San Jose State University SJSU ScholarWorks

Special Libraries, 1955

Special Libraries, 1950s

3-1-1955

Special Libraries, March 1955

Special Libraries Association

Follow this and additional works at: http://scholarworks.sjsu.edu/sla_sl_1955 Part of the <u>Cataloging and Metadata Commons</u>, <u>Collection Development and Management</u> <u>Commons</u>, <u>Information Literacy Commons</u>, and the <u>Scholarly Communication Commons</u>

Recommended Citation

Special Libraries Association, "Special Libraries, March 1955" (1955). *Special Libraries, 1955*. Book 3. http://scholarworks.sjsu.edu/sla_sl_1955/3

This Magazine is brought to you for free and open access by the Special Libraries, 1950s at SJSU ScholarWorks. It has been accepted for inclusion in Special Libraries, 1955 by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.



VOLUME 46

MARCH 1955

NUMBER 3

How to Start a Small Technical Library Marjorie O. Baker

Filing, Classification and Indexing Systems for Engineering Offices and Libraries Ralph H. Phelps and John J. Soroka

> The Paradoxical Trade Catalog William S. Budington

SLA Convention 1955 Special Collections in Detroit Ruth P. Braun

Published by SPECIAL LIBRARIES ASSOCIATION =Putting Knowledge to Work=

Technical Librarians

. Research Workers

. Patent Attorneys

7

CORRELATION INDEX DOCUMENT SERIES AND PB REPORTS

will serve as your checklist for the identification and procurement of unclassified and declassified serial-numbered government reports.

• This volume is a tabulation of the series numbers of government reports which have been abstracted in Volumes 1 to 17 of the BIBLIOGRAPHY OF TECHNICAL REPORTS (New title: U. S. GOV-ERNMENT RESEARCH REPORTS) published by the U. S. Department of Commerce, Office of Technical Services.

- It shows the relationship of the series report numbers to the Office of Technical Services PB report numbers.
- There are 792 different series, arranged alphabetically on 221 pages.
- A Key to Series Abbreviations and a Key to Issuing Agencies are given.

1953

281 pages

\$10.00

order from

SPECIAL LIBRARIES ASSOCIATION

31 East Tenth Street New York 3, New York

-INEW REDTINIS	New	Reprints-
----------------	-----	-----------

Ready February 1955

Botanical Gazette		Price per vol.
(Slightly reduced format) Vols. 1-20, 1875-1895, including General Index to Volumes 1-10		
Cloth bound set, bound in 16 volumes Double volumes, Volumes 1/2, 3/4, 5/6, 7/8,	\$300.00	
paper bound		\$20.00
Single volumes, Volumes 9-17, paper bound Single volumes, Volumes 18-20, paper bound		$\begin{array}{c} 15.00 \\ 20.00 \end{array}$
Zoological Record: Sectio	n In	secta
	225 00	

Paper bound set					225.00	
Single volumes, paper bound						11.25

Please address orders and inquiries to

JOHNSON REPRINT CORPORATION

125 East 23 Street, New York 10, New York

NEW!

SIGURD FUNDER

PRACTICAL MYCOLOGY

A Manual for the Identification of Fungi

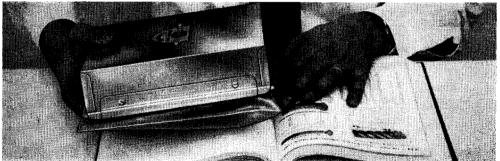
The book is divided in three groups: General, Medical and Plant Mycology. Identification is carried out, without the use of complicated techniques by making simple microscopic preparations which are then compared with the excellent illustrations in the book.

156 pages, 420 illustrations, table of classification 6.50

STECHERT-HAFNER, INC.

FOUNDED IN NEW YORK 1872 The World's Leading International Booksellers 31 EAST 10TH STREET, NEW YORK 3, N. Y.

YOU <u>CAN</u> TAKE IT WITH YOU



Completely flexible, the Contoura[®]-Constat[®] is the truly portable photocopier. A time-saving tool for any research project, the Contoura-Constat gives quick, crisp, error-free copies of anything printed, written or drawn. Wall charts, maps, metal plaques, blueprints, ledgers, record books all can be copied right where they are. And, the Contoura's special plastic light cushion lets you copy tightly bound book pages without the usual distortion at the binding.

The Contoura-Constat is ready for travel – the sturdy, lightweight carrying case is part of the equipment.

F. G. LUDWIG, Inc. 759 Coulter Street Old Saybrook, Conn.

Voted One of the

TOP TEN

Reference Books

of 1954

Occupational Literature:

An Annotated Bibliography

by Gertrude Forrester 467 pp. 6" x 9¹/₂" 1954 \$5.00

Voted one of the top ten reference books of 1954 by Louis Shores' committee of reference librarians.

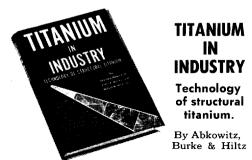
THE H. W. WILSON COMPANY

950 University Avenue

New York 52

NEW TECHNICAL BOOKS FOR INDUSTRY_____

in metallurgy, chemistry, and engineering



Fully covers production, properties, and processing of this new metal. (1955) 220 pages, illustrated \$5.00.

Chemistry of the Pesticides

3rd edition by Donald E. H. Frear A standard reference now revised to include the rodenticides as well as insecticides, fungicides, herbicides. (1955) 452 pages, illustrated \$8.00.

Reagent Chemicals and Standards

3rd edition by Joseph Rosin New, up-to-date coverage of properties, tests, standards for over 600 substances. (1955) 565 pages, \$9.50.

Two Ears of Corn, Two Blades of Grass

By D. H. Killeffer

A spokesman for the chemical industry tells of its great miracles, and prospects for youth to share in an ever greater future. (1955) 139 pages, \$4.00.

Fluid Dynamics of Jets

By Shih-I Pai

Modern developments in fluid dynamics with emphasis on the flow field of jets. (1954) 227 pages, \$5.00.

Wave Diagrams for Non-Steady Flow in Ducts

By George Rudinger

A consistent set of computing procedures, examples, fully worked out diagrams. (1955) 270 pages, \$6.00.



From a Librarian's Letter:

"... As soon as I heard that you had started your own business, I sent you a few orders to fill for our Library. I admit they were difficult ones because we wanted to try you out.

"I am now writing to tell you that we are very much pleased with the manner in which you handled our orders. You certainly kept your word as to the speed, accuracy and personalized handling of your service. Also your prices, especially for the out-of-print books, are extremely fair . . ."

Will you give us a trial?

- Orders for foreign and domestic books and periodicals filled speedily and accurately.
- Quotations—foreign and domestic — furnished cheerfully.
- Inquiries on foreign and domestic material answered promptly.

Ours is a complete, personalized library service!

•

ALBERT DAUB & CO., Inc. BOOKSELLERS

257 Fourth Avenue New York 10, N. Y.

SPECIAL LIBRARIES ASSOCIATION

"Putting Knowledge to Work"

THE FORTY-SIXTH ANNUAL SLA CONVENTION WILL TAKE PLACE JUNE 12-16, 1955 AT THE HOTEL STATLER, DETROIT, MICHIGAN

OFFICERS

President GRETCHEN D. LITTLE Atlas Powder Company, Wilmington, Delaware First Vice-President and President-Elect CHESTER M. LEWIS The New York Times, New York, N. Y. Second Vice-President ISABELLA M. FROST Lansing Library Service, Oakland, California Secretary MARGARET A. FIRTH United Shoe Machinery Corporation Beverly, Massachusetts Treasurer BURTON W. ADKINSON Library of Congress, Washington, D. C.

DIRECTORS

HELEN MARY PYLE Sun Oil Co., Philadelphia, Pennsylvania MRS. NELL STEINMETZ Pacific Aeronautical Library Los Angeles, California EUGENE B. JACKSON National Advisory Committee for Aeronautics Washington, D. C. CLARA G. MILLER Imperial Oil, Ltd., Toronto, Ontario, Canada SARA M. PRICE The Port of New York Authority New York, New York ELSE L. SCHULZE Procter & Gamble Co., Ivorydale, Ohio Immediate Past-President MRS. LUCILE L. KECK Joint Reference Library, Chicago, Illinois

OFFICIAL JOURNAL SPECIAL LIBRARIES

SPONSORED PERIODICAL TECHNICAL BOOK REVIEW INDEX Subscription, \$7.50 a year (\$8.00 Foreign)

MEMBERSHIP DUES SCHEDULE: Institutional, \$30; Active, \$10; Associate, \$5; Student, \$2; Sustaining, \$50; Life, \$250.

For qualifications, privileges and further information, write to the Executive Secretary, Special Libraries Association, 31 East Tenth Street, New York 3, N. Y.

PUBLICATIONS

Aviation Subject Headings.	1949	\$1.75
A Brief for Corporation Libraries.	1949	\$1.75
Classification Scheme and Sub- ject Headings List Loan Col- lection of SLA. Rev. Ed.	1951	\$1.50
Contributions Toward A Special Library Glossary. 2nd Ed.	1950	\$1.25
Correlation Index Document Series and PB Reports.	1953	\$10.00
Creation and Development of an Insurance Library. Rev. Ed.	1949	\$2.00
Directory of Special Libraries.	1953	\$10.00
Fakes and Forgeries in the Fine Arts.	1950	\$1.75
Map Collections in the U. S. and Canada, A Directory.	1954	\$3.00
Nicknames of American Cities, Towns and Villages Past and Present.	1951	\$2.00
Numerical Index to the Bibli- ography of Scientific and In- dustrial Reports, Vols. 1-10.	1949	\$10.00
SLA Directory of Members.	1951	
Source List of Selected Labor Statistics. Rev. Ed.	1953	\$2.00
Subject Headings for Aeronaut- ical Engineering Libraries.	1949	\$4.00
Subject Headings for Financial Libraries	1954	\$5.00
Technical Libraries, Their Or- ganization and Management.	1951	•
Visual Presentation. Our Library.	1953	\$10.00

SPECIAL LIBRARIES, published monthly September to April, bi-monthly May to August, by Special Libraries Association, Editorial Offices, 31 East Tenth Street, New York 3, N. Y. Publication Office: Rea Building, 704 Second Avenue, Pittsburgh 19, Pa.

- SUESCRIPTIONS: \$7 a year; foreign \$7.50; single copies 75 cents.
- MANUSCRIPTS submitted for publication must be typed, double space, on only one side of the paper. Mail manuscripts to Editor.
- REPRINTS may be ordered immediately prior to or following publication. Send reprint orders to Executive Secretary.

Entered as second-class matter February 5, 1947, at the Post Office in Pittsburgh, Pa., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in the Act of February 28, 1925, authorized February 5, 1947.

Special Libraries

OFFICIAL JOURNAL OF THE SPECIAL LIBRARIES ASSOCIATION

VOLUME 46

FEATURE ARTICLES

Indexed in Industrial Arts Index, Public Affairs Information Service, and Library Literature

CONTENTS

How to Start a Small Technical Library MARJORIE O. BAKER	103
Filing, Classification and Indexing Systems for Engineering Offices and Libraries	
RALPH H. PHELPS and JOHN J. SOROKA	109
The Paradoxical Trade Catalog WILLIAM S. BUDINGTON	113
The Use of Photocopy in the Technical Library JACK BALTES	118
The Thermo-Fax Duplicator SALVATORE D. NERBOSO	121
Automation Helen E. LOFTUS	127
The Answer Woman	129
SPECIAL LIBRARIES ASSOCIATION	
SLA Convention 1955: Special Collections in Detroit	
Ruth P. Braun	126
SLA Publications, Cumulative Statement, December 31, 1954	132
Your Fiftieth Anniversary: Report by the Fiftieth	
Anniversary Committee	133
Anniversary Committee	
Editor Resigns	
Editor Resigns	131

Editorial Board

Chairman: Alma Clarvoe Mitchill Mrs. Marie S. Goff Ruth Savord Ex Officio: Lucille Jackson

Editorial Staff

Editor: DORA RICHMAN Business Manager: MARIAN E. LUCIUS

Regional Representatives

MIDDLE WEST: MARION E. WELLS SOUTH: MARTHA MARSHALL

WEST: Albert P. Bradley CANADA: Grace Reynolds

Papers published in SPECIAL LIBRARIES express the views of the authors, and do not represent the opinion or the policy of the editorial staff or the publisher. Contents, copyright, 1955, by Special Libraries Association, 31 East 10th Street, New York 3, New York.





Look what happens...

Look what happens when ten issues of The New York Times are reproduced on microfilm.

The weight is reduced from around 12 pounds to less than 8 punces.

The *bulk* (and therefore the space it takes to store the ten issues) is reduced by over 96%.

But there is no reduction in the contents! It's still ten complete issues of The New York Times-but in a form that's much easier to handle than full sized newspapers, and a lot more economical to store.

Every ten days, a new reel of The New York Times on Microfilm is mailed to a growing list of subscribers who pay only \$160 for a full year's service. It's a "buy" for most libraries—for you salvage for other uses almost all the valuable stack space it takes to store bound newspaper volumes and single copies. You eliminate the entire cost of binding, maintenance and replacement.

If your library has not been using The New York Times on Microfilm, let us enter your subscription to this space saving, money saving service. It's one of the best paying investments you can make.

The New York Times on Microfilm

229 West 43rd Street, New York 36, New York

How to Start a Small Technical Library*

MARJORIE O. BAKER

Librarian, Baker & Company, Inc., Newark, New Jersey

WHEN A COMPANY considers organizing its own technical library, there are certain basic questions which must be answered:

- 1. Where should the library be located?
- 2. How much space will be needed?
- 3. How much will it cost to set up? to run?
- 4. How will it repay investment?
- 5. Who should direct it?

Library Location

Industrial libraries are invariably adapted to the needs of their own particular organizations. Library planning must therefore be based on specific needs and requirements.

The library should be located as conveniently as possible for its clientele. If a man working in his laboratory requires immediate information, he should be able to lay down his tools and within a few steps, find the literature which will give direction in solving the problem. Under such circumstances it is conceivable that quick access to the correct material might save a whole costly experiment.

Let us assume that the library is to serve an organization, possibly a company which has a small research and development department. If there is a separate research building, the library should be in it. A separate room offers many advantages. This may not be practical, however, and if necessary, the library may be established in a corner of a large laboratory. This would be preferable to locating the library at too remote a spot to be convenient for its clientele.

In selecting a location, the allowable floor load is a vital consideration. The weight of a stack of books seven shelves high is 140 pounds per foot, plus the weight of the stacks and a margin for safety.

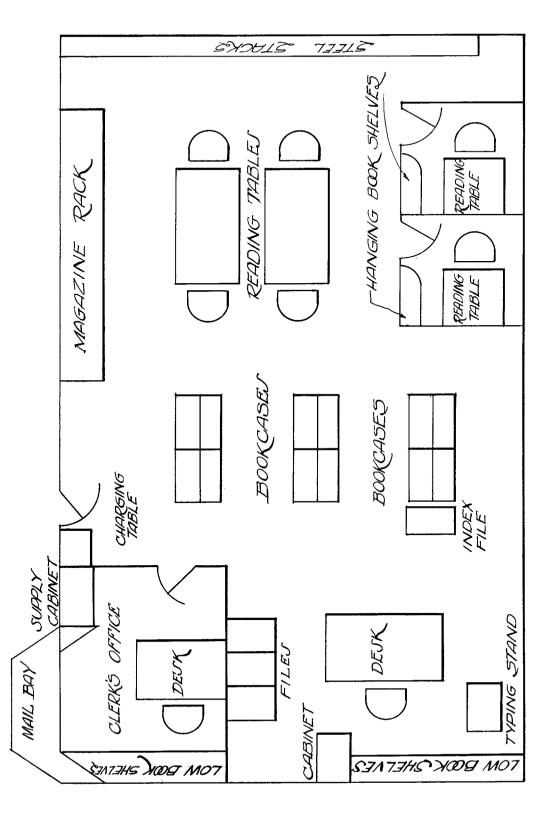
Whether or not a separate room is used for the library, the place selected should be quiet. Talking, shouted orders, noisy machinery or knocking and pounding, characteristic sounds in the industrial world, are exasperating in the extreme to people doing library research. If a library is located in an area where noise is unavoidable, it should be soundproof.

Another consideration is ventilation. Good air is essential. An oppressive atmosphere tends to distract the attention from mental efforts to physical discomforts. In a properly controlled atmosphere personnel can work more effectively. Moreover, the book collection maintained in an even temperature holds up much better. Air conditioning is therefore very desirable.

Lighting is a vital factor. Eyestrain is a deterrent to study and a prime source of error. Inadequate light engenders carelessness. Forty to sixty footcandles, shadowless light, is the illumination desirable for reading. There should also be an arrangement for lighting the stacks or bookshelves.

Summing up, the library should be located in a convenient place that is quiet, well ventilated and well lighted.

^{*} Based on a paper, "How to Start a Small Metallurgical Library," presented at the Fall Meeting of the Metals Division, Special Libraries Association, in Chicago, Illinois, on November 4, 1954.



Space Required

The special library is adaptable. Careful planning and ingenuity can make extensive use of limited space. However, greater efficiency is possible when the working area is adequate.

For consideration here the working model shown in the layout on the page facing is twenty-by-thirty-five feet.

Standard oak, glass-fronted bookcases are used. Open shelves are preferable if dust is not a serious factor. Space has been allowed for approximately 1,000 volumes. To be exact, such an arrangement will shelve 1,080 volumes of the *Encyclopaedia Britannica*.

It is possible to shelve twice as many books in the same area by using steel drawer type of shelving. Economy of space may be sufficiently significant a consideration to offset the somewhat greater initial expense.

In choosing space for the library a vital consideration is sufficient area for expansion. A library grows like the proverbial green bay tree. It cannot remain static. Much of the value of the library resources lies in the retention and listing of current data.

It has been estimated that a technical library doubles itself every twelve to fifteen years. This figure might be questioned as far as shelf space is concerned. Unless control is rigid, shelf space may double itself within eight years. Averages are merely guides at best. Periodicals grow at the average rate of seven inches of shelf space per year for each title. *Chemical Engineering* increases at the rate of ten inches per year. Weekly publications mount rapidly.

One answer to the problem is microfilm. It is increasingly possible to get complete files of periodicals on microfilm or on microcards. In planning a new library, it might be well worth while to investigate what material of this kind is available.

Some libraries make it a practice to keep periodicals only three years, after which those articles which are felt to be of recurrent value are put on microfilm and the periodicals are sold or discarded. Every library has specific journals of such lasting value that they are bound or conveniently shelved. These journals should be readily accessible for examination and search.

Another way of allowing for expansion where floor space is limited, is to increase stack holdings vertically. The library is sometimes a two-story room with one tier of shelves above the other. Doubling and concentrating the library holdings is possible only where the live floor load has the necessary margin of safety.

Still another device is to provide a stack room or storage space in some less desirable area. Many libraries do this and sometimes it is the only solution. However, library service is impaired when periodicals are inaccessible to readers.

Shelving is a primary consideration but space must be provided for other essential items: library catalog, information files, a working area for the librarian and his assistant, a reading room, etc.

Some libraries have no space for readers. A research staff loses the best values of a library if there is no provision for personnel to make use of the collection on the spot, to examine and select wanted items and to work with the entire holdings at hand for quick reference.

Engaging a Librarian

The ideal librarian is a man or woman who has been (a) trained in library science; (b) has had executive experience in administering a library; (c) has had some technical education; (d) has had some working experience in a laboratory; (e) has a working knowledge of technical German, etc.

These requirements are not all essential. They can be shaded to suit one's needs. In the libraries of chemical companies there is a decided tendency to emphasize a chemical education and background for the librarian and to minimize library science. The work of a librarian is to organize literature in a way to make it readily available; to systematize the resources of the library; to be alert for new, pertinent information, and to know where to look for it. The librarian must be familiar with extensive collections available in the field and must know how to use them advantageously. The librarian must have an acute awareness of company interests, and must be familiar with the fundamental vocabulary and terminology used.

A knowledge of foreign languages is an asset in scanning technical literature. However, the work of the translator should not be imposed on the librarian. Good translators require something more than an acquaintance with two languages.

Besides the professional requirements, the librarian should have an agreeable personality.

Salaries paid to librarians are based on qualifications and vary regionally. A minimum of \$5,000 per year should be allowed. Not all librarians are paid that; many are paid much more.

The librarian can offer expert advice in establishing the library: efficient layout, needed equipment, the basic reference collection, etc.

The floor plan here shows a possible arrangement within the space allotted. The mail bay could be done without the extra space. In estimating expenses, rent has been omitted because the factors are so variable as to make any general estimate impossible. The same applies to the partitions, built-in shelves, etc. Materials used and labor costs have to be determined locally.

In the following tables, the overall costs have been estimated, followed by a breakdown for each item. Equipment of a satisfactory grade has been selected for real economy.

Equipment	\$	2,637
Books		1,500
Subscriptions to app. 30 periodicals		200
Pamphlets		20
Miscellaneous supplies		243
	_	

Total \$ 4,600

EQUIPMENT

EQUIPMENT	
Executive Desk\$	125
Secretary's Desk	139
2 Typewriters @ \$169	338
2 Typist's Chairs @ \$32	64
Typing Stand	22
Two Door Steel Supply Cabinet	50
Charging Table	30
12 Tiers of Glass Front Bookcases*	930
(5 sections high)	
3 Four Drawer Steel Vertical Files	
@ \$48	144
Small Steel Cabinet	40
(10 drawers and shelves)	
Table (25 in. by 18 in.)	16
2 Reading Tables @ \$65	130
2 Tables (for built-in carrels)	100
5 Tiers of Steel Stacks (7 shelves	
high)	225
1 Book Truck	50
1 Ladder (on casters)	40
4 Chairs @ \$25	100
2 Chairs @ \$36	72
 Total\$ 2	2,637

* Twelve stacks of steel drawer type shelving would cost about \$1800 but as they would shelve nearly twice the number of volumes, the price per volume remains about the same.

In most organizations there is a wide scattering of books and printed matter in various departments that can be brought together to form a nucleus for the library collection. The librarian will then proceed to draw up a list of needed titles essential for basic reference in the specific subject area. Proximity to large collections available in the vicinity will reduce the book budget.

The total cost of setting up the library as estimated here is \$4,600. This sum does not include such extras as a microfilm or microcard reader, for instance, or a simple device for reproducing quickly a page of written or printed matter.

Maintenance

Since salaries are usually the largest item in the budget, the total expense depends considerably upon the size and type of library staff. The size and type of staff will depend upon the number of professional personnel to be served and the type of research and services required. For example, some laboratories require the services of a fulltime translator; some require a fulltime abstractor. Certain companies require constant and competent patent searches. These requirements naturally increase the staff and therefore the immediate cost. Generally speaking, and omitting these specialized positions, one competent librarian and one clerk can serve twenty to thirty professional research workers.

The type of research naturally enters into any estimate. Research which has very wide applications requires more professional library hours than does research within narrow limits.

Cost of library maintenance as compared with research laboratories is very low. An inquiry into the costs of a number of company libraries compared to the total cost of research has revealed a difference of between two and five per cent. It seems safe to say that the running costs of the library will be less than five per cent of the total annual budget of the organization which it serves.

The annual budget for the type of library described here can be broken down as follows:

Salaries	\$ 7,600
Books	1,000
Binding	125
Subscriptions	200
Supplies	200
Photostats, Microfilm, Pamphlets, etc.	100
Depreciation	460
Miscellaneous - postage, telephone,	
incidentals, etc	215
Travel	300
Total	\$ 10,200

The librarian should have discretionary powers in the matter of moving some of the apportioned money from one item to another, as long as the total remains constant. It should be remembered that the first year in a new library is the most expensive and this budget could probably be shaded after a year's experience. The allowance for travel covers expenses of attending professional meetings which bear on library and company interests.

This budget is in good proportion for a research department which spends between two and three hundred thousand dollars a year. It is worth noting that the larger the research department, the lower is the ratio of library cost. In very large organizations, the percentage of cost for the library becomes infinitesimal. However, if the research staff is smaller than the twenty to thirty in this hypothetical example, the library expenditures can be reduced accordingly.

Returns

The great physician and librarian, Sir William Osler, made the statement, Money invested in a library gives much better returns than mining stock.

An organization's library serves in three ways. It provides needed information. It saves time of executives, scientists, engineers and other high-salaried personnel. It saves money.

A good library renders indispensable service. A collection of books does not constitute a library. The effectiveness of the library depends primarily upon the librarian.

A competent, trained librarian who has a knowledge of special library resources can give excellent service with a skeleton collection of reference books and a moderate subscription list. The librarian can provide not only that material which is specifically requested but additional pertinent material of value that is currently available. The librarian will scan the literature for material bearing on company interests. A trained librarian knows where to look and where to borrow. He will search not only abstracts, but will obtain, wherever possible, the published papers, and frequently, even unpublished material through professional connections.

The librarian can save considerable laboratory time by handling routine inquiries; checking company reports on previous research in order to save duplication of work; and by scanning patents of particular significance to company projects.

Good library service is an important factor in attracting high caliber re-

search personnel to an organization. Indeed it is frequently mentioned by the director of research for recruiting new staff members. Company executives and sales force build customer confidence by citing the up-to-date information available in the research library.

In a recent address the manager of one of the leading research and development laboratories in the New York-New Jersey area gave figures to prove the vital necessity of research to business growth in this competitive age. He described the organization of his laboratories and went on to show that laboratory research is the main business-builder and money-getter for his company and that library research is fundamental to laboratory work. He emphasized the importance of library research as an important money-saver.

Pertinent points in his address included:

"Eighty per cent of the company's present business is due to research either in radically improved products or new products."

"The research laboratory employs six to eight technical men for each section of the business (22 sections)."

"The company has invested approximately \$40,000 in each technical man for equipment, etc."

"Each technical man costs the company approximately \$20,000 per year."

"One invention was developed, patented, put into manufacture, and now provides employment for over 1,000 people."

"A recent survey indicated that laboratory-files services save approximately five hours per week of each technical man's time. The total yearly saving is about eight hundred hours, but offsetting this time-saving is three hundred hours of library-files staff time, both professional and clerical. Time-saving represents a money-saving."

From these figures, it would seem evident that efficient library service is an important economy in the consideration of research and development organizations.

Administration

In many organizations the librarian is responsible to the vice-president in charge of research. Another company practice is to provide a board of directors for the library, consisting of one man from each department served by the library, to confer with the librarian. The board meets at stated regular intervals to take up overall policies and to discuss whatever business the librarian may present.

Since the library is a department of the research organization, it is important that the librarian should be directly responsible to the individual or to the group in charge. To place the librarian under the authority of a person heading a single department of the division is to hamstring at least partially the service intended for every department.

It is vital to engage a first-rate librarian in whom one may place confidence.

Library service is neither a luxury nor an extravagance but a necessary economy.

Bibliography

- 1. Public Relations Committee, Special Libraries Association. *Our Library*. New York, 1953.
- COLEMAN, H. S., Editor. Laboratory Design. New York: Reinhold, 1951, p. 77, 87, 288, 362, 369, 372.
- 3. JACKSON, LUCILLE, Editor. Technical Libraries, Their Organization and Management. New York: Science-Technology Division, Special Libraries Association, 1951.
- BROWN, ALBERTA A. The Organization and Administration of a Pharmaceutical Library. SPECIAL LIBRARIES, 39: 303-308, November 1948.
- 5. WYATT, E. LILLIAN, DECOU, G. ELINORE and BARTON, ELIZABETH M. Budgets and Finance. SPECIAL LIBRARIES, 39: 175-179, July-August 1948.
- 6. HAUSDORFER, WALTER. Special Library Budgets. SPECIAL LIBRARIES, 39: 179-184, July-August, 1948.
- HERNER, SAUL. The Physical Planning of Special Libraries. SPECIAL LIBRARIES, 42: 5-12, January 1951.
- 8. GIBSON, GEORGE W. Industrial Taxation and the Special Library. SPECIAL LIBRA-RIES, 42: 23, January 1951.

Filing, Classification and Indexing Systems for Engineering Offices and Libraries

RALPH H. PHELPS* and JOHN J. SOROKA* Engineering Societies Library, New York, N. Y.

PERSISTENTLY recurring inquiry received by the Engineering Socities Library concerns ways in which the engineer can organize his information sources so that he can use them more easily and effectively. If the request is from an engineer wanting to better organize his own personal materials, he usually asks about filing or classification systems. If the files to be organized are those of an engineering organization, an engineer making the request usually asks about classification systems. If the request comes through a librarian, he usually asks about indexing or subject heading lists.

The requests come primarily from individual engineers, engineering offices and librarians organizing small engineering libraries, wanting systems they can use. This paper aims to be useful to those groups. It presupposes little knowledge of methods of organizing files and indexes. The present paper and a separately-issued bibliography[†] prepared by the Engineering Societies Library include information about and references to articles, books and pamphlets on filing and classification, indexing, subject heading lists, and handsorted punched-card systems. Discussion of larger or more complex mechanical or electronic equipment and systems has been omitted.

No one ready-made classification, filing, or indexing system is suitable for the organization of *all* collections of engineering information. That may appear quite obvious, but the requests received by the Engineering Societies Library indicate that some believe, or at least hope, there may be such a system.

It is also unlikely any system exists that, without some adaptation, will be wholly and immediately satisfactory even for any one collection of information. This should not be used as an excuse or reason for immediately starting to develop one's own system. Melvil Dewey, in the introduction to his Decimal Classification wrote:

Time actually spent on tables here printed, by various committees and individuals, totals hundreds of years and has cost an immense sum. Uniform and urgent advice of the experienced is to adopt a poorer scheme already made than undertake so herculean a labor. No one yet ever wholly suited himself or anyone else, and probably no one ever will.

It may be remembered that Dewey's advice was given after he had devised a classification system covering all fields of knowledge. Not everyone has seen fit to take his advice. A number of people have more recently prepared systems for limited subject fields, while others have tackled the organization of all fields of knowledge. Some of the systems covering limited subject fields may be quite useful for a limited collection. For collections not confined to a relatively small or narrow field, it may be advisable to select and adapt one of the more "universal" classification systems. The chief advantages are that such "universal" classifications provide for material that may be needed outside the immediate subject field; also such classifications are known and used by others and one may be aided

MARCH, 1955

^{*} Ralph H. Phelps is Director of the Engineering Societies Library; John J. Soroka is Head of the Search and Translation Department.

Paper presented before the Engineering Section, Science-Technology Division, Cincinnati, Ohio, May 19, 1954, at the 45th Annual Convention of Special Libraries Association.

⁺ ESL Bibliography No. 9. Bibliography on Filing, Classification, and Indexing Systems for Engineering Offices and Libraries. 79 references. 1954.

by the work done elsewhere. For example, Dewey and Library of Congress classification numbers both appear on the catalog cards printed by and available from the Library of Congress. Also, a number of foreign journals print Universal Decimal Classification numbers with each article published, and *Science Abstracts* gives UDC numbers for all articles abstracted.

Classification systems are often used as a basis for filing material. Except in the very smallest collections used solely by the person who does his own classifying, it is not sufficient to merely group the material on shelves or in file cases. It is necessary to have an index to make it possible to locate material by author and to identify and locate specific information or details that may be a part of a book or other item that cannot readily be divided for filing in separate places. For example, one may have several books that could only be classified as general metallurgy. Suppose one of these books has a good section on nails. A filing system alone would not indicate which book has the information on nails, and only one's memory or browsing would locate the information, if it were found at all. With a good index or catalog one could immediately find the information on nails.

Material may be filed chronologically as received, or it may be filed by size, or some other criterion. When the material itself is so arranged without regard to subject classification, an index or catalog becomes even more essential.

When using a classification system for arranging material on shelves or in files the best practice, particularly in small collections, is to use broad classification. This brings the material together in a handy fashion for browsing, and permits the use of short symbols for identifying items for filing. The index or catalog takes care of locating the more specific bits of information.

Engineers, scientists, and technical men often prefer to have their catalog or index in a classified arrangement

similar to their files. This can be done, using the same classification system for both. In such a classed catalog, each item of information should be closely classified, but the material itself should be broadly classified for filing. In the catalog there may be from one to many cards for any one item filed on shelves or in file cases. Contrary to a rather widely held belief, a shelf list and a classed catalog are not the same. Each card in a classed catalog identifies specific information. Each card is identified and filed by a classification symbol. It is important to have an alphabetical index to the classed catalog.

An index to files may be provided through the use of words or phrases. To provide uniform terminology, subject heading lists with cross-references are often used as keys so that similar information may be indexed under similar headings. One form of index using subject headings is the dictionary catalog found in many public and university libraries. Sometimes the dictionary catalog idea is avoided and the subject and author index entries are filed separately. This eliminates some difficulties encountered in interfiling names and subjects.

Throughout the years many indexing systems have been described in the literature. Some have worked well for some applications and not for others. Recently there have been a number of articles and a book describing and advocating the use of "coordinate indexing"—sometimes referred to as the "uniterm system". Time and use will be the most effective judges of this system as they have of others in the past.

Punched cards may be used with various systems for indexing information. Special systems or coding may be required for punched card applications. One punched card can take the place of several ordinary index cards. Handsorted punched-cards are suitable for small collections and especially for those used by one or a few individuals.

Of the "universal-type" of classification systems covering all fields of knowl-

edge, the decimal classification devised by Dewey is the best known as it is widely used in public and school libraries. It was devised primarily for arranging books in public libraries. Dewey's Decimal Classification & Relative Index does not subdivide fields of knowledge sufficiently to be generally useful for special subject collections in engineering or technology. However, a number of expansions have been developed for special subjects and these may be useful.

The Universal Decimal Classification (often referred to as the UDC or the Brussels system) is an extension, with some modifications, of the Dewey Decimal Classification. The UDC, in contrast to the Dewey classification, was devised primarily for the classification or indexing of knowledge. Because of its detailed subdivision, it is useful for special collections. It can be used both for filing material and for indexing it in a classed catalog. Many of its numbers are long and especially so in some of the combining forms that are possible with this classification. It is seldom, if ever, desirable to use the full decimal numbers for filing material. They may or may not need to be used in full for indexing, but they are available when close classification may be needed for indexing especially detailed reports or periodical articles. It is easier and safer to reduce an extended classification than it is to expand one that does not have enough detail.

The Universal Decimal Classification is used for cataloging the collections of the Engineering Societies Library, the John Crerar Library, the science and technology books in the Carnegie Library of Pittsburgh, and the holdings of a number of smaller special libraries. This system is rather widely used in Europe, not only for library collections but also, as previously mentioned, for the classification of periodical articles.

One serious drawback to the use of the Universal Decimal Classification in this country is the lack of a complete English-language edition. The Englishlanguage edition now being published by the British Standards Institution is complete for SCIENCES (500-599). Also, already published in English are the sections covering ELECTRICAL ENGINEER-ING (621.3), METALLURGY (669), and RUBBER, PLASTICS, etc. (678/679). Reported as soon to be ready are the sections on MINING (622), and MILI-TARY AND NAVAL ENGINEERING AND TECHNOLOGY (623). The latest complete edition is the four-volume French edition of 1927-1933 now out-of-print.

An abridged English edition of the UDC, published by the British Standards Institution in 1948, covers all fields of knowledge including science, engineering and technology. One might first purchase this abridged edition, which costs relatively little. If after examining this it is found that a more detailed classification is needed, one can then order the needed unabridged sections, if they have been published.

The Library of Congress classification is another system covering all fields of knowledge. Developed for and used by the Library of Congress, this classification is subject to continual revision. It is available in separate parts covering broad groups of subjects. Each part has its own index.

In the Library of Congress classification letters and numbers are combined so that it may and does have more than ten main divisions. In the detail of its subdivision, it is between the Dewey and the UDC classifications. It was developed for the classification of books and materials in a large library, not for indexing as was the UDC.

Other "universal-type" classification systems include A Bibliographic Classification by Henry E. Bliss, and the Colon Classification by S. R. Ranganathan. Both the Bliss and the Ranganathan systems are relatively recent and there are few reports about their value when actually applied to the control of collections.

It is clear that despite the advantages of the "universal-type" systems they also have their drawbacks. It seems that of those available, the Universal

MARCH, 1955

Decimal Classification and the Library of Congress classification have the most to offer for special collections in engineering or related technical fields.

Systems other than the "universaltype" divide roughly into two groups: those that are rather fully detailed and well developed for special subject fields; and those much less fully developed systems that usually cover only a segment of any one field.

One of the better known of the welldeveloped special systems is the ASM-SLA Metallurgical Literature Classification. Such systems are particularly useful for collections primarily devoted to a special subject field. Other classifications of the same type of relatively fully-developed systems are: the National Advisory Committee for Aeronautics Classification: the Standard Filing System for Filing Information on the Materials, Appliances, and Equipment Employed in Construction and Related Activities issued by the American Institute of Architects; the Decimal System for Classifying Data Pertaining to the Petroleum Industry by Lester C. Uren; the Library Classification . . . [for] Traffic Engineering by K. C. Cassidy and J. Redfield; the Filing Classification of Welding, Brazing, Soldering, and Cutting Processes issued by the American Welding Society; and the classification system for materials handling in the book on that subject by John R. Immer.

Also in the same group are three others that are expansions or collected sections of the Dewey and UDC classifications. These are: ABC, Abridged Building Classification for Architects, Builders, Civil Engineers available from Bygglitteratur, Tumba, Sweden; A Decimal Classification System for Geophysical Exploration by C. A. Heiland; and one on illuminating engineering by A. A. Slobod.

A second type, special subject-field systems that are less fully developed and often cover only a segment of any field, has largely developed from the minor irritations that misplaced infor-

mation has caused individual engineers. This has needled them into organizing their own collections of clippings, catalogs, reprints, drawings and other odd bits of information.

Over the years some engineers, apparently pleased with the systems they have devised for their own use, have written articles describing these in more or less detail. As the articles are based on actually used systems, they are at least suggestive and some may be quite worth while. The Engineering Societies Library, in its previously referred to bibliography, has included references to such articles, selected to cover a wide range of subject interests and types of materials. The systems proposed range from the very simple that suggest only labeled groups of material without an index, through simply-indexed systems, to somewhat more detailed classifications.

Although there are few published articles about the organization of engineering files, it is easy to see that the problem is not a simple one. Many persons have learned by experience how difficult it is to find a suitable system, simple enough not to be too burdensome to use, yet adequate for present needs and with capacity to cover new needs as they arise.

There is no one system suitable for The engineer or the all collections. librarian should survey the available systems and decide which one most nearly suits his needs. It is quite likely that none will be exactly what is wanted, but he should try to use a system already made, rather than to devise a wholly new one. It will be easier and less time-consuming. Probably changes will have to be made in any selected system to adapt it to specific needs. Even in this, the best advice is to go slowly and be careful that changes do not create more difficulties than they solve. Use common sense freely.

Be sure the system serves you rather than that you serve the system. To justify itself, the system must supply information at lowest cost.

The Paradoxical Trade Catalog*

WILLIAM S. BUDINGTON

Associate Librarian, The John Crerar Library, Chicago, Illinois

ALTHOUGH the term "trade catalog" seems to have become generic, its use is fairly limited to the library profession. The engineer, salesman, or executive usually hits upon some such phrase as technical bulletin, price list, or advertisement—one or all of which may be applicable, for these publications appear in a variety of guises.

Definition

For definition, one can only say that a trade catalog is one or more pieces of paper describing something somebody somewhere wants to publicize. It is possible that film or recordings may have been employed, too. The "something" does not have to be a product; it may be a service, though the tangible item is what we usually think of in this connection.

Its purpose is to arouse interest and acceptance on the part of the recipient. It must have what is called "sell". The amount of information given varies all the way from next to nothing, to the most complete and elaborate description that can be gotten together.

Probably the simplest catalog consists of a tearsheet or reprint of an advertisement. The more elaborate range from folders through loose-leaf binders (which require keeping up to date) to elegantly bound volumes, and have only the limits, if any, of sales and advertising ingenuity and the allotted expense.

Items of information may include price, physical description, developmental research, specifications, operating characteristics, applications, sample installation data, how to obtain the product and why it is practically indispensable to the consumer. The last attribute is all that distinguishes some catalogs from operating manuals, and in certain instances they are intended to serve this purpose as well.

In the final analysis, whether single page leaflet or elaborately half-morocco, the trade catalog seeks to bring something to your attention in a favorable light.

In addition to the separately issued catalog describing one product or the products of one organization, a second version is the familiar consolidated or condensed catalog. This contains the bulletins of a number of companies, with related and often competing items appearing together within one volume. Best known examples of this type are probably the Sweet's File sets, the Chemical Engineering Catalog, and the ASME Mechanical Catalog and Directory. Information contained in these compendia is usually limited in nature. often lacks prices, and covers only part of each manufacturer's line. However, their handy format and comparatively broad coverage make them a popular addition to office or library reference shelves.

Many librarians view trade catalogs with mixed emotions. In these days of world tension one speaks of the "Russian situation," or the "German situation." Trade catalogs create a "situation," too. Most persons responsible for providing information recognize that over and above the pack-rat tendency to collect printed pages, a need for these publications exists. There is no argument concerning the uniqueness of their contents, and no doubt that industry, science, and to some extent the general public find the information essential. Just where do trade catalogs fit among the mass of materials available to us today?

^{*} Paper presented at the Fall Meeting of the Metals Division, Special Libraries Association, in Chicago, Illinois, on November 4, 1954.

Essential Information

The questions answerable from trade catalogs are principally three: What is available? What is it like or what does it do? Where and how can it be obtained?

If you are digging a post-hole for the garden fence, you want to know if any special tool exists for the job. You want to know how big a hole it will dig, how fast, and how long it will stand up under hard usage. You want to know the manufacturer and how much it costs.

If you are designing a process plant, you do not ordinarily specify a pump of unprecedented capacity, unless this is essential to the process; you design where possible around available equipment. The purchasing agent and the salesman have need for specifications, prices, and a general knowledge of the market. And where is all this information available? The catalogs of appropriate manufacturers.

The one big point about the trade catalog is that here it provides a current listing of items available for specific use. In patents, we have the birth of ideas; in learned journals, we have the accounts of research and discovery: in textbooks, we have the theory and sometimes the application - as of the time the books were written. The trade journals bring us closest to current information, and they have the advantage of indexes; their advertisements give us clues, also. But not all the information is there. It is the trade catalog that lays out for us the accomplished facts in full and says, "Here's what we have to offer-now." And that is the place that catalogs fill in the world of technical literature.

Acquisition

The problem of acquiring catalogs can be big or little, depending on what is made of it. As the first step, it is necessary to know the products on which information is desired; this may range from a general definition of construction equipment to specific items such as post-hole diggers. Next, one needs to know who manufactures this equipment. Here again, it may be necessary to include all manufacturers, or perhaps we've always used Brown & Co.'s post-hole digger and always will, so the others are eliminated.

Sources

Several sources for this information are available. For general information on suppliers, *Thomas' Register of American Manufacturers*, Federation of British Industries *Directory*, and trade directories in many fields are familiar to most of us. These may be used to initiate requests for literature without indication of specific items. This may be termed the ready-made, or take-whatvou-get method.

A better procedure is to make careful selection from the directories, or through scanning the trade journals, noting advertisements of especially interesting products. Often, the manufacturer gives the pertinent bulletin number to request.

In addition, many periodicals have sections devoted to new catalogs, and some provide postcards or pages on which desired material may be checked; the magazine forwards the requests to the various manufacturers, making this a painless method of acquisition.

Many companies maintain mailing lists, and a veritable flood of literature is very easily brought upon oneself. A tickler file for follow-up requests can easily be maintained on the catalog records to be mentioned later.

Concerning one small problem, I will say nothing. That is the means for obtaining a complete file on a competitor's line. While not all companies guard themselves this carefully, a number are understandably loath to aid their rivals in such a direct manner. Rumor hath it that there are ways and means.

The morsel which sticks in most librarians' gullets is not how to lay hands on some catalogs but what do to with them after they arrive. The very mass of them available is one deterrent to acquisition, and careful selection is the only answer.

Maintenance

In contrast to books and periodicals, there are no ready-made bibliographical controls. Their essentially ephemeral nature precludes full cataloging procedures, and yet their content must be made known to the persons needing it. The first fact to be faced is that no system or classification or file devised for one situation will exactly fit any other situation.

Many librarians have had the experience of telling an unbelieving office manager or engineer that librarians have not yet worked out millenial filing schemes for every segment of human knowledge. Each collection must be so designed as to provide its users with the specific information they want, in the way they want it. One can start from scratch to concoct an original system; the better approach is to investigate carefully schemes already proven in use, and to adapt to present requirements that one which comes nearest to filling the bill.

A number of articles and books have been written on the subject. An excellent starting point is ESL Bibliography No. 9, published recently by the Engineering Societies Library in New York, titled Bibliography on Filing, Classification, and Indexing Systems for Engineering Offices and Libraries.*

The two approaches which must be provided are first, by subject or product, and second, by company. Of the two, the former is the more important, since a user of trade catalogs is seeking information on a specific type of product. He may, however, want literature distributed by one company if he knows he will find his answer there. These approaches are provided by a well-designed system of filing or shelving, an accompanying card or loose-leaf index, or both.

MARCH, 1955

If the material is filed by company name, a product index will indicate appropriate companies. This index may be compiled on cards as the catalogs are received, listing on the card for each product of interest the companies whose literature is available.

As a substitute, Thomas' Register may be used, although this will not be as effective unless markings are made in the book to show actual availability.

For added convenience, a company card file may also be maintained, with listing of products represented in the catalog collection. The company card may be date stamped whenever material is received; this will indicate any earlier editions susceptible to discard, and also provide a tickler file for requesting renewal of mailing list privileges or the need for up-to-date catalogs. The catalogs themselves may be filed by subject, the company approach being provided through the company card file.

Subject Classification

In any case, it is essential that access by subject be carefully planned. Numerous subject classifications are available, from Dewey, UDC, and Library of Congress systems, down to quite specific expansion or compilations. Lists of subject headings may be found or adapted from periodical indexes. Many of these are cited in the ESL Bibliography mentioned earlier.

Let no one get his hopes up that any of these systems will solve his problems neatly, any more than this paper will. The specific needs of an organization, the type of material, the work habits of the users, the anticipated size, and the staff available to set the collection up and maintain it must be considered in choosing the final design. In other words, the same principles apply to trade catalogs as to the library in general.

It will be found as a rule, that the small collection, restricted in scope, or specializing in comparatively few products or those of a closely defined field, will operate best if the literature itself

^{*} See page 109.

is organized by subject. This necessitates marking each piece so that after use it may find its way home again.

One meets here the problem of catalogs describing the many products of large companies. This is solved by setting up a special section for such catchalls, or being ruthless and tearing them up, so that only needed sections may be filed, with proper identification on each.

Conversely, the large collection, broad in scope, covering many products and touching many fields, is best organized by company, with an adequate subject index. Although this lacks the handiness and the all-that-I-want-is-right-here aspect appreciated by engineers, it does make for simplified handling and is not complicated by large numbers of catalogs listing many different products. A subject index on cards is more readily used and can be more illuminating than a shelving system when sizeable proportions are faced.

Storage

What to do with the catalogs physically depends mostly on personal preference. The neatest method is probably insertion in filing cabinets, with folders for each company or subject. Advantages are protection of material and ease of arrangement and labelling. If subject organization is used, sub-folders and sub-sub-folders are in order, following the techniques of any vertical file system. Expense of the cabinets may, however, be a deterrent.

Storing the catalogs on ordinary bookshelves works well, if some sort of holder or stiffened separator is used; opentop pamphlet boxes or the metal Princeton file allow for variations in size. Manila folders or envelopes can contain groups of catalogs by company or subject, the original mailing envelope serving the purpose in some instances.

In addition to catalogs of their products, manufacturers issue other publications which may be of greater or lesser value. House organs carrying news of activities are sometimes of interest; periodically published technical bulletins often contain reports of research or other data of scientific importance. And several companies issue magazines, monographs, and handbooks which compare in excellence with trade and professional society publications. Normally such material is kept with the regular library collections and is processed in conventional fashion.

Up to this point, we have considered trade catalogs primarily as sources of current information on products available today. This is the reason for having them in most libraries, be they small special collections or large public institutions.

Applications

The following comments are not necessarily recommendations for everyday practice. However, one of the greatest potentials for catalog literature is as a record of industrial and scientific history. Normal procedures involve weeding the collection and discard of superseded and outdated material, which chokes off the historical life at birth.

This retrospective approach to trade catalogs has several important applications. Most obvious is their use in patent and prior art searching, where existence of a product or principle may be established by a dated catalog.

Product design may also employ catalogs in tracing development and style. And as a record of progress in an industry or by a company, an historically rich collection of manufacturers' catalogs is an almost unequalled source of information. Students of economics and sociology as well as of the sciences and technology have found this to be true.

Building such a collection involves considerable outlay in processing and storage facilities. Although some company libraries have catalogs numbering in the thousands, only a few large public and research libraries have attempted anything on the grand scale. The Midwest Interlibrary Center recently accepted a gift of 170 feet of catalogs from the Library of Congress; dating from 1890 to 1920, they were originally assembled by the Patent Office which felt that the products concerned might be the subject of patent applications or litigation.

Columbia University Collection

The largest collection in the country, to my knowledge, is at Columbia University. Numbering between a quarter and a half million, the catalogs describe the products of thousands of companies, many now absorbed by others or long defunct. This was largely the work of Miss Granville Meixell, who described it and made many suggestions for building large and small collections in her pamphlet, *The Trade Catalog Collection*; published by the Special Libraries Association in 1934, this helpful guide is now out of print but may be consulted in many libraries.

The large historical collection is beyond the capacity of most of us to attempt, and there is no real need for duplication of effort. Three or four regionally located or perhaps one readily available central depository might suffice. It has long been my thought that industry itself should be interested and concerned with the establishment and support of such a facility. Through the efforts of some organization such as the National Association of Manufacturers, the ephemeral trade catalogs of today might become the substantial record which tomorrow's lawyers, scientists, and scholars would regard as irreplaceable.

Summary

Originally this paper was entitled Handling of Trade Catalogs in a Small Metallurgical Library. Actually, the principles of handling them in one library differ very little from handling them in any other library.

In the brief space here, we have taken a look at some of the earmarks of trade catalogs, their selection and acauisition, their organization and storage, their indexing and retrieval from the mass which accumulates. Each decision to accept trade catalogs, to care for and develop them, must be made with full understanding of what is needed and what is involved in order to stay within one's capacity and to utilize fully a unique potential service. Carefully planned, wisely selected, pruned of the unnecessary, and easily accessible, the trade catalog collection can provide information unobtainable elsewhere, satisfying many an inquirer.

Operations Research Conference

"What is Operations Research Accomplishing in Industry?" will be the subject of a three-day conference to be held at Case Institute of Technology, Cleveland, Ohio, April 5-7, 1955.

The conference program, designed by Drs. Russell L. Ackoff, director, Operations Research Group, C. West Churchman, and E. Leonard Arnoff, conference director, will be directed toward business and industrial leaders interested in the application of scientific method and techniques to their problems. Case Institute is bringing together a group of recognized experts to discuss the methods, the results, and the organization of Operations Research in a cross-section of American industry.

Fee for the Conference is \$100 and includes meals and conference proceedings. Registration applications and inquiries should be addressed to: Dr. E. Leonard Arnoff, Operations Research Group, Engineering Administration Department, Case Institute of Technology, Cleveland 6, O.

The Use of Photocopy in the Technical Library*

JACK BALTES

Librarian, Globe-Union Inc., Milwaukee, Wisconsin

I N DEALING WITH CURRENT RESEARCH PROBLEMS, the technical librarian finds his main source of information to be a well organized vertical file, as material from books is either dated or not specific enough in most cases.

One problem arising from a large circulation of vertical file material is the the possibility of loss and the necessity of duplicating the material, for often several will need it at the same time.

Then, too, a department head, after requesting literature on a certain subject, will be stunned when faced with a two-foot pile of periodicals though the actual number of pages to be covered is very small. To overcome this stockpiling, to assure the prompt return of magazines to the library, and to help the department head acquire a file of needed information, the following procedure was worked out.

A small photocopy machine was purchased, one that would allow an open book to be copied, as well as singlepaged articles. This was first used to duplicate loaned, hard-to-obtain materials, but proved so successful that its use was broadened greatly. For example, when tear-sheets could not be obtained of many articles, we started to photocopy them from borrowed magazines. We thus developed a notebook covering one subject, and placed within it photocopied copies of all material. As this proved successful, duplicate notebooks were made for key men and for the library shelves.

Then, because the cost of photocopy and the time required started to increase, we developed the method of making a negative print of the article on a fine grade of very thin paper and processing positive prints of this through the copying machine used in the engineering department. In this way we made many copies of the article at very low cost, and the master copy, being a negative could not be taken from the file and used directly.

The success of this venture, in placing within one small looseleaf volume all technical, trade and experimental literature on a certain subject, caused us to use this processing method more and more. Its advantages were many: (1) It gave complete coverage of periodical materials. (2) It condensed the amount of material to be handled. (3) It gave many men personal files of material that they might otherwise miss. (4) It assured the library of a complete file of information at all times. (5) The fact that the notebook was organized and kept up to date by the library relieved the men of any need to search for materials and methods, as they formerly had done. (6) The cost was very slight and the method fast and efficient.

One thing needed to keep this type of work successful was close cooperation between research groups and the library. If the librarian could handle all correspondence suggested by the group, then they could be assured of complete coverage of requested information. Most engineers were only too willing to pass this task to someone else.

Lists of books, with pages indicated, and the owner of the book, be it company, public or near-by city library was also given. Government and other sources of pamphlet, technical, and trade literature, translations, and reports were

^{*} Reprinted from *Wilson Library Bulletin*, February 1955, where it appeared in "The Special Librarian" section, edited by SLA member, Fannie Simon.

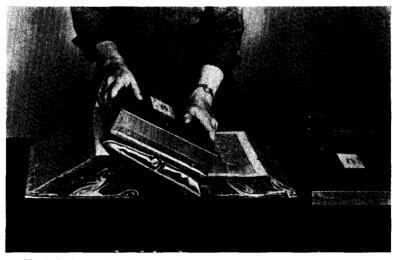
checked. Lists of library holdings were added to the notebooks as the material was received, as well as photocopies of late bibliographies from government and private manufacturing libraries.

Now, more and more, we could borrow magazines, photocopy the articles needed, and return them in a few hours. This cut tremendously the cost of buying reprints when they were requested for a departmental file, it allowed the library to obtain a copy of things that would otherwise be lost to the library in departmental files, it saved much valuable time in waiting for reprints to arrive, as we had many technical libraries as well as the libraries of two large cities to draw from, in obtaining material used for copy purposes.

We built up our vertical file by photocopying things on loan, out-of-print materials, translations, standards, etc. Departmental files were expanded by copying information that was necessary to both department and library. The file was broadened to include otherwise unobtainable articles. We have used newspaper clippings also in this manner. The clippings were laid out on a file-size paper, properly labeled, then photocopied. After duplication, we had a heavy duty copy to go into the files to take the place of otherwise easily damaged or lost clippings. This also allowed many copies to be made rapidly, so interested persons and departments might have copies for their own files.

Because this material would be lost if not cataloged properly, and could take much valuable time if overcataloged, we worked out a simple indexing system. In our card catalog, at the end of a subject listing we added a colored card with the same subject heading, telling that additional material on this subject could be found in the vertical file, and listed the headings under which it would be found if they varied from the original subject.

In another drawer of the catalog labeled REPRINTS we have headings such as GOVERNMENTAL, PERIODICAL, STANDARDS, TRANSLATIONS, etc. Under



Tightly bound books present no problem to the versatile Contoura, photocopying machine, produced by F. G. Ludwig, Inc., Old Saybrook, Conn. An exclusive plastic cushion permits inflating to the proper degree of roundness to match the contours of the material to be copied. Designed for on-the-spot use, the photo-copier is available in two sizes: $8 \ge 10$ inches and $8\frac{1}{2} \ge 14$ inches. The timer and paper safe on the right provide simpler operation.

the proper heading the article was listed by author and title, giving only these two facts along with the name of the magazine, date, and pages. To assure complete coverage, a card with the magazine name as heading was also used, listing by date and page the reprints we had of this periodical. One card could hold several years' listings. This added precaution has been of enough value to assure its usage. The color of the card on which this information was listed indicated whether it would be found in the vertical file or. because of its greater permanent value, that it had been processed as a regular book.

We have found that, in interlibrary loans, it was much easier to send a photocopy of the article wanted, the service was much more rapid, the borrowing librarian then had a permanent copy, and there was no trouble in returning the borrowed article: It might be pointed out too, that if a library was in the habit of buying photocopies from larger sources of information, these can be further copied if the need arises.

The cost of photocopying equipment is not high. There are many types and brands on the market today. There is a small desk-size copier which will take the picture and develop it in one operation. The great drawback here is that this machine can only take one-page articles, so does not allow for the copying of books and magazines. However, it can be used for letters, clippings, and other single-paged articles, is small, rather inexpensive, and very easy to handle. In larger photocopy machines, which can be used to copy directly from an open book or bound magazine of some thickness, there are several models of various sizes and prices. These range from large blueprint reproducing machines to a smaller size that will fit on a desk. However, if most technical librarians would check within their company, they will undoubtedly find a photocopy or photostat machine of one sort or another. The best for library use

is a combination of a single-page instant developer, along with the desk model photocopy machine that can be used in duplicating books. In this way, you have the advantage of the larger, better equipped photo machine, and the instant developing machine can be used for other office jobs as well. The cost varies with the makes; however, the total cost of both machines should come well within the equipment and supply part of most technical library budgets.

The following are a few companies that sell photocopy equipment.

THE AMERICAN PHOTOCOPY EQUIPMENT COM-PANY, 2849 North Clark Street, Chicago 14, Illinois.

The "Apeco Autostat" is a desk model which reprints single page materials in one operation.

- THE COPEASE COMPANY, 270 Park Avenue, New York 17, New York. The "Develop Combi" is a desk model single-page reproducing machine.
- EASTMAN KODAK COMPANY, Rochester, New York.

The "Verifax" machine comes in two sizes, allowing for single page and open book reproducing.

- F. G. LUDWIG, 759 Coulter Street, Old Saybrook, Connecticut. The "Contoura Constant" is a model which can be placed over an open book or magazine or single-paged article. It comes with a second, developing attachment.
- THE PHOTOSTAT CORPORATION, 299 State Street, Rochester 14, New York. The "Photostat Instant Copier" comes in two sizes allowing open book and magazine reprinting as well as single-page work.
- REMINGTON RAND, 315 Fourth Avenue, New York 10, New York. The "Transcopy Duplex" is a desk model which exposes, develops, and prints a single page in one operation. The "Portagraph" model is larger and allows for open book or magazine reprinting.

Additional materials can be obtained from any of the above companies or by consulting the classified section of the telephone directory.

THE THERMO-FAX DUPLICATOR

SALVATORE D. NERBOSO

Librarian, New York Times Washington Bureau, Washington, D. C.

R EPRODUCING PRINTED, TYPED, or other graphic material is a task faced at one time or another by all libraries. Only in certain circumstances, however, is the purchase of special equipment for this purpose warranted.

The decision as to whether a relatively expensive machine should be purchased will have to be judged on the merits of each individual case. This article has no concern with decisionmaking. Rather, it will describe the operations of one machine that meets the needs of our library in reproducing wanted materials.

On the basis of experience over an extended period of time we decided that our library should have a machine that would quickly and efficiently duplicate newspaper clippings.

Library Needs

After examining several machines on the market we finally selected the THERMO-FAX DUPLICATOR as the machine most nearly suited to our needs.

The reasons for our choice and the advantages and limitations of this particular device are outlined here, but it should be stressed at the outset that each library will face unique problems.

With a small staff and very limited space we had to have equipment that was very easy to operate and would not require any special facilities such as a darkroom. Use of the machine was to be sporadic, and any machine that required preparation before it could be used, such as the mixing of chemicals, would have for our purposes a serious disadvantage.

Process

The THERMO-FAX process was invented by Dr. Carl S. Miller, who, from his youth remembered that late-fallen leaves made impressions in the early



THERMO-FAX DUPLICATOR

snow—the leaf's absorption of radiant energy from the sun melted the snow underneath. The THERMO-FAX machine operates on this principle of radiant energy and is designed to meet the needs for making an extra copy or more of a form, letter, newspaper clipping, magazine article (if the binding can be folded to fit under the machine cover), drawing or diagram.

The machine will copy any typed, printed or written material that has carbon, graphite or metallic content. Generally speaking this means it will copy original black typing or printing, carbon copies, lead pencil, black stencil ink, IBM transfer posting carbon, some colored typewriter ribbons, some colored inks. It will not copy some ballpoint inks, some colored inks, and spirit or gelatin process inks.

No liquid solutions, negatives, master copies, and darkroom techniques are required.

The machine, which costs \$422, stands three and one-half feet high, one and one-half feet wide, and thirty-two inches long. It takes up approximately four and one-half square feet of floor space. It works from a 110 volt AC outlet or can be converted to 220 volts.

Operation

The material to be copied is placed on the machine over a single sheet of special copying paper, the cover is locked, the timing dial set, and the button pressed. The radiant energy is produced by a special light source. The non-image or unprinted area of the original reflects the light given off by the special light: but the image area ---the written, printed or typed copy ---absorbs the light and converts it to radiant energy. The special copying paper absorbs this energy and thus reproduces the original printing. It copies only one side of the original at a time. permitting the copying of both twosided and opaque originals. The entire process takes approximately fifteen seconds.

Paper

The paper used is tissue weight, costs five cents per sheet, and is available in three sizes: eight and one-half by fourteen inches, eight and one-half by eleven inches, and eight by ten and one-half inches. It can be ordered in large quantities in any size.

For departmental or other identification purposes the paper can be purchased in various colors such as pink, green, yellow, or neutral. If additional weight is required for the copy sheet a special backing paper can be used for this purpose. No special handling or storage of the copying paper is required. The Minnesota Mining and Manufacturing Company, which manufactures the THERMO-FAX machine, sells the paper nationally and has sales and service agents in the major cities.

The clearness of the copy produced by the **THERMO-FAX** falls below the average of other machines we examined before making our selection, but we were willing to sacrifice some clarity for ease of operation and speed.

In our library almost all materials reproduced are newspaper clippings, but in other libraries with different requirements the limitations mentioned above should be considered.

An additional restriction on material to be reproduced is imposed by the size of the exposure area (eight and onehalf by thirteen inches) and the fact that the cover of the machine must be closed during operation. The machine is designed primarily to handle material that is in single sheets, but it can be used for magazines if the binding can be bent over and pressed under the cover.

Summary

During the first six months our THERMO-FAX DUPLICATOR required only one minor adjustment. We found that ease of operation made the machine useful in ways that were not anticipated. The reporters in our office are able to use the machine when the library staff is not on duty, and copies of clippings are made available to staff members going on trips.

In summary, the THERMO-FAX DUP-LICATOR has met our needs for easy, fast, and inexpensive duplication of newspaper clippings. The limitations as set forth above are for our purposes negligible, but other libraries will, of course, want to consider the THERMO-FAX and other machines in terms of their own requirements.

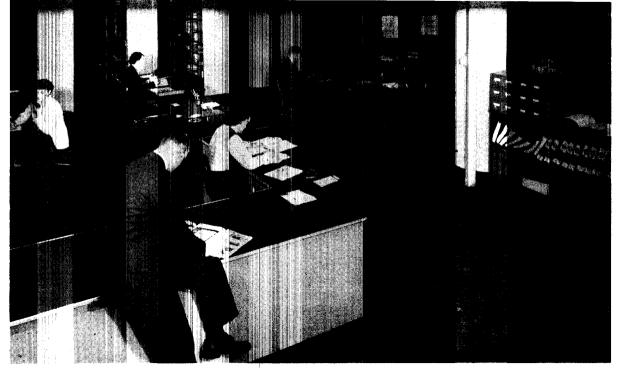
Make Your Plans Now to Attend

SLA CONVENTION

Statler Hotel

Detroit, Michigan

June 12-16, 1955



Ross Roy, Inc. Library

SLA CONVENTION 1955

Special Collections in Detroit

A WEALTH OF RESOURCES in Detroit libraries will be opened to members of Special Libraries Association attending the Forty-sixth Annual Convention, June 12-16, 1955.

Beginning with Open House on Sunday afternoon, The Detroit Public Library, with its richness in all subject fields and many of the finest special collections in the Middle West, will offer members an opportunity to see its famous Burton Collection. This notable Americana includes source materials on the history of Michigan, Detroit and the Northwest. The Automotive Collection, and a fine Labor Collection provide the community with research material of major importance to industrial and social life.

Opportunity will be granted to visit the Rare Book Room where incumabula printed in England before 1640, examples of early atlases of Ptolemy, Mercator, Ortelius and Blaeu may be viewed. Shelved in grill-protected bookcases, one finds American and English first editions, and many examples of fine press books. Other important collections at the Detroit Public Library are the E. Azalia Hackley Memorial Collection of Negro music, drama and dance, as well as an unusual study of the history of the development of children's books. Open House at the Detroit Public Library presents an added pleasure as one may enjoy the exhibits, fine murals and art objects throughout the building.

Across Woodward Avenue, facing the Public Library, is located the Detroit Institute of Arts with its excellent reference library established in 1905 to serve the public and the Institute staff. The collection includes 18,000 books, many pamphlets and periodicals in art and allied fields. Of special interest is a large slide collection classified and cataloged, and several collections such as the Paul McPharlin Puppet Collection.

Association members visiting the automotive center of the world will be particularly interested in the libraries of General Motors Corporation with its new Technical Center, the Ford Motor Company, and the Chrysler Corporation.

The General Motors libraries include a Research Laboratories Division Library specializing in automotive and chemical engineering, electronics, fuels and combustion engines, metallurgy and allied technical fields. The Research Library established in 1920, includes more than 8,000 volumes, 15,000 bound scientific journals and a large pamphlet collection. The GM Public Relations Library established in 1936, covers automotive and industrial history, economics, management and labor materials. The Styling Section Library is another of the General Motors Corporation service-research centers.

At the Ford Motor Company, the Engineering Library established in 1920 includes 5,000 volumes highly specialized in all phases of engineering and the basic sciences. Of special interest is an Industrial Relations Analysis Library, established in 1946. The publication, *Industrial Relations News Digest*, is compiled by the staff and is used in industrial planning.

The Engineering Research Library at the Chrysler Corporation was established in 1933, and contains 15,000 volumes and more than 60 cases of pamphlet materials. This library is newly designed, functionally planned, and uses its new equipment to greatest advantage.

Advertising Agency Libraries

Members of the Advertising Division will find several libraries open to them. At Ross Roy, Inc., one finds an unusual book collection based on marketing, sales training, automotive and specialized advertising. Of interest also is the collection of slide films and records produced for clients and a special data file which includes surveys, pamphlets and clippings on all industries. A client file shows the development of services for a particular product.

The library at Campbell-Ewald Company established in 1925 has an excellent collection of 3,000 volumes and nearly 600 periodicals.



George B. Catlin Memorial Library, The Detroit News

Since advertising libraries in the Detroit area serve personnel in offices branched in distant cities, opportunity for observation of coordinated service is possible.

Business Libraries

Comparison may be made of technics used in other business libraries such as The Detroit Edison Company Library which was established in 1914 and has 8,000 volumes and about 17,500 bound journals. With a staff of fourteen it publishes a digest of news for management.

The holdings of the library in the Detroit Testing Laboratory are strong in the field of stress analysis and failure prevention. The library was established in 1903 and its collection includes 2,000 volumes and many trade pamphlets.

Two bank libraries of interest are the National Bank of Detroit, and the Manufacturer's National Bank in Detroit.

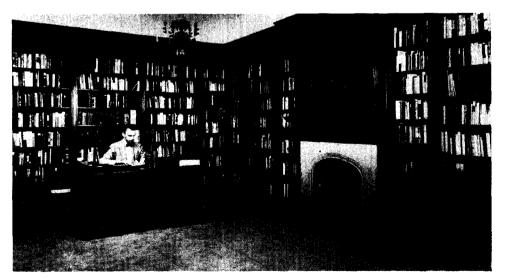
Newspaper Libraries

Members of the Newspaper Division may visit the libraries of *The Windsor Daily Star*, which specializes in local Canadian news coverage, and has been functioning since 1927. One of the libraries to be visited on Toledo Day, the final day of the Convention, is that of The Toledo Blade Company. The *Toledo Blade* has a book collection of 2,000 volumes and a large newspaper morgue. Members journeying to Flint, Michigan, may visit the library at the *Flint Journal*.

At the *Detroit News*, the editorial research facilities include the George B. Catlin Memorial Library with 22,000 volumes, and large pamphlet and map resources; the Public Information Center, and the Reference Department where there is opportunity to observe the indexing process, the filing of photographs and cuts with classification of all materials. Emphasis is placed upon a wide scope of public service to industries and the community.

Wayne University

As a visitor returns to the cultural center of Detroit surrounding the Art Institute, and the Detroit Public Lirary, one may see Wayne University Library. Its book collection numbers 445,000 volumes. A staff of specialists serves one of the nation's finest municipal universities. The College of Medicine Library at the university was established in 1910 to assist students in the medical school, physicians of the city hospitals, and the public. The Kresge-



Library at Ford Archives

Hooker Scientific Library, also on the Wayne campus, is the finest in functional planning, and should be a high point of a visit to the university area.

Municipal Reference Library

Another library offering broad civic service is the Municipal Reference Library, a part of the Detroit Public Library system. It was established in 1945 to aid municipal departments and the city council, and to serve the public. The library's 8,000 volumes and large pamphlet resources are used in the preparation of bibliographies. Of special interest is a collection of financial and operational reports on ten major cities.

Hospital Libraries

A number of hospital libraries in Detroit offer excellent service in this field. Harper Hospital maintains a book collection of nearly 15,000 volumes. A unification of the medical and nursing school libraries, as well as a patients' library for recreational reading, permits coordinated service by a staff of four. Of particular interest to visitors is a collection on the history of medicine, and the special index to current journals prepared as a supplement to Quarterly Cumulative Index Medicus.

At Grace Hospital, the Oscar LeSeure Professional Library established in 1914 serves the medical, administrative and technical staffs. Other hospital libraries of interest are located at Henry Ford Hospital, the U. S. Veterans Administration Hospital at Dearborn, the Evangelical Deaconness Hospital, and the Wayne County General Hospital.

It is not possible to do justice to the many and varied collections in the Detroit area. The world-famous Parke Davis Company, the Detroit Bar Association, the Carboloy Department of the General Electric Company, and many other organizations maintain special libraries to serve specific needs.

"TOLEDO DAY"

The SLA 1955 Convention program features an all-day field trip to special libraries in Toledo, Ohio, Friday, June 17, 1955. Participating libraries include the *Toledo Blade*, Toledo Edison, Toledo Medical, Toledo Municipal, Toledo University, Libbey-Owens-Ford, and Owens-Illinois Glass.

A library of unusual interest is the Garden Library of Michigan, located in the White House on scenic Belle Isle in the Detroit River. This has been a "growing" library since 1938 with interests in horticulture and allied fields.

Ford Archives

Another library not generally opened except for research projects is the Ford Motor Company Archives at Fair Lane. This center was established as a depository of all historical records of the company, and for the private papers of Mr. and Mrs. Henry Ford. There is a fine library at Fair Lane, the nucleus formed of books owned by Henry Ford, or purchased by the company at his request. By special permission groups may visit Fair Lane during the SLA Convention week.

Detroit Environs

SLA members will be interested also in the wonderful resources available within easy geographical proximity. The University of Michigan at Ann Arbor has many notable collections. In Bloomfield Hills, the internationally famous Cranbrook Foundation maintains special collections in the libraries of the Institute of Science and the Museum of Art.

> RUTH P. BRAUN, Chairman Convention Publicity Committee.

AUTOMATION

1

HELEN E. LOFTUS Assistant Librarian, Eli Lilly and Company, Indianapolis, Ind.

R VERYONE TODAY is talking of automation. It is difficult to find a single business periodical which does not have at least one article discussing the application of this concept. Associations and organizations of all kinds including scientific ones are devoting part of their conventions to a discussion of the topic. The First International Automation Exposition was held in New York City in December 1954. Three current publications were introduced last year devoted entirely to the discussion of new developments in the field: Automation, Control Engineering, and Automatic Control.

Definition

What is automation? Automation means many things to many people. It is referred to as cybernetics, automation, automatic control, control engineering, automatic methods of controlling, and industrial control.

John Diebold, in his book, Automation: The Advent of the Automatic Factory, designates automation as a new word denoting both automatic and the process of making things automatic. It is believed that the word was coined by an official of the Ford Motor Company to describe the automatic handling of materials and parts in and out of machines.¹

The popular concept of automation is one that conjures up the picture of a process being carried to completion or a product being manufactured without being touched by human hands. This is automation in its narrowest sense.

Peter Drucker defines the term more loosely. His concept of automation is approached from the standpoint of the most efficient and economical organization of work. He believes that mechanization is a result of automation and, therefore, is not essential to it. In the terms of his definition, automation can exist without a single automatic tool being utilized.²

It is not always feasible to take advantage of the latest mechanical improvements because the volume of work may not be sufficient to warrant the additional expense involved. However, no matter how small the organization, by logical reasoning and by the use of common sense many methods can be improved or simplified.

In the future how much can the librarian expect in terms of mechanization? This is one of the questions for which we hope to receive some answers in the discussion of the topic "Automation in the Library—Fact or Fantasy," a feature of the SLA Convention program sponsored by the Business Division, June 13, 1955. Shall we as librarians content ourselves with the more narrow definition of the term automation or shall we explore wider applications of this technology in our field of librarianship?

New techniques and electronic equipment are being developed to supplement human memory. These machines will be able to store unlimited amounts of information which can be recalled for reference. Tedious and time-consuming literature searches may no longer be necessary. Vast stores of information need no longer be considered embalmed knowledge impossible to resurrect because of the insurmountable problems in searching it out. There will be more time and energy for creative thinking.

One consultant in the field of electronic equipment foresees the development of equipment that will make it possible to consult information in a library automatically. The library user will merely dial into a catalog machine the specific subject about which he is seeking information. On a screen in front of the user will appear bibliographic references for his subject. After

MARCH, 1955

selecting the references in which he is interested he may then push a button and a copy of these references will be made for him.³

What techniques and procedures must librarians develop in their own field before they can hope to mechanize classification and retrieval of information? If mechanization does come will it be only for the large public or special libraries? Is it to be an instrument for bringing about revolutionary changes in the field of librarianship?

Automation in terms of mechanization is not a new concept. It is known, for example, that in Philadelphia in 1784 a completely automatic flour mill, powered by a water wheel, ground grain at a rate of 300 bushels an hour untouched by human hands. Automation, therefore, is a new term for an old practice. It is a modern version of methods improvement. There is, however, one principal difference. Automation moves the principles of methods improvement a big step forward and incorporates with them electronic control techniques. Essentially automation strives for production processes requiring a minimum amount of human endeavor.

Automation is often referred to as a second industrial revolution—the age of automatic production. Whatever the definition automation is here. Each day brings wider application in production activities and in offices.

The role that automation is to play in the library of the future has yet to be determined. Now is the time to do the advanced planning and perhaps even to dream of the progress to come.

References

- ¹ DIEBOLD, JOHN. Automation: The Advent of the Automatic Factory. New York: Van Nostrand, 1952.
- ² DRUCKER, PETER. Practice of Management. New York: Harper, 1954.
- ³ BERKELEY, EDMUND C. Giant Brains or Machines That Think. New York: John Wiley, 1949.

AUTOMATION BIBLIOGRAPHY

A selected bibliography on automation, listing articles that have appeared in journals during the past year, has been compiled by Helen E. Loftus.

"Automation in the Library—Fact or Fantasy," a panel discussion sponsored by the Business Division, to be held June 13, 1955 at the SLA Convention in Detroit, will find Miss Loftus in the role of moderator.

- Automatic Control: Today's Industrial Revolution. Automatic Control, 1:7-14, July 1954.
- Automation Is "In the Cards"—Prepare for It. NACA Bulletin (Section I), 35:1245-1251, June 1954.
- Automation: No Easy Answer. Office Management and Equipment, 15:32-33;76, March 1954.
- Capital Savings Through Automatic Control. Automatic Control, 1:4-8, August 1954.
- Computers Are Minus the Mystery. Office Executive, 29:24-25, March 1954.
- Criteria for Selecting Electronic Equipment. Systems Magazine, 18:24-25, November-December 1954.
- Economics of the Digital Computer. *Harvard Business Review*, 33:77-88, January-February 1955.
- How Much Automation for Your Plant? Dun's Review & Modern Industry, 63:62-68, February 1954.
- How You Can Automate? Factory Management, 112:118-125, August 1954.
- How Your Firm Can Organize an Electronics Investigation Program. *Management Meth*ods, 5:21-24, January 1954.

- The Impact of Computers on Office Management—Experience in Computer Application. American Management Association, Office Management Series, no. 136, p.3-60, 1954.
- Is the Price Tag on Automation Too High for Small Firms? Commerce Magazine, 15:16-17;24-27, September 1954.
- Machines That Think. *Barron's*, 34:3;15;39, December 27, 1954.
- Make the Most of Memory Tools. Automatic Control, 1:8-11, November 1954.
- Must Management Change to Prepare for Automation? Advanced Management, 19:25-28, May 1954.
- A New Approach to Office Mechanization: Integrated Data Processing Through Common Language Machines. American Management Association, Special Report, p. 7-62, 1954.
- Push-Button Labor. Fortune, 50:50;52, August 1954.
- Tomorrow's Automation Needs New Standards Today. *Automatic Control*, 1:14-17, August 1954.
- True Automation: Its Competitive Advantages. Automatic Control, 1:28-33, July 1954.



The Answer Woman

Answering a completely off-beat question may provide the germ of a great advertisement or an adoit advertising plan. Not long ago, for instance:

An art director at Campbell-Ewald asked what Nero wore when Rome burned, because it was important to the creation of a compelling ad;

A television man asked what a "kissing bridge" was, so he could film a commercial;

A chap in the research department asked for the estimated Gross National Product for 1955, to assist in preparing a prospectus.

And they each got the right answer. They turned to Miss Treat.

Miss Treat runs Campbell-Ewald's library. In fact, it's safe to say that Miss Treat *is* the library. She created it and she nurtured it, until now—as far as we've ever been able to determine—it is one of the most complete agency libraries west of the Hudson; better than most of those east of the Hudson.

We prove that to ourselves every day, but probably the most satisfactory

proof of the claim lies in the constant and increasing use our clients have made of this library over the years.

Miss Treat has an answer for everything — the answer. Like the time a copy writer sought the origin and meaning of "wheels within wheels." Origin was easy: "Ezekiel" in the Old Testament. Miss Treat found the meaning buried deep in John Calvin's Works.

Miss Treat is our own private oracle, and in a highly skilled creative agency an oracle is a handy person to have around.

Much of the information she provides is prosaic, albeit vital. The media department wants circulation figures, account executives want competitive advertising files from years past, or tear-sheets of ads from a field in which we're seeking new business, or market data, or references from Dun & Bradstreet, or any of a hundred other items. They all turn to Miss Treat.

Who knows when the research department, the media department, or

one of our other offices, may seek the solution to some problem that can be solved only by intensive and exacting library research? And who knows where a lively, inquisitive art director or copy writer may hang his hat when he takes off on the creation of an ad?

At Campbell-Ewald, everyone connected with creating advertising — and that's everyone—always seeks the new, shares an enthusiasm in his quest for the forceful and dramatic in advertising that isn't forestalled by mere inability to locate information.

Miss Treat sees to that. Her versatile assistance is essential—as much so as account executives, production men, researchers, art directors and copy writers —to the creation of readable, persuasive advertising that this agency insists upon for its clients.

A good library complements a good agency. Campbell-Ewald counts itself fortunate to have one of the foremost agency librarians in the United States — Miss Treat.

"The Answer Woman" appeared as a full-page advertisement in the New Yorker, February 12, 1955, and is reprinted here through courtesy of Campbell-Ewald Co.

SLA MEMBERS TO VISIT CAMPBELL-EWALD

Members of the SLA Advertising and Publishing Divisions attending the SLA Convention in Detroit, have been invited to visit Campbell-Ewald, Wednesday afternoon, June 15.

The convention program of the SLA Advertising Division highlights also a symposium on Motivation Research, Monday afternoon, June 13, to be conducted by Mrs. Mary-Jane Grunsfeld, director, Motivation Research, Weiss & Geller, Inc., Chicago.

A joint dinner meeting with the SLA Financial Division will feature guest speaker, Robert Eggert, Market Research Department, Ford Motor Company, who will discuss "Marketing Research Behind the Ford of the Future."

Mr. A. G. Dallert, Sales Department, Ford Motor Company, will discuss "Marketing Maps," before a joint meeting with the SLA Geography and Map Division, Tuesday morning, June 14. In the afternoon, members are invited to visit the Jam Handy Organization.

Have you heard . . .

Editor Resigns



Dora Richman has resigned as editor of SPECIAL LIBRARIES to take another position.

Miss Richman was appointed in October 1952 after a brief period as associate editor. She served formerly as a member of the SLA Editorial Governing Board and as chairman of the SLA Publishing Division, 1950-1952.

Applicants for the editor's position now open may obtain further information by writing to the Executive Secretary, Special Libraries Association, 31 East Tenth Street, New York 3, N. Y.

UN Observer

Lee Ash, librarian of the Carnegie Endowment for International Peace. has been accredited as SLA's official observer to the United Nations and as representative to the Department of Public Information's section on relations with Non-Governmental Organizations. Through this new and active relationship it is felt that the import and values of the United Nations may be effectively interpreted to SLA's membership. Any special librarians with problems concerning the United Nations are invited to use Mr. Ash's services freely, writing him at the Carnegie Endowment, United Nations Plaza at 46th St., New York 17, N. Y.

SLA Scholarship

SLA President Little has approved the extension of the closing date for receiving applications for the SLA Scholarship from March 1 to April 1, 1955.

The Scholarship and Student Loan Fund Committee of the Special Libraries Association recently announced a \$1,000 scholarship to be granted for graduate study in librarianship. The scholarship is to be used for work leading to a degree at an accredited library school. Applicants must be college graduates of high academic achievement who need financial assistance in obtaining the professional education necessary for work in the special library field.

Application blanks and details of eligibility for the scholarship award may be obtained from the Executive Secretary, Special Libraries Association, 31 East Tenth Street, New York 3, N. Y. The award will be announced at the annual convention of the Association in Detroit, Michigan, June 1955.

* **New Placement Service**

*

Librarians may subscribe to a new placement service. A list of job opportunities and situations wanted will be published semimonthly in Library Placement Exchange. The first issue is scheduled for March 1955.

Foster E. Mohrhardt and Joseph Becker will publish Library Placement Exchange. Checks or money orders should be mailed to the Library Placement Exchange, P.O. Box 172, Benjamin Franklin Station, Washington 4, D.C.

Institutional subscriptions are \$12.00 per year and permit the listing of an unlimited number of openings in two consecutive issues. Further runs of the same listing will cost \$1.00 per issue.

Individual subscriptions cost \$3.00 per year and permit the listing of a position wanted entry in two consecutive issues, and additional listings at \$1.00 per issue.

SLA Publications

CUMULATIVE STATEMENT ON PUBLICATIONS IN PRINT AS OF DECEMBER 31, 1954

Date	Name of Publication	Cost	No. Printed	Inst. Given	Copies Sold	Total Receipts To Date
1937	Social Welfare: Subject Headings List\$	293.25	1,000	*	555	\$ 493.40
1949	Aviation Subject Headings	526.95	1,000	239	342	584.96
1949	Brief for Corporation Libraries	700.73	1,500	395	796	1,355.03
1949	Creation and Development of an Insurance Library	366.10	1,000	238	405	759.20
1949	Subject Headings for Aeronautical Engineering Li- braries	1,311.73	1,000	205	399	1,538.12
1949	Numerical Index to the Bibliography of Scientific and Industrial Reports, Vols. 1-10	3,982.06	1,000		956	9,416.00
1950	Fakes and Forgeries in the Fine Arts	543.28	1,000	244	203	347.36
1950	Contributions Toward a Special Library Glossary	309.60	1,000	390	320	374.41
1951	Technical Libraries, Their Organization and Manage- ment	7,382.57	4,048	471	2,577	14,857.95
1951	SLA Directory of Members	2,360.78	1,500	549	668	2,574.45
1951	Nicknames of American Cities	816.81	1,500		1,156	1,996.34
1951	Classification Schemes and Subject Headings List Loan Collection of SLA	111.66	450		425	453.65
1953	Source List of Selected Labor Statistics	972.98	1,000	•••••	593	897.06
1953	Correlation Index Document Series and PB Reports	4,092.57	1,000		557	4,422.50
1953	Directory of Special Libraries	7,315.66	2,090		1,125	8,987.89
1954	Map Collections in the U.S. and Canada	970.07	1,000	•••••	481	1,183.74
1954	Subject Headings for Financial Libraries	1,264.35	1,000	•••••	138	457.50

* No records kept.

Your Fiftieth Anniversary

A report by the Fiftieth Anniversary Committee: Laura Marquis, Gretchen E. Runge and M. Margaret Kehl, chairman

ALTHOUGH 1959 seems far in the future, your Fiftieth Anniversary Committee is collecting suggestions for the kind of celebration which will bring our members to Atlantic City. It is our aim to have all interests represented. To do this we need the help of every chapter and of every division. Our plans so far include open meetings, entertainment and the honoring of our faithful workers. Can you suggest a theme for the anniversary meeting? The Chairman will welcome your ideas.

Meeting Place

After careful consideration of the need to keep expenses at a minimum, yet provide space for a large attendance, Atlantic City, and more specifically Haddon Hall, was chosen. The membership expressed a preference for a resort meeting in 1959. When the committee surveyed possible sites, it was difficult to find a resort where at least one thousand could be accommodated within one or two adjacent hotels at a fairly reasonable rate. It was also felt that a larger group of our entire membership could be counted upon to get to this East coast location. However, we realize that we must present an excellent program to attract those of you at distant points from the Atlantic Ocean and its famous boardwalk.

History

Each chapter has appointed one of its members to write its history. This will include the names of founders, the facts surrounding the birth of the chapter and highlights of its activities. If the history is written in a popular style it can be used locally for recruiting and for promoting the special library. The Fiftieth Anniversary Committee hopes to combine the essentials from each chapter history into one brochure dur-

MARCH, 1955

ing 1957 which will receive wide circulation in 1958 and 1959.

Since there may be some of you residing away from your home chapter who would like to send information to that historian, it seems worthwhile to name those chosen to compile each chapter's history. We feel sure that they will appreciate hearing about "the good old days."

Chapters

- ALABAMA—John K. Cameron, Air University Library, Maxwell, AFB, Alabama.
 BOSTON—Mildred C. O'Connor, Boston Public
- BOSTON—Mildred C. O'Connor, Boston Public Library, Boston, Massachusetts.
- CINCINNATI—Jean Orr, Cincinnati Public Library, Cincinnati, Ohio.
- GEORGIA—Mrs. Martha J. K. Zachert, 1760 Harbein Road, S.W., Atlanta, Georgia.
- GREATER ST. LOUIS—Mrs. Elizabeth Owens, Union Electric Co., St. Louis, Missouri.
- HEART OF AMERICA—Idris Smith, Business & Technical Section, Kansas City Public Library, Kansas City, Missouri.
- MICHIGAN—Dorothy V. Martin, Burton Historical Department, Detroit Public Library, 5201 Woodward Avenue, Detroit, Michigan.
- MILWAUKEE—Jack Baltes, Globe Union, Inc., 900 E. Keefe Ave., Milwaukee, Wisconsin.
- MINNESOTA—Anna M. Heilmaier, James J. Hill Reference Library, St. Paul, Minnesota.
- MONTREAL—Mrs. Margaret Stronach, 4 Ingleside Avenue, Westmount, Quebec, Canada.
- NEW JERSEY—Katharine L. Kinder, Johns-Manville Research Center, Manville, New Jersey.
- NEW YORK—Mrs. Catherine C. Supinski, Chamber of Commerce of the State of New York, 65 Liberty Street, New York, N. Y.
- OAK RIDGE—Elizabeth Howard, 226 N. Purdue Avenue, Oak Ridge, Tennessee.
- PITTSBURGH—Edith Portman, Mellon Institute, 4400 Fifth Avenue, Pittsburgh 13, Pennsylvania.
- PUGET SOUND—Winnifred Jones, Chemistry Library, University of Washington, Seattle 5, Washington.
- SAN FRANCISCO BAY REGION Margaret Hatch, Metropolitan Life Insurance Company, 600 Stockton Street, San Francisco 20, California.
- SOUTHERN CALIFORNIA—Guy R. Marion, 832 N. Mariposa Avenue, Los Angeles 29, Calif.

- TEXAS—Mrs. Helen E. Spangler, Research & Development Department, Atlantic Refining Company, P. O. Box 2819, Dallas 1, Texas.
- TORONTO—George A. Johnston, Law Society of Upper Canada, Osgoode Hall, 132 Queen Street, W., Toronto, Ontario, Canada.
- WASHINGTON, D. C.—Mildred Benton, Naval Research Laboratory Library, Washington 25, D. C.
- WESTERN NEW YORK—Mrs. Mabel G. Olney, 385 Hollywood Avenue, Rochester 18, New York:

Finally, we should advertise our Association in periodicals and through local organizations early in 1959. For this purpose the Committee would like to have each chapter prepare a list of firms to be contacted and the names of those who might advertise in the 1959 convention program. This is countrywide publicity and we seek your cooperation.

* * *

MLA Scholarship

The Medical Library Association at its Board Meeting in New York, January 15, approved two scholarships of \$150 each, to be offered in the 1955 summer course on Bibliography of Bio-Medical and Physical Sciences at the University of Southern California School of Library Science. The Association fosters training for medical librarianship whenever possible and these scholarships are the first to be offered on the west coast.

Application for scholarship should be made to the school at the time of application for enrollment. Since credentials must be approved in advance, application for admission should be made as far as possible before the date of opening of the session and sufficiently early in the year to permit the school to pass upon credentials and forward applications for scholarship to the Medical Library Association. Transcript of academic records should be submitted to the school even if applicant is not a candidate for a degree. April 1, 1955, is the Association's closing date for scholarship applications and candidates must already have been accepted by the school. Completion of the course will enable a student with a bachelor's degree and one year's library school training to qualify for Grade I certification by the Medical Library Association.

The course is offered from June 20 to July 29. It consists of selecting, evaluating, and using books and specialized reference and bibliographic tools in bio-medical and scientific literature. The instructor is Vilma Proctor, Ph.D., librarian of the University Medical School. The course has a credit value of 3 units. Tuition is \$60; registration, \$5. For application blanks and further information, write to Acting Director, School of Library Science, University of Southern California, Los Angeles 7.

* * * Grolier Fellowship

The Grolier Foundation, Inc., has renewed a fellowship grant of \$1,000 to the School of Library Service at Columbia University.

The Grolier Fellowship may be used for advanced study and research in the field of reference and bibliography.

Further information may be obtained from Mrs. Betty Murphy Mase, president, Grolier Foundation, Inc., 2 West 45th Street, New York, N. Y.

National Housing Center Library

The National Association of Home Builders has retained the Atlantic Research Corporation, a consulting firm in Alexandria, Va., to set up a building library and information bureau for the new National Housing Center, now under construction in Washington, D. C. The library will be one of the world's largest and most complete in the building field.

In addition to serving the needs of the more than 33,000 NAHB members, the library will furnish information to industries related to home building. The combined talents of librarians and building specialists have been utilized in developing plans for the National Housing Center Library.

A description of the Missile Systems division library of the Lockheed Aircraft Corporation in Van Nuys, California, appears in the January 19 issue of the Lockheed MSD Star. The holdings of this rapidly growing library, headed by SLA member Eva Louise Robertson, include more than five hundred technical volumes and over one hundred periodicals devoted largely to the field of missile technology. An accompanying photograph shows the specially designed, sloped units of the periodical shelves which carry current issues on top, and close down over compartments for storage of back issues. (These shelves, built in the MSD maintenance shops, are a feature of interest to visiting librarians.)

SLA member Gwendolen M. Kidd was one of the recipients of Royal honors conferred on New Year's Day by Britain's Queen Elizabeth and noted in the Washington Evening Star for January 1. Miss Kidd, librarian of the British Embassy in Washington, D. C., was honored with membership in the Order of the British Empire.

The special services provided by the Titanium Research Library (National Lead Company) is the subject of a feature article in the December 1954 issue of *The Titanox News*. Authored by Librarian K. Genevieve Ford, the article describes the library's holdings and includes photographs of staff mem-

the library. Miss Ford is president of SLA's New Jersey Chapter.

bers and plant employees at work in

The appointment of Elizabeth M. Walkey as editor of *Scalacs*, regional bulletin of the Southern California section of the American Chemical Society, was announced in the *Los Angeles Times*, December 21, 1954.

Miss Walkey, the first woman to serve as editor of the technical publication, is research librarian for Consolidated Engineering Corporation in Pasadena. She is public relations director of SLA's Southern California Chapter.

Tribute is paid to Sarah B. Ball, a charter member of SLA, in an article on the Newark Business Library published in the November 1954 issue of Dun's Review and Modern Industry.

The article, "Business Libraries Light the Way," describes the beginnings of the first library for business use, organized in 1904, and notes the achievements of Miss Ball, its first librarian. Written by Marian C. Manley, retired librarian of the Newark Business Library, the article refers to the acquisition of the initial collection as "the result of unceasing exploration by the enterprising librarian, Sarah B. Ball, under whose guidance the department grew."

* * *

Mrs. Eulalia D. Chapman, director of the Bibliographical Center for Research, Rocky Mountain Region, is the subject of an article in the *Denver Post* of October 7, 1954.

Mrs. Chapman has been associated with the "Bib Center," the popular designation for the Bibliographical Center, since its inception nineteen years ago. The Center, located in the Denver Public Library, was the first of its kind and is now one of three in the United States offering bibliographical aid to special libraries with special problems. (See SPECIAL LIBRARIES, 45: 424-425.)

The article notes also that Mrs. Chapman is president of the Mountain Plains Library Association, an associate editor on the International Shorthand Review, and the author of a coming juvenile book, Donna Hears the Birds.

Marguerite Giezentanner, librarian of the Educational Division of Field Enterprises, Inc., is pictured on the cover of the January 1955 issue of *Illinois Libraries*. Miss Giezentanner, SLA member of the Illinois Chapter, is shown as the recipient of a bust of Abraham

Ì

Lincoln presented to her by State Librarian Charles F. Carpentier. The presentation was made at the Annual Conference Banquet of the Illinois Library Association, of which Mis Giezentanner is president, in Springfield, November 5, 1954.

A photograph of Elizabeth Spring, librarian for the Monroe F. Dreher Inc. advertising agency, appears in the January 14th issue of Printers' Ink. Miss Spring, SLA member of the New York Chapter, is shown receiving the agency's award of the year from President Monroe F. Dreher. The award is given each year to a staff member who has made the greatest contribution to the agency's progress.

Portia Christian, former research director of Caldwell, Larkin & Company, became the secretary of a new organization formed by the merger of two advertising agencies in Indianapolis, announced the Indianapolis Sunday Star of December 19, 1954.

The merging organizations are Caldwell, Larkin & Company and Sidener and Van Riper, Inc. The new firm is known as Caldwell, Larkin & Sidener-Van Riper, Inc.

SLA AUTHORS IN PRINT

CLAPP, VERNER W., coauthor: The Improvement of bibliographic organization. The Library Quarterly, vol. 25, no. 1, January 1955, p. 91- 110.

EDINGER, DORA M.: The Magic in toys. American-German Review, vol. 21, no. 2, December-January 1954-55, p. 13-15. *

.

FAIR, ETHEL M.: Library programs in the Middle East. Library Journal, vol. 80, no. 2, January 15, 1955, p. 104-105.

*

FELLAND, NORDIS: The American Geographical Society Library. The Professional Geographer, vol. 7, no. 1, January 1955, p. 6-9. * *

HOWARD, PAUL. Associations and United States legislation. Library Trends, vol. 3, no. 3, January 1955, p. 279-289.

LEE, EMMA: Dr. Frederick W. Heyl. Chemical Bulletin, vol. 32, no. 2, February 1955, p 37.

MAASS, ERNEST: The Cabinet---right arm of presidents. Think, January 1955, vol. 21, no. 1, p. 6-7.

MANLEY, MARIAN C.: Business libraries light the way. Dun's Review and Modern Industry, vol. 64, no. 2,319, November 1954, p. 41; 68-73.

MCCARTHY, STEPHEN A .: Egyptian libraries. Library Journal, vol. 80, no. 2, January 15, 1955, p. 106-108.

MCINTOSH, JAMES C .: The Leonardian Library and Museum at Vinci. Wilson Library Bulletin, vol. 29, no. 5, January 1955, p. 366-377.

MURPHY, MARION A., coauthor: Some practical aspects of medical school library administration. **Ouarterly Bulletin** (Northwestern University Medical School), vol. 28, no. 4, Winter Quarter, p. 418.

NEIL, ALICE V.: Machines or books? - a case for both. Stechert-Hainer Book News, vol. 9, no. 5, January 1955, p. 57-58. * *

REILLEY, JEANNE M .: Services of the library of the American Medical Association. Illinois Libraries, vol. 36, no. 10, December 1954, p. 356-358.

RICHARDS, JOHN S.: State and regional library associations. Library Trends, vol. 3, no. 3, January 1955, p. 319-329.

SHORES, LOUIS: 1954 reference checklist. Library Journal, vol. 80, no. 1, January 1, 1955, p. 28-40.

SHORES, LOUIS: Qualifications of personnel; training and certification. Library Trends, vol. 3, no. 3, January 1955, p. 269-278.

*

*

STRABLE, EDWARD G .: Hemingway: a brief bibliographical survey. Book Bulletin of the Chicago Public Library, vol. 37, no. 1, January 1955, p. 3-5.

WESSELLS, HELEN E .: International cooperation. Library Trends, vol. 3, no. 3, January 1955, p. 308-318.

ZACHERT, MARTHA JANE K., compiler: Audiovisual materials in the pharmacy curriculum: an annotated bibliography. Available gratis from the author, Southern College of Pharmacy, 223 Walton Street, N.W., Atlanta, Georgia.

COMMITTEES DISCUSS LIBRARY EDUCATION

Meetings of the Subcommittee on Education for Special Librarianship and the Joint Committee on Library Education of the Council of National Library Associations were held at Edgewater Beach Hotel, Chicago, January 29-30, 1955.

The Chairman of the Subcommittee on Education for Special Librarianship reported that since the last meeting he had sent to thirty-eight accredited library schools a copy of Education for Special Librarianship, in which maximum curricula for courses for special libraries in seven areas were outlined. A covering letter requested the schools' reaction. The replies received indicated in many instances a very great interest by schools of library science to include programs for specialization in one or more areas in their curricula. The Committee felt that its work was having a decided impact on library schools as regards courses for work in specialized areas. It was voted at the meeting to continue the work of the Committee, and to explore five additional areas: Religion (Catholic and Non-Catholic), Art, Architecture, Geography and Maps.

At the meeting of the Joint Committee, a report of the Subcommittee on the feasibility of organizing a study of the national needs for special librarians presented in preliminary form a plan to distribute questionnaires on a limited scale to find out the number of librarians presently employed, positions filled and unfilled, turnover rate and "expectancy" in terms of number of positions over the next five years. At its next meeting this questionnaire will be recommended for approval of the Joint Committee with request that the Joint Committee present it to CNLA as a project.

Reports by the Subcommittees on Examination and Accreditation reviewed the progress of these activities to date.

On Monday evening the Joint Com-

mittee met with representatives of the ALA Board of Education for Librarianship, Association of American Library Schools, ALA Library Education Division, and other agencies interested in library education. The various aspects of library education were reviewed and a lively discussion period followed. The Joint Committee sponsored this meeting, and it was gratified at the interest shown by attendance. It felt that it had accomplished something worthwhile to have provided a forum for an exchange of ideas on library education, and it feels that such an exchange of views will be beneficial to all those agencies working toward a solution of problems in the field of education for librarianship.

> ELEANOR S. CAVANAUGH SLA Representative

DIVISION OF CHEMICAL LITERATURE ACS Spring Meeting

The Spring Meeting of the Division of Chemical Literature of the American Chemical Society will be held in Cincinnati, Ohio, March 30-April 2, 1955. The program includes several sessions of particular interest to special librarians.

"Chemists Can Streamline Their Reading," a paper to be presented on Wednesday, March 30 by Dr. A. J. Pelletieri of the University of Houston, will outline a system said to increase reading speed without loss of retention.

Papers on technical writing and the writing of recruiting booklets will be presented Thursday morning, March 31. Report writing will also be covered.

Two symposia have been scheduled for Saturday, April 2. A symposium on Training of Students for Careers in Chemical Literature will cover the problems encountered and the way in which these problems are being met by library schools in colleges and universities.

New Techniques

A symposium on New Tools for the Resurrection of Knowledge, scheduled also for Saturday morning, April 2, will present new techniques and ideas for efficient use of chemical knowledge. James W. Perry and Allen Kent will preside at this symposium.

Chemists are confronted today with the need for more effective techniques to make recorded knowledge readily available and to facilitate chemical communication.

Papers and discussion will cover "Methods and Equipment for Searching Encoded Abstracts," "An Operations Research Approach to the Resurrection of Knowledge," "The Informational Efficiency of Chemical Nomenclature Systems," and related topics.

Further developments in techniques for dealing with information problems are expected as research programs progress at the U. S. Patent Office, Battelle Memorial Institute, Chemical Abstracts, the Gmelin Institute of Germany and elsewhere.

* * *

Texas Meeting

A regional meeting of the ACS Division of Chemical Literature took place February 25, at the Rice Institute, Houston, Texas. The all-day program included papers by three members of the SLA Texas Chapter:

Martin Padwe, "The Activities of a Literature Chemist;" Charles Zerwekh, Jr., "Patent Practices in Research Institution;" and John Eben, "Microdocumentation."

Charles Zerwekh, Jr. served as general chairman of the meeting.

* * * Chemistry Documentation Congress

The First International Congress on Documentation of Applied Chemistry will be held in London, November 23-25, 1955.

The Congress, held under the patronage of the International Union of Pure and Applied Chemistry, is sponsored by the Society of Chemical Industry. Chairman of the Council is Sir William Ogg, director of Rothamsted Experimental Station.

Membership of the Congress is open to all interested persons on payment of the membership fee of approximately \$6. A detailed program will be issued shortly. Inquiries should be addressed to: The Honorary Secretary, International Congress on Documentation of Applied Chemistry, 56 Victoria Street, London, S.W. 1.

OBITUARIES

ISABELLE BRONK, research librarian at the Institute of Local and State Government of the University of Pennsylvania for the last eighteen years, died on February 2, 1955.

Miss Bronk was a graduate of Wellesley College and the Drexel Institute School of Library Science. She began her library career in the Stoneham, Massachusetts Public Library before joining the library staff of the Wharton School, her first position at the University of Pennsylvania. She was reference librarian at the university from 1932 to 1937 when she was appointed research librarian at the Institute of Local and State Government.

Miss Bronk, a member of SLA's Philadelphia Council, was active in the local Social Science Group.

* *

MRS. ISABELLA BROKAW WALLACE, librarian for the Great Lakes Carbon Corporation of Morton Grove, Illinois, died on January 20, 1955.

Mrs. Wallace was a graduate of Olivet College and the University of Illinois Library School. She headed the research library of the Standard Oil Company (Indiana) for twenty years.

Mrs. Wallace was an esteemed and extremely active member of SLA. She served in various official capacities, as president of the Illinois Chapter, 1934-35; chairman of the Science-Technology Division, 1935-36; and editor of the S-T Division's Handbook of Procedures (1951). She is best known perhaps for her valuable contribution to the SLA publication, the Patent Index to Chemical Abstracts, 1907-1936.

At the time of her death, Mrs. Wallace was membership chairman of the S-T Chemistry Section.

Washington Directory

ł

The fifth edition of Library and Reference Facilities in the Area of the District of Columbia will be issued shortly by the Library of Congress in cooperation with the Washington, D. C. Chapter of the Special Libraries Association and the District of Columbia Library Association. Copies will be available to members of the Special Libraries Association at a prepublication rate of \$1.00 per copy. Orders, together with payment, should be sent to Miss La Vera Morgan, 3601 Wisconsin Avenue, N.W., Washington 7, D.C.

* * *

Brussels Congress Proceedings

The text of all the scientific papers presented at the 27th International Congress of Industrial Chemistry held in Brussels, Belgium, September 11-19, 1954 will be published in two volumes by Industrie Chimique Belge.

The first volume will be available early in April and the second in July 1955. The price for this 2,000-page work will be \$19.00 which includes mailing costs. Subscriptions are now being accepted at the Federation des Industries Chimiques de Belgique, 32 rue Joseph II, Brussels, Belgium.

* * *

Sorbonne Summer School

The Graduate Division of The Sorbonne American Institute announces its School of Field Studies in European Archives, Libraries and Museums under the University of Paris, The Sorbonne, with the cooperation of the following: IN FRANCE: Ministry of Foreign Affairs, Direction Générale Des Archives Nationales, and Chartres, France's foremost school of Library Science.

IN ENGLAND: The Public Records Office, the British Museum, and the Library Association of London.

IN ITALY: The Ministry of Foreign Affairs and the National Archives.

Seminars will be held in London and Paris. The program includes field-study

visits to the most important archives and museums. The cost of the basic program—42 days, including transatlantic round trip on the French Line, London, Paris, Rome, and return to Paris via Florence and Venice, is \$690.

For further information and registration forms, write to the Sorbonne American Institute, Box 1405, Beverly Hills, Calif.

* * *

European Library Tour

Gerard L. Alexander, Map Division, New York Public Library, will personally conduct for the fourth consecutive summer the 1955 Grand Tour of Europe, including libraries, for the American Travel Company. This tour, especially planned for librarians and their friends, includes the following fifteen countries: England, Norway, Sweden, Denmark, Germany, Holland, Belgium, Luxembourg, Switzerland, Liechtenstein, Austria, Italy, San Marino, Monaco and France. Among libraries visited will be the British Museum and the Bibliothèque Nationale. The all expense tour includes either Tourist Class (\$1240) or Cabin Class (\$1350) on the S.S. United States, June 24-August 16, or a KLM, Royal Dutch Airlines flight (\$1395), June 28-August 11. For full details of the tour and descriptive travel folder "L" write to Gerard L. Alexander, c/o American Travel Company, 11 West 42nd Street, New York 26, New York.

RETIREMENT

HELEN C. LITTLE, law librarian for the U. S. Circuit Court of Appeals in Cincinnati, Ohio, retired in October 1954. Miss Little, an attorney, had practiced law with the late Judge Joseph O'Hara before becoming law librarian, a position she held for fifteen years.

One of the early members of Special Libraries Association, Miss Little also holds membership in the Cincinnati Bar Association and the American Law Library Association. THE AIA STANDARD CONTRACT FORMS AND THE LAW. By William Stanley Parker and Faneuil Adams. Boston: Little, Brown, 1954. 147p. \$7.50.

Defines and explains legal rights and obligations of home owners, architects and contractors. Based on provisions of the American Institute of Architects Contract Forms.

AMERICAN BOOK-PRICES CURRENT. 1954 Edition. Edited by Edward Lazare. New York: Edward Lazare (509 Fifth Avenue) 1954. 704p. \$15.

The sixtieth consecutive annual volume of this series. Authoritative record of auction prices of literary properties sold in the U. S.

ANNOTATED BIBLIOGRAPHY OF AUDIO-VISUAL AIDS FOR MANAGEMENT DEVELOPMENT PROGRAMS. Compiled by Charles A. Hebert. New York: Research Service (353 W. 57th St.) 1954. 16p. Paper, \$2.50.

Lists and describes films and recordings which have specific value for executive training and management development programs. Compiled for use at the 1955 Utility Management Workshop to be held by Columbia University Department of Industrial and Management Engineering.

AN ATLAS OF ANATOMY FOR ARTISTS. By Fritz Schider. 2nd ed. New York: Dover, 1954. 192p. \$6.

New features of the 1955 edition of this standard reference work include 85 plates by Leonardo, Rubens and other masters; photographs from the Muybridge series; and a new bibliography by Adolf Placzek.

BIBLIOGRAPHY ON UNIONIZATION OF PROFES-SIONAL ENGINEERS (ESL Bibliography No. 10) New York: Engineering Societies Library (29 W. 39th St.) 1954. 8p. Mimeographed, \$2.

Listed are 100 references to pamphlets and articles in magazines in the Engineering Societies Library.

BOOK COLLECTING AND SCHOLARSHIP. Essays by Theodore C. Blegen, James Ford Bell, Stanley Pargellis, Colton Storm, & Louis B. Wright. Minneapolis: University of Minnesota Press, 1954. 67p. \$5.

A handsome little volume distinguished in its design and typography.

BRITISH EMPIRE TRADES INDEX. 1954-55 Edition. Classified Trades Lists of Principal Business Houses with Their Cable, Postal Addresses and Telephone Numbers—in the British Commonwealth and United Nations. London: Business Dictionaries, Ltd., 1954. 1137p. \$6.75.

Five sections include alphabetical indexes and cross-references to products, professions and firms in the British Empire. Trade information on UN countries. CAREERS AND OPPORTUNITIES IN SCIENCE. A Survey of All Fields. By *Philip Pollack*. New York: Dutton, 1954. 252p. \$3.75.

A revised and rewritten version of *Careers in* Science by the same author. Information on schools and colleges, current salaries, and science courses available in the armed forces.

CATALOG OF REPRINTS IN SERIES. Edited by Robert M. Orton. 15th ed. New York: H. W. Wilson Co., 1954. 269p. \$4.

Listings include both hard and soft cover American, English and Canadian publications in philosophy, fiction, poetry, etc. Author, title and publisher entries. Includes Spring Supplement (1955).

THE CATHOLIC BOOKLIST 1955. Edited by Sister Stella Maris, O.P. St. Catharine, Kentucky: St. Catherine Junior College, 1955. 69p. Paper, 75 cents.

An annotated bibliography, for the most part Catholic in authorship or subject matter, chosen as a guide to the recreational and instructional reading of Catholics.

CLINICAL VS. STATISTICAL PREDICTION. By Paul E. Meehl. Minneapolis: University of Minnesota Press, 1954. 149p. \$3.

Considers the issues raised by the conflict in the behavioral sciences, and summarizes available studies comparing the efficiency of the clinical vs. statistical methods.

CONCISE DICTIONARY OF AMERICAN GRAM-MAR AND USAGE. Edited by Robert C. Whitford and James R. Foster. New York: Philosophical Library, 1955. 168p. \$4.50.

Includes words and phrases which lately have become current in the U. S. or have acquired new meanings.

THE CONCISE USAGE AND ABUSAGE. A Modern Guide to Good English. By Eric Partridge. New York: Philosophical Library, 1954. 219p. \$3.50.

A linguistic reference book. Simplifies and shortens the parent work.

DETROIT IN ITS WORLD SETTING. A 250-Year Chronology, 1701-1951. Detroit: Detroit Public Library, 1953. 311p. \$2.25.

A brief, chronological survey of highlights covering four categories: Detroit and Michigan, World History, Cultural Progress, Scientific and Commercial Progress. Prepared by the Detroit Public Library as part of its contribution to the celebration of the city's 250th anniversary. THE DEVELOPMENT OF MEDICAL BIBLIOGRA-PHY. (Medical Library Association, Publication No. 1) By Estelle Brodman. Baltimore: Waverly Press, 1954. 226p. \$5.

Describes and evaluates bibliographies relating to medicine in general from the 16th century to the present. Material relating to the history of medicine runs throughout the text. Includes a list of 250 medical bibliographies published since 1500 A.D., author and subject indexes. Invaluable reference volume for medical libraries, bibliographers and medical historians.

- DICTIONARY OF AMERICAN PROVERBS. Edited by David Kin. Preface by Mark Van Doren. New York: Philosophical Library, 1955. 290p. \$6.
- A listing of proverbs by subject.
- DICTIONARY OF LAST WORDS. Compiled by Edward S. Le Comte. New York: Philosophical Library, 1955. 267p. \$5.

Quotations of last recorded words, written and spoken; source in each case is included.

DRUGS IN CURRENT USE 1955. Edited by Walter Modell. New York: Springer Publishing Co., 1955. 148p. Paper, \$2.

Alphabetical listing of a thousand drugs in current use under proprietary and official names. Annotation includes pharmacologic characteristics, major uses, dosage, storage requirements, etc.

DRURY'S GUIDE TO BEST PLAYS. By F. K. W. Drury. New Brunswick, N. J.: Scarecrow Press, 1953. 367p. \$6.50.

Over 1,000 plays available in English listed by author, title and theme. Includes published sources for each play; also brief annotations and data for play-givers.

GEBBIE PRESS HOUSE MAGAZINE DIRECTORY. A Public Relations and Free-Lance Guide to over 3,000 of the Nation's Leading House Magazines. New York: The Gebbie Press, 1954. 272p. Paper, \$19.95.

Alphabetical listing of house organs by company, state, title and subject matter. This biennial directory includes cover illustrations for many, and pertinent editorial data for all listings.

HAMMOND'S PICTORIAL TRAVEL ATLAS OF SCENIC AMERICA. By E. L. Jordan. New York: C. S. Hammond, 1955. 256p. \$10.

Sightseeing gazetteer of the U.S. and Canada. Includes maps, notes and tables on highway, railroad, bus and air travel.

INFORMATION PLEASE ALMANAC 1955. Planned and supervised by Dan Golenpaul Associates. New York: Macmillan, 1954. 960p. \$2.

New edition of this concise, fact-finding reference work. LA FRANCE AU XX^e SIECLE. By Robert Lacour-Gayet. New York: Dryden Press, 1955. 329p. \$3.25.

A unique encyclopedic volume of authoritative information covering social, economic, scientific and political aspects of France in the twentieth century. Extremely useful reference volume (in French) includes statistics, charts and a 700-name index.

MATHEMATICS IN TYPE. Richmond, Va.: William Byrd Press, 1954. 58p. Paper, \$3. (fifty per cent discount to educational institution staff members)

A handsome extremely useful booklet for authors, editors and others concerned with the preparation and the economical production of books and articles containing mathematical expressions. Includes information on methods of composition, rules for setting and spacing, preparation and marking of manuscripts, proof changes and corrections, kinds and sizes of type, etc.

MONTGOMERY'S FEDERAL TAXES. 35th Edition. Edited by *Philip Bardes* and others. New York: Ronald Press, 1954. 1,000p. \$15.

Clarifies the 1954 Revenue Code as it applies to business organizations, investors and individual taxpayers. Organized to provide ready information and guidance on questions of tax policy, planning and operation.

1955 DIRECTORY OF AUTOMATIC MERCHANDIS-ING. 2nd ed. Chicago: National Automatic Merchandising Association (7 S. Dearborn Street) 1954. 146p. \$3.

Factual data, scope and potential of automatic merchandising.

- NORWEGIAN- ENGLISH TECHNICAL DICTION-ARY. Norsk-Engelsk Tednisk Ordbok. By John Ansteinsson. Trondheim, Norway: F. Bruns Bokhandels Forlag (available from Kraus Periodicals, 16 East 46th Street, New York) 1954. 327p. \$7.75.
- OCCUPATIONAL LITERATURE. An Annotated Bibliography. 3rd ed. rev. By Gertrude Forrester. New York: The H. W. Wilson Co., 1954. 463p. \$5.

The present edition expands the book beyond the pamphlet field and includes over 3,000 selected references to current publications. Other sections include school and college information; charts, posters and graphic aids; textbooks for courses in occupations; publishers' directory, etc.

PRIVATE UNITED STATES INVESTMENT IN EUROPE AND THE OVERSEAS TERRITORIES. Paris: Organization for European Economic Co-operation (OEEC Mission, 2002 P Street, N.W., Washington 6, D. C.) 1955. 137p. Paper, \$1.25.

Analysis of the regulations and provisions which apply to private investments; suggests measures to encourage investment in Member countries.

MARCH, 1955

- THE SOUTH AMERICAN HANDBOOK 1954-1955. A Year Book and Guide to the Countries and Resources of South and Central America, Mexico and Cuba. Edited by *Howell Davies*. 31st ed. London: Trade and Travel Publications (available from H. W. Wilson, New York) 1954. 822p. \$2.50.
- TELEVISION AND RADAR ENCYCLOPEDIA. Edited by S. MacLanachan. 2nd ed. New York: Pitman, 1954. 216p. \$6.

Reference book of television and radar terms in common use in Great Britain and the U. S. Useful to the qualified technician and the non-specialist reader. Includes tables and data for those concerned with installation and maintenance of television and radar equipment.

THIRTY-THIRD ANNUAL OF ADVERTISING AND EDITORIAL ART AND DESIGN. New York: Farrar, Straus & Young, 1954. 407p. \$12.50. A handsome pictorial record of 423 exhibits from the 33rd national exhibition of the Art

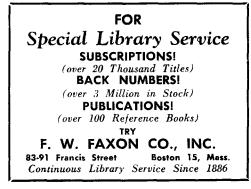
Directors Club of New York. TITLES IN SERIES. Published prior to January

- 11TLES IN SERIES, Published prior to January 1953. A Handbook for Librarians and Students. By *Eleanora A. Baer*. New Brunswick, N. J.; Scarecrow Press, 1954. 856p. \$16.
- TIME-SAVER STANDARDS. A Manual of Essential Architectural Data for Architects, Engineers, Designers, Builders, Draftsmen and Other Technicians. By the Editors of Architectural Record. 3rd ed. New York: F. W. Dodge Corp., 1954. 888p. \$12.50.

Revised and enlarged edition of the comprehensive reference work and handbook for construction industry professionals. Includes information on architectural design, engineering method, materials technology and building practice.

YEARBOOK OF INTERNATIONAL ORGANIZATIONS, 1954-55. Brussels, Belgium: Union of International Associations (available from Stechert-Hafner, New York) 1954. 1,200p. \$10.

Comprehensive details on over 1,000 international organizations. Compiled with the official collaboration of the UN Secretariat.



REFERENCE BOOKS IN HIGHER MATHEMATICS!

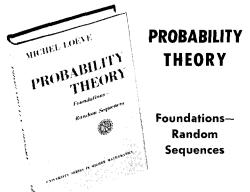
The University Series in Higher Mathematics

Coming in APRIL:

General Topology

By John L. Kelly, Ph.D., Univ. of Calif. A systematic and thorough coverage as a background for modern analysis, including terms, appendix, index. Probably \$6.50

NEW and RECENT:



By Michel Loève Professor of Mathematics, Univ. of California From the intuitive background of the concepts and problems through to the present state of probability theory. (1955) 515 pages, \$12.00

Measure Theory

By Paul Richard Halmos, Assoc. Prot. of Math., Univ. of Calif. \$6.25

Lectures in Abstract Algebra Vol. I—Basic Concepts Vol. II—Linear Algebra

By Nathan Jacobson, Prof. of Math., Yale Univ. Vol. I, \$5.50; Vol. II, \$6.25.

Introduction to Metamathematics

By Stephen Cole Kleene, Prof. of Math., Univ. of Wisconsin. \$8.75

An Introduction to Abstract Harmony Analysis

By Lynn H. Loomis, Assoc. Prof. of Math., Harvard Univ. \$5.00

Analytic Theory of Continued Fractions

By H. S. Wall, Prof. of Math., University of Texas. \$8.00

250 4th Ave., VAN NOSTRAND ^{New York} 3, N. Y.

Please Mention Special Libraries When Answering Advertisements

CLASSIFIED ADVERTISING

Positions open and wanted -50 cents per line: minimum charge \$1.50. Copy must be received by 5th of month preceding month of publication. Address Executive Secretary, Special Libraries Association, 31 E. 10 St., New York 3, N.Y.

POSITIONS WANTED

LIBRARIAN, 5th year degree, with varied experience in book publishing; 6 years library work, including 2 years cataloging plus indexing, 2 years supervisory capacity; mature and dependable, desires location in or near Chicago but will consider New York City, A19

WOMAN, B.S. in chemistry, experience in charge of small chemistry library. Desires library or technical-clerical work in Philadelphia-Wilmington area. A16

YOUNG woman with library degree desires position in business division of medium-size public library or in business, industrial or newspaper library, South or West. A17

ART LIBRARIAN REFERENCE LIBRARIAN

Career positions in New York advertising agency library for women 28-35 with Library Science degrees and business and/or advertising library experience. Must have initiative, resourcefulness and ability to work well with people. Salary commensurate with qualifications. Liberal benefit program.

Reply Box No. A18

EDITOR

for

SPECIAL LIBRARIES

Write

Do Not Phone

Special Libraries Association 31 E. 10th St., New York 3, N. Y.

for

Application Procedure

CALENDAR

MARCH 18 SLA Oak Ridge (Tennessee) Chapter. Training Building, Oak Ridge Institute of Nuclear Studies. Mrs. Helen Mason, Oak Ridge National Laboratory Library and Bernard Foy, libra-rian, TVA, Knoxville, Tenn., speakers. MARCH 22 SLA Cleveland Chapter. Case Institute of Technology. Workshop Session on Library Planning. MARCH 22 SLA Washington, D. C. Chapter with Science-Technology and Map Groups. Coolidge Auditorium. Hugh Odishaw, "International Geophysical speaker. Ÿear." **MARCH 24-25** National Microfilm Association. Boston. Sheraton Plaza Hotel. Annual Meeting. APRIL 2 SLA Philadelphia Council. Lancaster. Armstrong Cork Co. All-day Field Trip. APRIL 12-15 Catholic Library Association. Mil-Wisconsin. Annual Conferwaukee. ence. APRIL 14 SLA Connecticut Valley Chapter. New London. Lighthouse Inn. Afternoon tour of Fort Trumbull. Dinner and evening program. APRIL 16 Council of National Library Associa-tions. New York City. Bar Association, 42 West 44th Street. APRIL 20 SLA San Francisco Bay Region Chapter. Oakland. Lansing Library Service. 2538 Telegraph Street, Oakland, California. APRIL 21 SLA Montreal Chapter. Cercle Universitaire. Dinner Meeting. Mrs. H. N. Fieldhouse, Dean of the Faculty of Arts, McGill University, speaker. JOBS IN FAR AWAY PLACES Opportunities available to Librarians in Alaska, Europe, Japan, Korea, and Oki-nawa. If you are a single woman, U. S. citizen, age 21-40, have a degree in library science from a school accredited by the A.L.A., and one year of professional li-brary experience, you meet the minimum requirements. Salaries \$4205 to \$5060 plus housing. For further information write:

Special Services Recruitment Section **Overseas Affairs Division**

> Office of Civilian Personnel Department of the Army Washington 25, D. C.

Please Mention Special Libraries When Answering Advertisements MARCH, 1955

143

PUTTING KNOWLEDGE TO WORK A New Reference Tool for Business and Financial Libraries SUBJECT HEADINGS FOR FINANCIAL LIBRARIES Based on the subject headings used by the outstanding financial libraries of the American Bankers Association. Columbia University School of Business, Federal Reserve Bank of New York and Standard and Poor's Corporation. Compiled by a committee of the Financial Division of Special Libraries Association under the chairmanship of Janet Bogardus, Librarian, Federal Reserve Bank of New York. 1954 100 pages \$5.00 Order from SPECIAL LIBRARIES ASSOCIATION New York 3, N. Y. 31 East Tenth Street

THE BLETCHER-ANCHORS COMPANY

Printers and Publishers

FIFTH FLOOR . . . REA BUILDING 704 SECOND AVENUE PITTSBURGH 19, PENNA.

Please Mention Special Libraries When Answering Advertisements

"A splendid biographical tool in a subject area of great importance to the nation . . ."

THE NEW 9TH EDITION

AMERICAN MEN OF SCIENCE

VOL. I: THE PHYSICAL SCIENCES

A Science Press Publication Edited by Jacques Cattell

From a review in the *Library Journal* by Joseph C. Shipman, Librarian in Kansas City, Missouri: "All previous editions were published in one volume. The 9th edition will contain more than 90,000 names (compared to the 8th, which had 50,000) and will appear in three volumes, covering Physical Sciences, Biological Science, and Social Science. The first volume (Physical Sciences) includes scientists in the Physical, Mathematical, Chemical and Geological Sciences. Where field is overlapping, scientist has had a choice of volume, and 'see reference' appears in other volumes. Biographical data include full name, date of

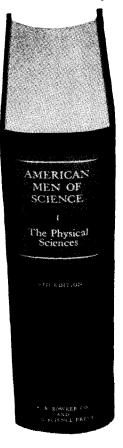
Coming:

Volume II: The Biological Sciences expected Fall 1955 Volume III: The Social Sciences expected Spring 1955

R. R. BOWKER COMPANY, 62 West 45th Street, New York 36, New York

Please Mention Special Libraries When Answering Advertisements

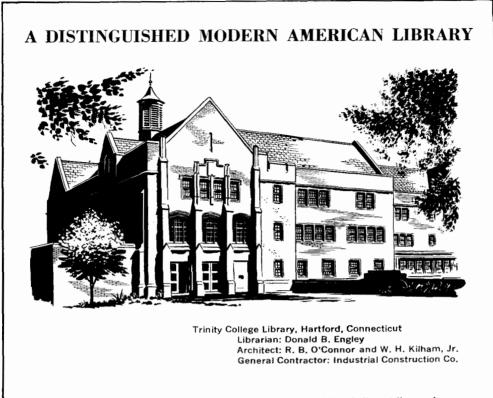
now ready!

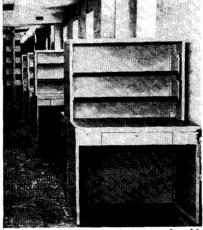


membership in professional societies, honors, and special fields of research. The paper, size and boldness of type are much superior to previous editions. A check reveals that older scientists, not listed in previous editions, have been added, as well as the biographics of younger men. A splendid biographical tool in a subject area of great importance to the nation. An expensive, but essential reference work for all large college, university and public libraries." 2180 pages. \$20. net postpaid.

birth, marital status and number of chil-

dren, education, professional positions,





VMP carrel units give privacy, comfortable working conditions at low cost.

The new Trinity College Library, housing the College's collections and the Watkinson Library formerly located in downtown Hartford, combines modern, functional planning in a collegiate Gothic quadrangle.

VMP stacks were selected throughout for housing the two research collections which total 365,000 volumes. In all stages of planning, VMP's specialized experience in supplying metal bookstacks proved its value.

Call on the VMP Library Planning Service for advice on the use and specifications for multi-tier or free-standing bookstacks, shelving, carrel units, book conveyors. VMP also makes MOBILWALL movable steel partitions, steel doors and frames. Write for complete VMP library bookstack equipment catalog, Dept. SL-3.



Subsidiary of Chesapeake Industries, Inc.

Please Mention Special Libraries When Answering Advertisements