the *Guide* also includes literature surveys and lists of subject materials published, but seldom seen, in periodicals, scholarly journals and other serial publications. Possibly this is one of the strongest elements on which the *Guide* can be recommended for use in technical fields and in history, economics and international relations. As might be expected, each of these fields are expertly

covered in relation to the British Commonwealth, revealing a multitude of official documents and serial publications seldom set forth so well before in any one place.

The great variety of United Nations materials are well-represented and are often cross-referenced from the annotations for standard sources, in the technical fields especially. Maps, anthologies and source books are omitted, but atlases have received a massive treatment over seven pages of entries for general atlases, by form arrangement and country, and are indexed from no less than 20 topical subdivisions. Needless to say, the citations for works covering English literature are possibly more extensive than anything since the publication of the Minto volumes.

Although the editor states that technology is almost as fully represented as in the Winchell *Guide*, this should be qualified on the double count of British emphasis and the generally comprehensive span of Miss Winchell's work in important areas outside the English speaking world. However, the division for physics is subdivided into 11 different fields and that for nuclear physics lists at least two entries from the Harwell British Atomic Energy Establishment that would be of special interest to the library collecting materials on the peaceful uses of atomic energy—an area in which Britain has now achieved universal distinction. For the law librarian who has often puzzled over the chronology and indexing of English legal materials, nearly ten pages of the *Guide* are devoted to a systematic exploration of British Commonwealth, English and Irish law reports, digests and statutes. The acknowledged superiority of British publishing in language bibliography appears in a total of 34 pages under the languages division.

Although it is probably destined to become one, Dr. Walford discounts the use of his *Guide* as a text in library school reference curricula. An analysis of his consistently exhaustive and often technical annotations supports this statement and separates his work from the generally sketchy annotations found in the Winchell *Guide*. As with most reference guides, these annotations should be read with care, since they often contain notes to outstanding materials which the editor, for reasons of his stated criteria, has not deemed of sufficient importance to warrant a separate entry. However, each title mentioned in the *Guide* is carefully indexed, whether it is given separate attention or merely a comment within an annotation.

The *Guide* is arranged by ten broad subject divisions according to the 1957 abridgement of the Universal Decimal Classification system. Where "content" is opposed to "application" under any one major subject division, this differ-

ence is indicated by cross-reference to another division. However, many librarians will find the Winchell *Guide* more convenient to use with its flexible adaptation to the standard Dewey system. Besides giving the usual bibliographical information for each title, the Walford *Guide* also includes a class number at the top of the entry, thus distinguishing it from the Winchell work and incidentally providing an aid to classification.

The format of the *Guide* could have been improved by placing headlines running at the top of each page in order to identify the subject division at hand, and this lack may definitely hinder its use. Also, the idea of thumb-indexing a volume of this sort has apparently not yet occurred to a publisher on either side of the Atlantic.

A distinguished group of special library administrators in the United Kingdom has been credited for their assistance in bringing this book to print and they, perhaps more than any others, are responsible for giving this *Guide* a place in the firmament of reference bibliography.

J. S. ELLENBERGER, Librarian
Carter, Ledyard & Milburn, New York City

New Serials

CHEMICAL TITLES, a 104-page semi-monthly publication of the American Chemical Society, will make available for the first time an automatically-produced indexed bibliography of some 3000 articles from the principal United States and foreign chemical journals within two to three weeks after receipt of the journal. All titles originally published in other languages will be translated into English before indexing. The new index utilizes the "Keyword-in-Context" system in which partial titles are indexed by an electronic computer into alphabetical order by keywords. Each keyword, positioned in the center of the page and amplified by the surrounding portion of the title, is accompanied on the same line by the article's identification code, which directs readers to the related entry in the alphabetically arranged bibliography for full source information. The "electronic editor" was developed by IBM's Advanced Systems Development Division after studies by Chemical Abstracts Services under a \$150,000 grant from the National Science Foundation.

FINANCIAL INDEX is a weekly index to all mentions of securities, other than price quotations, in the 100 most widely used brokers' reports, financial services, periodicals and newspapers. In addition to weekly issues, the new reference service will include quarterly cumulative editions for permanent use. Citations will indicate briefly whether the item is part of a survey or is a comprehensive article and the contents. For subscription information and a complete working list of publications to be indexed, contact The Financial Index Company, 488 Seventh Avenue, New York 18, New York.

LABOR HISTORY, a publication of the Tamiment Institute, 7 East 15th Street, New York 3, New York, will be published three times a year in the

winter, spring and fall. Articles will concentrate on original research in American labor history, studies of specific unions, the impact of labor problems on ethnic and minority groups, labor history theory, biographical portraits, analyses or comparative studies of foreign labor movements and studies of radical groups or history related to labor history. The annual subscription rate is \$4; single issues are \$1.50; plus 25¢ additional per year for foreign postage.

RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY is being published in cover-to-cover translation by The Chemical Society of London in cooperation with the British Department of Scientific and Industrial Research. Infosearch Ltd. is furnishing the translations, and Cleaver-Hume Press Ltd., 31 Wright's Lane, London, W. 8, is handling the distribution. Subscribers can order the first 18 months' issues (Russian July 1959 to December 1960) for £45.

I. B. Z. to be Reprinted

The noted German reference series, *Internationale Bibliographie der Zeitschriftenliteratur* (International Subject Index to Periodicals), which has been practically unobtainable since the publisher's stock was destroyed during World War II 20 years ago, is to be reprinted this fall by Kraus Reprint Corporation, 16 East 46th Street, New York 17. This extensive periodical index covers journals, yearbooks and transactions of learned societies in all fields of learning and during the later years of publication covered more than 6000 titles. Unlike the original edition, the reprint edition will be printed on high-quality paper with wide margins to facilitate rebinding. Special prices for orders received before September 15, 1960 are available as is a booklet describing the full scope of the various series and the prices and publication schedule for the reprinted volumes.

SLA Authors

ANNAN, GERTRUDE L. Survey or Slurvey?. *Library Journal*, vol. 85, no. 11, June 1, 1960, p. 2120-2.

ASH, LEE. Natural Resources of the Caribbean: Some Bibliographical and Library Needs. In *The Caribbean: Natural Resources*, A. Curtis Wilgus, ed. Gainesville: University of Florida Press, 1959.

BEYERLY, ELIZABETH. Soviet Bibliographical Projects. *American Documentation*, vol. 11, no. 1, January 1960, p. 44-53.

BONN, GEORGE S. Technical Books of 1959. *Library Journal*, vol. 85, no. 5, March 1, 1960, p. 898-904.

BURTON, R. E., co-author. The Half-Life of Some Scientific and Technical Literatures. *American Documentation*, vol. 11, no. 1, January 1960, p. 18-22.

CARLSON, WILLIAM H. The Library Services Act. *Canadian Library Association Bulletin*, vol. 16, no. 5, March 1960, p. 228-31.

CLAPP, VERNER W. The School of Experience. *Library Journal*, vol. 85, no. 9, May 1, 1960, p. 1748-50.

———. "To Assist in Solving the Problems of Libraries." *ALA Bulletin*, vol. 54, no. 3, March 1960, p. 187-93.

———. Senate Ratification of Florence Agreement. *ALA Bulletin*, vol. 54, no. 5, May 1960, p. 377-8.

COLE, GENEVIEVE. Career in Special Libraries. *Science News*, vol. 6, no. 3, Spring 1960, p. 2-3.

DAY, MELVIN S., co-author. New Indexing Pattern for *Nuclear Science Abstracts*. *American Documentation*, vol. 11, no. 2, April 1960, p. 120-7.

DOWNES, ROBERT B. Regional Library Centers. *Canadian Library Association Bulletin*, vol. 16, no. 5, March 1960, p. 212-5.

———. We and the ALA. *Wilson Library Bulletin*, vol. 34, no. 9, May 1960, p. 668-70.

DUNKIN, PAUL S. The Old Girl and the New Name. or, The Fabulous Fiftie. *Library Resources and Technical Services*, vol. 4, no. 2, Spring 1960, p. 109-15.

FOCKE, HELEN M. Reference Books of 1959. *Library Journal*, vol. 85, no. 8, April 15, 1960, p. 1513-21.

GRIMSON, SYBIL. Museums and Libraries in Montreal. *ALA Bulletin*, vol. 54, no. 6, June 1960, p. 493-5.

GROVE, LOUISE. A World to Discover. *Nursing Outlook*, vol. 8, no. 4, April 1960, p. 220-1.

KENT, ALLEN. Exploitation of Recorded Information. I. Development of an Operational Machine Searching Service for the Literature of Metallurgy and Allied Subjects. *American Documentation*, vol. 11, no. 2, April 1960, p. 173-88.

KINGERY, ROBERT E. Latin-American Cooperative Acquisitions Project. *Stechert-Hafner Book News*, vol. 14, no. 6, February 1960, p. 65-6.

KUHLMAN, A. F. Two ARL Approaches to Counting Holdings of Research Libraries. *College and Research Libraries*, vol. 21, no. 3, May 1960, p. 207-11.

JOHNSTON, MRS. LINDA M., co-comp. *List of Reference Relating to Merchant Credit in Agriculture*. Atlanta: Research Library, Federal Reserve Bank of Atlanta.

LAMB, W. KAYE. Canada's National Library—A Progress Report. *ALA Bulletin*, vol. 54, no. 4, April 1960, p. 287-92.

LAND, BRIAN. How Canada's Money Market Keeps Idle Cash at Work. *Canadian Business*, 1959.

LORENZ, JOHN G. Library Services Act—The First Three Years. *ALA Bulletin*, vol. 54, no. 1, January 1960, p. 17-27.

MCNIERNEY, MARY ALICE. *Library Service to Business: A Study of Ten Libraries* (thesis). New York, 1959. 24 p. pap. Available from author, Standard & Poor's Corp., 345 Hudson Street, New York 14.

MAIZELL, ROBERT E. Information Gathering Patterns and Creativity. *American Documentation*, vol. 11, no. 1, January 1960, p. 9-17.

———. International Conference for Standards on a Common Language for Machine Searching and Translation. *College and Research Libraries*, vol. 21, no. 2, March 1960, p. 117-24.

———. Physics Information at Bargain Prices. *Physics Today*, vol. 13, no. 3, March 1960, p. 40; 42.

MARTIN, ROBERT L. Foreign Scientific Literature in Translation. *American Documentation*, vol. 11, no. 2, April 1960, p. 135-50.

MINDER, THOMAS. The Mathematical Foundations of Bibliographic Organization. *American Documentation*, vol. 11, no. 1, January 1960, p. 2-8.

PETERSON, IRENE H. Reading in the Social Sciences. *Book Bulletin of the Chicago Public Library*, vol. 42, no. 3, March 1960, p. 43-6.

PHELPS, RALPH H. and HERLING, JOHN P. Alternatives to the Scientific Periodical: A Report and Bibliography. *Unesco Bulletin for Libraries*, vol. 14, no. 2, March-April 1960, p. 61-75.

RICHMOND, PHYLLIS A. American Documentation Institute Meeting. *College and Research Libraries*, vol. 21, no. 2, March 1960, p. 156-8.

RICHMOND, PHYLLIS ALLEN. Hierarchical Definition. *American Documentation*, vol. 11, no. 2, April 1960, p. 91-6.

———. Some Aspects of Basic Research in Classification. *Library Resources and Technical Services*, vol. 4, no. 2, Spring 1960, p. 139-49.

SHARP, HAROLD S. Organizing R/D Information. *Industrial Laboratory*, vol. 10, no. 11, November 1959.

———. Company Libraries Cut Research Cost. *Systems Magazine*, May-June 1960, p. 28-9.

SHICK, FRANK L. Bookbinding Problems and Promises: Steps Towards a Re-evaluation of Standards. *Library Resources and Technical Services*, vol. 4, no. 2, Spring 1960, p. 131-8.

SHOEMAKER, RALPH. Weeding Specialist Thins out Clippings. *Editor & Publisher*, May 28, 1960, p. 44.

SHORES, LOUIS. What is Right with Library Education. *Library Journal*, vol. 85, no. 9, May 1, 1960, p. 1742-4.

VORMELKER, ROSE L. Business Books of 1959. *Library Journal*, vol. 85, no. 5, March 1, 1960, p. 905-7.

ZAFREN, HERBERT C. *Jewish Newspapers and Periodicals on Microfilm Available at the American Jewish Periodical Center*. Cincinnati: American Jewish Periodical Center, 1960. 32 p. pap.

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INDUSTRIAL LIBRARIAN for library in large St. Louis, Missouri company with excellent benefits program including company paid retirement plan. Library degree required; cataloging experience helpful. Please write fully in complete confidence about your education, library and business background; give personal details such as age, marital status. Enclose recent snapshot if available. Write Box B 36.

LIBRARIAN. Newly established library in Engineering Department of private industry requires recent graduate with degree in Library Science. Duties will entail: ordering books and other publications, cataloging, reference searches, and related responsibilities. Interest in and familiarity with engineering terminology desirable. Fine employee benefit program. Please write giving complete resume and salary expected to Cutler-Hammer, Inc., 315 North 12th Street, Milwaukee 3, Wisconsin.

LITERATURE CHEMIST: Our Agricultural Research library needs a person with a B.S. in library science and a minimum of two years in the field of chemistry or a degree in chemistry to assist the Chemistry Group with nomenclature problems, to represent the Agricultural Division on the Chemical Nomenclature Committee, and to conduct literature searches. For further details please write to Mr. M. J. Duggan, Personnel Relations Supervisor, Agricultural Division, American Cyanamid Company, P. O. Box 672, Princeton, New Jersey.

MEDICAL LIBRARIAN. Professional librarian required immediately to supervise modern library serving large teaching hospital and research institute. Scientific or medical background desirable. Please send complete resume to: Dr. F. Van V. Snell, Chairman, Library Committee, Hospital for Sick Children, 555 University Ave., Toronto, Canada.

SCIENCE REFERENCE LIBRARIAN. In charge of science and technology reference work, bibliography and materials selection, including cooperation with faculty and local industry in building an outstanding research collection for the Houston area. Some teaching opportunity for qualified applicant. Salary open. Month's vacation, sick leave, retirement plan. I.S. degree, experience; advanced study in science or technology desirable. Write to Hardin Craig, Librarian, Rice Institute, Houston, for further details.

SPECIAL LIBRARIAN. M.L.S. or equivalent, to head industrial library devoted to medical, chemical, biological literature. Previous special library experience desirable. Salary up to \$485 depending on qualifications. Write to Director of Research, Cutter Laboratories, 4th and Parker Streets, Berkeley, California.

TECHNICAL LIBRARIAN. Well known manufacturer with new Research Center in Northwestern suburb of Chicago has opening for a woman with librarian experience combined with a scientific background desirable. Her services will require selection, procurement, cataloguing, indexing, abstracting and distribution of technical literature, reference work and literature search, planning and information retrieval program for research staff. Salary commensurate with training and experience. Company has excellent benefits including tuition refund program, group insurance and retirement program. In replying please give age, marital status, education and comprehensive description of work experience. Write Box B 37.

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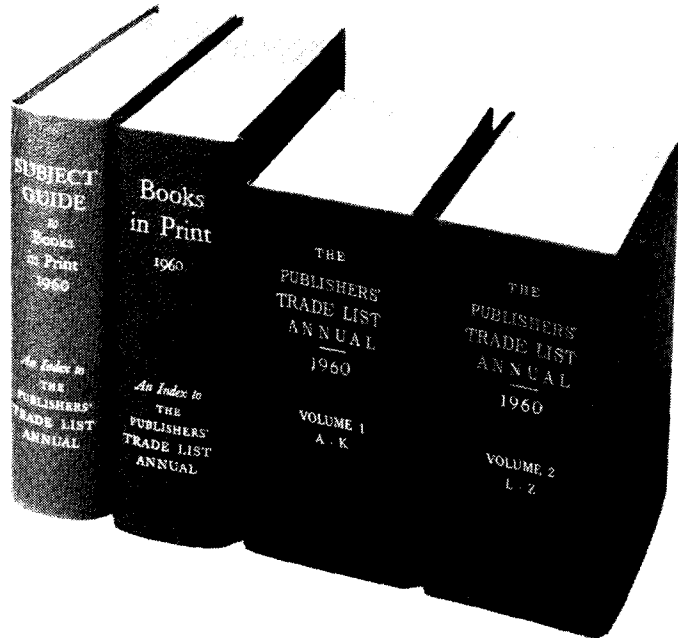
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