

# Special Libraries

Vol. 7

DECEMBER, 1916

No. 10

## Special Libraries Association Meeting---Eastern District

New Haven, Friday and Saturday  
December 8-9, 1916

General Subject: Co-ordination

Meet at Public Library (Elm and Temple Streets, north side of the Green)  
unless otherwise announced

Herbert O. Brigham, State Librarian of Rhode Island, will preside.

"SEEING NEW HAVEN." Friday, 3:00 P. M.

FIRST SESSION, FRIDAY, 4:30 P. M.—"SPECIALIZATIONS."

**The Libraries of New Haven.** Willis K Stetson, Librarian, New Haven, P. L.

**The Special Libraries of Yale.** Andrew Keogh, Librarian, Yale University.

**Library Specialties.** Informal discussion, led by Herbert O. Brigham

**Announcement:** Opportunities for visiting the libraries of New Haven.

SECOND SESSION, FRIDAY, 8:00 P. M.—"INFORMATION RESOURCES."

**Survey of the Field.** George Winthrop Lee, Librarian, Stone & Webster

**Information Clearing House of Boston.** Lewis A. Armistead, Librarian, Boston Elevated  
Railway. General discussion, opened by selected speakers.

THIRD SESSION, SATURDAY, 10 30 A. M.—"TEAM WORK AMONG LIBRARIANS."

Bibliographical co-operation, sponsorships, and other forms of co-ordination. Discussion  
opened by Messrs. Frederick Warren Jenkins, Librarian, Russell Sage Foundation,  
and George S. Godard, State Librarian of Connecticut.

**Announcement:** Opportunities for visiting libraries of Hartford

G. W. Lee, Chairman, Eastern District, 117 Milk St., Boston.

H. C. Wellman, H. O. Brigham, J. G. Moulton.

HOTELS (\$1.50 and up): The Taft, The Bishop, The Garde, The Duncan.

## A Clearing House for Civic and Social Activities

By R. E. Miles, Director, Ohio Institute for Public Efficiency,  
Columbus, Ohio

When a chamber of commerce, a city club, or charity organization society contemplates starting a new undertaking in the civic or social field, it frequently begins, and quite prudently, by inquiring what similar work has been undertaken in other places. By such inquiry it hopes to get helpful suggestions of what to do, and sometimes equally helpful suggestions of what not to do. When the other places which are working along similar lines happen to be in the same state and the problems confronted are such as to require statewide interest and action, the inquiry may prove useful as the preliminary step toward establishing co-operation.

These are some of the ideas which have led the Ohio Institute for Public Efficiency to initiate a clearing house of civic and social activities, particularly with reference to Ohio. The clearing house endeavors (1) to gather such reports as are available, in much the same way as municipal or legislative reference libraries, and (2) going one step beyond, to list the organizations which have been or are at work upon a common problem even when no report has been compiled or is available. The information is gained through questionnaires sent out several times a year and through the reports issued by the several organizations. By means of suitable filing and cross reference arrangements, this material will in course of time afford a fairly comprehensive view of (1) the kinds of civic and social activities which are being carried on in a given place, and (2) the places where a common civic or social activity is being carried on.

Valuable aid in locating the organization from which information should be sought is afforded by a directory, "Social Service Organization in Ohio," compiled by the Ohio State Board of Health.

It will be seen that the completeness of the information contained in the clearing house records will depend upon the co-operation of the organizations in furnishing the desired information when requested. It is believed that this co-operation will be promoted by the fact that the clearing house is at the service of all its participants.

The clearing house just described is one of the functions of a Department of Social Service which has just been organized by the Ohio Institute for Public Efficiency and

which will begin active work on July 1st. The object, methods and procedure of the Department may be outlined somewhat as follows:

### Object.

Promotion of program for Ohio leading to (1) ultimate elimination, as far as possible, of dependency and delinquency as forms of social waste, and (2) the establishment of progressively higher standards of living.

### Methods.

Investigation of conditions underlying and causing dependency, delinquency, and low standards of living.

Framing and promoting measures for the removal of such causes.

Promoting efficiency of administration in public and private institutions, departments, and agencies which affect social conditions.

### Means Employed.

Getting better teamwork among social organizations in the state.

Maintaining clearing house of information on social activities, methods and results.

Promoting continuous interchange of views among the social interests of the state.

Conducting special surveys when such may be helpful

Endeavoring, through painstaking study of new social proposals, to render them socially and economically sound.

Initiating new measures when necessary

The Department has been established at the request and with the support of social workers of Ohio with the purpose of centralizing social effort in the state. Instead of organizing various special agencies such as child welfare leagues, state charities associations, mental hygiene societies, etc., each of which maintains its own staff and finances its own program, the department of social service will undertake to include the special activities within a single broad program formulated and promoted through a widespread co-operation among the social interests of the state. It is hoped by this means to avoid considerable duplication of effort and overhead expense and to develop greater effectiveness in securing social results

## Co-operation Between Libraries and the Engineering Profession \*

By Kenneth Walker, Technology Department, Carnegie Library,  
Pittsburgh, Pa

In the last copy of the Ohio Brass Bulletin there appeared an article about a man once in the employ of the Patent Office. This man resigned in 1883 because, as he said, "Everything inevitable had been invented and there would be no further need of his services."

This is somewhat my state of mind here today. In suggesting co-operation between the two bodies mentioned it seems as if libraries were doing very nearly all that they could in some lines. In fact I have in my possession a letter from an engineer with the American Bridge Company which says, "As far as my limited observation goes, the libraries are at present doing most of the co-operating."

This state of mind is further enhanced by the receipt of the notice from the Library of the Engineering Societies entitled, "Preparedness for Service," and the pamphlet from the Information Clearing House of Boston describing its service.

However, to quote from the article which I am about to use as my text, "The trouble is that these efforts are generally individual, and have not been fully correlated."

With the article in mind which I will shortly read, I approached the President of this Association for the purpose of securing a Round Table discussion of this matter of co-operation. The outcome is this paper. I may further say that in the letter written in answer to this request the President stated, "There will, of course, be nothing to hinder your procuring anyone you wish to participate in a general discussion. This, of course, will be most satisfactory."

I will read the article to follow which I shall use as my text.

This article appeared in the Engineering Record for March 20th, 1915, and reads as follows:

"One of the unfortunate things about the literature of engineering is the way in which valuable material is scattered through periodicals. In spite of all books on technical subjects which are published, a great and vital mass of data never gets into them, or appears only in scant references, often to papers which if referred to precisely at all, prove to be inaccessible. Very much valuable information creeps into papers which would be for one reason or another omitted from a carefully ordered book. The

upshot of it is that the busy engineer, in trying to obtain suitable data, is frequently at a loss to get at the sources, which results in a very considerable amount of unnecessarily repeated work and collateral investigations which never get published at all.

"There are in this country a large group of engineering libraries of great value *collectively*, but not suitably *coordinated*. Of course, the splendid collections of the engineering societies in New York, with some allied groups in the same city, form a source comparatively accessible to those in the immediate vicinity. In other cities special libraries exist which probably contain unique matter of great value practically unknown even to the librarian. United effort is just beginning to take effect, and efforts are being made to furnish bibliographical and other information.

"The trouble is that these efforts are generally individual and have not been fully correlated. Would it not be possible to form an association of engineering libraries including technical departments of public libraries, which could work out in co-operation a systematic scheme for rendering more available the facilities of the country? Such an arrangement would include, sooner or later, a general catalog of engineering books, periodicals and pamphlets in possession of the various member libraries, reference to which could be simplified by carrying out on a larger scale what is already done here and there in the preparation of bibliographies on special topics. To do the work would necessarily require considerable expenditure, but it would be money and time well spent. The natural scheme would be for the engineering societies throughout the country to contribute toward the great work to be carried out for the common good. The library forces of all engineering libraries would be at once available to direct the work, if they could be relieved of the heavy clerical burden which would have to be assumed. The first step would naturally be a roster of the engineering periodicals brought up to date, and a catalog of at least those engineering works published within recent years. The former would constitute a work parallel to that already carried out for periodicals in general, but more carefully specialized and subdivided with reference to purely technical matter. The latter would work out in practice as a condensed catalog of a first class engineering library

\*Address delivered at the annual meeting of the Special Libraries Association, Asbury Park, June 30, 1916.

plus additions from other affiliated libraries. It is a big task, one must grant at the outset, but in the long run a profitable one to engineering societies and schools.

"In connection with this a special system of inter-library loans could be worked out with great advantage. The great libraries of the country are for the most part notably courteous in this particular, and their good will needs simply to be organized for securing maximum effectiveness. When the task here suggested can be carried out it will be possible for the first time for one engaged in engineering research to get access, at comparatively little trouble, to information which is now accessible only after long hunting if at all. The beginnings of this work of collation have fortunately been effectively made, warranting the belief that their extension to far more complete usefulness is not an idle dream."

As I read the above it seemed to me that this Association was peculiarly well fitted to be the association asked for in the question, "Would it not be possible to form an association of engineering libraries, and technical departments of public libraries that could work out in co-operation a systematic scheme for rendering more available the united facilities of the country?" Is not that question answered by Section II of our Constitution, which reads, "The object of this Association is to promote the interest of the commercial, industrial, technical, civic, municipal and legislative reference libraries, the special departments of public and university libraries . . . etc." There we have the engineering libraries and the technical departments of not only the public libraries, which was all that was asked for, but the special departments of university libraries. We have now been organized for six years. We have some of the very best material within our ranks engaged in active work. In fact, are we not specialists in this very thing that is sought by the question put in the article quoted? Are we not, then, just the ones to undertake such co-operation and co-ordinating?

I believe we are, and it is the purpose of this paper, to see if we can not stir up enough agitation to make the thing go and thereby promote what is a signal opportunity for this Association.

At no time has the need of information, printed or otherwise, been in greater demand. This country is in the midst of increased activities never before realized. Every facility for producing is being taxed to its utmost.

Already one of the warring nations has realized the value of the work of the public libraries and special requests have been placed with the government asking that the work of the public libraries should not be curtailed. A notice of this action appears in the April number of *Special Libraries* and reads in part as follows, "By cramping the power of the public library today they

were . . . going to seriously diminish its usefulness in the important work which must be dealt with after the war. Libraries were being used to supply information about industries that other countries had the monopoly of. In this way people were preparing for the future, and only the public libraries could collect and disperse such information."

If such be true is it not reasonable to suppose that it will be far more true of our highly specialized libraries?

Some one has said that countries today are so closely related that the burden of one must be shared in time by all. While that statement was intended largely for the financial relations it is not stretching the imagination to suppose that it is true to some degree of industrial and engineering relations.

Without doubt the warring nations will have so crippled their industries and allied professions that they can not alone cope with the tremendous reconstruction to follow. Since we are the only great nation not crippled by war it does not require a very vivid imagination to picture the probable demand on this country for aid to the beligerent nations in their reconstruction. In fact, this country is already in the market for such material.

Given such conditions as pictured, we can foresee where a greater necessity of the special library idea will weave itself into the engineering and industrial fabric of the country. If then we are not sufficiently co-ordinated in our facilities, which is most certainly true, why shouldn't we be? Do we not exist for the very purpose of "Promoting the interest of the commercial, industrial, technical, etc." libraries? What greater interest is there than pushing a movement that will render the material in these special collections more available?

Presupposing that this Association has acted upon the above and plans are about to be formulated by the committee chosen from the outcome of this agitation, here then are some of the steps leading to active operation.

Let me say at the outset I do not present these steps in, or with any degree of authority, or finality. My object in presenting them to you is that we may have something to attack and knock down, something to begin on to prove or disprove the advisability of action on the part of this Association.

The first step has already been pointed out in what preceded this part of the paper. It is the assignment of libraries already strong in one subject the sponsorship of the subject for which it exists. In other words, obtain a roster of sponsor libraries. This assignment of responsibility for one phase of an undertaking is a recognized tenet of modern scientific organization. Only by assigning to one source the responsibility of one or certain specified duties or subjects

can one be sure of knowing where to turn for information on that subject. Otherwise we shall spend wasted time in trying sources where we *think* the information should be.

Having our roster of responsible sources or libraries, the next step is to publish the list of such libraries. This list should be distributed widely and to the most effective places. Perhaps I should say here that with these sponsored libraries, suitable sub-sponsored libraries, or agencies distributed regionally should be made effective in order that the maximum convenience and accessibility be the resultant.

In the quotation chosen from the text there is this statement, which is a logical sequence of a complete roster of sponsored libraries, "The first step would be . . . a catalog of at least those engineering works published within recent years." And again, Mr. C. W. Andrews in his paper on "The Field of Cooperation Between Libraries of Learning," in the May Library Journal, says, "Every group of libraries offering assistance to scholars should have a joint catalog of the more important works in its possession." Undoubtedly this is true. It should be noted as expressed in the text that this catalog will not only serve the purpose of a joint catalog of the collections of each library, but will serve as a standard engineering library.

Right here let it be said that not only should an inventory of each library's resources be taken, but all resources where additional information of value can be obtained as the N. E. L. A. question box and similar organized information sources of other associations. Similar sources of industrial houses should be gathered. In noting the additional resources the degree of, or terms of use should be determined.

Inter-library loans will naturally play an important part in this co-operation. I can do no better than to quote Mr. Andrews again. His words on this matter are, "Every such library or group of libraries should make provision for copying by photography such material as the libraries are willing to have thus reproduced. From the experience of the John Creer Library it may be stated that this service will not be limited to rare and expensive works, but will be of even more use in making available articles in current periodicals and new books too much in demand to go out on the inter-library loans, or in saving expense of the borrowing library as often the copies of the article is less than the cost of transportation of the complete volumes. There should be a convenient codification of the practice of inter-library loans. This code should state the general principles under which requests should be granted, and, if possible, an agreement as to the maximum time desirable, and the discussion of this code should include the question of charging a small fee in addition to the cost of transportation, to cover the cost of correspond-

ence. This code might well give desirable forms and instructions."

The next problem is to educate your clientele in the use of the library service. Mr. W. P. Cutter, in his paper on "The Technical Library's Field of Service," read at the October meeting of this Association says, "This is the most difficult step; for unless you can find out very specifically what a man wants you will not only waste your time in looking up information which is not desired by the client, but you make him skeptical of your ability to help him. . . . Be sure, therefore, that you know what is wanted." Those of us who have done any reference work realize the full import of those words, but who under the sun is going to help the fellow who asks a question which can require only one answer, and that the right one to the question as put. For instance, when a person asks you, "How far is the Hudson river navigable?" you immediately find the only answer to that question and give it to the questioner, only to learn that "What he really wanted to know was how far is it salt?"

A problem connected with smooth and efficient operation of the sponsored libraries is that of standardization of operating details. Such would include, as hinted previously, the standardization of inter-library loans, also of operations of frequent occurrence within each library. Standardization would not only promote unification, which is most desirable, but permits that detail work be done by assistants, thereby leaving for the work of the librarian the work of the executive—creating and directing.

Up to this point little or nothing has been said of the person in charge of these sponsored collections. By virtue of the fact that certain collections have been assigned a given sponsorship it is to be supposed that the executive of such a collection is an able person. These executives to my mind must be more than catalogers, classifiers, and reference workers; they must be what Mr. C. B. Fairchild jr. has aptly called the future special librarian—the consulting analyst.

Any undertaking cannot be successfully launched without making itself known to all it is intended to benefit. In other words, whatever the outcome of this paper for co-operation with the engineering profession may be, publicity must play an important part.

Publicity may be obtained in many ways. The columns of the technical periodicals, of course, offer one of the best sources. In fact, much of the success of this undertaking, if carried through, will depend upon the co-operation this source of publicity will lend to the proposed plan. Whatever appears in the columns of the technical periodicals must be forceful and persistent. Intermittent occurrence of work of this sort will render little effective aid.

Most of the important technical period-

cals of the country devote a given space in a given number to book reviews and allied matter. Within this space well directed efforts on the behalf of promoting co-operation as outlined might well appear. As book reviews themselves appear the symbols representing the sponsored libraries which have the publication being reviewed might be attached. A list of questions asked and answered within a certain period might be published in this space.

Mentioning the above leads me to suggest that all the sponsored libraries should keep a file of questions asked and answered. Of course, one does not expect simple questions and questions where the source of answer is very obvious to be kept within such a file. By recourse to these files of questions the librarian will have a barometer of the demands on his or her library. If intelligently interpreted and studied they can give forth much information otherwise only vaguely known, if at all. A weekly record of questions asked and sources of answers sent to other libraries in the sponsorship chain would be the means of keeping each in more intimate touch with the other, and would undoubtedly do away with duplication of work as well as affording new and unexpected sources to the answers of many questions.

Such in part are some of the germs of co-operation and coordination which, if properly nurtured, should breed a healthy coordinated body for fulfilling the request, "Would it not be possible to form an asso-

ciation of engineering libraries and technical departments of public libraries which could work out in co-operation a systematic scheme for rendering more available the united facilities of the country?"

Let us then gather a committee now while the technical press is with us, as instanced by the article chosen as my text and many like it, and the engineering profession as witnessed by the work being done toward accomplishing a satisfactory technical classification.

To summarize then there should be (1) a committee chosen from this Association with a possible advisory or consulting committee of interested engineers, (2) this committee should work on a roster of sponsored libraries, (3) there should be published a list of the sponsored libraries and distributed widely and effectively, (4) the publication of an index of at least the important works of each collection, (5) a suitable code of inter-operation, (6) education of the clientele in the use of the service which will partly come under the heading of publicity, (7) the consideration of the introduction into engineering schools of instruction in library practice based on practice now followed two years with satisfactory results by Mr. Hendry of Pratt Institute Library, in exchange for the unorganized instructions and problems now carried on in certain engineering schools, (9) rounding up of all additional information as previously mentioned, (10) well directed publicity.

The Foreign Trade Bureau of the Business Men's League of St. Louis maintains a section which devotes its entire attention to the translation feature of foreign trade development. The bureau is equipped to make translations in Spanish, Portuguese, German, French, Italian, Dutch, Russian, Swedish, Norwegian, Polish, and Hungarian, and by special arrangement with translators in the city the service is extended to other languages.

A membership in the Business Men's League entitles the member to 100 commercial-letter translations of 100 words free of charge, additional letters being charged for at the rate of 12½ cents per letter of 100 words. The translation service, however, is not restricted to members of the organization, but may be used by any business concern, the rate to nonmembers being 25 cents per letter of 100 words for commercial-letter translations and 50 cents per 100 words for the translation of legal documents and catalogues.

Many of the firms for which translation work is done regularly have authorized the secretary of the bureau to sign their letters for them, and the method of procedure in such cases is as follows: A supply of the

stationery of the clients is kept on file at the bureau, the clients mail their letters for translation to the bureau, the translation is made by the bureau and the letter signed by the secretary in the name of the client and mailed direct to the addressee, and a copy of the translation mailed to the client. In this way a saving of at least 24 hours in time is made in the dispatch of letters, and in the case of out-of-town clients the time saved may be even greater. All translations, of course, are treated in a confidential manner.

During 1915 the bureau translated 16,000 letters besides a number of catalogues, cable codes, and legal and consular documents. At present it has in hand the translation and printing of 5,000 Portuguese booklets for circulation in Brazil for an out-of-town client.

That the translation service of the Foreign Trade Bureau is a distinct aid to manufacturers is indicated by the fact that outside of St. Louis use is made of it by business concerns in Memphis, Tenn.; New Orleans, La.; Quincy, Highland, Alton, and Springfield, Ill.; Jefferson City and Seneca, Mo.; Charleston, Miss.; and Keokuk, Iowa. [U. S. Commerce Reports, Ap. 3, 1916]

# Special Libraries

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Both features have been the subject of exhaustive experimentation for the purpose of achieving the best possible form and the greatest thoroughness.

## How the Index is Compiled.

The data which forms the basis for the work of the editors and compilers is furnished daily by State Legislatures, State Legislative Reference Bureaus, State Librarians, and other state officers, and the editing and publishing is done by the Law Reporting Company of New York City, with branches at Washington, Chicago, Kansas City, San Francisco and New Orleans.

The entire work has been carried on under the auspices and direction of the national associations of the State Librarians and the Law Librarians, acting through their joint committee.

After several years of experiments, in 1916 the Index was regularly issued each week, but, although it was considerably used it was not extensively advertised as the Joint Committee desired first to ascertain the practicability of the scheme, its usefulness, and whether it could be gotten out regularly and on time.

All these details have been satisfactorily proved by the experience of the past year, and the Joint Committee desires to call general attention to the publication, and urge subscriptions so that it may be put upon a self-supporting basis.

## Those Who Have Used the Index.

1. Officers and attorneys for corporations and firms doing business in all or many states who need to watch legislative action in several states for the protection of their interests.

2. Commercial organizations, whose members' interests are similarly affected.

3. Legislators desiring to keep in touch with legislation in other states.

4. Libraries whose patrons are interested in legislation.

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Those interested should send in their subscriptions so that the Joint Committee may conclude all arrangements with the publishers before the beginning of 1917.

#### Law Libraries Should Have It.

In many cases, attorneys desiring to use the Index can not afford to subscribe individually. Local law libraries are the natural depositories and they represent the collective effort of the bench and bar to make legal information available in the city or country.

If therefore you can not personally subscribe, please see to it that your local law library subscribes

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## Mine Accounting

Reference List to Books and Magazine Articles

By Anshel Slobod, Librarian, U. S. Bureau of Mines,  
Pittsburg, Pa.

This list is, with but few exceptions, confined to material in the Carnegie Library and in the Bureau of Mines Library, Pittsburg, Pa. It is by no means an exhaustive bibliography, but rather a working list of comparatively recent contributions on the subject.

It is needless to discuss the value of a proper system of accounts to the mine operator. The industrial preparedness movement, our foreign trade expansion and the requirements of the Federal Trade Commission—all tend to emphasize the importance and the urgent need of a sound system of mine accountancy and will, no doubt, lead to a speedy development of a standardized system of accounts for the use in mines.

It is hoped that this list will be of some help to the student of mine accountancy in his efforts to develop the system of the future.

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\*Published with the approval of the Director of the Bureau of Mines.

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Gives a summary of a system and forms used in a lead-zinc mine; this is also adaptable to any mining operation.

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Charleton, A. G. Mining accounts and cost sheets. 1897. (In *Transactions of the Institution of mining and metallurgy*, v. 5, p. 243-313.)

British practice. Develops a complete system giving numerous forms and examples.

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Accounting systems of representative firms engaged in iron mining, copper mining and metallurgy, gold mining and milling, coal mining and making of coke. One chapter is devoted to various methods for recording engineering and geological data.

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Collins, Glenville H. Efficiency-engineering

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- Proper accounting, p 653, 655-59.
- Cox, S. Herbert.** [Mine accounts.] 1899. (In Transactions of the Institution of mining and metallurgy, v. 7, p. 217-20.)
- Davis, Walter.** Card system of accounting. 1906. (In Engineering and mining journal, v 81, p. 142-43.)
- Del Mar, Algernon.** Mine accounts for the superintendent. 1908. (In Mining and scientific press, v. 96, p. 454-57.)
- Gives a number of suitable forms for the use of the mine superintendent.
- Dicksee, Lawrence R.** Mines accounting and management. 100 p 1914. Gee & Company, London.
- British practice About one-fifth of the volume is given to the report of the Mine Account and Cost-keeping Committee of the Council of the Institution of Mining and Metallurgy. This report makes a strong plea for uniform cost accounting in mines and gives the standard practice in the mines of the United Kingdom.
- Dilworth, J B.** Method of calculating sinking funds, and a table of values for ordinary periods and rates of interest. 1910. (In Transactions of the American institute of mining engineers, v. 41, p. 533-35)
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- Describes a system of checking by which every man can be traced during the entire day.
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- Complete system of bookkeeping for mining companies.
- Hallett, S. I.** Bookkeeping for mines. 1900. (In Mining and scientific press, v. 80, p. 66-7.)
- Hewitt, Charles.** Standardization of mining accounts 1914. (In South African mining journal, v. 23, pt. 2, p. 476.)
- Institution of mining and metallurgy.** Report of Mine accounts and cost sheets committee
- This report was unanimously adopted by the Institution in 1910, after ascertaining the views of a large number of engineers and other authorities in various parts of the world.
- For the recent version of this report see Transactions of this Institution, 1913-14, v. 23, p. 540-56.
- Janin, Charles.** Operating costs and mine management. 1911. (In Mining and scientific press, v. 103, p. 290-91.)
- Brings out serious blunders which are often committed in mine management and cost keeping.
- Jenkins, Charles V.** Auditing of a mining company's accounts. 1903. (In Transactions of the American institute of mining engineers, v. 33, p. 91-106.)
- Condensed. 1902. (In Mines and minerals, v. 22, p. 486-89.)
- Jenkins, Charles V.** Mine account keeping. 1901 (In Mines and minerals, v. 22, p. 7-13.)
- Thorough system of bookkeeping
- Lawn, James Gunson.** Mine accounts and mining bookkeeping; a manual for the use of students, managers of metalliferous mines and collieries and others interested in mining. 147 p. 1904. Griffin. London.
- British practice Gives books and forms used about a mine. Considerable attention to mining reports and statistics.
- Matheson, Ewing.** Depreciation of factories, mines and industrial undertakings and their valuation. Ed. 4, rev & enl. 230 p. 1910. Spon. London.
- Middleton, W. B.** Segregation of mine accounts. 1900. (In Transaction of the Institution of mining and metallurgy, v 8, p 305-11.)
- Paine, Paul McClary and Stroud, B. K.** Oil production methods, with a chapter on accounting systems by W. F. and W. B. Sampson, 239 p 1913. Western Engineering Publ Co. San Francisco.
- "Accounting systems," p. 209-34
- Payment of extensions of mining plant out of revenue.** 1903 (In Engineering and mining journal, v. 76, p. 48.)
- Discusses the suitability of the general methods of accounting to the case of mining.
- Sheidon, T. H.** Notes on mine accounting. 1911 (In Engineering and mining journal, v. 92, p. 1231-32)
- Wallace, David, pseud.** Simple mine accounting. 63 p. 1908. Hill Publ. Co. New York.
- For the beginner, mine foreman, time-keeper, etc. Contains some twenty forms of books and accounts.
- Witte.** Kaufmännische und Kamera listische buchführung für bergwerke. 1910 (In Gluckauf, v. 46, pt. 1, p. 645-53.)

Develops a complete system of mine accounts.

#### Coal Mine.

- Beaman, R. J.** Uniform accounting and cost records as applied to mining. 1915-16. (In *Coal age*, v. 8, p. 1053-54.)  
See also *Coal age*, v. 9, p. 20.  
General discussion of a paper before the West Virginia coal institute.
- Beissel.** Einführung der kartenkontrolle für die gesamte belegschaft der grube Eschweiler-Reserve bei Nothberg. 1912. (In *Glückauf*, v. 48, pt. 1, p. 710-14.)  
Describes an elaborate card-index time-keeping system.
- Federal trade commission.** Federal trade commission is to help in obtaining a uniform system of accounting for coal mines. Mine organizations are to draw up their own system and at a joint conference are to formulate a model system. The commission will then see that this model system be put into common use. 1916 (From brief notes in trade papers.)
- Field, E. B.** Little brass check in the crow's nest. 1916. (In *Coal age*, v. 9, p. 488-90.)  
Describes the mechanical methods of accounting used by Keystone coal and coke company, Buffalo, N. Y.
- Garcia, John A.** Cost sheets and daily reports. 1912. (In *Coal age*, v. 1, p. 451-53.)  
"Forms of accounts suited to assist in keeping before the manager's eye the salient points as to volume and character of daily output and various cost items entering into production"
- Gray, F. W.** Recording and use of colliery cost data. 1910. (In *Journal of the Canadian mining institute*, v. 13, p. 163-176.)  
From the standpoint of an engineer rather than accountant.
- Hill, F. A.** System of coal-mine accounting. 1907 (In *Engineering and mining journal*, v. 83, p. 624-25.)  
— condensed. 1907. (In *Journal of accountancy*, v. 4, p. 61-62.)  
Author's main distribution of accounts is: mining, transportation, deadwork, preparing and shipping, maintenance of equipment, maintenance of way and buildings, general expense and development. Gives a system and emphasizes the importance of the daily time sheet.
- Hornblower, J. B. L.** Coal-mine accounting systems. 1913. (In *Coal age*, v. 4, p. 653-54.)  
— 1913. (In *Coal and coke operator*, v. 22, p. 581-82.)  
Some comments on accounting methods in general with particular reference to those of the Pittsburg coal company. Plant and equipment depreciation are especially troublesome items to handle intelligently.  
— Mine accounting. 1914. (In *Colliery engineer*, v. 34, p. 362-63.)  
Paper read before the American Mining Congress.  
Discusses the items entering into cost of coal mining. Shows the items that may be capitalized and those that should be charged to operations.
- Johnson, George.** Colliery book-keeping and accounts. 1910. (In *Iron and coal trades review*, v. 81, p. 200-1.)
- Kenwin, J.** Keeping mine supply accounts. 1916. (In *Coal age*, v. 9, p. 22-23.)
- McNeil, J. C.** Accounting system for coal companies. 1913 (In *Coal age*, v. 4, p. 414-17.)  
Brief description of a simple system of book-keeping applicable to any coal company. Much reliance is placed on vouchers and loose-leaf form to reduce the amount of work to a minimum.
- McNeil, John C.** Coal mine accounting system. 1915. (In *Coal age*, v. 8, p. 422-23.)  
Discusses the benefits derived from a sound accounting system.  
— Quick action on payrolls. 1912. (In *Coal age*, v. 2, p. 388.)  
Gives a form which may serve as a miner's ledger, employee's statement, receipt for services and check in payment for same.
- Mikesell, H. S.** Value of daily cost sheets. 1915 (In *Coal age*, v. 7, p. 838-40)  
Discusses and illustrates a comprehensive daily cost sheet form and enumerates its advantages.
- Parker, Edward W.** Cost and profit of coal mining. 1913. (In *Coal and coke operator*, v. 22, p. 579-81.)  
A plea for standardized methods of accounting
- Prest, J. J.** Colliery cost-sheets 1895. (In *Transactions of the Federated institution of mining engineers*, v. 8, p. 326-31; v. 9, p. 239-42.)  
Discusses labor cost accounts, general cost accounts and summary of costs; gives a number of forms.
- Reckmann.** Die im Ruhrbergbau üblichene methoden der selbstkostenberechnung. 1909 (In *Glückauf*, v. 45, pt. 1, p. 9-18, 52-59, 82-91.)  
Exhaustive description of the cost-keeping methods in the collieries of the Ruhr district.
- Roberts, E. I.** Mine warehouse system 1916. (In *Coal age*, v. 9, p. 115-17, 154-56.)  
Discusses the proper methods of storage and issuing of supplies and gives a number of forms used.
- Scholz, Carl.** Another cost sheet. 1912. (In *Coal age*, v. 1, p. 687.) Used by the Consolidated Indiana coal company.
- Shaw, W. W. E.** Colliery book-keeping and accounts 1901. (In *Transactions of the Institution of mining engineers*, v. 21, p. 293-303)  
British practice.
- Smethurst, Richard.** Cost and general accounting as applied to coal mining oper-

- ations. 1915 (In Coal trade bulletin, v. 32, May 15, p. 51-53.)  
 Paper read before the West Virginia mining institute.  
 Mostly a discussion as to what constitutes a scientific cost system for coal mines.
- Standardized accounting and how to get it.** 1915. (In Black diamond, v. 54, p. 333.)  
 Considers methods giving accurate costs of coal mining.
- Warner, H. H.** Handling tonnage bulletins for machine mines. 1914. (In Coal age, v. 6, p. 579.)
- West Virginia Splint and Gas Association.** Uniform cost system for West Virginia mines. 1916. (In Black diamond, v. 57, p. 26-27)  
 ————. 1916. (In Coal mining review, August 1, p. 5, 8, 10.)  
 The Association adopted its committee's report creating five classes of accounts and showing what should be charged to each of them.
- Metal Mine.**
- Allen, A. W.** Statement of working costs. 1912. (In Mining and scientific press, v. 104, p. 204-06)  
 System for milling and cyaniding work.
- Argall, Philip Henry.** Metallurgical accounts. 1906. (In Mining and scientific press, v. 93, p. 573-76.)  
 A system for smelters, gives forms and statements.
- Chapman, James E.** Mine accounting for small mines. 1916. (In Bulletin of the American institute of mining engineers, March, No. 111, p. 663-69.)  
 ————. Abstract 1916. (In Mining and scientific press, v. 112, p. 400.)
- Chase, Charles A.** Keeping accounts at the Liberty Bell mine, Colorado. 1913. (In Mining and engineering world, v. 38, p. 961.)
- Comstock, Theo. B.** Card system for mine accounts. 1903 (In Engineering and mining journal, v. 76, p. 514-75.)
- Cost sheets for dredging company.** 1913. (In Mining and scientific press, v. 106, p. 518-19.)  
 Gives six forms used by the Ophir Gold Dredging Company for keeping track of dredging data, expense and income.
- Crocker, William T.** Importance of up-to-date mine accounting. 1913. (In Mining and engineering world, v. 39, p. 837-38.)  
 Discusses the many details that come before the accountant of a mine employing from 200 to 400 men.
- Dennison, John A.** Working costs on mines as practiced on the Rand. 1908. (In Transactions of the Institution of mining and metallurgy, v. 18, p. 108-18.)  
 Discussion, p. 118-32.
- Denton, F. W.** Card system for mine supply accounts. 1903. (In Proceedings of the Lake Superior mining institute, v. 9, p. 114-18.)  
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- Eye, C. M.** Mine cost keeping. 1913 (In Mining and scientific press, v. 107, p. 261-62.)  
 Describes a cost-keeping system with operations divided into three distinct departments: Mining, haulage and milling. Illustrates and discusses the use of the daily report forms.
- Godden, Danvers and Robertson, William N.** Australian mining companies' accounts. 78 p. 1902 Gee Co. London.
- Gold mine accounts.** A discussion. 1903. (In Engineering and mining journal, v. 76, p. 44, 228-29, 304-5, 536-37, 843-44.)  
 By H. C. Hoover, Charles V. Jenkins, Theo. B. Comstock and R. Gilman Brown.
- Haas, Herbert.** Smelter administration. 1906. (In Engineering and mining journal, v. 82, p. 1162-64.)  
 Systematic method of keeping accounts at metallurgical works.
- Handy, R. S.** Card system of mine accounts. 1907. (In Mining and scientific press, v. 95, p. 50-54.)  
 A system for small mines.
- Heap, R. R.** Loose-leaf time-keeping forms. 1914. (In Engineering and mining journal, v. 98, p. 67-68.)  
 Describes in detail and illustrates the forms used in the Joplin mining district.
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 System of Witherbee, Sherman & Co., Inc.
- Irvin, Donald F.** Cyanide plant accounting. 1914. (In Engineering and mining journal, v. 97, p. 897-99.)  
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- Jacobs, E.** General principles of mine accounting. 1903 (In Engineering magazine, v. 25, p. 73-80.)  
 Discusses principles to be followed out in a comprehensive system of mine accounts.
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 Brief, concrete example of a plan in actual use by the Le Roi, B. C., mines.
- Jeffery, W. M.** Card system of accounting for mining supplies. 1905. (In Proceedings of the Lake Superior mining institute, v. 11, p. 152-63.)  
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- Abstract. 1905. (In Engineering magazine, v 30, p. 428-30)
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- Condensed 1903 (In Mines and minerals, v. 24, p 121-23.)
- Considers the methods of the mines in the Lake Superior region.
- Jennings, Sidney J** Metallurgical book-keeping 1912. (In South African mining journal, 21st anniversary number, September, p. 33.)
- Shows how the Rand may profit from following the example set by American smelting works.
- MacLachlan, M W.** System of keeping mine and mill accounts and metallurgical records. 1913. (In Journal of the Chemical, metallurgical and mining society of South Africa, v. 14, p 138-48.)
- Describes in detail a system used for a group of mines in Mexico.
- Nichols, H G.** Standardization of mine accounts 1906. (In Mining and scientific press, v. 92, p. 313-14.)
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- Olson, G. L.** Timekeeping system and labor distribution at the Newport mine 1911. (In Proceedings of the Lake Superior mining institute, v 16, p. 127-43)
- Parrish, K. C.** Simple mine book-keeping 1911. (In Mining and scientific press, v 102, p. 751-53.)
- For a small mine
- Phantom Profits.** 1912 (In Mining magazine, v 6, p 255-57, 413-14, v. 7, p 20-22)
- Discusses the laxity of cost and profit accounts.
- Rice, Claude T.** System of keeping stoping costs. 1911. (In Engineering and mining journal, v. 92, p. 1032-31.)
- Practice of the Goldfield Consolidated Company
- Costs are kept for each stope. Stopping is discontinued if unprofitable for five days
- Rubidge, F T.** Recording and comparing mining data 1915 (In Engineering and mining journal, v. 99, p 193-94.)
- Ruhl, Otto.** Keeping mining costs at Joplin 1911 (In Engineering and mining journal, v. 92, p 1133-36)
- Sawyer, A. H.** Some stamp mill forms and records 1914. (In Mining and engineering world, v. 40, p. 636-42.)
- Used by most of the mills in the Lake Superior copper district of Michigan
- Sawyer, R. E.** Profit per fathom. 1911 (In Journal of the Chemical, metallurgical and mining society of South Africa, v 11, p. 354-60.)
- Describes H. F. Marriott's system bringing out its favorable points.
- Shaw, S. F.** System of mining warehouse records 1913. (In Mining and engineering world, v. 38, p. 392-95.)
- Gives method and forms satisfactorily used at a large Mexican property.
- Timekeeping system in a Mexican mine. 1913. (In Mining and engineering world, v. 38, p. 479-84.)
- Gives 14 blank forms.
- Sheldon, Thomas H** Cost accounts of gold mining operations. 1906. (In Transactions of the American institute of mining engineers, v 37, p. 91-127.)
- System of the Portland gold mining company, Cripple Creek, Colo.
- Simple mine accounts.** (In Mining and scientific press, v. 109, p. 60-61.)
- For a medium-sized mine.
- Smith, G. Hildick.** System of keeping underground costs and records. 1912 (In Journal of the Chemical, metallurgical and mining society of South Africa, v 12, p. 447-56)
- Abstract. 1912 (In South African mining journal, v. 21, pt 1, p. 469-70)
- Details and forms of the system at the Feireira gold mine, South Africa
- Some mine accounting problems.** 1912. (In South African mining journal, v. 22, pt. 1, p. 77-78)
- Wiping out capital expenditure; common procedure of Rand companies; recommendations of the Institution of mining and metallurgy, London
- Tait, G. W** Gold mine accounts and costing A practical manual for officials, accountants, bookkeepers, etc. 1912. Pitman. London
- Gives his experience in account keeping in connection with mines of the Witwatersrand, South Africa
- Reviewed in South African mining journal, 1912, v 22, pt. 1, p. 33-34
- Thum, E. E.** Cost accounting in the construction and operation of a copper smelter 1916. (In Metallurgical and chemical engineering, v 14, p. 529-34, 573-75, 600-603.)
- Van Eils, H. T.** Mining cost accounts of the Anaconda Copper Mining Company. 1913 (In Transactions of the American institute of mining engineers, v. 46, p. 201-8.)
- Vivian, James D.** Time keeping system of the Crystal Falls iron mining company 1911 (In Proceedings of the Lake Superior mining institute, v. 16, p. 70-76.)
- Webster, E. H** Cyanide mill metallurgical record 1912. (In Engineering and mining journal, v 93, p. 791-94.)
- "Metallurgical balance sheets are of value in exposing differences between theoretical extraction and actual bullion recovery."
- A complete set of forms for recording the essential data is given, together with suggestions as to methods of obtaining this information

**West Australia** gold mining costs. 1906. (In Mining and scientific press, v. 93, p. 686-88.)

Method of accounting for mines operated in groups under one central head.

**Wilson, Harold.** Mine accounts for the superintendent 1909. (In Mining and scientific press, v. 98, p. 686-87.)

Gives several forms.

**Yungbluth, A. J.** Mine accounts. 1898. (In Proceedings of the Lake Superior mining institute, v. 5, p. 21-39.)

Abstract. 1898. (In Engineering and mining journal, v. 66, p. 334.)

Deals more generally with the arrangement of mine accounts for the cost sheet than with the method of keeping them in detail.

## Book Reviews

**Cost of Living.** By Fabian Franklin. Doubleday, Page & Co., New York. \$1.00. This is one of the American Books constituting a library of good citizenship and is devoted to a discussion of one of the most perplexing modern economic problems. The question is defined in precise language, and the actual shrinking purchasing power of the dollar unequivocally established. The cause of prevailing high prices and the attendant industrial discontent are concisely set forth and described. Such proximate causes of inflated values as the tariff, trusts, cold storage, the middleman and the war are evaluated, and the possible efficacy of such correctives as co-operation are suggested.

**Selected Readings in Rural Economics.** By Thomas Nixon Carver. Ginn & Co. 974 pages. \$2.80. This work is a collation of source and secondary material on agricultural economics, hitherto widely dispersed, and therefor wholly or partially inaccessible. Considerable emphasis is placed on the historical development of the subject. The treatise includes such questions as land tenure, tenancy, the agrarian movement in the United States and rural organization and marketing.

**An Introduction to the Study of Organized Labor in America.** By George Gorham Groat. The Macmillan Co., New York. \$1.75. This is a compendious closely written, well thought-out work of 489 pages, with a brief, usable index and a suggestive but by no means comprehensive bibliography of further readings. The work is limited in its scope to a study of the various organizations of laborers, and is designed to supply a more systematic treatise on modern labor associations. An excellent brief history of each of the important labor organizations is given, including their political activity and the more recent revolutionary transition. Such agencies and institutions as the strike, arbitration, the boycott, the

closed shop and trade agreements are concisely and scientifically discussed.

**The Underlying Principles of Modern Legislation.** By W. Jethro Brown. E. P. Dutton & Co., New York. 319 pages. \$2.25. The primary purpose of this book is to state and interpret the principles that underlie the course of legislation and which lie deeper and are more fundamental than the antagonisms of parties. Although the chief emphasis is placed on British politics, the illustrations have been drawn from many other sources, and an attempt has been made to indicate the trend of political and industrial progress in other lands. The prologue of the work concerns itself with "the challenge of anarchy;" Part I is a statement of principles; Part II, the application of principles as exemplified in modern legislation; and Part III the present and future outlook. The work as a whole is a suggestive, quasi-philosophical dissertation on modern industrial society.

**The American Plan of Government.** By Charles W. Bacon. New York: G. P. Putnam's Sons. \$2.50. The sub-title of this book sets forth its scope and purpose very neatly: "The Constitution of the United States as Interpreted by Accepted Authorities." In setting forth the Federal Constitution as it has evolved under the interpretation of the courts from 1789 to 1916, the author seeks to supply "a knowledge of the circumstances attending its adoption", "a familiarity with the cases that led to its interpretation and with the circumstances that resulted in its amendment" and "an appreciation of the political atmosphere surrounding those interpretations and amendments." Each section of the Constitution is taken up in its logical order and the meaning thereof set forth as interpreted by the courts. The treatise brings together in proper juxtaposition a large amount of important material hitherto diffused through many sources.