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Special Libraries

Official Journal of the Special Libraries Association

September 1941

Proceedings Issue II

● PARTIAL LIST OF ORGANIZATIONS WITH SPECIAL LIBRARIES ●

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Indexed in Industrial Arts Index and Public Affairs Information Service

The Good Neighbor Library

Edited by Frank Henius

The Good Neighbor Library is planned to consist of twenty handy volumes giving a thorough and complete conspectus of the countries of Latin America. Each volume gives for a single nation an outline of history; constitution and form of government; ethnography, or nature and distribution of peoples; geography and climate, including scenic as well as economic features; data of population, both urban and rural; occupations and industries; exports and imports; transportation; travel features; education; and the sociological aspects of each republic that interest us in the United States, and with which we must acquaint ourselves if we are to attain to that mutually sympathetic understanding which is the only reliable basis for lasting friendship among the neighbors of this Western Hemisphere. Among such cultural topics are educational system, place of women, and the special relationship of each country to us in the United States.

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Edited by Frank Henius, author of *ABC of Foreign Trade* and *Latin American Trade—How to Get and Hold It*—foreign trade counsellor in Latin America to some of our largest industrial organizations, all volumes of the *Library* are to be uniform: $4\frac{3}{4}$ " x $7\frac{3}{8}$ " in size; 160 pages, with index, map and eight plates. The *Library* is being compiled in alphabetical order, with the ABC powers, Argentina, Brazil and Chile to be issued first.

Cloth, 160 pages, with index, map, and eight plates. Each, \$1.50.

ARGENTINA: *Ready in October.*

BRAZIL and CHILE: *Both ready December first. Others to follow.*

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Special Libraries

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September, 1941

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Mental Hygiene—Trends and Aids¹

By CLARA BASSETT

Senior Mental Hygienist, Bureau of Mental Hygiene, Connecticut State Department of Health, Hartford, Connecticut

THERE are, of course, varied opinions about how the field of mental hygiene should be defined and Dr. Frankwood Williams once startled everyone by writing a paper expressing doubt as to whether such a thing as "mental hygiene" even existed. I personally think of mental hygiene as that growing body of knowledge and techniques which may be used for the following purposes:

The understanding of the evolution, organization and functioning of personality from birth to old age and death;

The promotion of mental health as an expression of the highest development and integration possible at each age level, of the physical, emotional, mental and social powers of personality;

The study, treatment and prevention of emotional and behavior disorders;

The efficient organization and operation of community facilities which may be necessary for the achievement of these aims;

The progressive but radical modification of social institutions and agencies, which vitally affect the mental health of large groups, so that the principles, methods and practices in use may more successfully conserve mental health and contribute to the growth of personality.

Any knowledge of mental hygiene, which we may have achieved, is of very recent origin, as it is only within recent decades that the scientific approach has been focused on these problems. The mentally ill were for many centuries regarded as possessed of demons and were treated by magic, scourgings and various weird concoctions. Many thousands were imprisoned, tortured and executed as witches between the 15th and 17th centuries. For many years in this country, the harmless ones wandered about as tramps, beggars and vagrants or were cared for at home, while the troublesome ones were locked in attics or cellars, chained in kennels and cages or punished as criminals with pillory, whipping, gallows and jail. Later on, great numbers

found their way into the newly established almshouses and workhouses.

ORGANIZATION OF MENTAL HYGIENE

Mental hospitals

The first hospital treatment for mental patients was offered by Pennsylvania Hospital, opened in 1756 by the Society of Friends, where a few mental patients were cared for in the cellar. The first public institution exclusively for the care of mental patients, the Eastern Lunatic Asylum, was opened by the Virginia State Government at Williamsburg, Virginia, in 1773 and the first private hospital, also organized by the Friends in Pennsylvania, opened in 1817 with a new emphasis on treatment by country living, kindness, light occupations, reading, music and contacts with friends and relatives.

At the present time, there are about 257 state supported institutions for mental disorders in the country, the number provided in individual states ranging from one general institution in Arkansas, Montana and Nevada, to 17 in Massachusetts and 31 in New York. There are also about 247 private sanitariums for mental disorders for those whose families are able to pay. About 11 states do not yet have any such private institutions. In these institutions, accommodating over 606,000 patients, there are over 100,000 new admissions each year and the total mental hospital population is increasing at about the rate of 15,000 a year. In New York State, where mental hospital and clinic facilities and statistics are more adequately developed, it has been found that about 1 out of every 22 persons spends some part of his life in a mental hospital. Although there are about 20 different diagnostic classifications for mental diseases, three categories include the great majority of newly admitted patients: dementia praecox, 20%; manic-depressive psychoses, 12%; and patients with organic psychoses, largely due to syphilis, arteriosclerosis, deteriorations due to old age and alcoholism, 45%.

In all these institutions, patients who cannot be cared for in the home and community receive temporary or prolonged study and treatment, and, if

¹ Address before the Biological Sciences Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 18, 1941.

necessary, permanent custodial care and training. The quality and standards of institutional care and of study and treatment vary greatly from state to state, and from institution to institution, depending on public interest, political conditions, the size of appropriations the legislative bodies are willing to make for the maintenance and development of its institutional program and the qualifications and leadership of hospital executives. Some mental institutions are great scientific and educational centers with all the most modern facilities for physical and mental diagnosis and full utilization of all known types of therapy, research, professional and community education and preventive community services, while others offer only the barest essentials of meager custodial care.

In addition to these institutions, a few of the states, such as New York, Massachusetts, Michigan, Iowa and Colorado, operate a State Psychopathic Hospital, where emphasis is placed on research and experimentation, professional training and the study and treatment of younger patients with acute mental disorders, likely to clear up within a comparatively short time. These hospitals are usually affiliated with the State University and cooperate with the various departments in undergraduate and graduate educational programs. A few metropolitan city and county governments operate their own psychopathic wards and mental hospitals.

About 16% of the patients admitted to mental hospitals make good recoveries and an additional 26% recover sufficiently to be discharged as improved. It is estimated that about 40% of these mental conditions requiring hospitalization are preventable, if present scientific knowledge were fully utilized and widely applied. Some of the therapies now used in mental hospitals include medical and surgical, psychiatric and psychoanalytic treatment, psychological testing, occupational and recreational therapies, various physiotherapies, and social service in hospital, home and community. More recently there have been great improvements in the treatment of venereal diseases, in the electric and malarial fever treatments for general paresis, in the insulin shock treatment of dementia praecox and in the experimental use of various modern drugs. Glandular and vitamin deficiencies are also being studied and treated.

Mental health clinics

Only gradually did psychiatry emerge from the cloistered confines of the remotely situated mental hospital, with its preoccupation with the treatment of end results. Shortly after 1900, out-patient clinics for adults in the community increased in number, the community supervision of paroled patients was first established and Dr. Adolph Meyer helped in

diverting attention from the long concentration on laboratory study of the brains, spinal cords and diseased tissues of dead patients to the intensive detailed study of the whole life history of individual living patients. It then became possible to trace the evolution of personality from infancy to the present; to see quite clearly the unhealthy emotional influences in the family, school and community which played upon the patient during earliest years, the first symptoms of maladjustments in personality and behavior and the destructive experiences which intensified these deviations. This new approach, together with the psychoanalytic contributions of Freud and his disciples, stimulated interest in early treatment, in hope of cure and in the possibilities of prevention. In 1904, Dr. William Healy began his pioneer work in the intensive study of juvenile delinquents in the Juvenile Court of Chicago, resulting in the later publication of his splendid book *The Individual Delinquent*. Psychiatric clinics for children also increased in number after 1912. Exploratory clinical studies were soon made of samplings of delinquents in courts, jails, reformatories and prisons, of the clients of nursing, health and social service agencies and institutions, of children of preschool, elementary, high school and college levels and of workers in industry. It soon became evident that almost everyone presents some minor or serious problems of mental health, some personality and behavior distortions or disorders, which may be helped by study and treatment from the mental hygiene approach. A great many of these handicaps and deviations could be prevented if it were possible to achieve a widespread knowledge and application of the principles of mental health in family and school relationships in particular and the community in general. The need for treatment of the earliest symptoms of maladjustment resulted in 1922 in the 5-year demonstration child guidance clinic program financed by the Commonwealth Fund and conducted under the auspices of the National Committee for Mental Hygiene. This led to the establishment of full-time child guidance clinics in a number of the larger cities of the country. This program also established the clinical pattern of cooperative study by three examiners: the psychiatrist, a physician with hospital and clinical training and experience in the study and treatment of nervous and mental diseases and of personality and behavior disorders; the clinical psychologist trained in the application of psychological, educational and vocational tests; and the psychiatric social worker, who through community contacts with family, relatives, friends, employers and social institutions and agencies, obtains the personal and social history of the patient and his problems. Most organized activities in the mental hygiene field are carried on by members of these three professional groups.

In 1936, there were about 642 community mental hygiene clinics in the country, the majority of which function on a part-time basis. These clinics are operated by mental hospitals and state departments or bureaus of mental hygiene, by general hospitals and general medical dispensaries, by community chests, by social service, nursing and health agencies and institutions, by educational systems or institutions and by courts and institutions for juvenile and adult delinquents. The volume of this service is seriously inadequate to the needs in almost all communities. While there are many mental health clinics in such states as New York, Massachusetts, Pennsylvania and New Jersey, there are still about 13 states having no community mental health clinic, 6 states with only 1 each and 2 states with only 2 such services for the entire population of the state. While a considerable number of the larger cities have some clinical service, there are a great many rural and small town areas which cannot afford the cost of a clinic and where the state will ultimately have to provide a clinical program if the mental health needs of the population are to be met. A *Directory of Psychiatric Clinics* in the United States is published from time to time by the National Committee for Mental Hygiene.

The types of therapy used in clinics vary from clinic to clinic. As mental hygiene is in a very youthful stage as a science, there are still many widely divergent schools of thought. There are ardent disciples of Freud, Jung, Adler, Rank and Alexander. There are devoted followers of Drs. Adolph Meyer, William Healy, Charles Macfie Campbell, William A. White, and others who utilize any or all approaches as indicated in the study and treatment of patients. There are those who think all mental disorders have some known or unknown physical basis and others who think all physical disorders ultimately derive from mental and emotional states and conscious or unconscious desires. Some work at the level of conscious thought and emotion, while others delve into the deepest and most hidden realms of the subconscious.

Among the therapies used in clinics may be found the following:—treatment of physical disorders and defects; habit retraining; the use of explanation, suggestion, education or reeducation and the development of insight on subjects or experiences causing conflicts in the patient's mind and emotions; removal from home and neighborhood when these influences are too hopelessly destructive and not amenable to change or the improvement of home relationships and environmental influences where possible; aid in making group, recreational, educational or employment adjustments or readjustments; psychotherapy, psychoanalysis, attitude and relationship therapies with patient and nearest relatives; the development of understanding of patient's

problems, feelings and needs on part of those involved in his life; the use of all community health and social services as needed by the patient or his family; and the specific treatment of special problems such as reading or speech defects, deficiencies in special school subjects, or motor incoordination. More recently considerable emphasis has been placed on the use of play and play materials in both diagnosis and treatment. Interesting experiments have been made in study and treatment in the use of painting, clay modeling, puppets, active and passive dramatics, rhythms and the dance and various other arts and handicrafts. These encourage release of tensions and the symbolic expression of conflicts, preoccupations, emotions and traumatic experiences.

State Departments of Mental Hygiene

In several states, such as New York, Massachusetts, Pennsylvania, New Jersey and Maryland, state governmental bureaus or departments of mental diseases or mental hygiene have been established for the integration, supervision and development of the state mental institutional program, for the development of a unified plan for the community clinical program and for the promotion of mental health through the education of the general public.

Federal Government

Altogether, about 31 mental hospitals are now operated by various departments of the United States Government for the study and treatment of Veterans of the World War, enlisted personnel of the Army and Navy, federal prisoners, employees in certain federal services, the population of the District of Columbia, American Indians, and Alaskans. Psychopathic wards in government general hospitals and neuropsychiatric consultation and clinics are also provided by some federal departments for their beneficiaries.

A Division of Mental Hygiene functions in the United States Public Health Service and among other activities provides medical and psychiatric services in about 27 Federal penal and correctional institutions and in about 10 Federal Courts, operates 2 institutions for narcotic addicts and research in drug addiction and one for defective delinquents. It is also giving leadership in the improvement of public mental hospital programs and stimulating interest in mental hygiene activities as an integral part of city, county and state health departments.

In the United States Office of Education, the Division of Special Education provides an advisory service and publications on the education of exceptional children showing either physical or mental deviations from the normal. The United States Children's Bureau also issues studies and educational publications relating to mental hygiene. Valuable

statistical documents and analyses on the work of hospitals for mental diseases, institutions for the feebleminded and epileptic, juvenile courts and institutions for delinquent children and adults are regularly published and distributed by the United States Census Bureau.

Societies for mental hygiene

Mr. Clifford W. Beers founded the first Society for Mental Hygiene in Connecticut in 1908 and the National Committee for Mental Hygiene in New York City in 1909. These are private, voluntary associations of persons interested in improving the care of patients with nervous, mental and behavior disorders and the prevention of such conditions through study, research and professional and lay education. At present there are about 25 state, 17 county and 24 city societies or committees for mental hygiene, forming a nucleus of information and interest in these geographical areas. A few societies or committees have a full-time, paid staff and an active program, some depend on the part-time effort of individuals or committees, and others are fairly passive and quiescent.

Before the present war there were National Societies for Mental Hygiene in 30 different countries and in 1930, the First International Congress on Mental Hygiene, attended by more than 3000 representatives of 50 countries, was held in Washington, D. C. Since the depression and the intensification of the war fever, the interest and public and private funds which might have gone into the wider promotion of mental health, have been largely diverted into other more glamorous, more loudly advertised or emergency programs. Mental hygiene programs have therefore moved along on something of a plateau, maintaining themselves without much reduction but not experiencing the great expansion which otherwise would have undoubtedly occurred. Mental health seems a matter of minor importance when economic systems collapse and when millions of men are engaged in world wide slaughter. Of course, nothing could more effectively indicate the vast need for mental hygiene and health than this almost cosmic insanity of destruction which has seized the race and the power and domination which a few mentally deranged men have come to exercise over great subservient masses.

INTEGRATION OF MENTAL HYGIENE IN OTHER FIELDS OF ACTIVITY

Great strides have already been made in the integration of psychiatry and mental hygiene in medicine and in health services. Courses in these subjects and training and experience in psychopathic wards, mental hospitals and clinics are now provided for medical students. Exploratory studies and some

psychiatric consultation on the mental health problems of students of medicine have been made. In some general hospitals and clinics, psychiatric consultation is frequently used in the study of patients with physical complaints and physical disorders. In a number of centers, pediatricians are being trained in child psychiatry. So many studies have now been made of the mental and emotional components of various physical disorders that a new outlook of psychosomatic medicine seems to be developing. Many schools of nursing include a period in mental hospital and clinic in their training program and about a dozen public health nursing agencies have employed a psychiatric social worker for mental hygiene educational and consultation work.

Mental hygiene has been included in the curriculum of almost all schools of social work and has come to influence the thinking and practice throughout the whole field of social welfare, in family and children's agencies, in juvenile courts and institutions for dependent, neglected and delinquent children, in courts and institutions for adult delinquents, agencies for the care of the handicapped and in some group work and recreational programs.

A few churches have established part-time psychiatric clinics and a few ministers have studied mental hygiene and apply it in their approach to the problems of their parishioners. A Council for the Clinical Training of Theological Students places each year a number of students in mental hospitals for a period of training and experience.

Two or more business concerns have employed full-time psychiatrists for personnel work with employees, a large number have employed psychologists for this purpose and at least a few others utilize the services of private psychiatrists when needed.

Child study and parent education programs have absorbed and widely utilized mental hygiene content in their activities. Recreational and group work leaders are becoming more interested in the observation and individual adjustments of children and adults in group recreational and avocational programs, as well as in the mental health values of these activities.

It is difficult to say to what extent modern trends in education have resulted from a steady infiltration of mental hygiene knowledge and experience, but certainly considerable progress has been made in remolding educational thinking and practice in the direction of mental health. A few psychiatric studies have been made of the personality and behavior problems of all children in kindergarten and first grade in selected elementary schools. The destructive effects of school failure on the mental health of young children has led in some schools to the elimination of rigid grades. Activity programs dominate in kindergartens and in some schools have even infected educational practices in first, second and

sometimes third grades. Thousands of school children with personality and behavior disorders have been studied in mental health clinics, resulting in many publications throwing light on these problems. Analyses have been made of the relation between the teachers' attitudes and personality and the adjustment of pupils in the classroom. Truancy has been psychiatrically explored and the educational abilities and school experiences of juvenile and adult delinquents have shown the responsibilities and deficiencies of the educational programs in meeting the early needs of these children. Needs of the mentally deficient and retarded and of the superior and talented, as well as of children with physical diseases and defects have been brought to light by improved group and individual psychological and educational testing and school health services.

The visiting teacher, who is often a psychiatric social worker, has brought to the aid of the schools the case work and mental hygiene approaches to the study and treatment of problem school children. Increased emphasis is being placed on a closer relationship and cooperation between school and home and school and community. In about 19 cities, full-time or part-time child guidance clinics are conducted under the Board of Education and in all other communities where mental health clinics are in operation, a large number of the patients studied are referred to them by the schools. Recent titles of the year books of educational associations indicate the trends in thinking, even if practice may often lag far behind: *Mental and Physical Development*; *The Personality Adjustment of the Elementary School Child*; *Guidance in Education*; *Pupil Personnel, Guidance and Counseling*; *The Principal and His Community*; *Social Service and Schools*; *Mental Health in the Classroom*; *Fit to Teach*.

The emotional aspects of speech disorders, reading disabilities, left-handedness and impaired hearing have also been explored to some extent. Outlines and guides for teachers to aid them in the personality study of problem children in their classroom have been made available and the value of the accumulative school record for each child has been discussed.

While the permeation of mental hygiene in nursery and elementary schools has been rather hopeful, little progress has yet been made in the high schools of the country. There is much talk about student advising, counseling and guidance, but most of this is on a very superficial, educational level and, on the whole, one must say that high schools have this far kept themselves quite free of any mental hygiene contagion. The adjustments of the adolescent period are of vital significance to mental health and there are many mental hygiene studies and discussions of adolescence, but little practical application of this knowledge seems to

have been achieved as yet in our high school systems. One or two brief reports are available on an early 5-year program of psychiatric service in New York City high schools.

More progress has been made in the use of mental hygiene and psychiatry in the college and university. One or more full-time psychiatrists now function in the student health services in about 8 or 9 colleges and universities and psychiatric consultants are occasionally used by a number of other institutions. A number of psychiatric studies are available on the personality and adjustment problems, the sexual problems and the prevalence of psychoses among college youth and graduate students. Some use of mental health clinics and mental hospitals is being made by Departments of Education, Psychology and Sociology in the general education of students.

It is unfortunate that not as much headway as one could wish has been made in the integration of mental hygiene in teacher training institutions. So far as I know, only one teacher training institution operated for a time a child guidance clinic under its auspices. Many of the courses in such institutions on physical hygiene, psychology, guidance and educational sociology remain on quite an academic level and in few places is any practical field experience offered for student teachers. Physical examinations and psychological and educational tests are used in some teacher training institutions as an aid in selecting students for admission and a little rather innocuous experimentation is being done in the case study approach to student problems. The mental hygiene movement can rightly be charged with long neglect of this most important field, the mental hygiene education of teachers in training. In many communities, extension courses in mental hygiene and child guidance are regularly or occasionally offered for the training of teachers in service.

LITERATURE

Books

There is an increasing number of books published each year on mental hygiene and related subjects. At the present time these books may be classified under the following categories:

General, introductory and historical books surveying the field;

A few biographies and autobiographies on persons who have made some notable contributions as well as a few autobiographical accounts by former mental patients, delinquents, criminals, prostitutes and alcoholics;

Books for professional, and lay persons on nervous and mental diseases, psychology, psychiatry, psychoanalysis and mental deficiency;

Books on the more positive and preventive aspects of mental hygiene, such as mental health principles, marriage, family relationships, parent-child relationships, infancy and the pre-school child, the school age child, adolescence and a few relating to adjustments in middle life and old age;

Books on juvenile and adult delinquency, as studied in the community, in juvenile and adult courts, in jails, reformatories and prisons, the legal aspects of mental disorders, and possibilities for the prevention of delinquency and crime;

Books on the relation or application of mental hygiene to various other fields such as medicine, nursing, social work, education, religion, industry, and community organization and practice;

Books on the mental hygiene aspects of special or related problems such as alcoholism, syphilis, encephalitis, sterilization and the normal and pathological expressions of sex;

Books on the organization and administration of institutions for mental disorders, on diagnosis and the various special therapies and reeducational procedures, on psychiatric and child guidance clinics and on psychiatric social work.

A mile-stone was probably reached in about 1935, in the emergence of mental hygiene literature from the remote and esoteric realms of the professional field, when Dr. Karl A. Menninger's book *The Human Mind* was widely distributed by the Book-of-the-Month-Club. It would have also been a great contribution had his second book *Man Against Himself* obtained as wide a reading. Little genuine progress in mental hygiene developments can be expected in any community until an adequate range of mental hygiene publications is made readily available to professional and lay persons through local library facilities.

A book list of recommended reading in the field of mental hygiene is distributed free of charge by the National Committee for Mental Hygiene.

Periodicals and pamphlets

The periodical literature in the field of mental hygiene is of great importance. In these journals may be found reports on pioneer studies and experiments in a great variety of areas and subjects which have not yet reached the stage of development where material on the topic is available in book form. At least one library, the National Health Library, catalogs all significant articles of this kind appearing in a wide range of journals and it is an invaluable resource in compiling bibliographies on the mental hygiene aspects of almost any specialized subject.

Among the important journals in the mental hygiene field are:—*American Journal of Psychiatry*, *American Journal of Orthopsychiatry*, *American Psychiatric Quarterly*, *Psychiatry*, *Archives of Neurology and Psychiatry*, *Journal of Nervous and Mental Diseases*, *American Journal of Mental Deficiency*, *Psychoanalytic Quarterly*, *Psychoanalytic Review*, *Psychosomatic Medicine*, *Mental Hygiene*, *American Journal of Psychology*, *Journal of Abnormal and Social Psychology*, the *Journals of Applied, Educational, and Social Psychology*, of *Criminal Psychopathology* and of *Criminal Law and Criminology*.

A current bibliography of 8 or 10 pages, listing significant articles on mental hygiene subjects is

published at the end of each number of the quarterly, *Mental Hygiene*. *Child Development* abstracts and lists bibliographical material on mental hygiene. Bibliographies on this and related subjects can sometimes be obtained from the National Committee for Mental Hygiene and the National Health Library and from the Library of the Russell Sage Foundation.

A brief but fairly comprehensive orientation article on many aspects and activities of mental hygiene may be found in the *Social Work Year Book* published by the Russell Sage Foundation.

The production of pamphlet material in the mental hygiene field for widespread and popular use is far from adequate and few helpful pamphlets are available on any vital mental hygiene subject. It is possible to compile a fairly long list but these must be selected from the list of pamphlet publications of a variety of agencies and associations such as the United States Children's Bureau, and Office of Education, American Association of University Women, Child Study Association, American Social Hygiene Association, American Medical Association, American Association of Social Workers and other miscellaneous sources.

ASSOCIATIONS

Various types of information, advice and assistance may be obtained from the following professional associations in the mental hygiene field: The American Board of Psychiatry, which certifies physicians as psychiatric specialists; The American Psychiatric Association, which includes the medical staffs of mental hospitals; the American Orthopsychiatric Association, on whose membership list are psychiatrists, psychologists, psychiatric social workers, educators and others concerned with community psychiatric and child guidance clinics and community mental health programs; the American Association on Mental Deficiency; the American Psychological Association; the American Association of Applied Psychology; the American Psychoanalytic Society; the American Association of Psychiatric Social Workers; and the American Association of Visiting Teachers.

The time will come no doubt when the principles and practices of physical and mental hygiene will be considered the first basic essential underlying all programs throughout the whole organization of human society. They also will be among the most important subjects in the training of all professions and personnel responsible for dealing with human beings and their everyday problems. The principles of physical and mental hygiene should be known and practiced so far as possible in the daily life of the entire population of the country. The job before us is a huge one and may look quite hopeless at present, but no decent human society will ever be possible until this goal is achieved.

Patients' Libraries¹

By MILDRED SCHUMACHER

Librarian, United Hospital Fund of New York, New York

PATIENTS' libraries have been in a somewhat doubtful position as the library profession has been reticent in developing the field and the hospital world has been tardy in allowing the necessary funds for adequate development. It has not been until comparatively recent years that the two have joined forces.

In the development of patients' libraries the viewpoints of both hospital and library have had to be taken into consideration; the library must adapt service to hospital routine and the hospital will have to cooperate in making certain adjustments. The usual procedure is for library patrons to go to the library; in the hospital field this has to be reversed and the library goes to the patrons. Likewise, the hospital staff must accustom itself to the library truck being in the wards. It's surprising how many nurses on hospital floors make the librarian feel as if she were treading on forbidden ground when she wheels her truck into a ward, and there are hospitals that will not allow the book cart to be taken into the wards. The librarian must park it out of the way in the hall and carry the books to the patients. Hospital libraries, however, have progressed far since a superintendent of an insane hospital wrote in his report of January 1862, that among other things the Amusement Fund would establish "libraries for Sunday reading." In covering this broad subject, patients' libraries, I am going to discuss two aspects of the work: the various ways hospitals receive library service and the types of patients that benefit by the libraries. My first consideration will be how the hospitals maintain patients' library service. Typical of any field of service that has sprung up over a large area, there are several methods and combination of methods in giving this service. These can be classed under three general headings: 1. Unit library; 2. Public library; 3. Volunteer service.

The unit system

The unit system is that in which the library is a department of the hospital and organized within the hospital. In its organization it resembles a very small public library and a trained librarian, a

member of the hospital staff, is in charge. She may have one or more trained assistants or she may have untrained helpers. There is also a library room where patients may come to browse and where the collection is cataloged and classified. A book budget is allowed and regular schedules for floor rounds are maintained. This unit library is generally found in the larger hospitals, especially state and county. An ideal example of this unit library is in a 360 bed hospital. Another feature of this type of library is that the assistants attend the weekly Social Service meetings when patients' case histories are presented. This is invaluable to the librarian in helping her to understand the patient's need, for in this way she learns many little things without having to use the trial and error method. If the patient has not gone beyond the sixth grade in school that fact immediately tells the librarian approximately his reading level. This service is not always one-sided either. Often the librarian gleans information in her casual book conversations that the Social Service Department is anxious to know.

Cooperation with public library

The second way in which hospitals receive library service is through cooperation with the Public Library. The Public Library assumes the responsibility of the book service to the hospitals by supplying books and personnel. The hospital service may be a part of the Public Library Extension Division or it may be a separate Hospital Department. Each hospital is staffed according to its needs. A large hospital will have one or more librarians assigned to it; a small hospital will be given service a certain number of days per week with one librarian assigned to two or more small hospitals. As to the book collections in this type of service the large hospital will have a number of volumes as a permanent collection, these will be supplemented by borrowing from the hospital collection at the library center and the hospital

¹ Address before the Biological Sciences Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 18, 1941.

division in turn will borrow from the main library collection. A small hospital may have a very limited number of books in a permanent collection, but is more apt to be made up wholly on a loan basis from the hospital division and changed at intervals. The small hospital will borrow many books from the central collection as requests come from the patients. In the large hospital the library will be organized similar to a unit library with a catalog and necessary equipment for running a small library. In the hospital of less than 250 beds where the books will undoubtedly all be drawn from the hospital division this set-up will not be necessary for the books are all on a loan basis and no permanent records such as shelf-list and catalog will be needed.

The advantages of this type of service are many. Professional service is made available. Every hospital ultimately has the resources of the Public Library at its disposal. The technical routine is cut down to a minimum for all cataloging, book ordering, binding, etc. are done at the central office eliminating the processes for each hospital. And it is the ideal service for the small hospital that can never support a unit library of its own. In fact it can be adapted to any size hospital and any size town. It also has a value besides the ones mentioned above of giving uniformity to the work and of keeping the librarian from becoming a mechanical robot pushing a cart, for she is kept in touch with other hospitals and with the library world. When one person is doing a job alone, as a hospital librarian often is, it is all too easy for her to become engrossed in her own little library forgetting that there may be developments outside that would be of value to her.

Volunteer worker

The third way in which many hospitals are now receiving library service is by the volunteer committee sponsored by the Women's Auxiliary or Social Service groups of the hospital. There is a growing tendency in the hospital world to make use of the volunteer in places where the administrator cannot afford a paid person. Then too hospitals have always held a particular fascination for the volunteer worker. Unfortunately the budgets of both hospitals and public libraries are very limited and neither have been able to develop library service in many hospitals where there has been a crying need of it. In such cases the libraries have either been totally neglected or have been developed by the volunteer.

Where the volunteer alone has developed the library one usually will find little or no organization, unless one of the volunteers has had library experience. The book collection will range from good

to very bad, with little discrimination as to what should be read in a hospital. *The schedule for book rounds will depend on the volunteer's engagements.* This is the usual status of the library when undirected volunteer service is used. But, as I have said, libraries and hospitals are notorious for inadequate budgets and we must face this fact whether we like to or not and we must also face the increasing use of volunteers. I think professionals, as a rule, frown on any volunteer activity. *But I do not think we should, or can, disregard the volunteer in this particular case for there are many capable persons who with direction and supervision can do work where it would not be done unless done by the volunteer.* What the hospital and library must do is to direct and supervise this type of worker. Such direction and supervision may well take the form it has in New York City where two Bureaus, the Central Library Bureau of the New York Junior League and the Hospital Library Bureau of the United Hospital Fund have been organized to train volunteers, help with technical organization, book selection, act as a clearing house for books and keep a continuous volunteer schedule. Many hospitals are now receiving library service under this system. As an example, let me give the instance of one hospital where there was no library service. A new superintendent came into the hospital, one who had come from a hospital having such service and who was sold on libraries for patients. The same old answer met his plans to establish one. No funds. He then presented the idea of the library to the Women's Auxiliary of the Hospital, asking for books and volunteers. He also contacted one of the Bureaus with the result that six volunteers were trained and books were collected by the beg, borrow and steal process. The librarian at the Bureau worked with the volunteers, weeded the results of the book campaign, (for it is surprising what some people consider good hospital material), cataloged the books and made a schedule so service could be given twice a week. The volunteers call on the Bureau when any questions arise they cannot handle. The Bureau has directed the organization and is acting in a supervisory capacity for the library. And the "tough little boys," whom the nurses said could not be handled, are asking for *Bambi, The Yearling and Just So Stories.* Here a volunteer corps is maintaining a satisfactory library service which would not be possible unless the volunteer did give her time. There are, however, types of hospitals, namely the mental hospital, where no attempt should be made in the use of the volunteers.

My next consideration is the types of hospitals that are serviced. The general public is very apt to consider library service suitable only for a person

with a broken leg or the patient recovering from a minor operation. It was but a few weeks ago that someone said to me, "Do patients in a mental hospital actually read books?" I have classed the hospitals in four divisions according to the general type of patient that is hospitalized in each: 1. the General hospital; 2. the Mental hospital; 3. the Sanatorium for tuberculosis patients; 4. the Veteran's hospital. Although they are all hospitals and the work in general is the same, the service does vary somewhat in each type.

Service in a general hospital

In the general hospital where the patients usually stay only for a short time, from a few days to the most a few months, it is found that reading matter is much in demand. The patient who has had surgery will not care about reading for the first few days, but will later welcome a book.

With the patient in the general hospital the recreational, diversional value of the book is of primary importance. Novels of all descriptions, western, love, adventure, best sellers, will head the list in popularity; travel and biography will follow, and books in the other classes of Dewey will be in demand but not to a large extent. The average patient in a general hospital wants a book that will hold his attention and still not require any concentration. A patient may feel ambitious and ask for a book on advertising. But it is a good policy to leave another book with this patient, maybe an Ellery Queen mystery. It has been my experience that the mystery will be read and the advertising book will not. In keeping a patient occupied with reading, the librarian is helping that patient recover. The literary value in the hospital library becomes of secondary importance and the hospital librarian must be as enthusiastic over a Zane Grey as she is over a James Hilton. Because of the short time the patients are in the hospital, there is a rapid turnover of library patrons, and the librarian often sees a patient only once or twice. She does not have the opportunity to know the patient nor does she have a chance to do a great deal in directed reading. She must be able to judge quickly and to help these patients to choose books they like.

Service in a mental hospital

The library service in a mental hospital is perhaps the most highly specialized of all the hospital libraries. And it is also one where the most interesting study of book therapy may be applied. In a mental hospital the large percentage of the patients will not read. The average is about 20%, although in some the percentage has gone as high as 39%. This may seem a very low percentage, but I shall quote a psychiatrist who said, "If you help one patient out of 200 in even a small way, the ex-

penditure for the library is more than justified." In a mental hospital the patient will be long term. Perhaps some will be there only a few months, but the time usually ranges somewhere between one year to fifty. This gives the librarian time to know the patient, follow the case and to work with the attending doctor. There is an unlimited opportunity for helpful, constructive reading with the mental patient.

Tuberculosis sanatoriums

The most interesting patients with whom to work are those in the tuberculosis sanatorium. Here the patients are hospitalized for a period of six months to several years thus giving the librarian an opportunity to know the patient and to give an individual service that is very gratifying to both librarian and patient. The patients will not only ask for the book on advertising but will study it and ask for more. Educational programs are often carried on during the patient's hospitalization and the librarian has cheerful avid readers for her clientele. While books have to be selected with an eye to unfavorable references to tuberculosis which might create an attitude of futility, there is not the need for the close censorship that there is in a mental hospital.

Service in veteran's hospitals

Veteran's hospitals have well organized unit libraries under the supervision of the Veterans' Administration Facilities. Here the service is a combination of the type given in a general hospital and the sanatorium.

Conclusion

Library service in hospitals is just beginning to be developed into a branch of library science. The fact that only one library school in the country offers a hospital library training course indicates the newness of this field in library service. The word bibliotherapy is still questioned as to whether or not it is an acceptable term. When a person is hospitalized his whole life changes for hospital routine is very unlike the average person's home life. He is almost completely cut off from the normal way of his life. A large percentage of the general public does read, however, and reading is a part of a person's normal life. It is also one of the few things that can be permitted within the hospital that will give a patient the feeling of not being entirely cut off from the outside world. If you are one of these very fortunate persons who has never been hospitalized, you cannot appreciate this feeling of being alone in a strange world, and at the same time having the added worry and anxiety created by the cause of your being there. Too many people are

(Continued on page 274)

The Training of Volunteers for Patients' Libraries¹

By MARY FRANK MASON

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PERHAPS nowhere in the entire country has hospital library service achieved so great a distinction as in Rochester, New York. This, according to Miss Julia Sauer, Head of the Extension Department of the Rochester Public Library, has been due to two women who believed it possible to organize a volunteer system for hospital library service. One, the wife of a prominent physician, found in hospital wards a place where books were needed and knew how to adjust herself to hospital conditions. The other has served on so many boards that she thinks always in terms of organization and has learned the power of concerted action to achieve any ideal. Quietly, but insistently, over a period of years, she continued to reaffirm the need for an organization of the heads of the library service in the various hospitals. As a result of her wisdom and effort the Rochester Hospital Library Council was founded.

Volunteers as literary pharmacists

The volunteers who are attracted to the field of library service are usually women of fine feeling and instinct. They are willing to give generously of their intelligence, time and vitality to bring diversion, courage and renewed interest in living to the sick, many of whom are stricken in spirit as well as in body. "Books," said the wise Doctor Rabelais, "are the medicine of the soul." Who, in lieu of the full-fledged librarian, is better able to act in the capacity of literary pharmacist to the patient than the intelligent volunteer, equipped with a liking for both books and people?

It has been very difficult to discover, where throughout the country, volunteers are rendering library service in hospitals, since there has been no census to my knowledge of such service, either in the hospital or in the public library field or among women's organizations. Rochester, New York, and Toronto, Canada, are noted for their hospital library

work in cooperation with the public library. In both, volunteers have participated and have been given some training. Johns Hopkins has volunteers assisting the patients' librarian and undoubtedly the same is true in many other large hospitals.

In 1938 the New York Junior League was stirred by the discovery that not a single one of the city's great hospitals employed a full-time trained librarian for providing adequate book service to patients. As a result a training course consisting of a series of lectures for volunteers was launched under the direction of a professional librarian. Then in 1939 the League established a Central Bureau for Hospital Librarians with a supervising librarian in charge to promote the development of library service in the hospitals of the city area. A central book collection was organized for distribution to hospitals agreeing to cooperate with the League. This collection operated on a loan basis in the same manner as an extension service would from a public library. During the past two and one half years the Central Bureau for Hospital Libraries has furnished books and professional advice to nearly 20 hospitals interested in establishing patients' libraries under volunteer management. As a result of the stimulus given to the movement by the League's Central Bureau, two hospitals have acquired full-time librarians and two others have part-time professional service. Volunteers continue to assist the librarians in these hospitals. Another indication of quickened interest within the past few months is the establishment of another hospital library bureau at the headquarters of the United Hospital Fund with a professional librarian as director. The promotion work of these two bureaus has been accomplished through the zeal and devotion of out-standing volunteers who have applied remarkable organization ability in furthering the development of the hospital library field. Since the New York Public Library is so handicapped by lack of funds that it cannot service the city hospitals in its domain, we assume that volunteer service will be needed for some time to come. It will doubtless take more than a couple of years to develop patients' libraries in the approximately one hundred hospitals in Greater New York, even in view of the extension service being rendered to city hospitals in Brooklyn and Queens by the public

¹ Abridgment of an address before the Biological Sciences Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 18, 1941.

libraries there. With such a prospect facing us the training of volunteers continues to be a responsibility to the community and a challenge to the library profession.

Drawbacks to volunteer service

The drawbacks to volunteer service are obvious. Number one is the time element. Rounds to patients with book carts are made generally about twice a week. The volunteer sees the average patient three, at the most, six times in the course of three weeks, and then for only a few minutes, so has little time to become well acquainted with him, to find out his needs, to discover what is troubling him and what are his reactions to the books given him to read. Secondly, she is rarely qualified to prescribe a reading menu (and never in a psychiatric ward) because of her lack of knowledge of books and her inexperience in tapping the resources of a book collection covering general literature. Because she has been accustomed to reading those of her own choosing, she is not equipped with the technique of selecting books based on the reading level of the patient. She has to learn to read books other than those she likes, in order to discover what the patient wants and why. Also, when the volunteer librarian has a little money to spend on new books she is apt to rely on her own judgment; to base her selection on advertisements of best sellers or on bargain sales rather than to be guided by book selection aids recommended by the library profession.

Selection and training of volunteers

Lectures on library science, business ethics, bedside manner, dependability, punctuality, adaptability to hospital procedures and personal relationships can only register if we are fortunate in securing the right type of volunteer. Granted that the volunteer will not possess all of the educational requirements a librarian must possess, she should measure up to *all* of the personal requirements. She should be a person of good sense, sympathy, poise, and understanding, one who likes people *and* books. An endowment of imagination and intuition are accompanying assets. Many a volunteer has had more worldly advantages than the schooled librarian, and accordingly has more *savoir faire*. Because of all these factors the librarian should think well of the volunteer's possibilities and try to provide the kind of stimulus and guidance that will make her a valuable hospital library aide.

Following careful selection then, the next obligation is to provide some theoretical as well as practical

training for the hospital library volunteer before she starts making book rounds in a hospital. A course of twelve lectures is given in Rochester by the Civic Council and since 1938 in New York the Central Bureau for Hospital Libraries of the New York Junior League has also given a course of twelve lectures. Beginning experimentally this group of twelve lectures offered by the League has grown until the subjects now cover the volunteer's place in the hospital, the volunteer's relation to the patient's reading and various phases of such reading. The speakers who have contributed to this lecture program are all of them outstanding in their respective fields. Heads of social service departments in various hospitals and directors of nurses have contributed their observations on the function of the librarian in relation to the patient in a number of round table discussions. Hospital administrators have also given their practical observations on book service to patients. Children's librarians come to talk about juvenile books for hospital use, and Mary Gould Davis conducts a special series of lectures on story telling. Anne Eaton has covered books for adolescents. Jennie Flexner has indicated the approach to the patient who needs special advisory service, and May Lambertson Becker has stimulated everyone with her delightful reconnoitre of books for "Solid Solace." Miss Agnes Hansen, vice director of the Pratt Institute School of Library Science, gives a lecture on book reviewing. In addition there have been technical lectures on the organization of a hospital library, simple cataloging, etc., the care and repair of books and circulation methods and records.

Need for a Hospital Library Council

In order to combine community with professional responsibility for volunteer library service, I should like to recommend the establishment of a Hospital Library Welfare Council in every community where volunteers are rendering hospital library service. Such a council would consist of representatives of the hospital administrative staff, the medical profession, nursing staff, volunteer organizations and the library profession. Rochester already has such a council and is leading the way toward further developments. The Hospital Library Council would be responsible not only for outlining a course for training hospital library volunteers, coordinating various agencies and promoting public relations, but would also provide a system for recruiting, registering and investigating volunteer service and evaluating it periodically.

Collection And Use Of Statistics¹

By MARY ETHEL JAMESON

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THIS is an era of statistics and statistics have certainly come of age. The derivation of the word is "state affairs" and most state affairs now depend to a great extent on statistics for guidance.

The study of state affairs was first listed as a college course in 1660 at the University at Helmstedt. Gottfried Akenwall is called the Father of Statistics, as it was he who in 1749 first made use of the term. It is interesting to note that the problems which we call "statistical" were reported from the earliest times. In Egypt, in 3050 B.C., the progress of the building of the Pyramids was recorded, the construction, the number of workers and the hours worked—hence, man hours. In Judea, a census of population and of the fighting men was taken in c.1500 B.C. as recorded in the Book of Numbers. China described her population in 2300 B.C. and Persia reported on real estate taxes collected. The census of Athens in 309 B.C. showed that there were 10,000 aliens in the city and 400,000 slaves. This ratio might still hold for Athens and for other historic cities were a census taken today. The enumerations of the Romans were always made with the greatest detail and precision. The Elzivers of Leyden in 1626 began the publication of a series of little books on various countries which were called *Respublica*. These were written by celebrated authors of the time and the contents give statistical information concerning the countries. These lovely little volumes are now collectors' items.

The population estimates of the United States reach back to colonial times; Virginia in 1607, South Carolina in 1700 and North Carolina in 1710. The British Possessions in North America had an estimated population of 1,085,000 persons in 1780.

Wars and statistics have a strange affinity and statistics seem to thrive on wars. The French Revolution gave great impetus to the gathering of information concerning the production, finance, resources and population of France. A department of Finance and Statistics was appointed under Neufchateau

in 1795. Napoleon believed that complete statistical information was as important in military strategy as in civil affairs.

World War I accelerated the interest in statistics and at the outbreak of the war, the United States had many statistical bureaus. These statistics however, were in no way coordinated. As Dr. Allyn A. Young pointed out in an article in the *Journal of the American Statistical Association*, December, 1917, "In this emergency we turned first to our existing stocks of statistical information and the current statistical output of our Governmental bureaus and have realized perhaps for the first time how woefully incomplete and inadequate our Federal statistics are . . . we are in a state of statistical unpreparedness. . . Like chemistry, physics, etc., statistical method has come to be an important tool in modern warfare. . . It is necessary to keep informed regarding the measurement of resources of men, money and goods."

Colonel Leonard Ayres was called upon to coordinate the statistics of the War Department and we all know what an excellent job he did. A few of the statistics which were lacking at the time of World War I were:

Index of production of the Federal Reserve—first published in the *Federal Reserve Bulletin* of March, 1922.

Dr. Carl Snyder's index of the volume of trade—first described in the *Journal of the American Statistical Association* of December, 1923 and now continued by the Federal Reserve Bank of New York.

The *Survey of Current Business* issued first time in 1921.

The *Harvard Review of Economic Statistics*—issued first in a large folio volume in 1919 by Person and Day and containing an index of trade and a trade barometer.

The Cost of Living figures of the Bureau of Labor Statistics and of the National Industrial Conference Board—first constructed in 1918 and worked back to 1914.

The *Annalist* Index of Business Activity—begun in 1926 and later combined with the *Axe-Houghton* Index and carried back to 1919 and later to 1850. This Index now appears in *Business Week*.

¹ Address before the Financial Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 17, 1941.

The Census of Distribution—first published in 1930 although a trial census of eleven cities was published in 1926.

Some preparatory work had been done on national income prior to World War I but Dr. Willford I. King's pioneer study did not appear until much later. Estimates of national income on the basis of concepts that are at all comparable with national income figures as are now accepted were not published until 1927; monthly data on income are a comparatively current development.

In 1916 the business man who wished to keep informed as to nationwide developments was well satisfied with a chart or table showing the pig-iron production, exports and imports, bank clearings, cotton production and the Dow-Jones averages, etc. He was of necessity satisfied as there were no well rounded pictures of coordinated statistics. Today the business executive knows that intelligent experimentation must be built upon tested facts and experience. For twenty-five years the National Industrial Conference Board has endeavored to act as American industry's agency for research in the broad field of administrative policy. The Board's first research report was issued in 1917 and dealt with workmen's compensation acts. Since that time the Board has continuously served as a clearing house for information concerning management and

statistical problems and techniques. It is constantly gathering and analyzing and synthesizing data concerning a multitude of problems on business, taxation, inventories, industrial relations, income and numerous other subjects. These results are published in studies and reports, road maps and monthly periodicals, in the *Economic Record* and in the *Management Record*. The information for these reports is secured through conferences, original research, answers to questionnaires and the experience of others. The cooperators who answer our questionnaires are located in all parts of the United States, in small factory towns and in large industrial centers. The studies in industrial relations represent the practice in all types of companies in order to be representative of prevailing practice throughout the country. Those who answer the questionnaires are assured of complete restriction upon the use of their names and for that reason we secure full response. Under no circumstances are the names of companies given out unless with full approval and consent of the cooperator.

The Associates of the Board in 1916 comprised but six associations. Now the Associates include banks, railways, advertising agencies, insurance companies, manufacturing enterprises, law firms, oil companies, trade associations, public utilities, labor organizations and many individuals who are interested in the work of the Board outside their business or professional affiliations.

The Part Of Fire Insurance Companies In National Defense¹

By JOSEPH T. MALONE

Assistant Secretary, Travelers Fire Insurance Company, Hartford, Connecticut

IT IS truly an honor to come before your distinguished group. We of the Fire Insurance business welcome such opportunities as this since they offer a means of giving expression to the aims and hopes of the various organizations which make up our industry.

In this critical period, business leaders have assumed a tremendous responsibility. The world at large looks to our nation's business for resolute

leadership in sustaining the democracies in their struggle for existence. Obviously, we should let nothing detract from the supreme effort to keep American industry producing and in that connection we should not permit the wastefulness of fire to delay our preparedness.

It is generally conceded to be a fact that there can be no sustained prosperity which does not take into consideration the general welfare of all of the many interests of our country. In other words, industry needs the support of agriculture and agriculture is dependent upon the success of industry. It follows that the prosperity of all business

¹ Address before the Insurance Group at the Thirty-third Annual Convention of the Special Libraries Association, Hartford, Connecticut, June 17, 1941.

and the welfare of the people of this country as a whole are inter-dependent. In speaking, therefore, on behalf of Fire Insurance organizations as a group, it is well to outline our general position and usefulness to other interests and to the country at large.

One of the outstanding thoughts in the minds of most of us in these trying times is the question of security. Business and industry are being judged by their social and economic usefulness. The Fire Insurance interests occupy an outstanding position from the viewpoint of security and social and economic usefulness.

Security cannot be attained without stability and it is a fact that the Fire Insurance business as a whole has a record for stability which is outstanding. This may not be generally realized, possibly because our business seldom achieves unusual recognition in the minds of the general public. During the first World War and in the period of readjustment immediately thereafter, the various Fire Insurance Companies rendered remarkable service in many ways, meeting every legitimate demand and assisting immeasurably as a stabilizing influence during a time when financial structures throughout the entire world were in jeopardy.

As it has often been stated, history repeats itself and we now find ourselves in a position somewhat analogous to other trying periods through which our nation has passed. As soon as it became known officially that a crisis had appeared, the leaders of our business offered to our National and State Governments complete cooperation and the benefit of the innumerable services which the Fire Insurance companies and their many sub-organizations are so admirably fitted to render.

Affiliated with and operating for the vast majority of our companies we find what we call Inspection and Rating groups composed of trained and skilled engineers, and in particular a National organization known as the National Board of Fire Underwriters. The work of this outstanding organization is carried on under the direction of committees of Fire Insurance Company executives, among these being the Committees on Fire Prevention and Engineering Standards, Construction of Buildings, Incendiarism and Arson, Statistics and Origin of Fires.

The National Board of Fire Underwriters has functioned for a period of seventy-five years and has rendered to the various communities throughout the United States untold services in connection with the prevention of loss of life and property. When we realize that during 1940 alone the total fire loss in the United States was \$286,491,347 and the loss of life 10,000, it is at once apparent that there is need for services along the lines just mentioned. This loss of life and property is appalling

from every point of view and almost all of it is preventable. In a time of supreme crisis it is imperative that every possible effort be made to eliminate such wasteful and unwholesome conditions.

In peace-time the prevention of fires and the reduction of fire waste has a bearing on the productivity of the country. In war-time the duty of preventing fire is one which assumes tremendous significance. A committee of leading fire and casualty insurance company executives and managers of syndicates composed of these companies has placed at the disposal of the Federal Bureau of Investigation, to assist it in guarding against sabotage, plans and other data of thousands of the largest industrial plants in the country.

By invitation of the Quartermaster General, the National Board of Fire Underwriters has established a special bureau to cooperate with his department in Washington. This bureau consists of a number of experienced engineers who advise on fire protection and prevention for the construction work now being done by the Government. In addition, more than fifty engineers from fire insurance rating bureaus and other organizations are already stationed at Army camps and other sites where extensive building is being done, and their number is to be increased shortly. This service is being rendered for the sole purpose of making these quarters safer for military and naval trainees and for preventing fire losses, since the Government insures its own properties.

A third activity, and a very important one, is the provision of sufficient fire and use and occupancy insurance to protect the great private plants manufacturing defense supplies for the Government. The values in some of these plants are so high as to exceed the capacity of individual syndicates.

The inspection services of insurance companies and syndicates, at the same time, are keyed up to special watchfulness to detect conditions which might cause fire or accident in private defense plants, and to secure the removal of such conditions. By undertaking this helpful and necessary work, the National Board relieves our Federal and State Governments of an immense expense, places fire prevention on a sound basis and what is more, gives a demonstration of the manner in which a great private enterprise can meet grave social responsibilities in the democratic way.

We should feel it a civic duty to inculcate in the minds of the public the aims and purposes of our Fire Insurance organizations and we must begin to teach the people that the interest of the insurance companies and the community is identical. Your particular group is unusually qualified and especially equipped to render untold services along this line and I am sure you will seize upon every opportunity to lend a helping hand.

The Chamber of Commerce of the United States and What It Has for Insurance Libraries¹

By T. F. CUNNEEN

Executive Assistant for Insurance, Chamber of Commerce of the United States, Washington, D. C.

PRIOR to the creation of the Chamber of Commerce of the United States in 1912 there existed in the United States no group which was in a position to express the viewpoint of American business on national questions. Business men frequently found themselves in opposition to each other when important legislation was pending in Congress. The story is told of a United States Senator who in 1911 arose in the Senate and said he had received a telegram that morning from a chamber of commerce in his city urging him to vote against a bill which was then being discussed, saying it would work a great hardship to the commerce of his state. Later in the day he received a telegram from an association of business men in another part of the state urging him to vote for the bill, declaring it would greatly benefit his state and region. The Senator quite appropriately said, "What does business think?"

Organization of the Chamber of Commerce

In order to answer that question, President Taft and the Hon. Charles Nagel, then Secretary of Commerce and Labor, in 1912, invited a number of business men and representatives of business organizations to come to Washington to work out a plan so that government might have the advice and counsel of business through a national clearing house of business opinion. Five hundred business men responded to the call and the foundation was laid on which the Chamber of Commerce of the United States was erected. It was the desire of the founders that the proposed organization, in order to be of service to the country, should be democratic in its nature. Authority to direct the program of the organization was therefore vested in the member organizations. The By-Laws provided that the Board of Directors which administers the National Chamber should be elected by the member organizations.

From a small beginning the National Chamber has grown until today it has a membership of 1700 local, state and regional chambers of commerce and

¹ Address before the Insurance Group of the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 17, 1941.

trade associations. The underlying membership of these organizations includes some 700,000 business men, firms and corporations.

The service of the National Chamber is twofold. The primary function is to secure the views of business upon national questions and to present and interpret these views to the agencies of government, as well as to the public. The National Chamber serves as an agency through which the opinion of business is canvassed and is given point and emphasis.

In order to be in a position to present the views of business on national questions, a referendum system was established through which the Chamber's underlying membership expresses its views. In addition, the Chamber's annual meeting affords an opportunity to its membership to express its opinions on national questions through resolutions adopted at the meeting. In order that the Chamber may not dissipate its energies on unimportant questions, the By-Laws provide that subjects submitted for consideration to members shall be national in character, timely in importance and general in application to business and industry.

The influence of the Chamber as a factor in determining policies, has been demonstrated on many occasions. Its reports and referenda presented to Congress have been an important influence in the formulation of national legislation such as the Federal Budget Act, Federal Reserve Act, the Transportation Act, flood control, tariff administration and tax legislation. Many Chamber recommendations in the field of tax reform have been adopted in National Revenue Acts.

An important factor in the Chamber organization is its research and information service. This is the province of the departmental organizations, each of which has an expert staff occupied throughout the year in study and research. The results of these activities are broadcast to the membership in bulletins, surveys and reports.

The National Chamber does not duplicate or infringe upon the activities of other organizations. It develops contacts with such agencies and endeavors to supplement their efforts and to give them the widest possible distribution.

Departments—their work and policies

In addition to the administrative functions, the work of the Chamber is performed by five general departments dealing with membership relations, publicity, research, resolutions and referenda, and *Nation's Business*.

Nation's Business, the Chamber's publication, is a medium through which the Chamber each month puts before its members, as well as before a very large number of other readers, not only facts relating to its activities, but also facts relating to national and international questions, vitally affecting commerce and industry.

In addition to the departments referred to, the *National Chamber* has a number of service departments, such as Agriculture, Commercial Organization, Construction and Civic Development, Domestic Distribution, Finance, Foreign Commerce, Insurance, Manufacture, Natural Resources Production, Trade Association, and Transportation and Communication. Each of the service departments carries on a program under the direction of a committee which includes in its membership the two directors elected to represent the department, as well as other business men who will represent different points of view upon questions coming before the department for consideration. These departmental committees report their recommendations to the Chamber's Board of Directors.

The Chamber's Research Department, an important one in the Chamber organization, conducts legislative, legal and economic research for members, committees and others. This Department issues weekly a general bulletin containing information about the activities of government agencies that are of concern to business men. In addition, it also issues weekly during sessions of Congress, the *Legislative Bulletin*, which describes each bill of importance to business and follows it through all of its legislative stages, thus affording authoritative information about the contents and the status of each bill.

The Chamber's Agricultural Department keeps in touch with current federal legislation and with the activities of the United States Department of Agriculture, Agricultural Adjustment Administration, Farm Credit Administration and other agencies dealing with agricultural subjects.

The Construction and Civic Development Department follows national problems of the construction industry and deals with questions in the field of urban development, such as housing, public works, regional and city planning, zoning, recreation facilities, etc.

The Domestic Distribution Department considers problems incident to the movement of goods from purchaser and manufacturer to the consumer.

The Finance Department fosters sound financial policies and practices in business and in government. This Department is at work upon current and long-range problems in the field of banking, monetary policy, government fiscal affairs, corporate finance and related matters.

The Department of Manufacture closely follows decisions of the Labor Relations Board, the operations of the Walsh-Healey Act, federal regulation of hours and wages, decisions of the Federal Trade Commission, *Social Security Board* and other agencies.

More than 1100 legislative committees, an average of more than two in each Congressional District, have been organized by chambers of commerce and trade associations affiliated with the National Chamber. Committee members speak to their Congressmen as constituents with the intimate knowledge of how legislation affects their community or their industry. This approach from "back home" is the reverse of the old method of trying to influence Congress through a national headquarters located in a metropolitan area. The advantage of this plan lies in the fact that these committees are local in character and in their operations.

Recognizing the important place of insurance in our national business structure, the National Chamber has established as one of its major departments a division which is solely interested in insurance and related activities.

The Chamber's Insurance Department serves as a source of information, as an agency to watch the course of events and one of its important functions is to keep the insurance business advised as to development and prospective moves in Washington.

The Chamber's insurance program may be divided into three major branches. These deal with legislation, conservation and insurance education. Since the underlying membership of the Chamber consists primarily of insurance buyers it is natural its program should take definitely into consideration the interest of policyholders.

A fundamental policy of the Chamber is that government should refrain from engaging in any phase of business which can successfully be carried on by private enterprise. It has, therefore, opposed the creation of monopolistic state workmen's compensation funds and state automobile insurance funds. It has stated that special state taxes levied on insurance should not be treated as a source of general revenue, but that they should be reduced in each state to a total which would adequately support state supervision of insurance.

The Insurance Department of the Chamber annually makes a survey of the amount of special state insurance taxes, licenses and fees and the amount expended for state supervision of insurance. The latest survey showed that during the year 1939

special levies on insurance by the states and the District of Columbia totaled more than \$106,000,000, a new high in such taxes, while the cost of operating all of the State Insurance Departments amounted to a little more than \$5,000,000. It is the contention of the Chamber that these special levies on insurance are an indirect tax on policyholders and add to the cost of insurance. The surveys made by the Chamber's Insurance Department are given wide distribution among companies, agents and governmental officials, as well as non-insurance members of the Chamber and others.

The Chamber at its recent annual meeting reiterated its opposition to compulsory automobile insurance and approved the basic principles of financial responsibility legislation for motorists.

Fire prevention program

It is the contention of business, as expressed through the National Chamber, that waste in any form, whether of capital, labor, services, materials or natural resources, is intolerable and that constant effort should be made towards its elimination. In line with this policy and at the request of a group of Governors, the Chamber launched some years ago, a nation-wide program designed to reduce our fire losses. Since that time fire prevention has occupied an important place in the programs of local chambers of commerce throughout the country. Nearly 500 local chambers are enrolled in the Fire Waste Contest conducted by the National Chamber.

When the Chamber started its fire prevention program in 1923, the annual fire loss in the United States was in excess of \$500,000,000. Last year fires in the United States took a toll of some 1,500 lives and approximately \$300,000,000 in property losses. The misery and suffering from fire cannot be readily translated into dollars. We know, however, that the indirect losses run into many additional millions of dollars.

To promote its national fire prevention program the Chamber issues a number of bulletins dealing with various fire prevention problems. These include bulletins dealing with arson control, Fire Prevention Week activities, fire prevention programs for children, fire prevention programs for chambers of commerce and trade associations, rural fire departments, fire casualties, etc.

It is generally acknowledged that at least a large part of the reduction in our fire losses is the result of interest aroused through the Chamber's Fire Waste Contest. Numerous cities enrolled in this Contest have, in a period of a few years, reduced their fire losses more than 50%. The importance of these fire prevention activities, particularly at the present time in maintaining our production for national defense, is evident.

Recognizing the importance of good health in

our economic welfare, the Chamber, with the financial assistance of a group of life insurance companies, several years ago launched a nation-wide program for improving public health, in cooperation with the American Public Health Association. To promote the interest of local organizations it launched the City and Rural Health Conservation Contests. The experience of the Health Contests contains numerous instances of progress in health administration. Entire populations have been protected by better control of communicable disease, by safer water and sewage plants and improved protection of the milk supply. Lower death rates, prevention of illnesses and fewer accidents as well as many work hours preserved for industry have resulted.

More than 400 cities, having a population of 35,000,000, have participated in the City Health Contest and in addition, an equally effective plan has been carried on for rural areas. Almost all the states, as well as Hawaii and Alaska, are represented among the participants in these contests.

In one of the recent contests, forty-seven cities showed death rates from tuberculosis of less than forty per hundred thousand population. In 1929, when these contests were started, a rate of less than forty was considered a goal for the distant future.

The Health Contest has brought about the enthusiastic and intelligent cooperation of business men throughout the country of whom 6,000 are now serving on local health committees. The Metropolitan Life Insurance Company has provided a fund to furnish field service incident to the City Health Conservation Contest and the W. K. Kellogg Foundation of Battle Creek, Michigan, has financed the field work for the Health Contest in rural areas.

In order to bring about a better understanding of insurance on the part of business men and policyholders generally, the Chamber has issued a series of bulletins and pamphlets dealing with various insurance subjects. These publications explain in non-technical language the trends in workmen's compensation legislation, basic principles in the fire insurance contract, the workings of the coinsurance clause with respect to fire insurance, the use of life insurance for the business man, the forms of business interruption indemnity, as well as inland transportation insurance, burglary and robbery insurance, automobile liability insurance, and the loss which policyholders might sustain in changing their old life insurance policies for new. Some of these bulletins are now in the process of revision to bring them up-to-date. Requests for copies of these publications are constantly being received from business men, colleges, students, organizations, etc. More than 60,000 copies of a recent bulletin dealing with twisting of life insurance has been distributed and considerable publicity given to it.

(Continued on page 278)

Legal Books For An Insurance Library¹

By LELIA E. THOMPSON

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ATTORNEYS for insurance companies are confronted with all sorts of legal problems, from the extradition of criminals to patents and copyrights. The selection of a completely adequate library for insurance attorneys is, therefore, probably out of the question in most cases. Limitations of space and funds to be allocated to such libraries make it essential that a selection of books shall be made, covering the problems that arise with the greatest frequency. In discussing this subject, I will try to mention books or types of books that I think are essential, and also books that are desirable for effective work in the legal department.

General law books

As you all know, the principles of the law in accordance with which we must guide our business are to be found in the statutes that are passed by the various states and in the decisions of the courts. It is very necessary to an insurance library that it should be properly supplied with the statutes of all the states in which the company does business. Because of the tremendous volume of legislation that is turned out every year by state legislatures as well as by Congress, it is something of a task to keep the statutes up to date. Some states get out revisions so frequently that heavy expense is involved in purchasing them all, while others do not get them out frequently enough. Every year a review of the statutory equipment should be made with a representative of some reputable publishing house or bookseller carrying books of this type, to make sure that each state is up-to-date. In some instances, there will be more than one edition of the statutes in a certain state. There may be an official edition, and an edition put out by a publishing house. Some statutes are kept up-to-date through pocket supplements and others through supplementary volumes. Once in a while, money can be saved by buying supplementary volumes instead of buying a new edition.

¹ Address before the Insurance Group at the Thirty-third Annual Convention of the Special Libraries Association, Hartford, Connecticut, June 17, 1941.

It is very convenient to have the decisions of the courts available at the company's office. They do, however, occupy a tremendous amount of space. The most economical, from a space standpoint, and probably from the standpoint of expense also, is the *West Publishing Company's Reporter Series*. This series covers the decisions in states selected in groups, depending upon their geographical locations. If it is not possible to house the whole series, it may be possible to find room enough for the set which covers the state in which your company is located. In any event, it is almost necessary to have in the library the court reports of your own state. In any insurance company there will be many problems arising under the local law because of difficulties which the employees meet in one way or another, such as accidents, deaths in the family, etc. Unless the legal department is made entirely inaccessible to the employees, there will inevitably be a number of cases, day in and day out, in which reference to the local decisions is required.

If it is not possible to have the entire *Reporter Series* covering the court reports of the different states, and the *Federal Reporter*, there are synthetic substitutes on which the insurance attorney can live, especially if there are fully equipped libraries in the community which are available to him. Perhaps the most important of these is the West Publishing Company's key number digest system, which is tied up, through the indexing system, with the *Reporter Series* published by the same company. These digests cover all the decided cases in the higher courts of the United States. The first digest in this series was the *Century Digest*, followed by the Decennial edition. Since then, there have been three *Decennial Digests*, each covering a ten year period, and the series is kept up to date through volumes issued semiannually under the title of *General Digest*. Through the use of these books, the attorney can cull out cases having a bearing on his questions, and if necessary can then go to some library outside, in which the full report of the decision can be found. Because of the great increase in the number of decisions in the last few years, and the decided changes that have taken place in the trend of decisions, the older digests are becoming less and less valuable. If the digest series is to be added to a

library with limited space, the *Century Digest* could be omitted without curtailing the legal department in a serious way.

Another series of books which we have found extremely helpful is the *Lawyers' Reports Annotated*, which began in 1888, and is currently continued under the title of *American Law Reports*. This set contains selected cases, with excellent annotations, and a supplementary digest system, so that the material in the set can be readily located. It is sometimes possible to find almost a complete brief on the point which you are looking for in the annotations in these books.

There are two other sets of books which cover the law in general. These sets are *Ruling Case Law*, supplemented by *American Jurisprudence* and *Corpus Juris*, supplemented by *Corpus Juris Secundum*. Both of these sets contain treatises on the law on a topical basis. In contrast with the digest system, which gives digests of cases grouped under topics, these two sets give statements of the law supported by citations of cases. They are kept up-to-date by supplementary volumes. One of these sets at least is on the "must" lists. *Words and Phrases* is another fine work of the same kind.

All the books which I have been discussing up to this time cover the field of law as a whole. They are extremely valuable in the insurance library because they make it possible for the legal department to look up the unusual questions as well as those pertaining particularly to the insurance business in its various phases. The insurance attorney cannot hope to keep wholly away from the outlying fields of law that surround his business, such as that of torts occasioned by the negligence or wrongdoing of agents, or the defective condition of premises owned by the company, the interpretation of wills covering policy proceeds or real property in which the insurance company may be interested, the law of copyright as it affects material that the publicity department may wish to use, etc. A complete library of textbooks on all these various matters is hardly feasible. Sets of books containing summaries of the law are, therefore, extremely useful.

Insurance law books

There are at least five sets of books dealing with insurance law particularly. Three of these are on the general plan of *Corpus Juris* and *Ruling Case Law*, giving a general statement of the law, with comments and citations. The oldest of these three works is Cooley's *Briefs on Insurance*. The next in point of time is Couch's *Cyclopedia of Insurance Law*, and a set that is now currently in publication is Appleman's *Insurance Law and Practice*, of which three volumes have come out up to this time. Dietch's *Insurance Digest*, now continued under the title

Insurance Decisions and Insurance Digests, contains digests of cases coming out currently, arranged on a topical basis. It is published monthly by the Rough Notes Company. The *Insurance Law Journal* was a somewhat similar publication, containing, however, the full text of the cases. It is now being continued by the Commerce Clearing House in separate services covering the different types of insurance. The C.C.H. publication is called the *Insurance Case Series*, and we find the life, health and accident cases extremely useful to a life insurance company which does not have in its library the *Reporter Series* or any other volumes giving the full text of all insurance cases.

An understanding of the everyday problems of the legal department of an insurance company is required in order to select textbooks which will be of real value. Generally speaking, the work of the legal department centers largely around the problems arising from the insurance contract, including the preparation of the contract, claims, deferred settlements and changes of beneficiary if the company is in the life insurance business, and transfers of policies; problems arising from agency relations, problems arising from investments, including stocks, bonds and real estate, and matters of taxation, as they affect the company and the policyholder.

I have already covered the books that deal with insurance law in general. In connection with claim work, supplementary textbooks dealing with matters of procedure, evidence, the law of contracts and conflict of laws, are very desirable. The texts that our office is using on these subjects at the present time are Moore's *Federal Practice*, Jones, *Commentaries on Evidence*, Williston on *Contracts*, and Beale, *Conflict of Laws*. The *Attorney's Textbook of Medicine* is a practical book for lawyers handling claims.

The agency system has many ramifications, reaching out into insurance law and the relations between the company and the policyholder, torts, and intentional wrongdoing on the part of the agent. On questions relating to the relationship between the agent and the company, the American Law Institute's *Restatement of the Law of Agency* is very helpful. The general works already referred to covering insurance law will throw light on many of the related questions.

For many years, including the years before the depression, the insurance companies were having problems because of their farm loans. Generally speaking, the making of new loans in the farm district, has been considerably cut down, but the companies are making many loans in urban districts. Because of the problems arising from the depression, some work on bankruptcy is essential in the library. We recommend Collier as being the most complete and satisfactory. Other useful text-

books in this field are Thompson on *Real Property*, Tiffany on *Real Property*, Jones on *Mortgages*, latest edition, and Jones on *Chattel Mortgages and Conditional Sales*. If your company is making loans in the State of New York, your legal department would find *New York Real Property* by Weed helpful.

We have not found many textbooks that were of substantial assistance in connection with the problems that come to our department on investments. If the company is purchasing a bond issue, and an examination of the transcript is called for, a reference to the statutes of the state in which the bonds originated is necessary, especially if they are issued by some governmental authority. As far as I know, there has not been anything very helpful put out on the subject of "Revenue Bonds" which are at the present time a very popular investment for insurance companies. We have in our library a book on the general subject, *Bonds and Bond Securities* by Jones, which we use occasionally.

For the lawyer who is handling tax problems every day, it seems to me that the only answer is the tax services. The Commerce Clearing House and Prentice-Hall each publish excellent services on the various phases of federal and local taxation. They also publish other services covering current legal developments, which may touch the insurance company more or less closely, such as labor law, war law, and other matters of current interest.

In closing, I should say that the various books that I have mentioned in the course of this talk are by no means the only ones that might have been mentioned. I have selected those with which I happen to be familiar and which I, myself, have found useful. There are other excellent books on many of the topics mentioned, and my selection of a few has been made with the purpose rather of indicating the subject matter that should be covered in an insurance library, than of guiding you in the choice of particular volumes.

What an Insurance Library Means to a Salesman¹

By EDWARD C. WILKINS

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THE first way in which an insurance library can help a salesman is by assisting him in securing a broader knowledge of his business. It has been said that in order to succeed and reap the highest rewards, it is necessary for the Underwriter to be efficient in the working fundamentals of insurance, to have a knowledge of the plans used by other successful salesmen, and to adopt a working system in the field. The library can help him in each of these respects.

Education—mentally and spiritually

As is well known, many of the leading companies have their own course of instructions for new agents. These courses explain the functions of, and needs for, insurance and point out the basic field tactics as well as discuss the various policy forms and features.

¹ Address before the Insurance Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 18, 1941.

It is indeed unfortunate that so many insurance men stop the educational process at this point. They are, let us say, insurance freshmen and feel that their present knowledge entitles them to success in their new venture. This is where libraries can be extremely helpful. The man who stops his study at this point will always remain simply an insurance agent and the age of agents is rapidly passing. A Life Underwriter should equip himself to assume a professional relationship to his prospects, or to the Company's policyholders. Librarians can assist the new man to realize this early in his career and also can keep the older man in the business from forgetting it.

As I have said, a librarian can help tremendously in enabling an insurance salesman to complete the equivalent of a college course through the Chartered Life Underwriter movement. This course requires the Underwriter to familiarize himself with economics, government, banking and credit, commercial law, taxes, estate conservation, as well as an almost complete knowledge of insurance principles and practices and the psychology of selling.

An agent may make his own selection of books

somewhat at random. On the other hand, he may pursue a more definite system of reading and studying. In my Company he may follow a suggested course in which he is encouraged to discuss with our librarian his own reading and studying habits and desires. With the help of the librarian, a study course is outlined for a year in advance and books are mailed to the agent at certain definite times. In this way the agent is encouraged to "keep on keeping on."

Another way in which the librarian can assist the agent is by helping him in developing his personality so that his viewpoint towards life generally and people specifically will be broadened.

Above all, the spiritual side of his education should not be neglected. *The Magnificent Obsession*, *The Lost Horizon*, *A Fortune To Share*, *The Adventures of a Happy Man* will help in this direction. There are a great many men and women today who have little or no spiritual training. Perhaps one of the reasons the world is in its present state is due in part to the lack of development of our spiritual side. In my opinion, the road that stretches out ahead of this generation is very rocky. There are many storms and dark clouds on the horizon, and in order that the future generations may profit by and build upon the progress of the past and in order that our present ideals and ideas of life, liberty and the pursuit of happiness shall not perish altogether, a new, invigorated national spirit

is needed. There are leaders in the world today who want their people to forget the common origin of man. The peoples of the world are asked to forget their universal sympathies. They are told to be cold and cruel and to destroy all sentimentality. These leaders of whom we speak are trying to convince the world that certain races are to be damned and destroyed, that their own people are the chosen people—are a superior race. This is a new and very confusing philosophy of life. If the salesman is too upset over these problems, he is not in the proper frame of mind for successful selling. He must then go to his library which contains not only books, but "the assembled souls of all that men held wise." The study of the history of ages long past will help the salesman to a better understanding of events of the day. As Patrick Henry once said, "The only guide I have for the future is the light which comes over my shoulder from the past." This has no doubt a deeper meaning today than at any other time.

A salesman, more than most people, needs almost constant stimulation. What better way is there than for you to suggest some of the biographies of great men and women? He often has the idea that his row is the "hardest row to hoe." Biographies will show him that other men also had to fight an uphill battle to success. Theodore Roosevelt once said, "If you want to accomplish big things, associate with big people." Through your libraries your salesmen can associate with the biggest people of all time.

The Museum Library Experiments in the Use of Visual Aids¹

By ELLA TALLMAN

Cleveland Museum of Art, Cleveland, Ohio

THE fact that visual aids are of importance in educational work is now well recognized, although only a comparatively few years ago committees were appointed and courses conducted on how to introduce this idea into our educational

institutions. Now many schools are equipped with lanterns and screens for slides and some with reflectoscopes for photographs and reproductions. Some schools have their own visual aids departments and a number of towns and cities have large visual aid departments for the use of the whole school system.

How does a museum library with a collection of visual material fit into this picture? There are museums that have direct connections with the school

¹ Abridgment of an address before the Museum Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 17, 1941.

systems in their communities and supply all or part of the visual aids used. Most museums, however, have collections of slides and mounted pictures which have grown, as in the case of the Cleveland Museum of Art, because of the educational activities of the Museum's own staff. These collections, usually administered as a matter of course by the library of the museum, have been thrown open in a great many places for the use of the public, especially the schools, colleges, churches, clubs, etc., of the community. Sometimes this is a free service, sometimes a small fee is charged. The regulations usually include a time limit for borrowing, and breakage or damage fees. The borrower is responsible for transporting the material to and from the museum. Under a three-year grant from the General Education Board of the Rockefeller Foundation, the Cleveland Museum of Art in cooperation with the secondary schools of the Shaker Heights school system, is carrying on a project to ascertain and supply as far as possible the needs for visual material. Two years of this project have been concluded.

Before examining the results of this experiment, let me tell you about our lending collections at the Cleveland Museum of Art and their use. They consist of large color prints, mounted photographs and pictures and lantern slides. The large color prints are not mounted. They are lent for one month and exhibited in the schools. The mounted photographs and pictures and postcards are lent for one week with the privilege of renewal; the lantern slides for three days with the same privilege, provided there are no reservations for them. Reservations may be made for the pictures and slides but not for the large color prints. The public schools however are not our only borrowers, as we serve Western Reserve University, the Cleveland School of Art, other private schools, churches, clubs and our own Museum staff.

The problems in connection with the two Cleveland suburban school systems, with which the Cleveland Museum of Art has worked most closely, are very different. In the case of the Cleveland Heights schools, one of the definite aims has been to teach the use of visual aids. A Museum instructor plans with the teachers in the school a definite program for the year. Such subjects as sculpture, pottery, or textiles usually form the basis of a semester's work. The Museum instructor teaches a sample lesson and the visual material is left at the school. The lesson is then repeated by the teachers to the other classes in the building.

When the work in the Shaker Heights schools started under the General Education Board grant, it was decided to send a museum instructor to the schools to act as a liaison officer between the teachers in the schools and the visual material available in the Museum. It was the duty of the instructor to

interview the teachers, find out what their needs and problems were and to suggest the pictures and slides to be used. Each department of the Junior and Senior high schools was approached and material assembled which would assist in teaching a definite subject. For the Art Department there were reproductions of stained glass for a project in design, good examples of architecture, sculpture, painting and the minor arts; for the English Department, material on Elizabethan life as a background for the study of Shakespeare's works; for the Modern Language Departments, views of the countries whose language was being studied illustrating the life of the people as shown in paintings, etc.; for the Classical Languages, material on ancient Greece and Rome. The Home Economics Department found material in costume and furniture plates and slides; the Science Department displayed art forms in nature. City planning material was used for the Economics and Sociology Departments and the Mathematics Department exhibited geometric forms in art. At the beginning of the last school year, lists were compiled and mimeographed showing the material available in each field. These lists formed the basis for requests during the year. The liaison officer made all the reservations and was responsible for delivering the material to the teachers.

Three interesting facts came to light through this study. First, some teachers do not use visual material because they are unfamiliar with it. Second, teachers have many demands on their time due to the extra-curricular activities being undertaken in so many schools and thus do not have time to select visual material. Third, a liaison officer who is familiar with the problems of the teachers as well as the collections of visual material available is a great help to the teaching staff of a school.

To sum up:—The lending collections of a museum are vast storehouses of material which can be of service to public schools in almost every department. Even if a school has a visual aids department, there is much supplementary material to be found in the museum's files. When the school program is so full that teachers have no time to devote to selecting visual materials, the appointment of a museum instructor to act as a liaison officer may be found necessary and profitable. The Cleveland Museum of Art in conjunction with the School of Education, Western Reserve University, is giving a course in visual aids, showing how to select exhibit material, pictures and lantern slides, and how to use them in planning lessons. The teacher who becomes familiar with the lending collections through this course or other museum courses is likely to continue their use in her classroom. These courses and the contacts made by the museum instructors in the schools constitute the principal means of advertising a museum's lending collections.

The Library's Role in Museum Activities¹

By CHARLES H. SAWYER

Director, Worcester Art Museum, Worcester, Mass.

LET me preface my specific references to the role of the museum library with a brief mention of the background of the art museum itself. Our museums as they exist today have grown out of two influences, somewhat competitive and conflicting. The first is, of course, the influence of the Renaissance palace and the great collector, the political or merchant prince who from Renaissance to modern times has embellished himself, and occasionally, in a magnificent sense, his community and his country by collections, varied or specialized in scope and reflecting either his own taste or that of his class in society. Whether we think in terms of the Medicis or Henry the Eighth or Napoleon or, in more recent times, of Messers. Jack Gardner, J. Pierpont Morgan, Henry Clay Frick, Andrew Mellon, or William Randolph Hearst, we have in mind accumulators of historical treasures, who, sometimes by accident, sometimes by deliberate plan, have laid the foundations for the art museums of the world. A few such collections may remain temporarily today completely private in nature or, through an independent board of trustees, may have been transformed into semi-public institutions; as a background in art museums they represent very definitely the taste of the few imposed upon the community as a whole. All our great American museums established in the 19th century owe their foundation to this influence. Without such leadership, without this sense of quality and taste, independently if artificially developed through two generations, our great art museum collections would undoubtedly have been far less interesting than they are today.

As the art museum has come into its third generation in this country and as these great collections become increasingly dependent for their upkeep on the public treasury and on public support, there has appeared the more democratic ideal that the museum exists as an institution for public service. It was a librarian who was largely responsible for this new philosophy which was certainly revolutionary when instituted twenty-five

years ago. I refer, of course, to John Cotton Dana, at one time librarian in the neighboring city of Springfield and later known to all of us for his pioneer work in the Newark Public Library and in the foundation of the Newark Museum. Under his influence, both direct and indirect, the newer museums in America have become increasingly conscious of their educational function in society and even the older ones have been stirred to a sense of public consciousness and public reaction which would have been deemed Utopian only a generation ago. This period of museum development has seen the growth of educational departments in every museum in the country; it has seen in recent years interesting experiments in public display and in all forms of visual education. It has also seen in many institutions a comparative lessening interest in those problems of collection and research with which the museum was originally concerned.

Role of the museum administrator

It is the exceedingly difficult role of the museum administrator today to strike something of a balance between the aristocratic background and the democratic present of the museum. Unless these two important influences are brought together in such a way that they nourish and supplement rather than conflict with each other, the art museum will lose its great opportunity to be an important and permanent social force in the life of its community. Confronted as it is on the outside by the influence of those forces which are bringing about the destruction of the humanistic philosophy on which it was originally based, and on the inside by its own uncertainty of purpose, plan and execution, the art museum in this country is indeed in a dilemma. If it surrenders completely to transitory influences for the sake of a temporary public response, it will be swept out of existence by the very influences it may seek to imitate, the moving picture, the radio, the commercial display. If it dwells serenely in the ivory tower, it will be cheerfully passed over by a generation that will have far greater burdens to carry and will be more selective in its support than our own. Somehow he must turn exhibitionism

¹ Address before the Museum Group at the Thirty-third Annual Convention of the Special Libraries Association, Hartford, Connecticut, June 17, 1941.

toward a truly creative interpretation of great art, and unite and strengthen it by collection and adequate interpretation so that they will supplement rather than deny each other.

It is the dual role of the museum library in helping to promote both the sense of a museum's service to its community and the more remote sense of continuity and responsibility to the future that I wish to discuss with you. The museum library as an organization seems to me a real meeting ground where these competing interests might be reconciled. In a larger museum it is a question of encouraging each department to think in terms of the whole, its relation to the other departments, and somewhat introspectively of its own particular function. In a small institution it is the problem of encouraging individuals to see beyond the responsibilities and the interests of their own daily problems.

The library's contribution to the public

Let us consider first the library's contribution to the Museum's position as a public institution. We should have books in our libraries which have a popular as well as scholarly interest and which will go beyond the bounds of the average specialized art library in encouraging a wider public response. I do not mean to imply that the art museum library is obliged to buy every art book which has temporary popularity regardless of its accuracy or ultimate value. We have some obligations to our public in selecting material in which we have confidence. I think, however, that museum libraries could afford to be less provincial and to incorporate in their collections a good many books not labeled "art" but which are concerned with the arts in their broadest sense, as for example such interpretations of American social history as Van Wyck Brooks' *Flowering of New England* and Vernon Parrington's *Main Currents of American Thought*. These while of primary concern to the student of literature, have important implications for any reader interested in American art. Books on architecture, construction techniques, *planning or design* in all mediums might be considered, whether or not they adhere completely to nineteenth century standards of what constitutes "fine art". Isn't it possibly more important for us to be somewhat catholic in our selection of the best books covering a wide span of interest, than to have a complete collection of all books, good, bad or indifferent, in more limited fields? The museum library may also give consideration to articles appearing in general magazines and newspapers which concern the arts. Although not all catalogued in the *Art Index*, these influence and reach a far larger potential museum audience than do the present pitifully small list of specialized art

publications, barely kept alive by subsidy and scanty subscription and advertising lists.

We need these specialized publications; I am not discounting their importance to us for a moment. If subsidy it must be, museums, colleges, libraries and those foundations and individuals who have done so much to foster adequate publication must unite in insisting that the magazines supported adhere to the purposes for which they are supported. On top of the loss of so many of the European art publications, we are now faced with the loss of another of our American art periodicals. I am in no position to judge whether or not the decision of the Trustees of the College Art Association to abandon publication of *Parnassus* is a wise one. It is obvious, however, to any reader of the magazine over a period of years, that it had strayed far from its original goal—a medium of exchange of ideas between college art departments. Even the valiant efforts of its recent editors to restore that original function and at the same time to popularize its approach, left some of us with a feeling that it was still competing actively in the spheres of the *Magazine of Art*, the *Art Digest* and the *Art News*. The potential audience for specialized magazines of their type is a limited one, and, I think that as librarians and administrators we should encourage each to maintain its own individuality, to remain, as far as possible, in its own sphere, supplementing rather than competing directly with each other.

Visual or illustrative material

Possibly we might agree that as a museum differs from a general library in its emphasis on the visual rather than on the verbal, so the art museum library differs from other specialized libraries, not only in the content of its publications but also in their form. I like to think of the art museum library, not merely as a collection of books and publications on art, but as a center for visual material of all kinds, greatly enriching and enlarging the scope of the museum's permanent collections. I am taking it for granted that except in the largest and most departmentalized of museums all kinds of illustrative and reproductive material are properly under the jurisdiction of the library and that they are among the museum's most valuable educational or interpretive tools. If this assumption is justified, it follows, of course, that the library staff must be aware of all the great advances in processes of reproduction in recent years, that they should be able to judge critically on a qualitative basis the relative merits of these processes, and that in collaboration with the education and curatorial departments they will build up these collections on a coherent basis with proper regard for the original objects in the museum possessions.

There is still in some quarters a narrow prejudice against the color reproduction and the color slide, and possibly in others, an uncritical willingness to accept anything in color. It seems to me that we need a critical eye, accompanied by an understanding of the color as a stimulant to public interest in our reproductive material. We can do no greater service in the development of public taste today than in assisting our visitors to discriminate between good and bad color reproductions. Comparative exhibitions in our libraries and in schools, department and specialty stores, might encourage a larger demand for the best quality of reproductive material.

This is not the place to discuss in detail what the future of our imposing collections of glass lantern slides may be, but I would suggest that it is high time we all began to consider the possibilities of introducing microfilm and the smaller Kodachrome slides which seem bound to enlarge our visual collections and to make possible a variety and richness of illustrative material which could scarcely be contemplated with the more expensive full scale slides and reproductions.

I may be indicted for heresy by the print curators for suggesting that our print collections may properly be considered as a part of our collections of illustrative material. This is admittedly not a doctrine of the "print for print's sake" but it seems to me that except in the largest museums the print department might well be incorporated as a division of the library. I would include in the print collections many forms of reproductive material and except for the rarest and most expensive items, I would like to see us provide for wide distribution of these collections inside and outside the museum. There is no field where we so hide our resources in rows of unopened and sometimes inaccessible boxes. For most purposes the amazingly good collotype reproductions of prints and drawings serve quite as well as the originals and can be made far more accessible to our public. I am not discounting for one moment the importance of the great study collections of original prints, but I doubt whether most of us in smaller museums can afford the luxury of such collections any more than we should expect in other fields to be a miniature Metropolitan Museum of Art.

If display and distribution are the main reason for our collections of illustrative material, they are also important factors in the use of all the art library's resources. At Worcester, Miss Mundt has carried the library outside the walls of its special room by establishing miniature branches in the Museum School, the Member's Room and in the regular exhibition galleries. While this means

a certain amount of duplication of publications and possibly some damage or loss when their use cannot be closely supervised, we have felt that such expense is fully justified by the additional audience we reach. The Worcester Museum has also been very liberal in its conditions for loans of slides and all kinds of illustrative material. This has encouraged the use of our collections by smaller colleges and schools in the south and west, as well as by our New England institutions.

One further thought that I think administrators and librarians and educational staffs need to keep in mind is that our books and our photographs and slides exist not as an end in themselves, but as an aid in interpreting those original works of art which are the focal center on which the art museum is based. This seems trite and obvious enough and yet I feel it is sometimes overlooked as we collect our material and form our art history and appreciation courses. Especially in some of the larger museums there seems to be a complete void between the illustrative collections and the museum's original works. Organized by individuals with different interests, they exist in different worlds and for totally different purposes. Most of us would agree, I think, that many of our finest objects, especially those small in scale, mean little to the casual museum visitor unless somewhat dramatically displayed and interpreted in a way which finds some common denominator between the object and the observer. In much the same way, I believe that unless our library resources and educational courses have as their common denominator the objects on display, they lose a measure of their value and their meaning to the museum visitor.

Responsibility to the museum staff

In conclusion I also want to discuss with you, the museum's role in those other phases of its activity—collection, research and publications. These are now in comparative eclipse in those of our museums which are so fully imbued with the missionary spirit of our day. I have already suggested that it may be just as dangerous for a museum to allow all the energies of its staff to be swallowed up completely in the educational and social functions as to neglect these activities completely. As our museums become more democratic and popular in their nature, there is a tendency toward a leveling mediocrity to which the scattering of the energies of all our staff in so many directions contributes. Somehow we administrators, curators and librarians alike must strike a balance by insulating ourselves at intervals from those distractions, and through creative exploration in collecting and study give to our institutions that permanent significance which only objects and

their proper interpretation of quality and integrity can assure. This will not be easy. How are we, in the face of distractions, going to carry on effective study and publication? Possibly it is the librarian's job to help the administrator by calling attention to publications and articles in his field, by anticipating the material required for study, for preparation of any exhibition catalogues, for articles on new accessions, and even by preparing annotations of their content. I believe the museum librarian can play a vital role in maintaining and developing the intellectual standards of our whole professional staff. To carry out such a role requires a thorough knowledge of fine arts' bibliography and an ability to keep abreast of the constant flow of new publications. This has become an insuperable task for the museum curator and teacher; it may swamp the librarian as well unless she and her associates are able to set aside time for the purpose.

It is unquestionably the responsibility of the Trustees and Museum Administrators to see that the library has a staff adequate to play such a part. It is the librarian's responsibility to escape from the bonds of the daily routine of recording and of cataloguing to carry out this background work. I am not discounting the necessity for orderly library housekeeping, but I think we must be careful that it does not become an end in itself, if the library is to maintain its stature in museum work. If library and curatorial staffs cooperated to the fullest extent in their respective roles, the whole standard of American museum research and publica-

tion could be raised and we could compare more favorably than we do today with our European contemporaries. The distinct contributions of American museums to general education and to a museum's place in its community should not blind us to our present short comings in this direction. Outside of a few specialists on the staffs of our largest museums, it would be difficult to name a group of curators or associates in American museums who have made really distinguished contributions to scholarship in our field during the past decade.

Conclusion

If I seem in the course of these remarks to have thrust all the problems of art museum organization into the hands of the museum librarian, please rest assured that I do not for a moment wish to imply that they are her sole responsibility. They concern us primarily as museum people rather than as members of any special departments. We have far more to gain by considering them as a group in relation to the whole rather than in terms of rigid compartments. The main point I would leave with you is that we should try to see as a whole the many fields of activity in which we are engaged, with their constant inter-relationships. Thus we, as librarians, curators, administrators and instructors alike, may work together to preserve that delicate balance between the museum's present service to its community and its continued obligations to succeeding generations.

A Library Is Born in Modern Times¹

By RICHARD GIOVINE

Librarian, PM, New York

ON JUNE 18, 1940, a new type of daily newspaper, *PM*, made its debut. Although this date marked the birthday of *PM*, its Library was officially started some two and a half months before the first public appearance of the newspaper. It was on April first that I left my position on the New York *Herald Tribune* to organize and administer this new library, which was to be ready for full-scale functioning by June 18th.

¹ Address before the Newspaper Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 17, 1941.

Problems of starting a library

It was at precisely that moment that I realized two important things: first, just how very short a time two and a half months was, and second, the importance and usefulness of my membership in S.L.A. and of the project the national Newspaper Group has currently engaged in; namely the compiling of a *Manual of Newspaper Library Procedures*. If the manual had been published at that time, it would have truly been even more of a god-send.

Before definitely planning my schedule, I

revisited every newspaper library in the City of New York and had a long talk with the librarian. After these visits I went to work. My first problem was the eternal headache of libraries, old and new—space. After making a survey, I found that no newspaper library in New York City had less than 1600 square feet and at least one library had over 10,000. I then decided that if I could have 700 square feet of space it would be an excellent start. I settled for 500. However, just three weeks ago we were allowed an additional 400 square feet. The next problem was equipment. I finally chose all steel equipment which combined satisfactorily quality and price.

In order that you may have a picture of the growth of the Library, during the past year and two months, I shall now take you behind the scenes. The Library consists of three principal divisions: the clipping files, the picture files and the reference book collection.

Reference book collection

Our reference book collection is of far greater proportional importance in our library than in the usual newspaper library. The reason for this is two-fold. First, the fact that our clipping files only cover a short period forces us to make far more use of book material than is generally the case. Second, *PM* pays a great deal of attention to the background of foreign and national affairs.

Since our library began from scratch, it was possible to follow a virtually ideal method of selecting our book stock. *PM* is highly departmentalized. The head librarian asked each department chief to submit a list of the books which in his opinion were the basic literature in the field. These lists were then studied by me and the final choice made by him. There is no other type of special library whose book collection must be as broad and all inclusive as that of a newspaper library. Our collection, now numbering some 1000 volumes, includes the usual encyclopedias, yearbooks, guidebooks and directories generally to be found in newspaper libraries, but is especially strong, again because of the very nature of the newspaper itself, in labor, foreign affairs and journalistic literature.

Clipping files

The clipping files, which are the life-blood of a newspaper library, are divided into two parts: a Biographical section and a Subject section. The former is an alphabetical arrangement by name of personality. The latter includes both topical and geographical headings in a single alphabet. Our biographical files are housed in all steel cabinets, seven drawers, each drawer with two

compartments which hold 5x8 folders. These folders are open on three sides except for expansion envelopes having overlapping tops with a string for closing. This size was adopted as being generally in use in the larger newspaper libraries.

The subject files are housed in all-steel cabinets, five drawers, in folders which measure 7½ by 10. These are closed folders, open on top. The clippings within these envelopes are kept in chronological order and held together with rubber bands. The subject headings are a combination of the headings used in the libraries of the New York *Herald-Tribune* and of the *World-Telegram*. We have found it useful to keep a card file 3x5, each card duplicating the subject heading used on each subject envelope. In this way we know whether a certain folder is lost or whether it has not been made. Our method of marking and clipping also follows that in general use in other newspaper libraries.

Picture files

PM, as you know, is a picture newspaper and therefore picture files are important. These files are kept in all-steel cabinets, 5 drawers containing folders measuring 9 x 12. The picture files now number 80 drawers and are divided into personality and subject files. All service pictures are stamped with the date of filing.

In the early days we spent a great deal of time compiling lists of names of Congressmen, rulers of foreign countries, statesmen, and every world or nationally known figure. Then the Picture Services were asked to provide pictures of them. In this way our files have grown so rapidly that we are now able to handle nearly every request for stock photos.

The negative files are also important because *PM* receives a great many requests every day for prints of various photos it publishes. This means that negatives are valuable and represent dollars and cents. They must be carefully filed so as to be available for use in the dark rooms whenever requests for prints are received.

Map collection

The *PM* map collection started with a set of the Shell Oil State Road Maps. It has now grown to some 100 maps of various kinds and descriptions, including many of the useful International Maps of the World, as well as coastal and geodetic charts. This collection is housed in a specially built steel cabinet of twelve long and wide flat drawers. While speaking on the subject of maps I should like to put in a good word for the lonely auto road map. It is the best type of map available for general purposes. I clearly recall one newspaper item which

(Continued on page 274)

Libel Law Pertaining to Newspapers¹

By J. HOWARD CARTER

Townley, Updike & Carter, New York

A CENTURY and a half ago, when the Fourth Estate was still in relative infancy, this topic would have been rather limited in scope. The great libel cases of those days principally concerned scurrilous books and pamphlets, penned by some literary figure who had a political axe to grind or who lashed out at some supposed injustice to humanity. But the days of the pamphleteer are over and today it is the newspaper, reporting and commenting on current events, that bears the brunt of the law of libel. Every newspaper seeking to present to its readers a reasonably accurate world panorama must, of necessity, face certain risks which were unknown to the journal of even fifty years ago. The library is an integral part of the newspaper, and the hazards to which all newspapers are exposed in the field of libel are lessened considerably when librarians and their staffs are functioning efficiently, and are receiving the proper cooperation from other departments. So swift is the tempo of modern life, so varied are the topics of everyday discussion, that the modern newspaper is forced to discuss in its news columns and editorials various matters in which it can ill afford to be wrong.

An obvious illustration is that of marital status. At the turn of the century, separation, divorce and kindred subjects were strictly taboo. No newspaper was expected to carry such news and none would dare print it. Yet today every journal in the country is forced to carry, in increasing proportions, news items of that nature. Newspaper libraries contain great masses of material of this type, properly indexed and cross-referenced. As time passes, additional material is added to the various libraries, making them even more indispensable, and the job of the librarian that much more important. As a result, the newspaper of today finds itself in the precarious position of accepting news items of this nature from whatever sources are available and supplementing it with additional material obtained from the library, including pictures. Very often, the data obtained from the library is far more

important from a news standpoint, than the facts involved in the story itself, with the result that the supplemental facts gleaned from library files, are featured. Needless to say, stories in this so-called divorce category are dangerous, particularly where a mistake occurs.

Libel by mistake

It is for these reasons that an adequate treatment of my subject would necessitate a complete discussion of the law of libel as it exists today. The broadness of the subject and shortness of time form an effective barrier. So I shall confine my talk to one phase of the law which directly affects you as librarians in your daily work. I shall call this discussion "Libel by Mistake". I thus exclude those intentional diatribes levelled at individuals or groups by a crusading newspaper or columnist. Those are instances in which the writer deliberately exposes the object of his attack to "hatred, contempt or ridicule." (As you all know, a written accusation of that nature is actionable by the party attacked if it is false.) Thus when Westbrook Pegler refers to Benito Mussolini as "Benny the Bum" and charges that he is an incompetent fool, Il Duce theoretically has a good cause of action against Pegler. "Never sue for libel, they might prove it on you" is a maxim which might appropriately be applied in this instance.

The libel suit with which you are principally concerned is one where a man is libeled i.e., attacked in a manner calculated to expose him to the hatred, contempt or ridicule of his fellow-men through an honest mistake on the part of the writer, incurred in some manner by reason of the neglect or carelessness of someone in your department. Mistake is no defense to an action for libel. Though an honest mistake be shown, the publisher of a libel is still held answerable for such damage to a plaintiff's reputation as a jury believes it to have been caused by the publication. Moreover, the plaintiff is under no duty to prove that he actually was damaged. He need prove merely that the article was defamatory to him and that it was false. Damage to his reputation is then presumed and the defendant has the burden of rebutting this pre-

¹ Address before the Newspaper Group at the Thirty-third Annual Convention of the Special Libraries Association, Hartford, Connecticut, June 18, 1941.

sumption. I might add that damages, in a libel case, are almost wholly in the jury's discretion. Where there is an honest mistake, of course, the publisher cannot be held liable for what lawyers call "punitive damages", that is, damages which are not designed to compensate the plaintiff for his injury but rather are granted by the law as a form of punishment, to deter the publisher from similar articles in the future. Such damages are permitted only where the article was published with actual malice, that is, spite or ill-will. The Courts have held that a wanton or reckless disregard of a person's right to have the esteem in which he or she is held by friends unimpaired by false statements to his or her discredit, constitutes malice, which in turn, means punitive damages. In a word, gross carelessness is malice. Therefore, it is of extreme importance to publishers, that material in their respective libraries be properly indexed and cross-referenced and that care and caution be used in supplying the material to Editorial Departments.

Let us take a concrete illustration and follow the case from beginning to end. I shall assume that the mistake is one due to simple carelessness on the part of an assistant librarian. We will say that in June, 1939, one John J. Smith, an attorney in New York, was convicted of a crime and then was disbarred. The *New York Gazette* reports this and the material is duly filed in the impressive labyrinth of metal cabinets maintained by the *Gazette* library. Then in January, 1941, another John Smith (John T. Smith) who is also a New York attorney happens to do something newsworthy. Let us say that he sues for divorce on the ground of mental cruelty, alleging among other things, that his wife refused to serve proper meals. The *Gazette* reporter telephones Mrs. Smith and she tells him that the suit is a fake and as to the meals, his sole complaint is that she doesn't serve mustard pickles every day. She goes off on other tangents but the reporter is hardly listening. He has his story. He sends to the library for the "clips" on John T. Smith, a New York attorney. Back comes the article of June, 1939, when John J. Smith was convicted of fraud and disbarred. The library also furnishes a picture of John J. Smith, labeled "John Smith". The reporter delightedly sets to work on his story and the following day *Gazette* readers are scanning a headline:

DISBARRED ATTORNEY SPURNS
WIFE FOR MUSTARD PICKLES

Under the picture is the caption, "John T. Smith"

John T. Smith, who was never convicted of a crime or disbarred, and who looks nothing like the picture featured by the *Gazette*, sues for libel. His attorney serves a summons and complaint on the *Gazette* stating that the article is wholly false and defamatory as to plaintiff John T. Smith

and that he has been damaged to the extent of \$50,000. Investigation quickly reveals the error and expensive litigation follows. A case such as this might result in a very substantial verdict against the paper involved. The element of malice through carelessness is also present. The amount of damages assessed would depend upon the character and general reputation of John T. Smith and the extent of the carelessness. A verdict of \$25,000 would not be disturbed on appeal as excessive. In a situation such as this, the mistake and ultimate responsibility would be that of the librarian or the assistant who sent the John T. Smith clips to the Editorial Room. Possibly it was a faulty filing system. To be sure, the City Editor or rewrite man would be equally culpable for failing to make the distinction. However, the librarian would have to take the rap, if for no other reason than editors and writers generally have a habit of relying upon him. In any event, we must always be conscious of the fact that editors rely 100% on the correctness of information sent them from their libraries. When we stop to consider the multitudinous demands editors make upon librarians, and the heavy penalties imposed when serious mistakes occur, we immediately become aware of the importance of newspaper librarians and the heavy responsibility they carry. With this realization should come a firm resolution to make your library the most accurate and efficient in existence. Every publisher should be just as proud of his library as he is of his paper generally. A library to a publisher, is just as important as is a library to a lawyer. Without one, neither publisher nor lawyer could succeed.

You may think that such cases of mistaken identity are rare. Yet every firm representing a newspaper handles them by the score. Back in 1926 a certain New York newspaper printed an article which began, "William H. Kehoe, formerly Assistant Corporation Counsel for New York City, who was convicted in the milk scandal, has purchased from B.D. Drake, a twelve-room house and estate in Garrison, New York." Believe it or not, the estate had been purchased by a man named William H. Kehoe, who was an Assistant Corporation Counsel for New York City. But he had not been convicted in a milk scandal and had been grossly libeled, simply because he had been confused with another man of the same name, who had held the same position in the city administration and had been jailed in a notorious scandal.

Moreover, when a jury returned a six-cent verdict for the plaintiff in that case, the Appellate Court reversed the judgment and ordered a new trial, saying "In a case where it is established that the article was grossly libelous and that the plaintiff is a man of excellent reputation and good character, there should be a verdict for substantial damages,

unless there are some mitigating circumstances." On the second trial, a new jury awarded him the sum of \$9,000. This was later set aside for various reasons but the case clearly illustrates how serious may be a wholly innocent and reasonable error. To be sure, that was a novel and unusual situation. Undoubtedly the editor sent to the Library for the clips on William H. Kehoe. Up they come, with the history of criminal conviction. Before publication someone should have realized something was wrong because a convicted person couldn't be an Assistant Corporation Counsel for the City of New York. Haste, speed and carelessness cost the newspaper involved thousands of dollars.

A different type of situation which occurs very frequently in this so-called mistake category, is what we call "wrong picture cases". An article describes the conviction of John Jones for forgery. Accompanying the story is a picture with the caption, "John Jones." It develops that the picture is that of Rev. John Jones, a minister of impeccable morals, who promptly sues for libel. There is in this case a close question as to whether or not the article refers to the minister, since his sole link to the story is the accompanying picture. But the court has held that the picture is sufficient and that if the jury finds that a plaintiff's reputation has been injured by such a mistake, he may recover substantial damages. In many of these instances, the librarians are blameless. For example, the photographer who took a group picture, inadvertently confused the identities and thereafter the picture was filed in the library under an improper name. Surely no one could criticize a librarian under such circumstances. In other instances, the error occurs in the composing room, when the cuts are improperly and carelessly handled or inserted in the wrong places. However, every librarian should strive to make sure that pictures in his care are properly captioned. Publication of wrong pictures costs newspapers thousands of dollars annually. In every instance, carelessness is involved.

These are but a few illustrations of the serious damage which may result to a newspaper in the absence of 100% cooperation between the library and all other departments. You must realize that you have a grave responsibility. The staff of your paper is wholly dependent on the accuracy of your files for many, many important facts. You must be certain that no reporter or editorial writer, penning an article in haste to make a deadline, is misled by your failure to indicate clearly to what or to whom your material refers.

Conclusion

As I said before, with each passing year, newspaper librarians become more and more important in the daily life of the paper. As your material and responsibility increase, your filing systems, of necessity, become more complex. As the newspaper industry grows in importance, the libraries grow with it. Never let it be said of the librarians that they fell behind the pace. Your opportunity for service is greater today than it has ever been in the history of this country. Seize it and hold it! Show the rest of the world a free press is essential to the welfare of any country.

Your responsibility is far more grave than ever before. We are living in a state of unlimited national emergency, wherein every newspaper in the country has an obligation to its readers to report current events with such accuracy that no false rumors or suspicions should be created. The false accusation that a man was convicted of espionage, the false charge that a man addressed a Nazi or Communist meeting, these are mistakes which not only can blacken a man's reputation and not only injure your newspaper but may well have consequences far more serious in nature. The reading public must not be misled. Today we live in the only country in the world where freedom of the press is not a mockery. We must make certain that no abuse of that right will contribute to its eventual destruction.



America has furnished to the world the character of Washington. And if our American institutions had done nothing else, that alone would have entitled them to the respect of mankind.—Daniel Webster.

The Fifth Column In Libraries¹

By ROSEMARY HANLON

Librarian, Mine Safety Appliances Co., Pittsburgh, Pennsylvania

HAS the library come to this—that it too has a Fifth Column, something boring from within to undermine the present structure, something that gives no evidence of its presence but makes itself diabolically apparent after a period of time? Let us look at the library with its collection of books to see if it *has* a Fifth Column and to find out if we as Keepers of the Keys can and should establish our own F. B. I. It seems to me that the Fifth Column in libraries has a 5-cornered pedestal: condition of the air, including dryness and moisture; chemicals in the air, such as sulphur dioxide and dust; poor quality of paper; light; and insects.

I. Condition of the air

What is the condition of the air in *your* library? Is it dry? How dry? What *is* dry air? What effect has dry air on the paper in your books; on the bindings of our books, the cloth, thread, adhesives and leather that make up the binding? Is the air in your library *moist*? What effect has moist air on the occupants of your shelves? When you speak of paper as foxy, do you mean that it is sly and cunning? What is mildew and how is it propagated? What conditions are favorable for its growth? How does the condition of the air in the library in winter, differ from that in summer and with what effect on books? Is there a recommended temperature and humidity for books—as well as the keeper of the books? Is a positive circulation of air necessary?

II. Chemicals in the air

What are the air contaminants? How does sulphur dioxide, a product of the combustion of fuel and of certain industrial processes, affect paper? Most papers contain small amounts of iron derived from iron equipment, water and reagents used in paper-making processes. To what extent does the iron accelerate the rotting induced by the sulphur dioxide oxidizing to sulphuric acid? It is said that the air in cities has caused paper to deteriorate even

in so short a time as 10 days. How much greater is the concentration of sulphur dioxide in cities than in rural districts? Is the difference in locality noticeable in the condition of the books? Can sulphur dioxide be washed from the air used in libraries? Can air conditioning systems so treat the wash water that the amount of sulphur dioxide can be appreciably lessened or completely removed?

So much about this air-borne gas. What of dust? What is its composition? Dust particles in addition to their abrasive action upon paper and bindings of stored material, act as nuclei for the condensation of acidic moisture. How can dust be eliminated from the air? Once having entered, how can it be satisfactorily removed from the books?

I have mentioned sulphur dioxide and dust. Are there other contaminants and what are they?

III. Poor quality of paper

Will the paper of today withstand the test of time? Will it age as gracefully as the old hand-made papers? How does the content of newspaper differ from book papers? What is the composition of most of the book paper now used? What is the record of straw fibers and ground wood fibers? What is the development of the papers used for our literature? Is alum used in rosin-sizing paper necessary or does it contribute to early deterioration? Is clay filler, a component of book papers, harmful? Do the center and marginal sections of the leaves of a book show the same results of physical and chemical tests? High alphacellulose content is considered an indication of superior condition in paper. The copper number, on the other hand, is a measure of the amount of modified or deteriorated cellulose present and, when high, is regarded as an indication of poor condition in paper. Can we as librarians insist on further research so that papers adequate for the present and for the future are used in our books and magazines?

IV. Light

What effect has *light* on paper? Yellowing or embrittlement or both? Are all types of paper, the purer as well as the sulphite papers, affected by

¹ Address before the Science-Technology Group, Chemistry Section at the Thirty-third Annual Convention of the Special Libraries Association, Hartford, Connecticut, June 17, 1941.

light? What is the element in paper that is sensitive to light?

What do we know of the effect of ultra-violet light? Is colored glass to filter actinic rays of light effective in preserving paper? Is indirect lighting preferable to direct? If direct lighting is used, is there a recommended type of bulb? Is it only of economic concern if the lamps in the stacks are left burning? What of fluorescent lighting and its effect?

V. Insects

What in a book attracts an insect and are all insects attracted by the same factor? What insects are harmful to books—winged or crawling? How do they attack the book? What methods have been found to eliminate them? If fumigants are used, are they harmful to books? Can the librarian administer the lethal dose or must it be done by experts? How should it be administered? Must the books be removed from the shelves? How soon is the fumigant effective? How satisfactory are repellent materials incorporated in bindings and in varnishes and lacquers used to coat books?

Is a Drugstore Beetle indigenous to drugstores and a Brown House Moth to brown houses? Is Silver Fish an Izaak Walton term? May we, for purposes of inclusion, call a mouse an insect?

Such is the Fifth Column which creeps in silently to steal away our valued records. What can be said of our diligence to combat it by protective coatings, writing inks, preservation by reproduction, revivifying damaged documents?

Protective coatings

There have been offered many methods of treating paper to render it more resistant to handling and to retard the processes of deterioration as much as possible. Have any of these proved successful? Are they low in cost, simple and easy of application? What methods allow the minimum increased weight and bulk? Do they impair legibility? Do some of the materials used for treating invite fungi and insects? What for instance is the Broadman process? Has it been found satisfactory?

Writing inks

What are the ingredients of writing inks? How do they affect paper? How is the acid in ink deleterious? Is there a standard ink found satisfactory that causes practically no loss of folding endurance of paper inked with it? What is meant by folding endurance and what is the test for it?

Preservation by reproduction

What grades of photostat paper are available and what are their qualities? Is it the photostat paper or the process including washing, which prevents fading of the print? As for film reproduction, is the acetate film preferable to the nitrate? What are the results of test of dry and moist air on film? What are the best cleaning processes for removing dust and finger prints from film or oil from the projector? Can they be applied by hand?

What of the effect on film, of the light of projectors and of contaminated air? Are there other problems?

Revivifying damaged documents

We read in the papers of rehabilitation. Can books and documents damaged by fire, water, chemicals and other forces be rehabilitated? What are the methods? Is legibility restored and a coveted place on the shelves reawarded? What of the household ironer for wrinkled rags, or chloral hydrate for charred charges?

Credit for an idea belongs to its originator so I must tell you that the idea for this paper is not mine. It is Edith Portman's suggestion, surely a thought-provoking one.

Not until I began preparing this paper did I realize how much research had already been done by the National Bureau of Standards, by associations and by individuals, and how closely all this concerns us as librarians. Should not we as custodians of the records of the past and of the future make it our first concern to discover what has already been done to preserve these records? Should we not cooperate to the fullest extent with others who are endeavoring to keep intact the wealth of wisdom encompassed by the covers of a book?

Today the world is full of questions, some unanswerable. Do the questions I have offered intrigue you into searching out the answers?

The spirit of all fruitful search is to

"Attempt the end and never stand to doubt;
Nothing so hard but search will find it out."

I believe that the study and compilation of the best methods discovered by science by means of which librarians can safeguard their treasured collections from the insidious attack of the enemy, is a forward-looking opportunity.

Can we as members of the Chemistry Section undertake this task? Or is it a problem to be explored by a larger group? I am asking YOU.



A Printed Subject Catalog for an Industrial Research Library¹

By ERNEST F. SPITZER

Librarian, Consolidated Oil Corp., New York

AN INDUSTRIAL research library, like any other library, has certain basic functions which constitute its reason-for-being. It serves as a central depository of printed information in its various forms, including books, periodicals, patents, photostats, translations and the like. It is a place of reference and research, and it endeavors to make its collected information available to the greatest possible number.

In addition, being a special library, it will "put its knowledge to work", and its collection will form the basis of such abstracting, translating, indexing and searching services as may be required by the organization of which it forms a part. Furthermore, it will cultivate an active attitude by going to the actual and prospective library users, rather than sitting and waiting for them to come to the library.

Such a principle is translated into practice by two major approaches:

1. By means of an adequate catalog system.
2. By personal contacts.

Generally a combination of both is employed.

Classification of industrial and technical libraries

The majority of industrial and technical research libraries now being operated throughout this country can be classed into two main groups.

To the first group belong those libraries which are directly associated with a research laboratory; this in turn, may be located at a manufacturing plant, or, in the case of a larger organization with many manufacturing centers, may constitute an independent unit where all research facilities are concentrated.

The second group takes in research libraries located at the main offices of the organization, usually operated together with or attached to, a technical department, or patent department, a development department or any of their combinations.

In a library of the first type, all or most of its

potential users are near it and grouped around it. It plays an important role in their daily activities and they need no one to convince them of its value as a basic instrument of research.

A library located in this type of setting is usually best served by a centrally located card catalog—dictionary or classified type. Here, too, the value of personal contact cannot be overemphasized and there exist unlimited opportunities for the librarian to "extend himself" and to take his information and data to the research staff rather than wait for them to approach him. It is at such a time and under such conditions that a thorough background of chemical and/or technical training and a knowledge of problems and research work in progress and under consideration are of particular value to the technical librarian.

A technical research library attached to a technical division, a development department, patent department, etc., is in quite another position and faces different problems.

Obviously, a major share of its work will revolve around the activities of the technical department with which it is associated. In addition, its resources should be available to all other departments and individuals forming part of the organization, especially if located in the same building. Beyond these groups, there are individual key men and persons located in other plants, laboratories, etc., at various distances from the main office.

This is the situation in the case of the Sinclair Refining Company. Its technical and general library operates as a research unit in conjunction with, and under the supervision of, the Patent and Development Department, to which the major portion of its activities are devoted. In addition, however, it serves all other departments and individuals located on the premises. Then, outside of New York City, it serves technical key men and representatives including a number of refineries and laboratories.

Under these circumstances the use of personal contact methods is limited, and the catalog becomes the main source of information on the library's holdings. This catalog, for all-round satisfaction, should meet the following demands:

1. It should provide a quick and sufficiently

¹ Address before the Science-Technology Group, Petroleum Section, at the Thirty-third Annual Convention of the Special Libraries Association, Hartford, Connecticut, June 17, 1941.

complete means of informing the prospective library user of the library holdings, especially from the subject approach.

2. It should not be overloaded with unnecessary information.

3. It should be readily accessible to its users.

4. It should be inexpensive to prepare and maintain.

5. It should be readily kept up-to-date.

Furthermore, in planning for a suitable catalog a satisfactory balance must be reached between any work which may have already been carried out, and whatever remains to be done, a balance which considers the wishes of the management, the degree of efficiency to be obtained and the eventual cost involved.

Cataloguing the Library of the Sinclair Oil Refining Company

A careful consideration of these factors in our case led to the decision that a printed catalog would best answer all the requirements. The term "printed" as used here refers to the form of the catalog, i.e., printed as opposed to card catalog, and not to its method of production which may be by any standard duplicating process. In this particular instance, the mimeograph process was employed.

The library of Sinclair Refining Company is operated as a closed shelf collection. With shelf space at a premium and because of the divergent character of the material covered by the printed catalog, it follows none of the recognized systems of classification. Rather, the books are arranged on the shelves in a numerical and arbitrary order, separated into four groups by size and are merely given a current shelf number for purposes of identification, so that, e.g., C-456 would represent the four hundred and fifty-sixth book received in group C, representing books within a certain size limit.

Books on the shelves and items in the vertical files (such as photostats, translations, reprints, etc) are located with the aid of a finding index in card catalog form. These cards show main author, title, journal reference, if any, series number, if any, shelf number and explanatory notes. Any one item may have two, three or four cards, i.e., author, title and journal reference card and series number card, if required.

However, none of these aids covers the most important subject approach and it is here that the printed catalog takes its place.

The catalog is based on a list of some 250 subjects, arranged as headings in alphabetical order and including a generous number of "see" and "see also" references. The terms used in the list are selected from the fields of petroleum technology, organic chemistry and related subjects. The list is flexible and terms can be eliminated or added

whenever desired. This arrangement resembles a subject-heading list and is, of course, self-indexing. It permits any single book to be listed under several headings, the same as in a dictionary card catalog.

Under each individual heading are listed the entries for the books, pamphlets, bulletins, etc. Each entry is made up of the following parts, in the order given:

a. Title, in an abbreviated form, omitting initial article, alternative title, subtitle, etc.

b. Author, individual or corporate, but no initials, dates or name added entries.

c. A statement of the edition, if other than first.

d. *Date of publication.*

e. Shelf number.

An entry of this type runs across a page and furnishes all the information required. This is an example of part of a page of the catalog:

Catalysts And Catalysis

Catalysis in Organic Chemistry	Sabatier	1922	C-194
Industrial Catalysis	Green	1928	C-102
Catalytic Processes in Applied Chemistry	Hilditch	1929	B-75
		2nd 1937	B-75a
Catalysis	Schwab	1937	B-385
Phenomena of Catalysis	Berkman	1937	U.O.P. Booklet

Individual titles listed under any one subject are arranged by date of publication as far as this can be conveniently accomplished; editions of the same book, on the other hand, are usually kept together. This arrangement permits the reader to ascertain at a glance "what is the latest" information on any given subject within the catalog, while the "see" and "see also" references direct him to related subjects.

The very low cost of preparing this type of catalog is an important point in its favor. The information required is taken directly from the books, assembled on cards and then typed on stencils. Then follow the usual operations of running off the sheets from the stencils, using both sides of the paper, assembling into sets, adding necessary extra pages, providing covers and fastening the sets together with heavy staples or fasteners. The catalogs are then ready for mailing and distribution.

All this work can be readily and accurately performed by a non-professional staff, and the directions are clearly given and understood. If it is assumed that mimeograph service is available, the only additional cost would be for the printed covers which will not exceed a few dollars per hundred.

Whenever the pros and cons of card and printed catalogs are enumerated, it is rightly claimed that a printed catalog is out-of-date practically as soon

as it comes off the press. However, in a library of the type under consideration here, this problem can be solved without too much difficulty.

First, the library copy of the subject catalog which is available for reference, is kept in a loose-leaf binder and is constantly kept up-to-date by insertions of new entries. Thus, anyone consulting the library can refer to an up-to-date subject catalog supplemented by the author and title card index, just as if a complete dictionary card catalog were available.

Second, by virtue of his knowledge of projects in progress and contemplated, and of the major interests of the catalog holders, the librarian is in a position to call new books to the immediate attention of interested parties, either by personal discussion or by mail. This, again, is a legitimate place for using the "personal contact method."

Third, accession bulletins and supplements are

prepared at suitable intervals, to be used together with the catalog.

Fourth, the catalog is easily revised and retyped whenever the need arises.

Conclusion

Thus, a catalog of the type described here offers a number of definite advantages within the limitations provided. Its wide distribution makes it available to its users at all times. It does not require the space needed by a card catalog. It is inexpensive to prepare and to keep up-to-date. But, on the other hand, it fulfills these functions only in a small to medium-sized library. Here, as in other places, the law of diminishing returns eventually asserts itself. Because of its increasing bulkiness the catalog is not recommended for larger libraries.

Plastics¹

By HENRY GRIFFITH

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FRANKLY, I am somewhat at a disadvantage in speaking to you on this particular subject, as there are some amongst you who, I personally know, are better informed both from the point of view of theory and of practical application of these materials than I am. Therefore, it is essential to make this a most informal talk and to spend at least a portion of our time in discussion of questions which may be uppermost in your minds in regard to plastic materials. However, there are some amongst you who have a somewhat limited background in regard to plastic materials, and we should, therefore, deal at least for a short period upon the basic theory of these plastic materials, and at least a short time in a discussion of the methods of manufacture which are being commercially utilized before proceeding into a discussion of some of the functional and decorative uses of these materials. I also want finally to mention quite briefly the place of plastics in our National Defense program.

¹ Abridgment of an address before the Science-Technology Group, Chemistry Section, at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 17, 1941.

Definition of plastics

To begin with, we should start with a good understanding of what is meant by "plastics." I hesitate to make any explicit definition, as the word has been much misused and defined in so many ways. However, if I must give some definition, it would be briefly that a plastic is a material which is solid at ordinary temperatures but which allows an appreciable and permanent change of form when subjected to strain. Therefore, a plastic material must possess both elasticity and rigidity. Finally, a plastic material, as it is commercially known, is an organic material.

Of equal importance to a definition of plastics is a definition of the word "resin", or rather, synthetic resin, for most of our plastics are made up from resinous material of one type or another. One of the shortest definitions of synthetic resins that I have found, and therefore, probably as good as any, appeared in a book entitled *Synthetic Resins and Allied Plastics* by Barry, Britton, Langston & Moore. This book has stated that a synthetic resin may be considered a complex amorphous organic

solid or semi-solid material, usually a mixture of substances, built up by chemical reaction. In respect to its lustre, fracture and comparative brittleness at ordinary temperatures, it closely simulates the natural resins in insolubility in water, fuseability or plasticity when heated and subjected to pressure, or other characteristics in which a synthetic resin resembles the natural resin. However, in chemical constitution there is a wide divergence between the natural and synthetic resins and equally wide is their divergence in response to chemical reagent.

Now, having these two definitions in mind, let us proceed to a general understanding of the field of plastics. First, we have two large and major divisions—those plastics which are thermosetting and those which are thermoplastic.

Thermosettings are, for practical purposes in the discussion, limited to two types of material commercially known and used in large quantities, namely, the phenol formaldehyde and urea formaldehyde materials. These by very name constitute that group which goes through a chemical reaction during the forming stage, and thus under heat changes its constitution to that of a new material. In this changed form the group assumes the rigidity and elasticity which is characteristic of all plastics, although the shape cannot be changed under further heat treatment.

The second class of materials is the thermoplastic materials. These materials embrace a wide range of different chemically constituted plastics from the cellulose materials to the vinyl materials. Under the cellulose materials we have the esters and ethers of cellulose commonly known as nitro-cellulose, cellulose acetate, ethyl cellulose, butyl cellulose, etc., and the modified esters such as cellulose acetobutyrate and cellulose aceto-propionate. Under the vinyls we have two main divisions again, the aliphatic and the aromatic vinyls. This latter group embraces styrene, vinyl naphthalene, its analogues and the divinyl benzene groups. Under the aliphatic vinyls we have the vinyl halides which in the plasticized state constitute the rubber substitutes, the vinyl ethers, the vinyl esters, those that are modified with chlorine and those that are modified by condensation of aldehyde, and the methylene ketones which are growing and will eventually develop large uses, and finally the acrylic types which are made up of the acrylic esters, the methacrylic esters, acrolein, acrylonitriles, itaconics and aconitics acid. These cellulose and vinyls make up the great majority of the thermoplastic materials.

Thermosettings

Let us now quite briefly review these materials in somewhat more detail as to their uses. First, we have the thermosettings which, to recapitulate,

are the phenol formaldehydes, the urea formaldehydes and the thio urea formaldehydes. You are all familiar, with the phenol formaldehyde type commonly known as Bakelite. This material, originally commercially developed by Dr. L. H. Baekeland, has a considerable history behind it. It was developed in 1909 and up to the present emergency had been used mainly in pieces of a decorative nature rather than functional, although a number of functional applications were in use, such as the so-called plastic airplane, special electrical equipment and certain automotive parts. Now, under the stimulus of National Defense, this material is achieving importance as a substitute for metal and wood.

At this time, I should like to point out that there is a certain misunderstanding in regard to plastic materials, namely, that plastic materials are cheap in price. The thermosetting materials are the cheapest of the plastic group and even these range from 11¢ to 12¢ a pound up to as high as 75¢ or 80¢ a pound. This quite naturally has startled the manufacturers who are attempting to replace metals, as it had been generally thought that plastics were considerably cheaper. In addition to this fact, it should be remembered that most of the plastic materials, while having much lower specific gravity than aluminum, iron and steel, do not have as high a modulus of elasticity. Generally, the plastic has a modulus approximately 1/20th of that of the metal for which it is to be substituted. So far, I have spoken of the phenol formaldehyde type purely from the point of view of the molding materials. There is, of course, the so-called cast resin which is, as its name implies, cast in lead alloy molds, and can be produced in beautiful colors and with lovely color effects. This material, however, unlike the molding compounds, is quite expensive in the finished form, because of the considerable amount of hand labor involved in the casting process.

The second type of material of a thermosetting nature is the urea formaldehyde or beetle ware. With this material molding compounds of a far greater degree of color stability can be made, as for example plastic dishes, cups, tops to thermos bottles and similar articles where color has an appeal. The urea formaldehydes are quite similar to the phenol formaldehydes in physical characteristics, i.e., they have the same tendency towards brittleness and the same degree of rigidity and thermal stability, and are made by the so-called condensation reaction.

Thermoplastics

Amongst the thermoplastic materials, we have first the cellulose materials of which cellulose nitrate is possibly the most familiar. It was originally known commercially as celluloid and with only a slight modification this same basic cellulose nitrate be-

comes gun cotton. The celluloid material, until quite recent years has been relatively unstable, and, it is a wonder that many of the postmen who wore straight celluloid collars and celluloid fronts did not suddenly burst into flame by spontaneous combustion. However, it has certain characteristics of toughness which none of the other cellulose, and in many cases the vinyls, possess, since it has a toughness combined with rigidity, unusual even amongst the thermoplastics. This is mainly due to the use of a modifying agent which gives it this plasticity, namely, camphor. Camphor is a plasticizing agent quite remarkable in the thermoplastic and particularly the cellulosic field, as it is a single plasticizer which gives to the finished plastic all of the desired characteristics. Fortunately, there are other materials to replace camphor, which used to be imported from Japan and Germany. While made synthetically by Du Pont today, the capacity is considerably under that required for the total usage of the industry. When the manufacturers were faced with this shortage, they changed to the use of tricesyl phosphate and diethyl phthalate used in proportions of approximately 50 per cent with the camphor, making up the total 100 per cent of plasticizer required. However, this combination does not give as good a material as the camphor by itself.

Now cellulose nitrate can be manufactured from wood pulp which is purified and nitrated, whereas cellulose acetate, the second large producer in the cellulosic field, is acetylated cellulose and can be made only of acetylated, purified cotton linters. Further, cellulose acetate is not as good a plastic to begin with as the cellulose nitrate.

In this particular field of plasticization of cellulose acetate, there are a great many theoretical ideas as to just what is the action of the plasticizer upon the cellulose chain. At the present time the general accepted theory is as follows:

The plasticizer either tends to solvate the cellulose, thus increasing the distance between the chains and reducing the forces holding the adjacent chains to its neighbor, or a network of membranes and filaments of solvated derivatives surrounds and penetrates areas of much higher concentration of plasticizers. The first action was proposed by three men, namely, Mark, Myers and Kuhn. The second system was, to the best of my knowledge, proposed by the Hercules Powder Company. Irrespective of the system, the method used produced molecules with long stretches of chains which were held apart and thus freed to move under the influence of thermal agitation while a few strong cross linkages with firm bands prevent cold flow.

Such systems show relatively high tensile strength and toughness. Possibly a more readily understandable theory is that at which I have arrived through my own work in the field, namely, that there are

three types of plasticizers for the cellulosic materials which I roughly classified as solvating plasticizers, enriching plasticizers and flux type plasticizers. These plasticizers do exactly what is suggested by their name,—the solvating plasticizer absorbing the plasticizer into itself and thus producing the type of system suggested by the first theory given above. The second type, the enriching plasticizer swells up the molecule and gives a somewhat more rubbery system, or jell type structure, while the third type plasticizer has a solvating action at high temperatures and probably comes out of the molecule at room temperatures and lies in the intracellulose spaces of the micellar bundles, thereby giving a rigidity to the plastic at room temperatures.

It is of course quite logical to question at this point whether it is not somewhat easier to modify the molecule itself chemically by some grouping which would have an effect on the physical properties similar to that of the plasticizers. This is done commercially by the use of butyric and propionic mixed esters of the cellulose acetate. In these cases a plasticized group is obtained and much less plasticizer is necessary to produce the same degree of plasticity in the finished material. With ethyl cellulose and the other cellulose ethers the main effort in recent years has been directed to the development of a film which can be used for wrapping and which in the trade produces a material capable of what is termed a deep draw. The utilization in the molding powder field has to date been somewhat limited.

Proceeding now to the vinyl copolymers, we have the vinyl acetate chloride which is the most common type of copolymer known. Of course, it is generally conceded that the aromatic vinyls suffer from certain disabilities which have retarded their widespread acceptance due to the fact that the vinyl esters, such as vinyl acetate, propionate, butyrate, etc. are too soft, weak and easily soluble, and thus soften at temperatures too low to make them suitable for any commercial purpose. On the other hand, the polymers of the vinyl chloride on other vinyl halids are too brittle, unstable and hard and insufficiently plastic to be entirely satisfactory. Therefore, the joining of these two polymers in varying quantities produces a plastic with characteristics varying between these two extremes. This, of course, is the "happy hunting ground" of all copolymer work today. Every copolymer that is being developed is being developed purely to give a plastic which by copolymerization gives the two characteristics, the extremes of which are unusable, but the combination of which would be usable. Unfortunately, most copolymers do not do that, and more often than not, you get all of one and very little of the other in the finished mixture.

The second group, the acrylates, more commonly

known as "lucite" and "crystalite" are modified acrylic resin polymers. These have been modified in their base molecular structure into an ethyl or butyl ester form so as to give plasticity and fluidity at the elevated temperatures which, of course, are essential to the molding of a useable plastic. However, plasticization of this material has been found necessary in most cases, and additions of a lubricant have further helped in commercial utilization. We then have left the Polystyrene group which is, of course, of vital importance, as the unusual electrical properties which this material possesses are beginning to receive true recognition in the radio and electrical fields. In addition the material has a rigidity which has now made possible industrial utilization of the thermoplastic materials. However, this material has a low shock strength which prevents its use in the wide field it should serve. The comment is often made that Polystyrene does not become embrittled at low temperature. Of course, while this is true, it should be remembered that it is so poor at room temperature that even at low temperatures, it is not to any considerable degree better than some of the cellulose. It possesses a great beauty in color and transparency in forms similar to the Methacrylates.

Unfortunately, so far as we know today, Polystyrene cannot be plasticized. This is in part due to its chemical formation, and the only method of giving different degrees of fluidity and flow in molding and even in utilization comes through the degree of polymerization. Possibly I have neglected to make clear that in these materials we start with a monomeric material, a resin which has only one unit of the molecule in it. During the polymerization which forms the plastic, there is a continuous chain growth of these monomeric units into what is termed a polymer or many monomers added end to end. The exact chemical method of obtaining these tremendous molecules is little known, but let me give those of you who do not know the field well an idea of the size of the chains. Polystyrene can be polymerized up to between 500,000 and 1,000,000 units of the monomer.

Utilization of plastics

From the point of view of utilization, thermosetting materials are used where costs must be maintained at an absolute minimum. They are generally molded by one of two processes,—the com-

pression molding method, or the transfer method. The thermoplastic materials, too, are molded by compression molding, but also by a process called injection, which is very much more rapid. The thermoplastic materials are obtained also in sheets, rods and tubes, and these are blanked, machined, etc. into the forms required. The thermosetting materials are used, as stated before, in plywood to give a plasticity to the wood in molding and in the finished form to give rigidity, decrease in warpage and to prevent attack by fungus or algae. The thermosetting materials are used particularly for high temperatures such as may occur in such functional utilizations as automobiles, while the thermoplastic materials, being heat sensitive, cannot be used above 212 F. Each material varies in its resistance to different solvents, and therefore each material must be used with a thorough knowledge of the external effects to which it must be subjected, including moisture, actinic rays, solvents, physical loading, temperature, etc.

Plastics in the present emergency are receiving two-fold interest: (1) in replacement of metals, as we have briefly discussed, and (2) in Government work. In the first, we are making considerable headway. There are several utilizations which have shown the plastic to be better than the metal previously used, and at a cost generally comparable to the original metal. In some incidents lower costs have been achieved, but in the majority of cases an increased cost has produced a material of somewhat inferior quality. Secondly, there is considerable plastic material being applied by the Army and Navy ordinance departments to war work. Polystyrene and phenol formaldehyde resins make up the majority of the utilization. However, a most unique situation has arisen. We are faced with definite shortages in most of the plastic materials. Production of phenol formaldehyde and urea formaldehyde has been reduced very considerably due to the fact that methanol production facilities have been taken over for munitions. This has been quite serious in many cases, and a number of the plants are now running at very much reduced speed even though their orders have been greatly increased. In the cellulosic field the plasticizers are becoming a priority material.

This is but a thumb nail sketch of plastic material as we know it today. I have made no attempt to show you what is expected from research for the plastic industry of tomorrow.



Chemical Library Research And Your Car¹

By ELEANOR V. WRIGHT

Engineering Librarian, Chrysler Corporation, Detroit, Michigan

WHEN we think of the automobile, which has speeded up communication and revolutionized so many phases of life, tribute must first of all be paid to the genius of the mechanical engineer for its invention and early evolution. The automobile, in fact, is almost always thought of as a mechanical device, and we forget the role of chemistry, yet chemistry is also a very essential and important wheel in the automobile industry. It is to the chemical and metallurgical engineer that credit must be given for the development and refinement of the automobile. It is he who has developed the various alloys, surface finishes, safety glass, textiles, rubber, plastics and countless other products without which there would be no modern automobile.

Since I am not a chemist, and the Engineering Library connected with the Testing and Research Laboratories of the Chrysler Corporation is not primarily a chemical one, perhaps I am not qualified to speak on this subject. Nevertheless I believe it may interest you to know the procedure in our library to aid the chemical engineer. The automobile manufacturer works with the materials that your companies sell him, developing and testing them. In this respect it is well to remember that the automobile industry is the largest purchaser of such commodities as gasoline, rubber, steel, malleable iron, lubricating oil, plate glass, nickel and lead.

Chrysler Corporation Library collection

By way of background for the library, I might mention that the first Chrysler car was exhibited at the 1924 New York Automobile Show and was built in the old Maxwell Automobile plant which Walter P. Chrysler was helping to reorganize at the time. The immediate popularity of this car led to the purchase of the properties of Dodge Brothers in 1928, and thus the immense Chrysler Corporation was formed. In comparison, therefore, with other larger corporations it is still quite new. The Library, however, was not organized until about seven

years ago. At this time, it possessed some fifty odd textbooks and a couple of moldy sets of the *Iron Age* and *Automobile* which preceded the magazine now known as *Automotive Industries*. These early volumes were inherited from Dodge. Today, however, its collection is some five to six thousand books and bound periodicals supplemented by a large trade catalog and pamphlet file. In subject matter the literature covers, mechanical, chemical, electrical and metallurgical engineering, air conditioning, industrial hygiene, and some business and economic material.

In a library of such broad scope, the librarian cannot be a specialist in all fields, much as it might be desired. She can, however, make her collection a valuable one by providing the necessary and most important handbooks, dictionaries, directories, reference texts, periodicals and abstract service guides in each of the various fields covered by the library. They are the foundation and the main reference source of the collection. If a library of this type operates on a budget, as ours does, there is, of course, the added problem of how much shall be spent for each item. Our chemical and metallurgical literature amounts to about one third to one half of our entire expenditure. *Chemical Abstracts* form the backbone of this field as in all chemical libraries. In addition, there are complete sets of the *Engineering Index* and *Industrial Arts*; the latter is especially useful for current references as most of the leading American and English chemical and metallurgical journals are indexed in it. The library subscribes to approximately 200 periodicals, of which 85 are chemical and metallurgical. Only about 10 periodicals in foreign languages are received, none of which are chemical. Three-fourths of our periodicals are bound at the end of the year so we are, therefore, unable to keep an extensive clipping file.

Library services

The Library does not issue an abstract bulletin of current articles, but the library staff and the chemists check carefully the abstracts appearing in the *Journal of the Institute of Metals*; *Metals and Alloys*; *Journal and Abstract of the American Ceramic Society*; *Chemical Abstracts*; *U. S. Government Pub-*

¹ Address before the Science-Technology Group, Chemistry Section, at the Thirty-third Annual Convention of the Special Libraries Association, Hartford, Connecticut, June 17, 1941.

lications, *Monthly Catalog*; *Nickel Bulletin* of the Mond Nickel Company and the *Library Bulletin of Abstracts* issued by the Universal Oil Products Company. In addition all current periodicals are scanned by the librarian for book reviews and advertisements of pamphlets and catalogs from various manufacturers that may be of value.

It is not deemed advisable for the Library to issue an abstract bulletin of its own due to the wideness of its collection, but a monthly bulletin is circulated in which are listed new book accessions, fifteen or twenty titles of outstanding periodical references, pamphlets and the like, and a short news column in which are given miscellaneous items of interest concerning the library. This bulletin is of special interest to the users of the library located in other plants who must necessarily make requests by mail or telephone. Our bulletin was started last October and now has a mailing list of two hundred and fifty.

Fortunately for our Library, Detroit has an excellent public library from which we borrow constantly, and the University of Michigan, located at Ann Arbor, is a distance of only thirty miles. Other special libraries such as the ones at Dow Chemical Company, General Motors Corporation, and the Ford Motor Company, have been most generous and willing to loan us material whenever needed. If the particular reference cannot be secured in Detroit, every effort is made to obtain a photostatic copy from some agency outside the city. Photostatic reproductions of articles from our own periodicals are obtained through the company Photographic Department and all legitimate requests are filled.

Periodicals are routed to executive engineers and heads of various Laboratories. They are checked in and out on a Cardex file. Before a periodical is sent on its way, it is always scanned in the library for articles of special interest which are to be added to the Analytics card file. Then, if in our estimation, a particular article should be sent to a member of our clientele who would not ordinarily see the periodical in question, it is sent directly to him, marked to his attention.

Chemical and metallurgical reference books

Among our chemical and metallurgical reference books there are the usual well known handbooks, encyclopedias, dictionaries, year books, and the like. It is very difficult to classify them according to importance, but for our purposes, we list the following fifteen as essential.

1. American Society for Metals. National metals handbook. 1939.
2. Carpenter, Sir Henry C. H. *Metals*. 2v. 1939.
3. Chemical Industries. Buyer's guidebook number. 16th annual. 1940.
4. Chemical Rubber Company. Handbook of chemistry and physics. 24th ed. 1940.

5. Davis, Carroll C. Chemistry and technology of rubber. 1937.
6. Dustan, A. F. Science of petroleum. 4v. 1938.
7. Ellis, Carleton. Chemistry of synthetic resins. 2v. 1934.
8. Gardner, William. Chemical synonyms and trade names. 1936.
9. Heilbron, H. I. (Editor). Dictionary of organic compounds. 3v. 1934-1937.
10. Mellor, Joseph William. Comprehensive treatise on inorganic and theoretical chemistry. 16v. 1922-1937.
11. Nash, Alfred W. Principles of motor fuel preparation and application. 2v. 1934-1935.
12. National Research Council. International critical tables. 7v. 1926-1930.
13. Perry, John H. (Editor). Chemical engineers handbook. 1934.
14. Thorpe, Sir Thomas Edward. Dictionary of applied chemistry. 7v. supplements 3v. 1927-1936. (4th ed. v. 1-3).
15. Woldman, N. E. Engineering alloys. 1936.

The automobile manufacturer must also be interested in the developing and testing of metals, for the many metallurgical achievements of the past decade have made possible the present all steel body. Through metallurgical research domestic molybdenum has been partially substituted for imported tungsten. Research with non-ferrous metals has also played its role. Die castings for body hardware and radiator grilles are now largely of high-purity zinc; sintered powder bearings have also advanced lubrication, and the electroplater has developed hard chromium and bright nickel platings for automotive parts which have added much beauty to your car.

Whenever requested, the Library compiles bibliographies for its clientele, and in addition maintains the analytics card file previously mentioned. As in every library, this is our first-aid tool. Here, arranged according to subject matter, are listed references which have taken considerable time to unearth and may be needed later, and items which are used often and must be found at a minute's notice. Laboratory reports and patents are filed in departments outside the library but are accessible for the Library's use.

The National Defense Program has, of course, increased the work of the library as it has no doubt in many libraries, and in its wake has brought many new problems. Much time and money have been spent developing our aeronautical literature section and gathering data relative to strategic materials. In addition, we have collected quite a complete file of *Army, Navy, and Federal Stock Catalog Materials Specifications*, and the S.A.E. *Aeronautical Materials Specifications*.

Methods Used in an Industrial Research Library¹

By THELMA R. REINBERG

Librarian, Battelle Memorial Institute, Columbus, Ohio

MUCH has been written of technical libraries in the past two decades, but it is not yet generally recognized that special library work is a specialized type of research. Arthur Connolly, in his paper on *Library vs. Laboratory Research*, in a recent issue of the *News Edition of Industrial and Engineering Chemistry*, tells us that today science has another setting for research—the library. In order to conserve time and money, literature searches should be made on all projects before laboratory work is started. The primary duty of the librarian and her assistants is, therefore, to have all material easily accessible. Special library procedure, as a rule, varies from that used by public and university libraries since it serves a special clientele.

Material in a special library includes books, journals, miscellaneous material such as reprints, photostats, microfilm, theses and special papers, trade literature, patents and college and university publications, but, unless this material is brought to the attention of the group served, its ultimate value will be worthless. The operation of such a library is very important. The librarian must be free for administrative work, an all important phase of which is contact with key men in the organization. In addition to cataloging and classifying material to make it readily accessible there is the necessary reference work as well as that which may be considered routine, circulation and binding.

What is the expedient method of doing these various jobs? At Battelle Memorial Institute, where the library with its staff of four serves 150 research engineers and members of the various auxiliary groups, it is our aim to use a minimum amount of time in the physical preparation of material so that more time may be allowed for reference and other inquiries.

Books are classified according to the Library of Congress system and all are fully cataloged. We save time in this process by using L.C. printed cards whenever possible. Journals are listed in the catalog by title and the inclusive volumes are given. Un-

bound serials are also noted with a list of our holdings. To a great extent the efficiency of a technical library depends upon the selection and availability of the unbound material. To make this easily accessible, catalog cards of the vertical file miscellaneous material are included in the book catalog. This material is classified and filed by subject and when sufficient material accumulates on one subject, it is removed from the general file and by the addition of a number on the pamphlet and catalog card is filed with similar material. For example, material on rotary furnaces is accumulated and put in the F folder; when four or five such articles are received they are placed in their own folder, given the next number in the F file, i.e., F-7, and then a cross reference card for rotary furnaces is made. These changes are possible by adding the number 7 to the F already on the catalog card and pamphlets. Thus, books, periodicals and miscellaneous material are indexed and filed.

Patents are the next most important phase of responsibility. Those of interest are ordered weekly from the *U. S. Patent Gazette*. So that they may be circulated as soon as they are received, a form is used listing the patents in numerical order, giving the title and the name of the person to whom they are to be sent. When they are returned to the library they are fully indexed by number, patentee, assignee and subject and then filed numerically. At the end of the year they are bound in such a way that other patents may be added as the occasion arises.

Trade literature is another important tool, for it is there that much of the new material appears before it is printed in books or journals. This we index under company and subject and file alphabetically by name of company.

University publications and bulletins of various engineering experiment stations are listed on a serial card and entered as analytics. This method of cataloging almost always suffices since these publications are seldom requested except as a *University Bulletin*—practically never by author or title.

Probably a unique service only a special library can offer is the thorough indexing of current literature. We do this by use of abstracts pasted on cards with the subjects added. Three copies of all abstract journals are received, two of which are clipped. These cards are filed in a dictionary catalog.

¹Address before the Science-Technology Group at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 18, 1941.

The library is a service department and to pay dividends potential users must be made aware of what is available. To accomplish this we issue a semi-monthly literature review which lists the important articles, pertinent to our work, appearing in the journals the library receives. This review brings these articles to the attention of the men and saves them time. In it are listed new books and miscellaneous material as well as journals in which no articles of special interest are found. Thus the Institute staff is informed of all material that comes to the library. Upon receipt of the review the men check the items that they wish and return it to the library. To accommodate those wanting to look up information immediately, all material from the current review is kept in the library a week. After this period any material requested is lent out for a three day period. To supplement this service we send out

cards listing articles, news items and other information of individual interest. This serves as a more personalized library service. This reviewing and circulation of journals is time consuming, but it is negligible when compared to the time saved if each man had to do this work for himself.

The most difficult task we have to overcome is attempting to bridge the gap between the research worker and the librarian. Too often the former fails to realize what the librarian can do for him. By the services we offer, literature surveys, preparing bibliographies on needed subjects and sending out pertinent information as it comes across the librarian's desk we can do much to keep the men library minded. We try to imbue the staff with the idea that we are there to help—it matters little whether it is only a question that can be answered immediately or a problem that will take an extensive literature search.

Technique Of Meeting The Information Needs Of A Patent Department Of Any Industry¹

By CHARLOTTE SCHALER

Sinclair Refining Company, New York

A PATENT and development department is concerned with the technical and legal aspects of process development. It has numerous functions of an engineering and chemical nature, and in connection with its work along the lines of the actual development of processes, it must also carry out prior art, patent and literature searches. It is with this phase of the work I shall deal, discussing at the same time the information needs of a department such as ours.

The usual lengthy search procedure, used by the investigator entirely dependent on the public libraries and the Washington Patent Office, can generally be effectively shortened, often entirely circumvented, if library material is arranged purposefully to be of most help to the searcher. He cannot save time at the expense of the completeness of searches, however, for that might mean the loss

of a case in court or the waste of thousands of dollars on research already carried out elsewhere. Nor can searching be rushed. However, it is possible to plan ahead for search needs in such a way that not just hours, but literally weeks and months, can be saved on practically every search made. The problem I shall discuss then is, how the searching done in a patent department and the material stored in a library can both be planned around a special industry for economy of time and effort spent in searching, without loss of efficiency, and how such specialized search procedure differs from the generally used search methods.

Flexible subject index system

Search procedure in a specialized industry can be simplified immeasurably by the development and use of a highly flexible subject index system, developed for the specific industry in question. Material stored in a library according to such a system will automatically feed into search needs. The system must be suitable for both patents and

¹ Abridgment of an address before the Science-Technology Group, Petroleum Section, at the Thirty-third Annual Convention of Special Libraries Association, Hartford, Connecticut, June 17, 1941.

periodical literature and must be planned accordingly. Books also can be indexed in this way, either as a whole under the more general classes, or broken up into chapters and the various chapters indexed under the more specific classes.

The urgent need for a form of subject indexing peculiarly useful for searching resulted in developing our own system in the patent department. A careful study of the problem was made and the legal as well as the engineering and chemical viewpoints were considered in setting up this system, which we have found very satisfactory. The object was twofold: 1) to transform the files from a mere place where searches could be made into an effective research tool or library, where material would be so arranged that it presents what might be called a series of continuous searches in all important subjects of our field, and 2) to organize searching, abstracting, indexing, etc., so that every operation would serve, not one purpose but several. Thus, our technical library was actually an outgrowth of the files of the patent and development department, arranged to meet its specific needs. Naturally it was advisable to have current literature sheets made, that is, abstracts of current scientific articles, to be sent out to our various refineries, laboratories and other departments. Such material is subject indexed, so that these cards, together with the patents also indexed according to the same system, form a series of continuous searches on the class subjects, constantly kept up-to-date. We receive from the Patent Office in Washington, copies of all U. S. patents in our field of interest. These are analyzed and subject indexed like the current literature. Before the war we used to get files of foreign patents as well.

Usually current literature abstracting and indexing serves two purposes: 1) keeping members of the company abreast of scientific developments, 2) keeping references filed by subject so that they can be found when wanted. By using our special indexing system, we achieve two additional services without added work: 1) we obtain extensive search material corralled in advance under quite detailed possible search subjects and 2) we are able to give to our research laboratory men (who are in East Chicago, while we are in New York) instantly available collections of material, including both periodical literature and lists of patents. The advantage of such material accumulated on special subjects is that it is ready and waiting, before it is requested. Also the research worker is afforded easy access to the collection.

The ordinary routine of abstracting and indexing keeps these collections constantly up-to-date with no additional steps or extra labor. The use of the hectographing machine makes it possible to ac-

complish all this with one typing operation. The current literature sheets, the cards for the subject file for use of the patent department and the cards for the subject file for the research laboratory are all run off from a single typed copy. The current literature sheets are mailed to the various refineries, departments, etc.; one set of subject index cards is kept and one set is sent to the East Chicago laboratory.

Now for the details of working out such a subject indexing system. The patent classification system of the Patent Office in Washington must of necessity be extremely broad, because it covers every conceivable subject. The same holds for the Dewey system. However, some such system could be devised to cover only one industry. To be useful the system must be detailed enough to be of real value, yet broad enough to make proper classification possible. It must present room for expansion through sub-classes to include, when necessary, new developments and discoveries, and it must completely cover the industry.

In working out such a system for a patent and development department it must constantly be kept in mind that its main purpose is to simplify and aid prior art, patent and literature searching, and it must satisfy the research man. The chief objection to a decimal system is that it is arbitrary, and consequently frequently irritates the research worker, the laboratory and plant man, who are by nature logical. Can we overcome this arbitrary and artificial character of a decimal system, so that it will attract rather than annoy the scientific man? The obvious answer is, yes, if we can *make* it logical rather than arbitrary.

Index based on industry flow chart

The most logical way of working out such a flexible, specialized subject index system is to follow a generalized flow chart of the industry in question. This idea wins the approval of laboratory and plant specialists, because it represents their natural way of thinking. They note, for instance, that the number designations of the classes are not haphazard, but gradually increase as we approach nearer and nearer the end of the flow chart. That means the numbers are easy to remember, and users of the system soon find they no longer require the alphabetical guide.

The patent attorney, on the other hand, wants searches. He likes this type of classification system, because finished searches reach his hands much more quickly. Searchers of course like it, because, besides being logical, it cuts down their work.

A lengthy alphabetical guide to the decimal system must of course be available for visitors and

for those not completely familiar with oil processing. Here every possible synonym is entered for various operations and products, and everybody's pet phrases can also be put in for good measure—one important advantage of such a decimal subject indexing system is that it does not become antiquated. The system has proved workable, capable of easy expansion and extremely adaptable to the inclusion of new developments and discoveries as they arise.

To illustrate how time in searching can be saved by keeping up such a classification of literature and patents over a period of years, I will give an example. Suppose to-morrow we should begin a search on solvent deasphaltizing of lubricating oils with alcohols. Normally a complete search on this subject through the patent and periodical literature at the public libraries would take months. However, in our decimal subject index system, class 12.0222 is on solvent deasphaltizing with alcohols. Under this class we will find a list of all patents on file in our library on the subject and that means practically all patents that have been issued on the subject. We will also find here all articles (in magazines we abstract) that have appeared on the subject since 1927, when our current literature abstracting and indexing were begun. Also material of older articles in our photostat file will appear here. Thus within an hour or so we can have on our desk several hundred pertinent references. In fact, we will know fairly accurately what the outcome of our search will be. Actually it is complete, except for compilation.

Our subject index classes are very definite and detailed, and constitute, as I have pointed out before, a series of continuous searches, not only on general subjects, but on fine points of special processes. As we have almost 400 subject classes (counting sub- and sub-sub-classes), this means we have almost 400 running searches, kept continually up-to-date, on all important phases of our industry and special problems that are likely to arise, as well as fairly complete patent searches on almost anything you can mention in our line of work. It is only when we must search in some related field, outside our own industry, and are thrown back on the usual patent indices, abstract journals and journals that we do not ourselves abstract and index, that we run into the time-consuming mechanics of regular search methods.

You may ask "What do you mean by using a generalized flow chart of an industry to work out a subject index system?" Let me illustrate with the oil industry. First, the oil is taken out of the ground. Thus we start with a class on production. As sub-classes under this we will put various methods and points of interest in connection with prospecting,

drilling, etc. Then the oil must be taken from the wells to the plant. We have a class on transportation, with sub-classes on pipe lines, tankers, etc. Then as other main classes, there will follow in succession, classes on preliminary treatment of oil preparatory to distillation, the general class on distillation with its numerous sub-headings on different types of distillation, then cracking with sub-headings covering the many different kinds of cracking, etc., until we have followed petroleum from the crude to the finished products. When we have set up the process classes, we again start at the beginning of the flow chart and continue by designating product classes, starting with gas, the lightest petroleum product, and ending with asphalt and coke. Then we will create classes on products made from petroleum and material used in connection with petroleum refining, as well as classes on various allied industries of interest to us, and certain classes for purely scientific articles on various subjects. The classes for such an index will practically suggest themselves and the index can be expanded when necessary.

File of old material invaluable

Perhaps one of the most marked differences between the technical library of a patent department and an industrial technical library in general, or one operated in connection with a research laboratory, is the value a patent department places on old material. The reason for this is of course the problem of patent anticipation. U. S. patents are valid for seventeen years from the date of issue and the application date may be several years before the issue date. To anticipate a patent we must find pertinent references two years or more prior to the application date. Consequently we may frequently be looking for pertinent references printed twenty years or more ago.

In a patent department we need current literature to keep abreast of the times, but current literature references must be indexed and filed to meet search requirements of future years. Thus, the value of the current literature subject index file increases as it ceases to be current.

Antiquated technical books are carefully preserved. Our file of British patent specifications dates from 1694, and we have abridgments back to 1617. Our German patent file begins with 1877, Russian with 1871 and French with 1803. Our photostat file of articles of interest to the oil industry goes back to 1805. Most of this material was collected by searching through the libraries of Europe at considerable cost. These accumulated files of old material are constantly in use. Some of the old Russian literature has proved particularly valuable because these references are not found in the

English, German or French abstract journals of early years. We have quite a good file of early Austrian patents and privileges, and we have scattered copies of Belgian, Danish, Dutch, Hungarian, Indian, Italian, Japanese, Mexican, Norwegian and Polish patents.

Bibliographies essential

Bibliographies are, of course, of great value to the searcher and therefore those should be collected which deal with all subjects of interest to the industry in question. A simple way of doing this is to create a special class for bibliographies in the subject index system, and thus automatically all articles with good bibliographies will be indexed under this class, as well as under those specific subject headings with which the articles deal. Sometimes a few good bibliographies will form the backbone of a search.

Current books, especially those with extensive bibliographies on interesting subjects, should be called to the attention of the members of the patent department who are working on these subjects. This can be done by the librarian when he receives new books.

Presentation of a search report

The presentation of a search report is a matter of viewpoint and practice. Generally it consists of a series of abstracts. The report must actually build up a case, unless it is an exploratory search, whose aim is to discover new and promising research avenues. Nothing may be included in a search report that does not have a significant bearing on the purpose and the subject of the search. Superfluous material is simply ignored, even if it constitutes the main subject of the article being abstracted. A good searcher will also evaluate his references as he writes them up, pointing out which ones are most pertinent for the purpose of the search and why. Therefore, he should, as well as being familiar with the technical aspects of the subject, try to acquire a cursory understanding of the viewpoint of the patent attorney, who must use the search to prove certain points in court. The reading of one or two of the more-popular books on patent law for the chemist and engineer will prove very profitable to get this viewpoint.

The length of a search depends primarily on its purpose; it may vary from a few pages to a thousand or more, and may take from a few days to years to conclude. Here again sound judgment and an understanding of the problem are the important

factors. As several investigators frequently work on a search together, it is important that the aim of the search, the time period the references must cover, and the specific questions which are to be answered in each item entry be clearly defined in writing. An index of items entered into a lengthy search should be kept to prevent duplication of references.

A patent department is primarily concerned with the development of new processes. It is therefore important to watch for significant new trends in methods and products. Articles on such developments should be very carefully abstracted and subject indexed, and the searcher should be able to put his finger on them at a moment's notice. Then, when a search is begun on one of these subjects, he will have a head start.

Summary

To summarize, a useful technique in meeting the information needs of an industrial patent department consists in taking the following steps:

- 1) Create a flexible subject index system, preferably based on a flow-chart of the industry in question, and use it to turn the indexing of current literature and patents into a series of continuous searches on both major and comparatively minor point of interest to the industry; in other words constantly feed the current literature and patent references into search needs.
- 2) Keep a file of old patent and literature material and antiquated books readily accessible and well indexed for search uses, as these may prove very valuable prior art material.
- 3) Keep a good file of bibliographies of interest to the industry.
- 4) Have the members of the patent department, the research laboratory, and other departments kept posted on current periodical literature, patents and technical books.
- 5) Keep in mind the basic difference between current literature and search abstracting and get a general understanding of the patent attorney's approach to problems, as well as the technical approach, so that search reports will be clear and purposeful.
- 6) Watch publications carefully for new developments and trends in your industry, and conserve future energy by using plenty of imagination in guessing at the possible search subjects of to-morrow. For searching and for meeting the information needs of a patent department in general, imagination, as a tool, is an effective labor saving device.



Patients' Libraries

(Continued from page 237)

looking upon reading as "nice" for the patient and are overlooking the therapeutic value of books. I realize that it is very dangerous to make claims for what books will do for a patient. We have no neat charts and graphs showing the effect of this book or that one on certain patients. And a sadder truth is that we never will have. The benefits derived from reading are far too intangible to chart. But there are enough facts to support the theories of those who do believe there is a definite ther-

apeutic agent in the library. Every physical illness has its mental component which doctors now recognize as important to recovery as the knitting of a broken bone and selected directed reading is becoming the medicine used to counteract unfavorable mental attitudes. The real research and development in hospital library work is in this therapeutic handling of books. I believe the day will come when the library and its bibliotherapy will be as definite a hospital unit as occupational therapy.



A Library Is Born in Modern Times

(Continued from page 255)

described the army using these simple homely road maps for its troop maneuvers, and during the Spanish Civil War the well-known, Michelin maps were used in actual large scale military maneuvers. They are excellent maps and the newspaper library having a collection of these, together with those of both the United States and foreign oil companies, should consider itself very fortunate. The foreign oil road maps can be procured through the regular map distributors.

Our map collection has been supplemented by the purchase of most of the well-known general atlases. These include Rand-McNally, Hammond's, Philip's, Mercantile, etc. While not able to purchase a copy of the *London Times Atlas*, we were able to provide an excellent substitute in the newly published *Great Italian Atlas*, which is undoubtedly the finest in print today. It compares in every respect in accuracy and thoroughness with the *Times Atlas*, which is older by some twenty years.

We also keep on permanent file about twenty of the most widely read magazines such as *Time*, *Fortune*, *New Masses*, *Nation*, and *Editor and Publisher*, *New Yorker*, *Current History*, etc. We subscribe to *Readers Guide to Periodical Literature*. Approximately 100 other magazines are either routed to interested persons in the organization or examined for important or useful stories which are clipped and filed in the clipping files.

Library staff

Needless to say a book collection, a picture collection or a clipping file, however broad and complete, are not of themselves sufficient to provide the kind of reference service needed by a modern newspaper. The essential ingredient is a good library staff. *PM* believes it has done this more than adequately by selecting a staff of young and experienced men and women from various newspaper libraries in the New York area. Since we were beginning from scratch, we hired persons who were thoroughly experienced and who could immediately fit into the rhythm of newspaper library work, without a long training period. Our staff now numbers ten persons. It began with five. Several members of the library staff have been called upon to review books for the book page, while two others have covered various national conventions in Washington, D.C.

The head librarian has been made a member of the small Editorial Board which controls the policy of *PM*, a rare event on any newspaper. These incidents are, I believe, a real sign of the growth in importance of a research library to a modern newspaper trying to tell the news in a modern manner.

S.L.A. National, Group and Chapter Officers 1941-1942

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Announcements

Appointments

Gordon E. Randall has been appointed Chattanooga Branch Librarian of the TVA Technical Library to succeed Aubrey F. Andrews who resigned to accept a position in the Buffalo Public Library.

. . .

Joseph B. Rounds has been appointed Acting-Librarian at the Grosvenor Library, Buffalo, New York. He had recently been appointed Assistant to Dr. Augustus H. Shearer, who died on May 31. Mr. Rounds received his bachelor's degree in Library Science from the University of Michigan in 1931; his master's degree from the same institution in 1938. He has had experience in this country in the libraries of Earlham and Oberlin colleges and in the New York Public Library; in Europe he worked on the reorganization of the Library of the International Labor Office. He has also been Assistant Professor in Library Science for the past year, at the University of Buffalo.

Sir Angus Fletcher To Retire As Director

The forthcoming retirement is announced of Sir Angus Fletcher as Director of the British Library of Information. Sir Angus, who was at the time a member of the research staff of the National Industrial Conference Board in New York, joined the Library in 1922 at the request of the British Government, and in 1927 became its Director. He has thus been associated with the British Library of Information since its earliest days, and has been largely responsible for building up its resources and services. Sir Angus was made a Commander of the Order of the British Empire in 1931, and was recently created Knight Commander of the Order of St. Michael and St. George.

The conception of an official library of information on British affairs to serve the interests of the public but without engaging in the advocacy of any particular British policy is generally credited to Lord Tyrell, formerly Sir William Tyrell, Permanent Under Secretary of State for Foreign Affairs, and well known in Washington and New York. There was no experience on which to draw when the Library was started in 1920 and it was for several years regarded as experimental. The fact that by

the outbreak of the present war it had grown to be a large and important part of the British official establishment in the United States, is a tribute to the soundness of Lord Tyrell's conception no less than to the success with which it was carried out. Sir Angus has taken an active part in the interests of the library profession, and is widely known in library circles in the United States.

In Active Service With The U. S. Army

Richard Gibson Hensley, Chief Librarian of the Reference Division, Boston Public Library, Boston, Massachusetts, is on extended active duty with the First Engineer Battalion, First Division, U. S. Army, Fort Devens, Massachusetts. Captain Hensley is Adjutant of the Battalion.

Marriages

Paul Gay, President of the Special Libraries Council of Philadelphia and Vicinity, and Miss Katherine D. Patterson, Head of the Circulation Department of Swarthmore College Library, were married on August 9, 1941. Mr. and Mrs. Gay will reside at 410 Harvard Avenue, Swarthmore, Pennsylvania.

They Made Good In "Man's World"

The Rotogravure Section of the Los Angeles *Times* of June 1, 1941 featured under the above caption the pictures of two Los Angeles special librarians: Miss Frances C. Richardson, Head of the Research Department of the 20th Century-Fox Studio and Miss Patsy Kelly, Librarian of the Douglas Aircraft Company.

Appeal For Material On Benjamin Franklin

The NATIONAL COMMITTEE TO SIGNALIZE BENJAMIN FRANKLIN'S CONTINUING CONTRIBUTION TO AMERICAN CIVILIZATION has sent out an appeal to SLA members for copies of documents, historical papers and other material pertaining to the life of Benjamin Franklin. This Committee, organized by the Franklin Institute, is endeavoring to assemble at the Institute concrete evidence that Franklin is today an inspiration to thousands of associations and learned societies. In addition to building up a permanent Franklin collection, Mr. William M. Vermilye, Chairman, writes that the Committee will also gladly furnish factual information on Benjamin Franklin to any one requesting it. Contributions may be sent to Mr. Vermilye at the Franklin Institute, Philadelphia, Pa.

Special Collections

Mrs. Robert Sonnenschein has presented to the John Crerar Library, Chicago, Illinois, the Robert Sonnenschein Collection of portraits of scientific and medical men. The collection numbers more than 2000 portraits. This valuable and interesting collection includes early mezzotints, copperplates, and many early and late photographs. It will be kept separate, arranged in a special cabinet, and known as the Robert Sonnenschein Portrait Collection. A catalogue is being prepared.

Publications

A 46 page mimeographed booklet containing full and detailed reports of the five Discussion Conference Units of the Thirty-third Annual Convention of Special Libraries Association, June 16-19, 1941, at Hartford, Connecticut, is now available at the Executive Office, 31 East Tenth Street, New York. This publication may be purchased for twenty-five cents plus two cents postage. The *Functions of Management as Applied to Libraries*; *Administration-Operation of Library and Reference and Information Service Technique* were the subjects discussed by more than 150 librarians who attended the conferences. The reports are full of useful information and should prove of inestimable value to all special librarians.

• • •

Library organization and management was the topic of the lectures and discussions presented at the Library Section of the 1941 Institute of Government of the University of Southern California held on the campus June 9th to 13th under the leadership of Dr. E. W. McDiarmid of the Library School, University of Illinois, and Dr. John McDiarmid of the School of Government, University of Southern California. A digested report of the twenty sessions which covered such topics as "What Librarians Might Learn from Business Administration," "The Elements of a Good Personnel Scheme," "Trends in Civil Service as They Affect Libraries," "Internal Organization of the Library," "Coordination Devices," "Staff Associations and Unions" and "Methods of Budgetary Control" has been prepared

and published in a 25-page booklet. Copies may be secured at 50 cents each by addressing the Graduate School of Library Science, University of Southern California, Los Angeles, California.

(Continued on page 279)

Necrology

At the first General Session of the Hartford Convention the Secretary read the names of the following SLA members who had passed away during 1940-1941:

Boston Chapter—

Mrs. Norman Cofren, Boston Filing and Indexing Institute

Miss Alice Wilde, Harvard College Library

Connecticut Chapter—

Miss Abby L. Bentley, Reference Library, New Haven Public Library

Mr. George Lillard, Hartford Colleges of Law and Insurance

Illinois Chapter—

Miss Betty Fisher, Lantern Slide Department, Art Institute of Chicago

Michigan Chapter—

Miss Elva Clarke, Employers' Association, Detroit

Mrs. Louise P. Dorn, Detroit Edison Company

New York Chapter—

Mr. S. Martin Login, B. Login and Sons

Mr. Arthur S. McDaniel, Association of the Bar of the City of New York

Philadelphia Council—

Mr. Alfred Rigling, The Franklin Institute Library

Unaffiliated—

Dr. Augustus Shearer, Grosvenor Library, Buffalo

Editor's Note

Convention papers received by the Editor and not appearing in the *Proceedings Issues* of SPECIAL LIBRARIES will either be abstracted in the *Abstracts of Reports of Committees, Groups and Chapters*, a copy of which is being mailed to each member, or they will be printed in special issues of the magazine.

A. C. M.

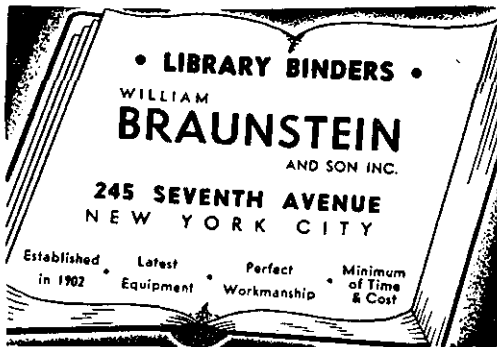


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(Continued from page 245)

Insurance program

The National Chamber provides a most important medium for cooperation between business men and those engaged in insurance. It is in a position to survey the problems of insurance, not alone from the viewpoint of those engaged in the business, but also from the viewpoint of policyholders. The insurance program of the Chamber, therefore, has been formulated with the view to bringing about a better public understanding of insurance. Last year *Nation's Business* carried a special 32 page article entitled "The Case for Insurance", which attracted wide attention throughout the business world and was given an extensive distribution in response to many thousands of requests.

In recent months the Chamber has announced an enlarged program along insurance and loss prevention lines. The Chamber is seeking the cooperation of business men and policyholders to see that insurance is given fair play in the exercise of private initiative, unhampered by ill-advised special legislation, but still subject to sound regulation.

Visits have been made to home offices of member companies and meetings with company executives, agents and others have been arranged. It is the purpose of these meetings, not alone to create good will, but to secure the views of insurance members on problems in their field and to discuss with them the Chamber's program as it relates to their business. Visits have been made to chambers of commerce and trade associations, many of which have shown interest in insurance problems of various types.

The Insurance Department of the Chamber provides a medium through which life, fire and casualty insurance, stock and mutual, agents and brokers and other business men may cooperate in solving their problems as they arise. Through its widespread membership, the National Chamber can serve as a functioning group to oppose any attacks that may be detrimental to the interest of policyholders, as well as of the insurance business.

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NEW YORK

(Continued from page 277)

Local Residential Occupancy-Vacancy Surveys—A suggested procedure. Federal Housing Administration. Washington, D. C., 63 pages, forms. Mimeograph. "There is probably no single series of data so helpful in guiding decisions with respect to both private and public policy in the field of mortgage finance as a comprehensive and thorough analysis of the occupancy-vacancy situation," writes Ernest M. Fisher, under whose direction staff members of the Federal Housing Administration prepared the above cited handbook describing how to make these local surveys readily and at small cost.

The technique for making a vacancy survey described in this handbook should be of interest to local government officials responsible for housing conditions in your community and private individuals or organizations studying housing. There is a small quantity of these handbooks available for free distribution. Direct your request to the Federal Housing Administration, Attention: Research and Statistics Division, Washington, D. C.

. . .

The *Custom House Guide*, 1941 edition, is now being distributed by John F. Budd, Publisher. With domestic manufacturers searching the world for raw materials and looking for export outlets in a world disrupted by war, the issuance of the 1941 edition of the *Guide* at this time is of vital importance to our national defense and foreign trade. The new features outstanding this year have been the revision of the "No Consul List" and a substantially increased Marine Section showing in color the flags and funnels of Tow Boat and Lighterage Companies for the first time, plus many additional steamship lines. It has been thumb indexed for speed and convenience in locating information as well as being completely revised and brought up-to-date. Supplementary service to this annual *Guide* is issued monthly under the name of the *American Import and Export Bulletin*, a publication of some 40 pages which not only keeps the Annual revised to date, but contains a complete coverage of all the latest Laws, Regulations, Decisions, Rulings, Export Control Licensing Requirements, Reciprocal Trade Agreements, etc., affecting foreign trade. *Custom House Guide* (79th year), 1941 edition. Published by Custom House Guide, Box 7, Sta. P., Custom House, New York City. \$15.00, plus postage.



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BOOKLIST

LISTINGS

The following books have been listed in
The Booklist:

Electric Welding: Potter	\$1.25
Tool Making: Cole	3.50
Forging Practice: Johnson	1.50
Pattern Making: Ritchey-Monroe-Beese-Hall	2.00
Foundry Work: Stimpson-Gray-Grennan	2.00
Flight-First Principles: Wright-Smiley, Jr.-Martin	2.50
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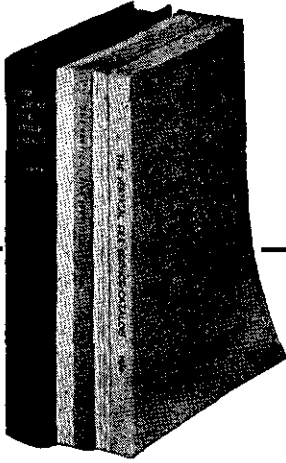
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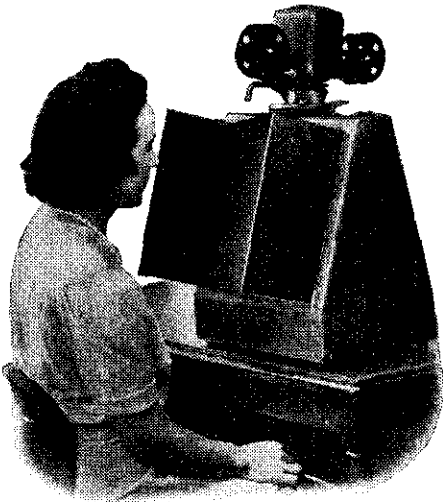
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