1935

# Accounting principles for cooperative cotton gin associations

Otis T. Weaver

United States. Farm Credit Administration. Cooperative Division

# Accounting Principles for COOPERATIVE COTTON GIN Associations

by

Otis T. Weaver

FARM CREDIT ADMINISTRATION
COOPERATIVE DIVISION
WASHINGTON, D.C.

BULLETIN No. 2 DECEMBER 1935

# Accounting Principles for COOPERATIVE COTTON GIN Associations

by

**Otis T. Weaver**

FARM CREDIT ADMINISTRATION
COOPERATIVE DIVISION
WASHINGTON, D.C.

BULLETIN No. 2 DECEMBER 1935

# Farm Credit Administration

W. I. Myers, *Governor*

## Cooperative Division

F. W. Peck, *Commissioner*

Research, Service, and Educational Staff of the Cooperative Division

H. M. Bain, *Assistant Commissioner in Charge*
W. W. Fetrow, *Chief Research Economist*

*Cotton*
O. W. Herrmann
Otis T. Weaver

*Dairy and Poultry*
T. G. Stitts
D. D. Brubaker
John J. Scanlan
Gordon Laughlin
W. C. Welden

*Fruits and Vegetables*
K. B. Gardner
M. C. Gay
H. C. Hensley
N. Fogelberg
H. W. Mumford, Jr.
Wm. J. Broadhead
George T. Hudson

*Grain*
Roy M. Green
Harry E. Ratcliffe

*History and Statistics*
R. H. Elsworth

*Insurance*
V. N. Valgren
F. C. Murphey

*Livestock and Wool*
C. G. Randell
L. B. Mann
H. H. Hulbert
James M. Coon

*Membership*
James W. Jones

*Purchasing Associations*
Joseph G. Knapp
John H. Lister

*Traffic*
Charles B. Bowling

The research, service, and educational staff conducts research studies and service activities relating to problems of management, organization, policies, merchandising, sales, costs, competition, and membership, arising in connection with the cooperative marketing of agricultural products and the cooperative purchase of farm supplies and services; publishes the results of such studies; confers and advises with officials of farmers' cooperative associations; and cooperates with educational agencies, cooperative associations and others in the dissemination of information relating to cooperative principles and practices.

Copies of this publication may be obtained upon request from the

Director of Information,
Farm Credit Administration,
Washington, D. C.

Bulletin No. 2 December 1935

# Accounting Principles
## for
# Cooperative Cotton Gin Associations

By

OTIS T. WEAVER

*Agricultural Economist*

FARM CREDIT ADMINISTRATION
Cooperative Division
Washington, D. C.

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1936

# CONTENTS

# Accounting Principles For Cooperative Cotton Gin Associations[1]

ADEQUATE records are even more necessary for a cooperative association than for business organizations of some other types. Each member[2] has a right to know the true financial condition of his association at least once a year, perhaps oftener; the manager and the members of the board of directors should know the financial condition at all times. For these reasons the cooperative cotton-gin associations need to plan carefully for the keeping of records that will supply this information and to see that they employ bookkeepers having the best of training and ability in accounting.

This does not always mean that the installation of a more elaborate set of records is desirable. Studies of the accounting systems of some 200 cooperative cotton-gin associations in Oklahoma and Texas have indicated a need, not for a new or an additional accounting system, but for some clarification of the principles of accounting and their application.

These principles are more or less fixed, and should be applied to the business of cooperative cotton-gin associations in much the same way as to any other business. Numerous and varied types of forms have been designed in an attempt to simplify bookkeeping for cotton gins; but, for the most part, these forms differ in arrangement rather than in principle. Some are more convenient than others for recording business transactions, but the results obtained should be identical, regardless of the type of form used, if recognized basic principles of accounting are followed.

The purpose of this report, therefore, is (1) to outline some of these basic principles of accounting as related to the business of cooperative cotton-gin associations, (2) to show how these principles may be applied to any practical set of forms, and (3) to point out some of the benefits that may be realized from the use of these principles. It is believed that this information will be of use to bookkeepers and managers of cooperative cotton gins, in improving the technique of management.

---

[1] Acknowledgment is made of helpful suggestions by other members of the Cooperative Division, Farm Credit Administration, by the staff of the Central Bank for Cooperatives, and of the Houston Bank for Cooperatives.

[2] The term "member" as used in this report refers to any person who has subscribed to one or more shares of common stock, or a membership in a cooperative association.

## DIVISIONS OF ACCOUNTING RECORDS

Any system of accounting for cotton-gin associations naturally divides itself into four rather distinct groups of records, as follows:

*Auxiliary or memorandum records.*—These include stubs or carbon copies of individual transactions; such as scale tickets, checks issued, cash receipts, sales or purchase invoices and statements, bills of lading, drafts, deposit slips, and similar items.

*Journals, or books of original entry.*—The book, or books, wherein the original or memorandum records are entered in the order in which the transactions occur, is commonly called the "journal."

*Ledgers, or books of final record.*—The book wherein the summarized journal entries are transferred and grouped into classified accounts is commonly called the "ledger." Sometimes it is desirable to subdivide certain ledger accounts according to the business of individual patrons. These are kept for convenience as subsidiary ledgers. When this is done the volume showing the summarized accounts is referred to as the "general ledger."

*Statements.*—These include the Income and Expense statement and the balance sheet.

The first group, auxiliary or memorandum records, is the basis of information that is recorded in the books. The second and third groups known as the "journal" and the "ledger", respectively, are the books.[3] The fourth group consists of statements or summaries of information taken from the ledger. That is, all book entries are made first in the journal, from the information on the memorandum records. These journal entries are then summarized periodically and transferred to (posted in) classified accounts in the ledger, from which monthly and annual statements are prepared.

### Auxiliary or Memorandum Records

Carbon duplicates or stubs of scale tickets, carbon copies of tickets or invoices of sales, stubs or carbon copies of checks issued, receipts for cash received or paid out, and other primary records of transactions by the association, together with copies of invoices received covering purchases from other firms or individuals, make up the original records or memoranda upon which all the accounts are based.

Each of these original records should contain complete information as to (1) the name of the individual or firm with whom the transaction is made; (2) the date of the transaction; and (3) the quantity, price, total amount, and terms of the transaction. A strict observance of this rule will mean that much less effort is required to record this information in the journal. These memoranda represent written authority for entries to be made in the journal and practically all of the figures recorded therein will be copied directly from such records.

[3] Kerr, W. H. Cooperative organization business methods. U. S. Dept. Agr. Bull. 178, p. 3. 1915.

Blank forms for all of the necessary original records may be printed according to specifications to fit any particular needs, but usually it will be less expensive and equally satisfactory to buy these supplies from printing firms that carry them in stock already made up.

A list of the forms generally found necessary follows:

(1) Ginning scale tickets.
(2) Seed-rebate checks.
(3) Expense checks.
(4) Bale-cotton checks or bills of exchange.
(5) Cash-paid-out tickets.
(6) Cash-received tickets.
(7) Sales tickets.
(8) Weekly pay-roll book.

All of the above forms with the exception of the pay-roll book should be in duplicate or possibly in triplicate, as exact carbon copies are preferable to stubs on which the same information has been copied.

Some gin associations use only one form of check for all purposes. The transactions are usually more easily recorded, however, if separate check forms are used for seed rebates, cotton purchases, and expenses. The advantages of using different forms for different purposes will be explained more fully in later sections dealing with the recording of these transactions in the journal.

### Journals, or Books of Original Entry

All books of original entry, whatever form they may take, represent merely an expansion of the ordinary journal which has only two columns—a debit column and a credit column. Cotton-ginning journals in common use are referred to by various names; such as "cash book", "daily gin report", "ginning journal" or "ginning register", "sales journal", "purchase record", "check register", and other terms. Regardless of the name by which known, however, they represent a form of the general journal, the book or books in which each day's business transactions are recorded in the order in which they occurred. Some gin associations use only one journal; others having considerable volume of business subdivide the journal into two or more of the above-named books. If custom ginning and the handling of cottonseed constitute practically all the activities of the cooperative, one multicolumn journal will probably be sufficient. Accounting systems having two or more journals were originally designed for businesses sufficiently large to employ two or more bookkeepers.

Single-journal systems of accounting differ only in the arrangement and number of the several debit and credit columns. Systems having several journals usually differ as to the particular transactions recorded in each volume as well as in the arrangement of the columns

JOURNAL

| 1 | | 2 | 3 | 4 | | 5 | 6 | | 7 | | | 8 | | 9 | 10 | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SUNDRY DEBIT | | BANK DEPOSIT | ACCOUNTS RECEIVABLE DR. | EXPENSE DEBIT | | CASH RECEIPTS | SEED COTTON BOUGHT | | BALE COTTON BOUGHT | | | COTTONSEED BOUGHT | | DATE | NAME AND EXPLANATION | BALE | |
| ACCOUNT | AMOUNT | AMOUNT | AMOUNT | ACCOUNT | AMOUNT | AMOUNT | POUNDS | AMOUNT | NUMBER OF BALES | POUNDS OF LINT | AMOUNT | POUNDS | AMOUNT | | | NUMBER | POUNDS OF LINT |

FORM 1.—SUGGESTED JOURNAL SHEET.

DEBIT ITEMS.—Left-hand half of suggested journal sheet if printed in pads, or left-hand page if printed in book form.

JOURNAL

| 12 | | 13 | 14 | | 15 | 16 | 17 | | | 18 | | | 19 | | 20 | | | 21 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEED COTTON GINNED | | GINNING, BAGGING AND TIES | CHECKS ISSUED | | CASH CREDIT | ACCOUNTS RECEIV-ABLE CR. | BALE COTTON SOLD | | | SEED COTTON PRODUCTS SOLD | | | COTTONSEED SOLD | | COAL, FEED, ETC. SOLD | | | SUNDRY CREDIT | |
| POUNDS PICKED | POUNDS SNAPS | AMOUNT | CHECK NUMBER | AMOUNT | AMOUNT | AMOUNT | NUMBER OF BALES | POUNDS OF LINT | AMOUNT | NUMBER OF BALES | POUNDS OF LINT | AMOUNT | POUNDS | AMOUNT | ITEM | QUANTITY | AMOUNT | ACCOUNT | AMOUNT |

FORM 1 (Continued).—SUGGESTED JOURNAL SHEET.

CREDIT ITEMS.—Right-hand half of journal sheet if printed in pads, or right-hand page if printed in book form.

in each. Regardless of whether a journal form has 2 columns or 20, or whether one or several journals may be used, the principle is the same; the amount of every transaction is recorded twice—once as a debit and once as a credit—in the same journal. Journals having numerous columns have been devised so that similar transactions may be recorded in specific columns in order to facilitate the addition of items in each column for posting as one total into the ledger. The number of journals used and the arrangement of the several columns in any one journal are of much less importance than the principles used in making the original entries. That is, if the proper accounts are debited and credited when each transaction is recorded, the final result will be exactly the same regardless of the arrangement of columns in any one journal or of the number of journals used.

Most of the multicolumn journal forms on the market are known as "daily gin reports." This record—in reality a journal, as stated above—has been abused by printing firms and individuals who have attempted to design and sell a foolproof system to meet the needs of all variations of the ginning business. Most of these so-called "systems" have some merits. They do not differ essentially in the results obtainable, provided the entries pertaining to the original transactions are properly made. Stock forms of these journals may be purchased from a number of firms specializing in such records. Care should be taken in selecting the forms to see that the number as well as the arrangement of the columns is adapted to the needs of the association.

As a rule, the most satisfactory forms are those with which the manager and bookkeeper are familiar or which may be easily understood by them. For the benefit of those desiring a one-journal system, form 1 is presented as suggestive of the arrangement and headings of the columns. It will be noted that the arrangement of this form is such that the "name and explanation" column is the center of this sheet,[4] with all debit columns to the left and all credit columns to the right. This distinct separation of debits and credits will be found to be of considerable advantage in recording the transactions in the proper columns. Such forms may be ruled and printed at any local printing or newspaper office. Before having any appreciable quantity printed, care should be taken that the necessary number and arrangement of columns has been anticipated. In order to be sure of the number of columns and the desired headings, it may be advisable to purchase columnar accounting sheets, having 25 or more columns, and write in the headings for each column until a satisfactory arrangement has been found. These columnar sheets, put up in pads, may be obtained from almost any office-supply firm.

[4] This arrangement was originally suggested by SWARTHOUT, A. V., and BEXELL, J. A. A SYSTEM OF ACCOUNTING FOR COTTON GINNERIES. U. S. Dept. Agr. Bull. 985, 42 pp., illus. 1921.

## Ledgers or Books of Final Record

The general ledger is the book of final record. Unfortunately, the general ledger is the one record that is not kept in the gin office by many cooperative cotton-gin associations. In the ledger similar transactions are grouped together by means of separate accounts; whereas, in the journal the transactions are recorded by date or in the order in which they occur. No entries are made in the ledger except those previously recorded in the journal.

The general ledger contains one page (see form 2) for each of the accounts used by a gin association during the year. A separate account should be maintained in the ledger for every fact which it is desirable to show in the financial statements. Any standard 2-column ledger will usually be found satisfactory; however, a loose-leaf ledger is more convenient than a bound book.

An orderly arrangement of the accounts in the general ledger will facilitate posting from the journal to the ledger, and will also require less effort in making out monthly statements. For this purpose the necessary accounts for the business of a cotton-gin association may be divided into four groups: (A) assets, (B) liabilities and net worth, (C) trading and revenue, and (D) expenses.

The number of individual accounts needed for each of the above groups will vary somewhat. The following list is suggested for organizations that engage in those activities usually associated with cotton ginning. If it is desired to use as the journal, form 1 (see pp. 4–5), the figures in the right-hand column below indicate the particular column of the journal in which transactions involving these accounts should be originally recorded. Each account appears on a separate sheet in the general ledger.

Number and Order of Individual Accounts in the General Ledger and Journal Source of Entries

| Number of account | Name of account | Number of column in journal (form 1) where entries originate | |
|---|---|---|---|
| | | Debits | Credits |
| | *Assets:* | | |
| A 1 | Cash account | 5 | 15 |
| A 2 | Bank account | 2 | 14 |
| A 3 | Accounts receivable | 3 | 16 |
| A 4 | Notes receivable | 1 | 21 |
| A 5 | Inventories | 1 | 21 |
| A 6 | Stock subscription notes | 1 | 21 |
| A 7 | Investments | 1 | 21 |
| A 8 | Meter deposits | 1 | 21 |

NUMBER AND ORDER OF INDIVIDUAL ACCOUNTS IN THE GENERAL LEDGER AND JOURNAL SOURCE OF ENTRIES—Continued

| Number of account | Name of account | Number of column in journal (form 1) where entries originate | |
|---|---|---|---|
| | | Debits | Credits |
| | *Assets*—Continued. | | |
| A 9 | Land | 1 | 21 |
| A 10 | Building | 1 | 21 |
| A 010 | Reserve for depreciation—buildings | 1 | 21 |
| A 11 | Machinery and equipment | 1 | 21 |
| A 011 | Reserve for depreciation—machinery and equipment | 1 | 21 |
| A 12 | Office furniture and fixtures | 1 | 21 |
| A 012 | Reserve for depreciation—furniture and fixtures | 1 | 21 |
| A 13 | Autos and trucks | 1 | 21 |
| A 013 | Reserve for depreciation—autos and trucks | 1 | 21 |
| A 14 | Other fixed assets | 1 | 21 |
| A 014 | Reserve for depreciation—other fixed assets | 1 | 21 |
| A 15 | Prepaid expenses | 1 | 21 |
| | *Liabilities and net worth:* | | |
| B 1 | Accounts payable | 1 | 21 |
| B 2 | Notes payable | 1 | 21 |
| B 3 | Dividends payable | 1 | 21 |
| B 4 | Accrued expenses | 1 | 21 |
| B 5 | Mortgages payable | 1 | 21 |
| B 6 | Unissued capital stock | 1 | 21 |
| B 7 | Authorized capital stock | 1 | 21 |
| B 8 | Treasury stock | 1 | 21 |
| B 9 | 10-percent surplus reserve | 1 | 21 |
| B 10 | Surplus | 1 | 21 |
| | *Trading and revenue accounts:* | | |
| C 1 | Bale cotton sales | 1 | 17 |
| C 2 | Sales of seed-cotton products | 1 | 18 |
| C 3 | Cottonseed sales | 1 | 19 |
| C 4 | Sales of coal, feed, etc | 1 | 20 |
| C 5 | Miscellaneous income | 1 | 21 |
| C 6 | Revenue—ginning and wrapping | 1 | 13 |
| C 7 | Bale cotton purchases (including beginning inventory) | 7 | 21 |
| C 8 | Seed cotton purchases (including beginning inventory) | 6 | 21 |
| C 9 | Cottonseed purchases (including beginning inventory) | 8 | 21 |
| C 10 | Purchases, of coal, feed, etc. (including beginning inventory) | 1 | 21 |
| C 11 | Purchases of bagging and ties (including beginning inventory, freight and drayage) | 1 | 21 |
| | *Expense accounts:* | | |
| D 0 | Expense control (total of all expenses) | 4 | 21 |
| D 1 | Expense of handling cotton | 4 | 21 |
| D 2 | Expense of handling cottonseed | 4 | 21 |
| D 3 | Expense of handling coal, feed, etc | 4 | 21 |
| D 4 | Fuel, power, light, water | 4 | 21 |
| D 5 | Wages | 4 | 21 |
| D 6 | Repair labor | 4 | 21 |
| D 7 | Repair material | 4 | 21 |

Number and Order of Individual Accounts in the General Ledger and Journal Source of Entries—Continued

| Number of account | Name of account | Number of column in journal (form 1) where entries originate | |
|---|---|---|---|
| | | Debits | Credits |
| | *Expense accounts*—Continued. | | |
| D 8 | Supplies and tools | 4 | 21 |
| D 9 | Lubricating oil and grease | 4 | 21 |
| D 10 | Manager's salary | 4 | 21 |
| D 11 | Manager's expense | 4 | 21 |
| D 12 | Directors fees and expenses | 4 | 21 |
| D 13 | Office salaries | 4 | 21 |
| D 14 | Office supplies and postage | 4 | 21 |
| D 15 | Telephone and telegraph | 4 | 21 |
| D 16 | Insurance and bond premiums | 4 | 21 |
| D 17 | Auditing and legal fees | 4 | 21 |
| D 18 | Advertising and dues | 4 | 21 |
| D 19 | Drayage—gin only | 4 | 21 |
| D 20 | Taxes—except Federal income | 4 | 21 |
| D 21 | Loss from bad accounts | 4 | 21 |
| D 22 | Depreciation | 4 | 21 |
| D 23 | Interest and exchange | 4 | 21 |

At the beginning of each year all of the ledger sheets that are in balance should be removed from the ledger binder and put into a permanent binder kept for that purpose, the year to which they apply clearly indicated by a division sheet. Such a preservation of records will be very helpful when it is necessary to refer to accounts of previous years. When these sheets representing the closed accounts are removed from the ledger the only sheets that will remain will be the asset, liability, and net worth accounts (the balance sheet accounts). The sheets in each of the subsidiary ledgers may also be continued from year to year, removing only those pages that are in balance or those for which the balance has been carried forward to additional sheets.

A subsidiary ledger will probably be needed for each of the following accounts, as the general ledger account will show only the sum of numerous individual accounts:

A 3. Accounts receivable.
A 4. Notes receivable.
A 6. Stock subscription notes.
B 1. Accounts payable.
B 2. Notes payable.
B 3. Dividends payable.
B 7 less sum of B 6 and B 8. Outstanding capital stock.
D 0. Expense control.

LEDGER

*NAME*

*Account No.* ____________

| DATE | ITEMS | FOLIO | ✓ | DEBITS | CREDITS | BALANCE |
|---|---|---|---|---|---|---|
| | | | | | | |

FORM 2.—SUGGESTED LEDGER SHEET.

*Subsidiary Ledgers*

The *Accounts Receivable* subsidiary ledger will contain on separate pages the accounts with individual patrons and customers.[5] The total of these individual accounts should equal the Accounts Receivable account in the general ledger. (See also Appendix.) The *Notes Receivable* subsidiary ledger should be similar to that for accounts receivable.

The *Stock Subscription Notes Receivable* subsidiary ledger will contain a separate page for each subscribing member. The notes themselves may be used as this ledger by recording directly on the notes, as credit items, any payments received.

The *Accounts Payable* and *Notes Payable* subsidiary ledgers will show on separate pages the amount of open accounts or notes owed to other individuals or firms. If the number of either accounts or notes payable is relatively few, a separate page for each may be kept in the general ledger instead of having a control or total account in the general ledger and these subsidiary ledgers.

The *Dividends Payable* subsidiary ledger is one in which a record is kept year after year showing the dividends declared and paid to each member or patron. At times when all declared dividends have been paid in full the control account in the general ledger, as well as each individual account in the subsidiary ledger, will be in balance.

The *Stock Ownership* subsidiary ledger should show on separate pages the amount of stock owned by each member. The sum of the credit balances on the several pages of this subsidiary ledger must exactly equal the difference between the Authorized Capital Stock (B7) and the sum of the Unissued Capital Stock (B6) and the Treasury Stock (B8) accounts in the general ledger. (See also p. 32.)

The individual expense accounts, D1 to D23, make up the *Expense* subsidiary ledger and should follow immediately after the Expense control page in the general ledger.

The *Patrons'*, or customers' ledger, the only ledger kept by many gin associations, is likewise a subsidiary ledger. (See also Appendix.) In this, by using a separate sheet for each patron, a complete record of the ginning business is afforded. The sum of certain items from all of the individual accounts will equal corresponding control accounts in the general ledger. For example, the sum of charges for ginning and wrapping for all patrons will equal the Revenue, Ginning and Wrapping account in the general ledger. Likewise, the value of the cottonseed sold by patrons will equal the total of the Cottonseed Pur-

[5] The term "patron" as here used refers to any farmer, whether member or nonmember, utilizing the facilities of a cooperative association. The term "customer" refers to nonfarmers who purchase coal, feed or other supplies from a cooperative association.

chases account in the general ledger. Seed cotton ginned and cottonseed sold to the gin may be similarly verified as to quantity.

Since the information recorded in the Patrons' ledger is copied directly from the carbon copies of the scale tickets, some bookkeepers have successfully used an envelop filing system as a form of this ledger. That is, an envelop for each patron is filed alphabetically in a filing cabinet and a triplicate copy of each scale ticket is placed in the proper envelop at the end of each day. This system is quite satisfactory if care is taken to file the tickets correctly. Bound volumes are undesirable for this ledger, as it often becomes necessary to record the ginning business with large producers on two or more widely separated pages. By means of a loose-leaf system, additional sheets may be inserted and an account of any size kept together.

The information needed on the Patrons' ledger may be brief or elaborate as the local requirements demand. At least it should show—

(1) Pounds of seed cotton ginned.
(2) Weight and number of bales.
(3) Total weight of cottonseed ginned.
(4) Cottonseed "caught."
(5) Pounds of cottonseed sold, and value.
(6) Charges for ginning and wrapping.

Other information may be desirable for the benefit of patrons, but one or several of the items listed above will be necessary to the cooperative association in determining patronage dividends. This record is also useful in that totals of individual accounts for certain items may be proved for accuracy by comparison with the corresponding control account in the general ledger.

Under some circumstances, discussed more fully in the section on relationship of net income, reserves, surplus, and dividends, it is desirable to set up a *Patrons' Equity* subsidiary ledger, with a corresponding account in the general ledger. This record shows by individual accounts, the equity of patrons in amounts set aside as patronage dividends earned but not actually distributed at the time.

As a matter of convenience and economy, all of the subsidiary ledgers except the Patrons' ledger may be placed, in separate sections, in the same loose-leaf binder with the general ledger and the same size and form of ledger sheet used for all. Since the page rulings for the Patrons' ledger differ from those of the other ledgers, a separate loose-leaf binder will probably be needed for it, unless the envelop system is used.

Other subsidiary ledgers which may be found desirable are discussed in connection with the particular circumstances involving need for them.

### STATEMENTS

The Income and Expense statement, together with the balance sheet (statement of assets and liabilities), is an orderly grouping of the financial data assembled by means of accounting records. In the ledger each account is on a separate page and may have numerous entries. In the Income and Expense statement and balance sheet, each account is represented by one item. This sum is the balance of the corresponding account in the general ledger.

Form 3 is a suggested arrangement for an income and expense statement. This form is not particularly different from those used by most cooperative cotton-gin associations. Many bookkeepers tend to subdivide the revenue accounts into more departments than those shown in this form. For example, coal, feed, and similar items are frequently reported in as many groups; and bagging-and-ties is often shown separate from ginning. It is entirely correct for these subdivisions to be made, but it is doubtful that much additional information is gained by too many subdivisions. Form 3 provides for only one expense account for each department other than ginning proper. If it is desired to separate the expenses chargeable to cotton, for example, into several items, this may be done; but the Income and Expense statement will be much longer and therefore more difficult to understand.

It is realized that a portion of some of the items of expense charged to ginning proper, as provided by this form, is really incurred in buying and selling cotton, cottonseed, or other products. Since the amounts involved are relatively small, however, and since no satisfactory basis for allocating these expenses to the different departments is available, they are shown as expenses of ginning proper. Since ginning and wrapping are the primary activities of a cotton-gin association, and as other products are usually bought and sold primarily to attract new members and patrons, very little error is introduced by charging these items of overhead expense to ginning proper. Any direct expenses incurred in the handling of any products should, of course, be charged to the expense account of that department. If ginning is the main activity, there seems to be little support for the theory that a portion of all overhead expenses, such as the manager's salary, for example, should be prorated to the other departments.

The statement of assets and liabilities (the balance sheet) illustrated by form 4 does not differ materially in arrangement from financial statements in common use by many cooperative gin associations. The balance sheet of a corporation is nothing more than an itemized statement of (1) what the corporation owns—its assets, (2) what the corporation owes—its liabilities, and (3) its net worth accounts—capital and surplus. The distinguishing feature about a balance sheet is that the sum of the assets always exactly equals the sum of the liabilities, capital, and surplus.[6]

[6] Surplus represents accumulated earnings or, in the case of a cooperative, savings not yet declared as dividends to patrons or otherwise appropriated for some specific purpose or contingency. For further discussion of this item see pp. 75-81.

14977—36——2

FORM 3

## SUGGESTED FORM OF INCOME AND EXPENSE STATEMENT

From .......... to ..........

| | Quantity | Amount | Amount | Amount |
|---|---|---|---|---|
| Bale cotton: | | | | |
| Sales to date | ........ | | $....... | |
| Purchases and beginning inventory | ........ | $....... | | |
| (Less) present inventory | ........ | ........ | | |
| Cost of cotton sold | ........ | | ........ | |
| Gross income (sales less cost) | ........ | | ........ | |
| Expense of handling cotton | ........ | | ........ | |
| Net income—bale cotton | | | | $........ |
| Seed cotton: | | | | |
| Sales to date | ........ | | ........ | |
| Purchases and beginning inventory | ........ | ........ | | |
| (Less) present inventory | ........ | ........ | | |
| Cost of seed cotton sold | | | ........ | |
| Net income—seed cotton | | | | .......... |
| Cottonseed: | | | | |
| Sales | ........ | | ........ | |
| Purchases and beginning inventory | ........ | ........ | | |
| (Less) present inventory | ........ | ........ | | |
| Cost of cottonseed sold | ........ | | ........ | |
| Gross income (sales less cost) | ........ | | ........ | |
| Expense of handling cottonseed | ........ | | ........ | |
| Net income—cottonseed | | | | ......... |
| Coal, feed, supplies, etc.: | | | | |
| Sales | ........ | | ........ | |
| Purchases and beginning inventory | ........ | ........ | | |
| (Less) present inventory | ........ | ........ | | |
| Cost of sales | ........ | | ........ | |
| Gross income (sales less cost) | ........ | | ........ | |
| Handling expenses | ........ | | ........ | |
| Net income—coal, etc. | | | | .......... |
| Trading net income—Forwarded | | | | $........ |

FORM 3—Continued

| | Quantity | Amount | Amount | Amount |
|---|---|---|---|---|
| Trading net income—Brought forward | | | | $......... |
| Ginning and wrapping: | | | | |
| Ginning tolls, bagging, and ties | ........ | | $....... | |
| Purchases—bagging and ties, and beginning inventory | ........ | $....... | | |
| (Less) Present inventory | ........ | ........ | | |
| Cost of bagging and ties sold | ........ | | ........ | |
| Gross income (tolls less cost of bagging and ties) | ........ | | ........ | |
| Expenses: | | | | |
| Fuel, power, light, water | | ........ | | |
| Wages | | ........ | | |
| Repairs—labor | | ........ | | |
| Repairs—material | | ........ | | |
| Supplies and tools | | ........ | | |
| Lubricating oil and grease | | ........ | | |
| Manager's salary | | ........ | | |
| Manager's expense | | ........ | | |
| Directors' fees | | ........ | | |
| Office salaries | | ........ | | |
| Office supplies and postage | | ........ | | |
| Telephone and telegraph | | ........ | | |
| Insurance and bond premiums | | ........ | | |
| Auditing and legal | | ........ | | |
| Advertising and dues | | ........ | | |
| Drayage—gin only | | ........ | | |
| Taxes—except Federal income | | ........ | | |
| Depreciation | | ........ | | |
| Total ginning expenses | | | ........ | |
| Net income—ginning and wrapping | | | | .......... |
| Net income from operations. | | | | $......... |
| Other deductions less other income: | | | | |
| Loss on bad accounts | | ........ | | |
| Interest and exchange | | ........ | ........ | |
| Miscellaneous income | | | ........ | .......... |
| Total net income | | | | .......... |

Form 4

## SUGGESTED FORM OF BALANCE SHEET

As of ............, 19 .

ASSETS

| | | | |
|---|---|---|---|
| Current assets: | | | |
| Cash in office | | $........ | |
| Cash in bank | | ........ | |
| Accounts receivable | | ........ | |
| Notes receivable | | ........ | |
| Inventory (stocks on hand) | | ........ | |
| Total current assets | | | $......... |
| Other assets: | | | |
| Stock subscription notes receivable | | ........ | |
| Investments | | ........ | |
| Meter deposits | | ........ | |
| Total other assets | | | .......... |
| Fixed assets: | | | |
| Land | | ........ | |
| Buildings | $.......... | | |
| Less reserve for depreciation | .......... | ........ | |
| Machinery and equipment | .......... | | |
| Less reserve for depreciation | .......... | ........ | |
| Furniture and fixtures | .......... | | |
| Less reserve for depreciation | .......... | ........ | |
| Truck or auto | .......... | | |
| Less reserve for depreciation | .......... | ........ | |
| Other fixed assets | .......... | | |
| Less reserve for depreciation | .......... | ........ | |
| Total fixed assets | | | .......... |
| Prepaid expenses (insurances, etc.) | | | .......... |
| Total assets | | | .......... |

FORM 4—Continued

LIABILITIES AND NET WORTH

| | | | | |
|---|---|---|---|---|
| Current liabilities: | | | | |
| Notes payable (short-time) | | | $....... | |
| Accounts payable | | | ....... | |
| Dividends payable | | | ....... | |
| Accrued expenses: | | | | |
| Wages and salaries due | | $....... | | |
| Interest due and unpaid | | ....... | | |
| Taxes due and unpaid | | ....... | ....... | |
| Total current liabilities | | | | $......... |
| Fixed liabilities: | | | | |
| Mortgages payable | | | | ......... |
| Net worth: | | | | |
| Capital stock—par value $...... per share: | | | | |
| Authorized ...... shares | | ....... | | |
| Less: | | | | |
| Unissued | $....... | | | |
| In treasury | ....... | ....... | | |
| Outstanding capital stock | | | ....... | |
| Surplus: | | | | |
| 10-percent surplus reserve | | ....... | | |
| Undivided savings | | ....... | ....... | |
| Total net worth | | | | ......... |
| Total liabilities and net worth | | | | ......... |

*Reconciliation of surplus*

| | | |
|---|---|---|
| Balance (preceding balance sheet) | ....... | |
| Add: | | |
| Net income | ....... | |
| Other credits to surplus | ....... | ......... |
| Deduct: | | |
| Net loss | ....... | |
| Federal income tax | ....... | |
| Dividends on capital stock @ .. % | ....... | |
| Patronage dividends @ .. per ... | ....... | ......... |
| Balance (current balance sheet) | | ......... |

## OPENING OR REVISING THE BOOKS

THE PROCEDURE to be followed in opening a set of books for a cooperative gin association depends somewhat on whether the cooperative is just beginning to operate or has operated the previous year, and also on the completeness of any books previously kept.

Suggestions for opening or revising the books, therefore, will be discussed under each of the following conditions:

*General ledger properly closed and balanced.*—The revenue and expense accounts of the previous year have been correctly closed with balances shown for only the asset, liability, and net-worth accounts; and the sum of the debit balances is exactly equal to the sum of the credit balances.

*An audit only available.*—In some cases there is no ledger at all, or only an incomplete and unbalanced set of accounts of the previous year's business, but an auditor's statement which has been prepared from working papers independent of the books or records kept at the gin office.

*Previous accounts incomplete and unbalanced with no audit available.*—Again there are only some miscellaneous unbalanced records for the previous season with no audit or balanced statement of the assets, liabilities, and net worth at the end of the previous year.

*Accounts for a new association and a new plant.*—Books for a newly organized cooperative building a new gin plant.

*Accounts for a new association and an old plant.*—Books for a newly organized cooperative that buys a second-hand plant.

### General Ledger Properly Closed and Balanced

If the revenue and expense accounts for the previous year have been properly closed, the only accounts that will appear in the ledger with balances will be the asset, liability, and net-worth accounts—those which appear on the balance sheet. Opening entries, therefore, will not be necessary in the sense of starting a set of books.

Before any transactions of the current season are posted, a trial balance should be taken of the general ledger to prove that it is in balance, and to show the active accounts that appear in the ledger. This trial balance is merely a list of the accounts having balances, with these balances recorded in separate debit and credit columns opposite the names of the accounts. If the ledger is in balance, the sum of the debit balances will equal the sum of the credit balances.

If the trial balance, as of the date the books were closed, shows that there were balances in merchandise inventory accounts, such as cotton and cottonseed; balances in supply inventory accounts, such as fuel; and balances in prepaid expense accounts, such as insurance paid in advance, it will be necessary to make journal entries to transfer the balances of these balance-sheet accounts to the current year's operating accounts. Inventory values of cotton, cottonseed, and other merchandise for sale should then be transferred to corresponding purchase accounts; inventory values of supply items, such as fuel; and balances in prepaid accounts, such as prepaid insurance, should be transferred to the proper current expense accounts. Journal entries such as these are the only entries necessary to reopen a general ledger that has been properly closed.

On the other hand, credit balances in accrued expense accounts, such as interest, taxes, and salaries due and unpaid as of the date the books were closed, should **not** be transferred to accounts of the current year by journal entries, but should remain open as liability accounts, exactly as any other obligation, until paid. That is, if these expenses which were due and unpaid at the time the books were closed are paid during the current year, the debit entry recording the payment should be to these liability accounts rather than to corresponding expense accounts.

In order to illustrate the above principles, assume that the following trial balance of the ledger is obtained:

TRIAL BALANCE APRIL 1, 1935

| *Debits* | | *Credits* |
|---|---|---|
| $500.00 | Bank account | |
| 100.00 | Accounts receivable | |
| 120.00 | Cotton inventory (2 bales) | |
| 35.00 | Bagging and ties inventory (50 patterns) | |
| 36.00 | Fuel coal inventory (3 tons) | |
| 500.00 | Land | |
| 6,000.00 | Buildings | |
| | Reserve for depreciation—buildings | $900.00 |
| 15,000.00 | Machinery | |
| | Reserve for depreciation—machinery | 3,000.00 |
| 800.00 | Furniture and fixtures | |
| | Reserve for depreciation—furniture and fixtures | 240.00 |
| 50.00 | Prepaid insurance | |
| | Accrued interest | 60.00 |
| | Accrued taxes | 160.00 |
| | Accrued manager's salary | 150.00 |
| | Mortgages payable | 3,000.00 |
| 500.00 | Unissued capital stock | |
| | Authorized capital stock | 15,000.00 |
| | Surplus | 1,131.00 |
| $23,641.00 | Total | $23,641.00 |

If an auditor's statement, as of the date the books were closed, is available, the figures in the trial balance should be compared with the audit to make sure that any adjustments or corrections made by the auditor were entered in the books. If the balances of the ledger accounts, as shown by the trial balance, do not agree with the audit, the auditor should be consulted in order that any corrections or adjustments made by the auditor may be entered on the books. The auditor's report should show, among other things, a reconciliation of the bank statement and a list of the accounts receivable.

When an audit as of the date when the books were closed is not available, the correctness of each of the control accounts (accounts for which there are subsidiary ledgers) and of the bank account should be verified. That is, a list of individual accounts receivable should be made to prove that the control of these accounts in the general ledger ($100 in the above illustration) is the sum of the individual accounts in the accounts receivable ledger. Likewise the balance as shown by the bank statement, as of the date the books were closed, should be reconciled with the bank balance, as shown by the books (see p. 59).

Assuming that the above questions have been answered satisfactorily, journal entries such as are necessary to transfer the merchandise inventory balances to current purchases, and the prepaid insurance and inventory of supplies to current expenses may then be made as illustrated on the following page:

JOURNAL

| 1 | | 4 | | 7 | | | 9 | 10 | 21 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sundry debit | | Expense debit | | Bale cotton bought | | | Date | Name and explanation | Sundry credit | |
| Account | Amount | Account | Amount | Number of bales | Pounds of lint | Amount | | | Account | Amount |
| | | | | 2 | 1,000 | $120 | April 1 | Opening cotton inventory to purchases. | Cotton inventory | $120 |
| Bagging and ties purchases. | $35.00 | | | | | | April 1 | Opening bagging and ties inventory to purchases. | Bagging and ties inventory. | 35 |
| | | Fuel | $36 | | | | April 1 | Fuel coal inventory to expenses. | Fuel coal inventory. | 36 |
| | | Insurance | 50 | | | | April 1 | Prepaid insurance to expense. | Prepaid insurance. | 50 |

As stated above, the accrued expenses shown as liabilities, as of the date the books were closed, will not be transferred by journal entries to accounts for the current season, as prepaid expense accounts and inventories were transferred. These accrued liability accounts will remain on the books as liabilities until paid, at which time the payments will be recorded as debit entries to these accounts and thereby cause them to balance out.

For illustration, assume that the $150 item for accrued manager's salary due and unpaid as of the date the books were closed (Mar. 31, 1935, for example), as shown by the trial balance of the ledger, was paid by a check on April 15, and that another check of $240 was issued on July 1 to pay the semiannual interest on the $3,000 mortgage. These checks would be recorded in the journal as illustrated below.

JOURNAL

| 1 | | 4 | | 9 | 10 | 14 | |
|---|---|---|---|---|---|---|---|
| Sundry debit | | Expense debit | | Date | Name and explanation | Checks issued | |
| Account | Amount | Account | Amount | | | Check No. | Amount |
| Accrued salary | $150 | | | Apr. 15 | John Jones, Manager | 1 | $150 |
| Accrued interest | 60 | Interest | $180 | July 1 | First National Bank | 2 | 240 |

Attention is called to the difference in handling accrued and prepaid items in the ledger accounts in reopening the books at the beginning of the new business year. Accrued items are expenses that were charged as expenses in the accounts for the previous year and shown as liabilities because they were not paid. Prepaid items are expenses of the current year that were paid in advance during the previous year and properly shown as assets, as of the date the books were closed. Inventories and prepaid expenses must therefore be transferred by journal entries from the asset accounts to corresponding purchase and expense accounts of the current season.

## AN AUDIT ONLY AVAILABLE

The first step in starting a set of books when only an audit of the last season's business is to be had, and no balanced ledger accounts are available, is to enter in the journal the balances of the accounts as shown in the audit. For illustration, assume that the following balance sheet or statement of assets, liabilities, and net worth is available:

ASSETS

| | | |
|---|---|---|
| Cash in bank | | $500 |
| Land | | 600 |
| Buildings | $5,000 | |
| Less reserve for depreciation | 1,000 | |
| | | 4,000 |
| Machinery and equipment | 15,000 | |
| Less reserve for depreciation | 5,000 | |
| | | 10,000 |
| Office furniture and fixtures | 500 | |
| Less reserve for depreciation | 100 | |
| | | 400 |
| Total assets | | 15,500 |

LIABILITIES AND NET WORTH

| | |
|---|---|
| Accounts payable | $500 |
| Mortgages payable | 4,000 |
| Authorized capital stock (or memberships) | 10,000 |
| Surplus | 1,000 |
| Total liabilities | 15,500 |

The aim is to enter these figures in the general ledger (form 2) for the new year's business. Although it would be possible to enter these figures directly in the general ledger from the previous year's statement, to make the transactions complete, the items should first be recorded on page 1 of the journal (form 1). It is suggested that no other entries be made on page 1 of the journal. The entries would be made then as follows:

JOURNAL

Page 1

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| A 2 | $500.00 | | Bank account | | |
| A 9 | 600.00 | | Land | | |
| A 10 | 5,000.00 | | Building | | |
| | | | Reserve for depreciation—buildings | A 010 | $1,000.00 |
| A 11 | 15,000.00 | | Machinery and equipment | | |
| | | | Reserve for depreciation—machinery and equipment | A 011 | 5,000.00 |
| A 12 | 500.00 | | Office furniture and fixtures | | |
| | | | Reserve for depreciation—furniture and fixtures | A 012 | 100.00 |
| | | | Accounts payable | B 1 | 500.00 |
| | | | Mortgages payable | B 5 | 4,000.00 |
| | | | Authorized capital stock | B 7 | 10,000.00 |
| | | | Surplus | B 10 | 1,000.00 |
| | | | (Opening entries April 1, 1935.) | | |

It will be noted that certain figures shown under assets in the above balance sheet are omitted from this journal entry. For example, the present value of buildings, $4,000 (the difference between the original cost of $5,000, and the reserve for depreciation on buildings of $1,000) is not entered in the journal. Notice, however, that the $5,000 item for buildings is entered on the left (debit) side of the journal and the $1,000 item, reserve for depreciation on buildings, is entered on the right (credit) side of the journal. It is not necessary, therefore, for the $4,000 to be entered anywhere in the books as it is nothing more than the difference between the other two items. A similar procedure is followed with respect to other assets having an associated reserve account for depreciation.

As soon as the items have been entered in the journal, as illustrated above, it is advisable to add the debits (items on the left) and see that the total equals the sum of the credits (items on the right side of the journal sheet). It will be noted that these totals are not the same as total assets and total liabilities shown on the illustrative balance sheet, each of which is $15,500; whereas both the sum of the debit items and the sum of the credit items on the illustrative journal entry is $21,600. This is because the reserves are deducted from the assets in the balance sheet, while they are shown as credit items in the illustrative journal entry.

When it has been determined that the sum of the debits is the same as the sum of the credits, as entered on the first page of the journal, each of these items may be posted in the general ledger. As each item is posted, a check mark (√) should be placed immediately after the amount as recorded in the journal.

When the above journal entries have been posted, the active general ledger sheets should be as follows:

BANK ACCOUNT

Date — Account No. A2

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | $500. 00 | -------- |

LAND

Date — Account No. A9

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | $600. 00 | -------- |

BUILDING

Date — Account No. A10

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | $5, 000. 00 | |

Reserve for Depreciation—Building

Date | Account No. A010

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | | $1,000.00 |

Machinery and Equipment

Date | Account No. A11

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | $15,000.00 | |

Reserve for Depreciation—Machinery and Equipment

Date | Account No. A011

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | | $5,000.00 |

Office Furniture and Fixtures

Date | Account No. A12

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | $500. 00 | |

Reserve for Depreciation—Furniture and Fixtures

Date | Account No. A012

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | | $100. 00 |

Accounts Payable

Date | Account No. B1

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | | $500. 00 |

Mortgages Payable

Date | Account No. B5

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | | $4,000.00 |

AUTHORIZED CAPITAL STOCK

Date | Account No. B7

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | | $10,000.00 |

SURPLUS

Date | Account No. B10

| 1935 | | Folio | Debits | Credits |
|---|---|---|---|---|
| April 1 | Audit balance | J1 | | $1,000.00 |

The next step is to take a trial balance of the general ledger to prove that the postings from the journal have been made correctly. The items in a trial balance of the general ledger at this time, as shown below, would be the same as the journal entries illustrated above.

TRIAL BALANCE AFTER OPENING BOOKS

| Debits | Name of account | Credits |
|---|---|---|
| $500. 00 | Bank account | |
| 600. 00 | Land | |
| 5, 000. 00 | Building | |
| | Reserve for depreciation—buildings | $1, 000. 00 |
| 15, 000. 00 | Machinery and equipment | |
| | Reserve for depreciation—machinery and equipment | 5, 000. 00 |
| 500. 00 | Office furniture and fixtures | |
| | Reserve for depreciation—furniture and fixtures | 100. 00 |
| | Accounts payable | 500. 00 |
| | Mortgages payable | 4, 000. 00 |
| | Authorized capital stock | 10, 000. 00 |
| | Surplus | 1, 000. 00 |
| 21, 600. 00 | Total | 21, 600. 00 |

The trial balance proves that the accounts have been posted correctly from the journal to the general ledger. Certain other provings may then be made. Unless a list of the stock owners is already available, the several individual accounts in the Stock Ownership subsidiary ledger should be totaled in order to make sure that this sum is the same as that of the Authorized Capital Stock account. The only other account as shown by the above trial balance that might be represented by a subsidiary ledger is the Accounts Payable. If the number of individual accounts payable is less than four or five, it may be desirable to have a separate account for each one in the general ledger rather than have one control or total account in the general ledger with the individual accounts in an Accounts Payable subsidiary ledger. If such a subsidiary ledger is desired, an additional column for recording debits and credits to Accounts Payable should be provided on both the debit and the credit sides of the journal (form 1).

### Previous Accounts Incomplete and Unbalanced With No Audit Available

This is the most difficult of the five situations described above to enter properly in a set of books. In case the management and office help have been changed since the previous year and no complete records have been kept, it may be necessary to originate a balance sheet. The balance as shown by the monthly bank statement, less any outstanding checks at that time, will be the amount of the Bank account. Accounts due from customers and others possibly may be found in memorandum books at the gin office, even though a balanced set of books was not kept. Such memorandum accounts, however, should be verified with the customers. As a rule, inventories of cotton, cottonseed, and other products will not have been large. Some well-informed member of the board of directors may be consulted about such items. If no figures at all are available, showing the value of land, buildings, machinery and equipment, office fixtures, and so forth, separately, and if the advice of a commercial gin appraiser is not available, a committee selected from the board of directors, acting with the manager and the ginner, should be able to appraise the present physical value of these assets. The names of the stockholders and the amount of stock or membership fee contributed by each should be obtainable from the secretary of the board. Approximate information as to the amount of the notes, mortgages, and accounts due to individuals or firms may be had from the members of the board. The exact amount of these obligations may be obtained by writing or otherwise making contact with individuals or firms.

As soon as the assets and liabilities have been determined, the amount of surplus (or deficit) may be obtained by subtracting the sum of the liabilities and capital stock from the total assets. If the sum of the liabilities and the outstanding capital stock exactly equals the book value of the total assets, there will be no Surplus account. On the other hand, if the sum of the liabilities and capital stock are greater than the total of the assets, the Surplus account will have a debit balance (a minus surplus), or in other words will be a deficit.

When a statement of the assets, liabilities, and surplus (or deficit) has been prepared, this statement should be entered in the journal (form 1) and posted to the general ledger (form 2) in the manner illustrated above.

## Accounts for a New Association and a New Plant

When the cooperative has been organized and the charter obtained, the first entry to be made in the journal is to record the authorized capital stock. This entry is presumably made before any of the stock is sold. Assuming that the authorized capital stock is 2,000 shares with a par value of $10 per share, or a total of $20,000, the opening journal entry would be as follows:

Journal

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debts | | Date | Name and explanation | Sundry credits | |
| Account | Amount | | | Account | Amount |
| Unissued capital stock. | $20, 000 | Aug. 1 | To record the authorized capital stock. | Authorized capital stock. | $20, 000 |

As shares of capital stock are sold, the Cash account and the Stock Subscription Notes Receivable account or both as the case may be are debited, with corresponding credits to the Unissued Capital Stock account. No account for Capital Stock Outstanding will appear in the ledger. In preparing a balance sheet, however, Capital Stock Outstanding will be shown as the difference between the amount of capital stock authorized and the amount unissued. In a similar manner, the depreciated value of the buildings does not appear in the ledger as a separate account but is shown in the balance sheet as the difference between the original cost of the buildings and the reserve for depreciation.

To continue with the entries involving capital stock, assume that $10,000 worth of stock has been sold for cash to 200 individuals, each of whom bought five shares, or $50 worth. The journal entry will be as follows:

JOURNAL

| 5 | 9 | 10 | 21 | |
|---|---|---|---|---|
| Cash receipts | Date | Name and explanation | Sundry credits | |
| Amount | | | Account | Amount |
| $10, 000. 00 | | To record sale of capital stock for cash | Unissued capital stock | $10, 000. 00 |
| | | | Credits to the accounts of each individual stockholder in the Stock Ownership subsidiary ledger | |
| | | | Name | Amount |
| | | | A | $50. 00 |
| | | | B | 50. 00 |
| | | | etc. | etc. |

The list of stockholders and the amount of stock purchased by each one is recorded for two reasons: (1) To show that the sum of the individual amounts purchased equals the total amount of stock sold, and (2) in order that the Stock Ownership subsidiary ledger may be made up with a separate page for each stockholder. Only the total amount of stock sold, the $10,000, would be posted to the Unissued Capital Stock account in the general ledger.

14977—36——3

On the other hand, if 100 members paid only half in cash and gave a note for the balance, the above journal entry would be made as follows:

JOURNAL

| 1 | | 5 | 21 | |
|---|---|---|---|---|
| Sundry debit | | Cash receipts (debit) | Sundry credit | |
| Account | Amount | Amount | Account | Amt. |
| Stock-subscription notes | $2, 500 | $7, 500 | Unissued capital stock | $10, 000 |
| Debits to the individual accounts of stockholders giving notes | | | Credits to the account of each stockholder in the Stock Ownership subsidiary ledger | |
| Name | Amount | | Name | Amt. |
| A<br>B<br>etc. | $25<br>25<br>etc. | | A<br>B<br>etc. | $50<br>50<br>etc. |

Although the stock certificates may not be delivered to members who give their notes as part payment, each share will probably be made out, and in effect issued, although held as security for the payment of the note. In most States, this stock will carry all the rights as to voting and dividends of stock fully paid for in cash even though both stock and patronage dividends are applied to the payment of the note.

To continue with the journal entries, assume that the following transactions have taken place:

(1) That $5,000 collected from the sale of stock has been deposited in the bank.

(2) That land costing $1,000 has been bought and paid for by check.

(3) That the gin buildings have been built under contract, including all material and labor, at a cost of $5,000, for which a note secured by a mortgage has been given in payment.

(4) That new gin machinery and equipment costing $14,000 has been purchased and installed, for which a check for $3,500 and a note and mortgage for $10,500 have been given in payment.

(5) That office furniture and fixtures costing $100 have been bought on open account.

These transactions will be entered in the journal as illustrated on the following page.

JOURNAL

| 1 | | 2 | 9 | 10 | 14 | | 15 | 21 | |
|---|---|---|---|---|---|---|---|---|---|
| Sundry debit | | Bank deposit | Date | Name and explanation | Checks issued | | Cash credit | Sundry credit | |
| Account | Amount | Amount | | | Check number | Amount | Amount | Account | Amount |
| | | $5,000.00 | April 1 | First National Bank, deposit | | | $5,000.00 | | |
| Land | $1,000.00 | | April 2 | Land Co., 1 block | 1 | $1,000.00 | | | |
| Buildings | 5,000.00 | | April 3 | Building Co., contract | | | | Mortgages payable | $5,000.00 |
| Gin machinery | 14,000.00 | | April 4 | Gin Machinery Co., machinery installed | 2 | 3,500.00 | | Mortgages payable | 10,500.00 |
| Furniture and fixtures | 100.00 | | | Office Supply Co., desk and safe | | | | Accounts payable | 100.00 |

*Stock Ownership Records*

It will now be necessary to open a Stock Ownership subsidiary ledger in which the stock sold to each individual stockholder will be recorded on a separate sheet. For example, an account in this subsidiary ledger would be opened for A and the amount of stock purchased by him would be posted to the credit side of his account from the journal entry shown above. Similar accounts would likewise be opened for each of the other stockholders. The total of these several accounts in the Stock Ownership subsidiary ledger will at all times exactly equal the difference between the authorized and unissued stock.

STOCK OWNERSHIP SUBSIDIARY LEDGER

ACCOUNT OF A

| Date | | Folio | Debits | Credits |
|---|---|---|---|---|
| 1935: July 25 | Stock certificate no. — | J1 | | $50. 00 |

Entries in the Stock Ownership subsidiary ledger will be made only when stock is sold, transferred, or repurchased by the association. If both common and preferred stock is issued, two stock ownership ledgers will be needed. For nonstock cooperatives, the original membership fee (not the annual dues) should be set up in the balance sheet as a capital investment. The combined total of the membership fees (not the annual dues) should be shown in the general ledger accounts for a nonstock association in the same way capital stock is shown for a stock organization. That is, if a cooperative is organized by 50 members and the original membership fee is $3, all of which is paid in cash, the first entry to be made should be as follows:

JOURNAL

| 5 | 9 | 10 | 21 | |
|---|---|---|---|---|
| Cash receipts | Date | Name and explanation | Sundry credits | |
| | | | Account | Amount |
| $150. 00 | | (Subscribers' names) | Membership fees | $150. 00 |

The $150 credit item should be posted to a Membership Fees account in the general ledger, with postings to each member's account in the Membership subsidiary ledger. Since memberships in nonstock associations are usually not transferable, it is not necessary to have a separate sheet or page for each member of such an association as in the case of a cooperative which has capital stock. That is, any ordinary daybook will do for a membership register as the names of the members may be written in successive lines of the same page. The sum of the amounts contributed by the members as membership fees should at all times be equal to the Membership Fees control account in the general ledger.

If stock subscription notes are given, another subsidiary ledger will also be needed to record on a separate sheet the stock subscription note of each member. Of course, the notes themselves can be used as a subsidiary ledger, and payments made from time to time recorded directly on the notes, with a total of all payments entered through the journal to the control account in the general ledger.

No entries other than the sale of the capital stock should be recorded on page 1 of the journal, since the entries necessary to record the amount of stock sold to each individual, and the amount of the stock subscription notes received from those that did not pay cash, must be made in addition to the entries necessary to show the total stock sold, the total cash received, and the total amount of subscription notes.

### *Notes Given for Capital Purposes*

A nonstock cooperative association that obtains initial funds by giving the note of the association to members in exchange for cash should keep a subsidiary ledger for these notes due to members, with a corresponding control account in the general ledger. Such notes are liabilities in much the same way as money borrowed from a bank; that is, the association as a business organization owes its members as individuals for these initial funds.

A situation even more complicated results when all or part of the members make promissory notes to the cooperative to be used by the association as collateral in borrowing money. If such notes are given in payment for stock, they are merely stock subscription notes, or an asset of the association. If, however, the cooperative association is a nonstock organization, it should in turn give some evidence of this indebtedness to each of the members, either in the form of a promissory note or by setting up on the books an account payable to each member. The note given by each member to the association for use as collateral for loans is an asset of the association, while the note or other evidence of indebtedness given by the association to each of the members is a contingent liability.

The association has two possible methods of raising funds on members' notes: (1) The notes may be discounted by a bank, or (2) they may be used as collateral to secure notes given by the association to a bank. If the notes given by members are discounted by some individual or bank for cash, it will be necessary to set up an additional general ledger account, Notes Receivable Discounted, which would be credited with the amount of the notes discounted with corresponding debit entries to the Cash or Bank account, and to the expense account Interest (discount) and Exchange. As an example, assuming that certain notes given by members in the amount of $500 were discounted at the bank, the transactions would be recorded as follows:

JOURNAL

| 4 | | 5 | 9 | 10 | 21 | |
|---|---|---|---|---|---|---|
| Expense debit | | Cash receipts | Date | Name and explanation | Sundry credit | |
| Account | Amt. | Amt. | | | Account | Amt. |
| D 23 | $50. 00 | $450. 00 | | Notes of members discounted for cash | Notes receivable discounted | $500. 00 |

It appears at first that the credit entry in the above illustration should be to Notes Receivable, and if the note is sold outright without the association's endorsement or guarantee of payment this will be true. If the association is liable as an endorsee, in case the original payor does not pay the note, however, this possible or contingent liability should be shown on the books by setting up the Notes Receivable Discounted account as shown by the above illustration. When the member pays his note to the bank or individual[7] who holds it, the entry in the association's books will be as follows:

JOURNAL

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amt. | | | Account | Amt. |
| Notes receivable discounted | $500. 00 | | Discounted note paid by maker to holder of note | Notes receivable | $500. 00 |

[7] Payment will not be made to the association, though the association may receive the payment to be credited to the account of the holder of the note.

In this assumed case the association would still owe the members who had paid these notes. That is, these members would have a claim on the assets of the association similar to the claim of owners of capital stock in a capital stock organization.

If, instead of being sold or discounted, the note of the member is used as security or collateral on which to borrow money, no additional entry is necessary in the books of the association since the cooperative still, in effect, owns the note. In recording the loan from the bank, however, there should be a debit to Bank Deposit and a credit to Notes Payable. It is, of course, desirable to make a memorandum on the Notes Receivable subsidiary ledger that these notes given to the association by the members have been deposited with the bank as collateral to secure the loan. If a member pays his note while it is still on deposit as security, the association should thereupon remit the cash received to the firm holding the member's note as collateral. When this note has been returned to the association it should be handed over, duly canceled, to the member.

### *Land, Building, and Other Accounts*

The above journal entries are given for simple illustrative purposes and are by no means all that will be required in recording the original investment in land, buildings, gin machinery, office fixtures, and other assets. For example, there may be the costs of securing the charter, drawing up articles of incorporation and bylaws, of printing capital-stock certificates, and commissions or other expenses involved in the sale of capital stock, all of which should be charged to an organization expense account.

In addition to the actual purchase price paid for land, there will be the attorney's fee for examination of abstract of title and the recording fees for having deeds and possibly other necessary papers recorded. Such items should be charged to the Land account as they are in reality additions to the cost of the land and not separate expenses.

It may be that instead of having the gin buildings erected under contract for a fixed price, as assumed in the first illustration above, the cooperative will buy its own material and employ its own labor for the construction of these buildings. In this case, each bill for material and each check for labor will be a part of the total cost of the buildings and not an expense item. Likewise, freight and drayage on building material and the cost of any excavation work will be a part of the cost of the buildings. The corresponding credit entries for any material purchased on open account or with a note should be under Accounts Payable or Notes Payable, respectively.

Frequently a stockholder who has given his note in part or full payment for stock may work on the construction of the gin building and allow the wages for such labor to be applied on the payment of his note without a check or cash being given or received. In such cases the transactions should be recorded by charging the amount of his labor to the Building account with a corresponding credit to Stock Subscription Notes. This credit should be made to his account in the subsidiary ledger, as well as to the total or control account in the general ledger, in the same manner as though the transaction had been in cash.

If the gin machinery is purchased with the agreement that the cooperative is to make its own installation, not only the purchase price of the machinery itself, but all labor and other installation costs should be charged to the Machinery and Equipment account. Freight and drayage on any of the machinery and equipment should also be charged to this account.

### Accounts for a New Association and an Old Plant

When a new cooperative gin association buys an old gin, the entries for the stock sales are similar to those described in the previous section. The entries for the building, machinery, and such items will be slightly different. For illustration, assume that the same stock sales have been made and recorded as in the first illustration, but that instead of buying a new gin, a second-hand gin including the land, building, machinery, and office fixtures, is bought for $10,000; that $1,000 of the purchase price is paid by check, and that a note for $9,000 is given for the balance.

The first task is to split up the $10,000 purchase price into land, buildings, machinery, office fixtures, and any other fixed assets that have been acquired. This apportionment of the cost of these accounts for entry in the books is necessary if a complete set of records is to be kept. A committee made up of the members of the board of directors, the manager, the ginner, and perhaps some local business men can appraise the value of each of these assets so that the total will equal $10,000, the purchase price. Assuming that the following appraisal is made: Land, $500; building, $3,000; machinery, $6,300; and office furniture and fixtures, $200; the journal entry should be as shown on page 37.

JOURNAL

| 1 | | 9 | 10 | 14 | | 21 | |
|---|---|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Checks issued | | Sundry credits | |
| Account | Amount | | | Check no. | Amount | Account | Amount |
| Land<br>Building<br>Machinery<br>Office furniture and fixtures | $500.00<br>3,000.00<br>6,300.00<br>200.00 | April 1 | Former Gin Co. to record the purchase of plant from former owners | | $1,000.00 | Notes payable | $9,000.00 |

## KEEPING THE RECORDS

### During the Inactive Season

MANY COOPERATIVE gin associations are quite inactive in the spring and summer, but in practically every case some payments and collections are made. As a rule, some repair work is done; some miscellaneous sales are made in cleaning up remnants of cotton and cottonseed; some feed or some seed for planting is bought from and sold to farmers, and other small business transactions take place. These transactions may be easily overlooked, as the bookkeeper often is not employed until just before ginning starts, and the only records available to him are the original memoranda, such as check stubs, deposit slips, or sales tickets. If a gin is quite inactive during the spring and summer, all the transactions for this period may be entered in the journal (form 1) and posted to the ledger (form 2) at one time, just before the ginning season begins. Of course, it is desirable that transactions be entered in the journal and posted in the ledger monthly, even during this inactive period.

The recording during the inactive period of some transactions, such as repair labor, and the payment of expenses accrued at the end of the previous year, require special consideration. Repair labor is quite different from operating wages; in fact, it is nearly the same as repairs. For example, if a set of saws is sent to the machine shop to be filed and the machine shop charges $15, it is clear that the check in payment should be charged to the Repairs expense account. If, on the other hand, someone is hired locally to file the saws, the check in payment of such services should be for wages, but not operating wages. For these reasons, a separate expense account should be kept for repair labor. The Federal income-tax blanks call for all three of these expense items: Wages, repair labor, and repair material.

### *Additions and Replacements of Machinery, Equipment, and Buildings*

Additions, replacements, sale or junking of machinery, equipment or buildings sometimes involves problems for the bookkeeper. When additional machinery is installed [8] the debit journal entry is made in the Machinery and Equipment account. For example, if a sprinkler system is installed as an addition to, rather than a replacement of the previous fire-fighting equipment, the invoice cost of the sprinkler together with incoming freight or drayage charges and the cost of installation, including labor, should be added to the Machinery and Equipment account. If the sprinkler was bought for cash, the corresponding journal credit entry would be in the Checks Issued column; if bought on open account, the journal credit entry would be in

[8] U. S. Treasury Department, Bureau of Internal Revenue. INCOME TAX DEPRECIATION AND OBSOLESCENCE. B. I. T. Bull. F, 37 pp. 1931.

Accounts Payable; and if a note was given in payment, the credit entry would be in Notes Payable.

Replacements are entered in the books in much the same way as additions, with the exception that additional journal entries are necessary to remove the replaced machine from the Machinery and Equipment account and also from the corresponding Reserve for Depreciation account. For example, assume that a new cleaner costing $1,200 (including freight, drayage, and installation) is bought to replace another cleaner bought 6 years ago for $800. Assume also that the depreciation rate used on gin machinery during the last 6 years has been 6⅔ percent, and that the old cleaner has no junk value. Since the old cleaner has been in use only 6 years, the total depreciation on it, at 6⅔ percent per year, will be only 40 percent of the original cost, or $320. For this illustrative case, therefore, the Machinery and Equipment account will be credited with $800, with corresponding debit entries of $320 to Reserve for Depreciation—Machinery and $480 to Surplus. The debit surplus entry will be recorded as a loss occasioned by the fact that estimated depreciation during the useful life of the cleaner was insufficient to reclaim its original cost. The above journal entries may be illustrated as follows:

JOURNAL

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| Reserve for depreciation—machinery and equipment | $320.00 | April 15 | Old cleaner removed; no salvage value | Machinery and equipment | $800.00 |
| Surplus | 480.00 | | | | |
| Machinery and equipment | 1,200.00 | April 20 | Machinery Co. (new cleaner installed) | Accounts payable | 1,200.00 |

When the above entries are posted to the general ledger, the Machinery and Equipment account will have been debited with $1,200 and credited with $800, or a net increase of $400. The debit of $480 to the Surplus account in the above illustration means that a loss has been taken in the junking of the old cleaner over and above the amount previously deducted as depreciation.

Had the old cleaner been used 12 years instead of 6, and had it been traded in on the new cleaner for $200, the journal entries would be somewhat different. The original cost of the old cleaner would be deducted from the Machinery and Equipment account and the cost of the new cleaner would be added by making the following journal entry:

JOURNAL

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| Reserve for depreciation—machinery and equipment | $640.00 | April 15 | Old cleaner traded in on new cleaner | Machinery and equipment | $800.00 |
| Accounts payable (Machinery Co.) | 200.00 | | | Surplus | 40.00 |
| Machinery and equipment | 1,200.00 | April 20 | Machinery Co. (new cleaner installed) | Accounts payable | 1,200.00 |

In this illustration the net increase in the Machinery and Equipment account is the same as for the first illustration. The debit to the depreciation reserve for machinery naturally is greater than on the previous illustration since the assumed use is for a period of 12 years instead of 6. Since the amount previously deducted as depreciation expense and set up as a reserve ($640) plus the trade-in or junk value of the old cleaner is more than the original cost of the old cleaner, the difference ($40) will be a credit to Surplus. This credit to the Surplus account in the journal means that more depreciation was estimated during the 12 years use of the cleaner than was actually sustained. The $40, therefore, is in the nature of a profit rather than a loss, as shown in the first illustration.

### During the Ginning Season

The transactions to be recorded during the ginning season naturally group themselves into four divisions: (1) Ginning and wrapping, which is closely associated with seed buying; (2) purchases of cotton and other products bought for subsequent sale; (3) sales; and (4) expenses.

All of these transactions must be recorded first in the journal, in the order in which they occur, and the totals therefrom transferred to the ledger where totals from similar transactions are grouped together month by month.

It is possible to enter all of these transactions through the one journal form illustrated by form 1. However, if the business is large enough to justify subdivisions of this record, a cotton purchase journal, a sales journal, a cash book, and other books may be added. The following discussion will proceed, however, under the assumption that only one journal, similar to that illustrated by form 1, will be used. As stated above, columns other than the ones shown on this form may be added, or some of those shown may be omitted.

#### *Ginning, Sales of Bagging and Ties, and Purchases of Cottonseed*

When entering in the journal the memoranda on ginning and seed buying, the scale tickets for any one day should be entered consecutively. (See also Appendix.) Variations may occur, however, in recording the ginning of different bales of cotton. For illustration, (1) commonly the patron sells his cottonseed to the gin and receives in exchange the ginning and wrapping, and a small rebate check. The Cottonseed Bought column is debited with the value of the seed, and offsetting credit items totaling the same amount are entered in the Ginning, Bagging, and Ties column, and in the Checks Issued column. (2) The patron may catch his cottonseed; that is, retain the seed for his own use, and pay cash for his ginning. The cash paid by the patron is recorded in the Cash Receipts column (a debit), and the balancing credit entry will be found in the ginning revenue account in the Ginning, Bagging, and Ties column. (3) Again the patron may catch his seed and charge the ginning, in which case the Accounts Receivable Debit column shows the debit item and the Ginning, Bagging, and Ties column the credit item. (4) The next patron may sell his cottonseed, but request that the amount of the rebate check be credited to his account for items previously charged. In this case, the value of the seed bought by the gin is the debit item and the balancing credit items are the cost of ginning and wrapping and the amount entered in the Accounts Receivable Credit column. Any number of other combinations may occur. The principle to be followed is that the gin should charge or debit everything that is received from the patron, and credit everything given the patron, so that, for each bale ginned the sum of the debits will equal the sum of the credits. The journal entries shown on page 45 illustrate these four situations.

JOURNAL

| 3 | 5 | 8 | | 9 | 10 | 13 | 14 | | 16 |
|---|---|---|---|---|---|---|---|---|---|
| Accounts receivable, debit | Cash receipts | Cottonseed bought | | Date | Name and explanation | Ginning, bagging, and ties | Checks issued | | Accounts receivable, credit |
| Amount | Amount | Pounds | Amount | | | | Check no. | Amount | Amount |
| | | 1,000 | $20.00 | | Patron No. 1 | $5.80 | 1 | $14.20 | |
| | $5.50 | | | | Patron No. 2 | 5.50 | | | |
| $5.65 | | | | | Patron No. 3 | 5.65 | | | |
| | | 1,100 | 22.00 | | Patron No. 4 | 6.10 | | | $15.90 |

It should be noted that for every bale ginned, the total charge for ginning and wrapping is always entered in the Ginning, Bagging, and Ties column in the journal, regardless of whether the cottonseed is bought and the cost of ginning deducted from the amount paid for the seed; whether cash is paid for the ginning; the ginning is charged; or some other manner of settlement is used. Moreover, the amount to be entered in the Cottonseed Bought column is the full amount paid for the seed, before any deductions are made, and not just the amount of any rebate check issued.

### *Seed Cotton Remnants*

Practically every cotton-gin association buys some seed cotton, either as remnants or in bale lots. Various methods for recording the purchase, ginning, and sale of this cotton are used.[9] Since purchases of cotton and cottonseed, ginning revenues, sales of bagging and ties, and sales of bale cotton are all involved in handling seed cotton the method used in recording such transactions should take into consideration all of these accounts.

Perhaps the easiest and at the same time the most accurate method is to record the transactions in the journal as follows:

1. Record the purchase of the seed cotton in the journal from the information on the stub or duplicate of the check issued in payment by debiting Seed Cotton Purchased and crediting the Bank account (Checks Issued).

2. When a part or all of this seed cotton is subsequently ginned, make out a scale ticket in the name of the association exactly as is done for a patron. Enter the scale ticket in the journal exactly as for custom ginning, but instead of issuing a seed rebate check to the association for the excess of the value of the seed over the charge for ginning and wrapping, enter the amount of the rebate in the credit column, Seed Cotton Products Sold.[10]

The cottonseed and the ginning departments will no doubt make a book profit at the expense of seed cotton as a result of recording the ginning of purchased seed cotton in this way; however, since the seed cotton department is seldom charged with any of the additional labor, storage, and other handling costs, there is little justification for allowing all of the net income, if any, that is made on seed cotton to accrue to that department.

---

[9] HATHCOCK, JAMES S.—PRACTICES AND COSTS OF COTTON-GIN OPERATION IN NORTH-CENTRAL TEXAS, 1924–25, U. S. Dept. Agr. Tech. Bull. 13, p. 21. 1927; and SWARTHOUT, A. V. and BEXELL, J. A.—A SYSTEM OF ACCOUNTING FOR COTTON GINNERIES, U. S. Dept. Agr. Bull. 985, p. 35, 1921.

[10] Technically the excess of the value of the cottonseed over the charge for ginning and wrapping should be credited to seed cotton purchases rather than entered as sales of seed cotton products as it is in reality a deduction from cost rather than an actual sale.

3. The sale of the bales ginned from this seed cotton may be recorded in either of two ways; (a) at the time these bales are sold, debit Cash Received and credit Seed Cotton Products Sold, or (b) at the time the seed cotton is ginned, debit Bale Cotton Bought and credit Seed Cotton Products Sold with the market value of these bales.

*Purchases of Cotton*

After the ginning scale tickets have been recorded in the journal the next group of transactions to be recorded is purchases, particularly of bale cotton. The amount of the check is the credit item which should be entered in the Checks Issued column. The corresponding debit should be in the column showing bale cotton bought. When a separate bank account is kept for the purchase and sale of bale cotton, an additional Checks Issued column on the credit side of the journal and an additional Bank Deposit column on the debit side are necessary.

When the gin association buys a bale of cotton on which the patron has not paid the ginning charge, it is a common practice to deduct the cost of ginning from the check or bill of exchange issued in payment for the cotton. If notation that the ginning charge has been deducted is made on the check stub, the debit for the total purchase price of the cotton should be entered in the column Bale Cotton Bought, with corresponding credits to the Checks Issued column for the net amount of the check, and a credit to Accounts Receivable for the amount of the ginning deducted. Deductions from any checks issued to patrons of amounts to be credited on account should be handled in the same manner.

Bills of exchange, if handled as such by the bank, require special mention. As a rule, banks handle bills of exchange exactly as they handle checks, and if this practice is followed the bills of exchange issued for cotton should be recorded in exactly the same manner as checks. Sometimes, however, bills of exchange may not be charged to the association's account when paid at the bank, as a check is charged, but will be held by the bank until the cotton represented by them has been sold. When bills of exchange are held by the bank in this fashion, they should be entered in the journal, in a column headed "Bills of Exchange", separate from the Checks Issued column. If this is done, an account in the general ledger under the title "Bills of Exchange Issued and Paid" will be needed. The total of the Bills of Exchange column in the journal should be posted to the credit column of this general ledger account.

When the bank charges a number of these bills of exchange, which have been paid, and sends a notice of the amount so charged, the proper entry in the journal will be a debit to Bills of Exchange in the Sundry

Debit column of the journal, with a corresponding credit to the regular Checks Issued column. If the bank also adds a charge for handling these bills of exchange as such, it will be necessary to debit the Interest and Exchange expense account with the amount added; since the credit item in the journal, the total amount charged against the association's account by the bank, will be larger than the amount of the bills of exchange paid, by the amount of interest or other handling charges made at the bank. These charges are to be distinguished from exchange which may be deducted from the amount of a draft when cotton is sold and a draft is drawn on the buyer for the total amount of the sale. The recording of such deductions, however, will be discussed in the following section under sales of cotton and cottonseed.

*Deductions from Checks to Patrons*

It is the policy of many cooperative gin associations to do business strictly on a cash basis, and carry on their books no charge accounts (accounts receivable) with patrons. If this practice is followed by an association, neither the Accounts Receivable Debit column nor the Accounts Receivable Credit column will be needed in the journal. Such associations, however, when the patron "catches" his cottonseed, are frequently called upon to wait for payment of the ginning charges until the cotton has been sold. This transaction may be handled exactly as a cash transaction, by holding a memorandum or a copy of the scale ticket marked "cash" in the drawer as cash until the ginning charge is paid. When this amount is later paid in cash, or by check, no additional book entry is necessary. The scale ticket which was made out (and entered in the journal as cash received) at the time the bale was ginned is simply given to the patron.

If the owner sells the bale of cotton to the gin and requests that the ginning charge be deducted from the amount of the check, the check stub should be made out, for example, as follows:

| | |
|---|---|
| Cost of cotton | $50.00 |
| Less ginning | 5.00 |
| Amount of check | 45.00 |

In this case the cost of the cotton ($50) is entered in the Cotton Bought column, the amount of the check ($45) in the Checks Issued column, and the amount deducted for ginning ($5) in the Cash Credit column, since the scale ticket which has been held as cash is now surrendered. This method of handling accounts that run only a few days makes it unnecessary to open accounts in the Accounts Receivable subsidiary ledger (when one is used) for patrons who have only a few items charged each season. This method of handling charge accounts is used quite satisfactorily by most of the line gin companies.

*Sales*

For convenience, the journal should have as many "sales" columns as there are products sold frequently or in any appreciable quantity. Every cooperative gin association sells cottonseed and many sell in addition, cotton, coal, feed, and other commodities. A product that is sold only occasionally may be entered in the Sundry Credit column and posted to the ledger as an individual transaction rather than a column total. It will probably be found advisable to have one miscellaneous sales column through which the sale of minor products such as coal, feed, and supplies may be entered and later posted to the ledger as one account. The local sales of cottonseed as well as the car-lot sales, should be recorded in the Cottonseed Sold column. The weight as well as the amount should be recorded and transferred to the Cottonseed Sales account when the total of the column is posted to the general ledger.

The debit items corresponding to the above credit items should be made on the left side of the journal. If cash is received, the amount will be entered in the Cash Receipts column. Likewise, if it is a charge sale, the amount will be entered in the Accounts Receivable Debit column.

Cash received for ginning at the time cotton is ginned should be indicated on the scale ticket so that a separate cash receipt will not be necessary. In recording this scale ticket in the journal, the amount of cash received should be the debit entry in the Cash Receipts column, offsetting the Ginning, Bagging, and Ties entry on the credit side of the journal.

The debit in the Cash Receipts column from a cash sale of coal, feed, or other products, will likewise be made directly from the scale ticket or invoice without any necessity for making out a special cash receipt.

The cash receipt book should be used only for the collection of cash on statements or invoices previously made out and charged, and for the receipt of money in payment of interest, rebates on insurance premiums, and similar items. These cash receipts should be entered in the journal at the end of each day.

The proper entries for car-lot sales of cottonseed depend somewhat on the conditions of the sale. If, for example, a car is shipped to an oil mill under an "open" or "straight" bill of lading, the credit is to Cottonseed Sold and the debit to Accounts Receivable. This entry is illustrated as car no. 1, below. The oil mill may send a check as soon as the car has been received, in which case the necessary entry will be a credit to Accounts Receivable and a debit to Cash Receipts; or, the association may draw a sight draft on the oil mill after the weight outturn for the car of cottonseed has been received.

If it should be desirable to keep accounts with oil mills separate from charge accounts with individuals, the charges and credits to the oil mills may be entered in the Sundry Debit and Sundry Credit columns of the journal and transactions with each oil mill transferred to a separate sheet in the general ledger instead of to a sheet in the Accounts Receivable subsidiary ledger.

If a car of seed is shipped under bill of lading with draft attached, there will be two entries to be made on each side of the journal. The weight and amount of the seed should be entered in the Cottonseed Sold column with a corresponding debit to the Bank Deposit column. In addition, the oil mill should be credited with the amount of the draft in the Accounts Receivable Credit column (or in the Sundry Credit column) and debited or charged with the car of seed (by railroad car number) in the Accounts Receivable Debit column (or in the Sundry Debit column). When the outturn on the car of seed is received from the oil mill, the mill's account is charged (if the association's draft was less than the value of the cottonseed according to the mill's weights) with a corresponding credit in the Cottonseed Sold column. If the mill later sends a check for the amount, its account will be credited and there will be a corresponding debit in the Cash Receipts column.

If, on the other hand, the draft is drawn for more than the value of the cottonseed, according to the mill's weights, the entry to be made in recording the outturn, will be a credit to the account of the oil mill in the Accounts Receivable Credit column (or Sundry Credit column), with a corresponding debit to cottonseed sales in the Sundry Debit column. Since, obviously, there will not be a Cottonseed Sold column on the debit or left-hand side of the journal, the entry will be made in the Sundry Debit column and posted individually to the debit column of the Cottonseed Sales account in the general ledger. (See illustration below, car no. 2.) When, later, a check is issued to the mill to cover the amount overdrawn, the credit entry will be in the Checks Issued column, with a corresponding debit entry to the oil mill's account in the Accounts Receivable debit column (or in the Sundry Debit column). However, these small amounts resulting from overdrawing or underdrawing, may not be paid on each car but instead may be settled by one check from or to the oil mill at the end of the season.

Truck shipments of cottonseed are perhaps the most difficult to enter properly. If the oil mill remits by check, for each truck load, these sales may be recorded just as local cash sales. If, however, the oil mill remits weekly, it will probably be more satisfactory to keep the weight of sales by truck loads in a memorandum book, and not enter them as sales until an invoice has been received from the oil mill. If the mill sends a check with the invoice, the transaction may be entered as a cash sale or by means of a double entry, as described above for a car-lot shipment under draft and bill of lading. (See also the last line in the following illustration.)

JOURNAL

| 1 | | 2 | 5 | 9 | 10 | 19 | | 21 | |
|---|---|---|---|---|---|---|---|---|---|
| Sundry debit | | Bank deposit | Cash receipts | Date | Name and explanation | Cottonseed sold | | Sundry credit | |
| Account | Amount | Amount | Amount | | | Pounds | Amount | Account | Amount |
| Cottonseed Oil Co. | $600 | | | | Bill of lading, open, car no. 1 | 40,000 | $600 | | |
| Cottonseed Oil Co. | 10 | | $610 | | Outturn, car no. 1 and check | | 10 | Cottonseed Oil Co. | $610 |
| Cottonseed Oil Co. | 600 | $600 | | | Bill of lading with draft, car no. 2 | 40,600 | 600 | Cottonseed Oil Co. | 600 |
| Cottonseed sales | 10 | | | | Outturn, car no. 2 | | | Cottonseed Oil Co. | 10 |
| Cottonseed Oil Co. | 480 | | 480 | | Local oil-mill truck sales | 24,000 | 480 | Cottonseed Oil Co. | 480 |

It is a common practice for gin associations to buy bagging and ties, as well as other supplies, from oil mills. When this is done, it is much easier from the standpoint of records, for the association to issue its check for items purchased from the oil mill, and receive the oil mill's check for the full value of seed purchased by the mill.

### *Expenses*

When scale tickets, cotton-purchase checks, and all sales have been entered in the journal each day, the checks that have been issued for expenses should be entered in the journal. As previously stated, it will usually be found convenient for an association to use three different check books; one for seed rebates; one for cotton purchases, which may be paid for with bills of exchange instead of checks; and one for expenses. The use of three different checks (especially when cotton is bought by the association) makes it easier to enter the transactions in the journal by groups, in the order in which they took place, and further facilitates verification of the canceled checks when reconciling the bank statement.

The credit entries in the journal, for all items of expense paid by check, are recorded in the Checks Issued column. Corresponding or offsetting debit entries should be made in the Expense Debit column. As stated previously, expenses should be charged insofar as possible to the particular department (ginning proper, cotton, cottonseed, or other) for which incurred. It will sometimes be necessary to make two or more entries in the Expense Debit column to balance with the amount of the check in the Checks Issued (credit) column. For example, if the premium on a blanket insurance policy, to the amount of $60, is paid, and it is estimated that the cost of this insurance should be divided equally between ginning proper, cotton, and cottonseed, the journal entry will be as follows:

JOURNAL

| 4 | | 9 | 10 | 14 | |
|---|---|---|---|---|---|
| Expense debit | | Date | Name and explanation | Checks issued | |
| Account | Amount | | | Check no. | Amount |
| B/C expense D 1<br>C/S expense D 2<br>Insurance (gin) D 16 | $20.00<br>20.00<br>20.00 | | Mutual Insurance Co., blanket policy | 1 | $60.00 |

It will be impossible, of course, to estimate exactly the correct proportion of certain items of expense that should be charged to the several departments, and it will probably be inadvisable to attempt to charge any part of such expenses as salaries and office supplies to departments other than ginning proper. A part of the expense for telephone and telegraph service may be charged to cotton and cottonseed sales if numerous long-distance calls are made in selling these products, and especially if the amount of that expense is large. As a rule, it will be found desirable to charge cotton, cottonseed, and other accounts, with only the direct expenses, such as hauling, for instance, incurred in handling these products.

Small items of expense paid in cash are recorded in exactly the same way as those paid by check, with the exception that the credit entry in the journal is in the Cash Credit rather than the Checks Issued column.

The following entries illustrate the proper method of recording expense checks and small items of cash expense in the journal:

JOURNAL

| 1 | | 4 | | 10 | 14 | | 15 |
|---|---|---|---|---|---|---|---|
| Sundry debit | | Expense debit | | | Checks issued | | Cash credit |
| Account | Amount | Account | Amount | Name and explanation | Check no. | Amount | Amount |
| | | D 10 | $150. 00 | John Jones, manager's salary | 2 | $150. 00 | |
| | | D 13 | 100. 00 | Clyde Smith, bookkeeper's salary | 3 | 100. 00 | |
| | | | | C. Hart, ginner | 4 | 30. 00 | |
| | | D 5 | 100. 00 | A. L. Short, engineer | 5 | 28. 00 | |
| | | | | A. V. White, passman | 6 | 24. 00 | |
| | | | | N. E. Black, suction | 7 | 18. 00 | |
| | | D 7 | 20. 00 | Gin Supply Co., 2 pulleys | 8 | 20. 00 | |
| | | D 15 | 4. 50 | Telephone Co., monthly account | 9 | 4. 50 | |
| | | D 1 | 5. 00 | Telegraph Co. CND | 10 | 5. 00 | |
| | | D 1 | 3. 00 | OK Cotton Yard, yardage | 11 | 3. 00 | |
| | | D 1 | 5. 00 | Local Truck Co., hauling | 12 | 45. 00 | |
| | | D 2 | 40. 00 | | | | |
| | | D 14 | . 75 | Cash paid for stamps | | | $0. 75 |
| A 12 | $100 | | | Office Supply Co., adding machine | 13 | 100. 00 | |

As a general rule, entries involving expense accounts are debits and are accordingly entered in column 4 of the journal (form 1). The total of this column is posted monthly as a debit of the Expense Control account (D 0) in the general ledger (form 2). Individual items of expense within the Expense Debit (column 4) of the journal are posted separately to corresponding expense accounts in the ledger in the same way as items entered in the sundry columns. The total of these individual postings will equal the amount posted to the expense control account as the total of column 4 of the journal. When an expense control account is used in the general ledger, the individual expense accounts constitute a subsidiary expense ledger. That is, the sum of the balances in all of the individual expense accounts will exactly equal the balance in the Expense Control account.

Credit entries to expense accounts are necessary in making corrections and in closing the books. Since these credit entries to expense accounts do not occur frequently, they may be entered as sundry credits in column 20 of the journal. It will be necessary to post such entries twice; once to the individual expense account and once to the expense control account.

There is considerable difference of opinion among cotton-gin association bookkeepers as to the particular account to be debited with certain items of expense. The following suggestions are in accordance with several authoritative cotton-gin accountants and auditors.

*Expense control (ledger account no. D 0).*—This account should contain the total of all expenses including expenses incurred in handling cotton, cottonseed, or other products, as well as the expense of ginning.

*Expense of handling cotton (ledger account no. D 1).*—One or several separate accounts in the ledger may be used for recording the expenses of handling bale cotton. It might be advisable to have several different accounts in the ledger and yet show them as one total when the income and expense statement is made up. Such expenses as drayage, yardage, storage, exchange on drafts, brokerage, telegraph service, and perhaps a portion of such expenses as telephone and blanket insurance.

*Expense of handling cottonseed (ledger account no. D 2).*—Drayage is the principal expense incurred in handling cottonseed. If an extra man is hired to shovel seed, his wages should be charged to this expense account. As for cotton, a part of the telephone bill or a part of the premium on blanket insurance policies could be logically charged to cottonseed.

*Expense of handling coal, feed, supplies, and so forth (ledger account no. D 3).*—All of the miscellaneous trading accounts should be charged with any item of expense incurred directly in handling these products.

*Fuel, power, lights, and water (ledger account no. D 4).*—The invoice cost of coal, gas, oil, or any kind of fuel used, including freight, drayage, and unloading on these items should appear in this account, as well as monthly gas bills, electric bills, and water bills. If any of the fuel is sold to customers, the cost of the amount sold should be deducted from (that is, credited to) the fuel account, and the sale shown under "other sales" with the original cost shown as "other purchases."

*Wages (D 5).*—All wages paid for gin crew, night watchman, or for any other labor should be shown under wages. This should not, however, include office salaries.

*Repair labor (D 6).*—Expense for labor employed during spring or summer for repair work, saw filing, painting the smokestacks or buildings, scale testing, and similar work should be included under "repair labor."

*Repair material (D 7).*—This account covers the cost price of all repair parts, including freight, express, or drayage on these parts, belt lacing, lumber, sheet iron, nails, cement, sand, and other supplies used in making minor repairs.

*Supplies and tools (D 8).*—Purchases of wrenches and other small tools, brooms, seed forks, cotton forks, bale tags, marking ink, belt dressing, and similar items may be shown here.

*Lubricating oil and grease (D 9).*—Cost of engine oil, grease, or any other oil used in lubricating the gin machinery or power plant, may be included in this account.

*Manager's salary (D 10).*—All amounts paid to the manager as salary or commission should be shown as manager's salary. If the manager is furnished with a house as part of his compensation, a reasonable monthly charge should be made to this account with an offsetting credit to rental or miscellaneous income. Fuel or lights supplied should be likewise charged here, with corresponding credits to some sales or revenue account.

*Manager's expense (D 11).*—Travel and other expenses of managers, such as for automobile travel that has been authorized by the board of directors, constitute this item.

*Directors' fees and expenses (D 12).*—Any salaries, fees, or expenses paid to the directors by the association should be described in this account.

*Office salaries (D 13).*—Payments made to bookkeeper, weigher, or other office employee for wages or salaries constitute "office salaries", but payments made to auditors should not be included.

*Office supplies and postage (D 14).*—This item includes expense for scale tickets, check pads, daily report sheets, all record books, adding-machine and typewriter ribbons, pencils, stationery, postage stamps, and other office supplies.

*Telephone and telegraph* (*D 15*).—Monthly telephone and telegraph expense incurred for ginning proper belong here.

*Insurance and bond premiums* (*D 16*).—This account should show insurance premiums of all kinds; fire and tornado premiums on buildings and machinery, boiler insurance, commodity insurance protecting patrons' cotton, surety-bond premiums, premiums on accident policies, and pay-roll or compensation insurance.

*Auditing and legal* (*D 17*).—Annual or monthly fees paid to auditors and lawyers' fees may be included here, but not the cost of stationery or bookkeeping forms purchased from auditors.

*Advertising and dues* (*D 18*).—Newspaper advertising; circulars; souvenirs such as calendars, pencils, or cotton books given customers; dues paid to local chamber of commerce, civic clubs, or trade organizations; subscriptions to newspapers and magazines—all may be entered here.

*Drayage* (*D 19*).—This item includes expense for drayage, hauling, truck-line and similar costs incurred as a part of ginning proper. (Charge drayage on products to the respective expense account of each.)

*Taxes, except Federal income* (*D 20*).—Ad valorem taxes, State income tax, corporation license tax, auto or truck licenses and all Federal taxes except income and excess-profit taxes may be included here.

*Loss from bad accounts* (*D 21*).—This includes any accounts determined to be worthless and charged off during the year. Unless the total amount of charge accounts handled is large, it is inadvisable to set up reserves for probable losses of this kind. Worthless accounts may be charged off directly to this account.

*Depreciation* (*D 22*).—At the end of the year this account should be charged with total depreciation on building, machinery, furniture and fixtures, auto or truck, and any other depreciable assets.

*Interest and exchange* (*D 23*).—All interest on long- or short-time notes should be itemized here as well as exchange on drafts. At the end of the year this account should be charged with all interest due and unpaid, and a corresponding credit to accrued expenses should be made.

## Posting from the Journal to the General Ledger

As soon as all of the transactions for a given period have been entered in the journal and summarized, the next step is to post to the corresponding accounts in the general ledger. Posting may be done daily or for each journal sheet as it is completed, or monthly. Monthly posting is preferable and is the method most commonly used.

As more than one journal sheet will be used in recording a month's business, a total of each column on every sheet will be needed. To avoid errors, each sheet should be totaled and balanced separately. The totals for each column may be brought forward and indicated at the top of each succeeding sheet until the end of the month; or if preferred, each sheet may be totaled separately and, at the end of the month, each of these totals may be entered on consecutive lines of a summary sheet which, in turn, may be added for the grand total.

Since every transaction will have been entered in the journal both as a debit and as a credit, the sum of the credit items should equal the sum of the debit items for any one sheet or for the cumulative sum of all the sheets used during the month. This proving should be done, by all means, before the totals are posted to the ledger. When these balanced totals for a month's business have been obtained in the journal, the totals of all columns except the general debits and general credits should be posted to corresponding accounts in the general ledger. The individual items in the general debit and general credit columns will already have been posted to the ledger, as they occurred. Obviously, the totals in debit columns of the journal will be posted to the debit columns of corresponding accounts in the ledger, and likewise the totals in credit columns of the journal to the credit columns of corresponding accounts in the ledger.

The total of the Expense Debit column may or may not be posted to a total-expense account in the ledger. If the total Expense or Expense Control account is used it should be remembered in taking a trial balance of the ledger that either the individual expense accounts or the Expense Control account is to be omitted. One advantage of having an Expense Control account in the ledger is that the total of the individual expense accounts may be proved by determining that the sum of these accounts equals the total of the Expense Control account.

Individual expense accounts may be transferred from the journal to the ledger in either of two ways: Each individual charge as entered in the Expense Debit column of the journal may be posted to the corresponding account in the ledger; or the items in each individual expense account may be totaled at the end of the month, and these totals entered on the last journal sheet for that month as a recapitulation. The sum of each of these totals may then be transferred to the corresponding expense account in the ledger. The latter method may require somewhat less time as there will be fewer postings to be made, but the first method is preferable as it is often desirable to know from the ledger, just what items have been charged to each expense account. For example, the expense account Repair Material might have several charges during any one month, the sum of which would be quite large. If each of these individual expenditures was posted in the ledger, the detailed information would be much more easily accessible.

### Trial Balance of the General Ledger

As soon as the total of each column in the journal (form 1) has been posted to the corresponding account in the general ledger (form 2) each month, a trial balance of the ledger should be made to determine the accuracy of the postings. If the totals of the debit items in the journal equal the totals of the credit items, and no error has been made in posting these totals to corresponding accounts in the general ledger, the sum of the ledger accounts having debit balances (the difference between the debit and the credit columns in each account) will exactly equal the sum of the ledger accounts having credit balances. Moreover, equal sums may be obtained by adding the total debits to each account and the total credits to each account. If the latter method is used, it will still be necessary to determine the balance of each account on the trial balance sheet. As mentioned previously, if a total-expense account is entered in the general ledger, in addition to all of the individual expense accounts, either the total or all the individual accounts will be omitted from the trial balance.

Monthly trial balances are indispensable in locating errors, and in proving the accuracy of the accounts. These trial balances may be recorded on any kind of ruled paper, but it is more convenient to have a long, narrow, two-column day book in which successive monthly trial balances are recorded as a permanent subsidiary record.

### Monthly Statements

A monthly statement, especially of revenues and expenses, is very useful to the manager and the board of directors. These statements are not difficult to prepare and do not require much time after the ledger has been balanced each month, nor do they require that the books be closed. Monthly inventories will be necessary.

The Income and Expense statement illustrated by form 3 is intended for both monthly and annual use. If each succeeding monthly report is made out to include all business from the beginning of the business year (usually April 1) to the date of the report, it will have more meaning than if made for a single month. For example, the report made at the end of September should include all income and expense from April 1 to September 30. If it is then desired to determine the income for September alone, each item of income shown by the August 31 report may be subtracted from the corresponding figure in the report of September 30. Expenses for any month may be ascertained in a similar manner.

Because of numerous prepaid and accrued items it is hardly practical to make an entirely accurate balance sheet during the busy season. For example, premiums on insurance policies are paid only a few times each year, while the cost of insurance is obviously continuous. The same is true of taxes and interest on indebtedness. Depreciation, likewise, is not entered on the books until the end of the year; yet the greatest depreciation takes place during the ginning season. Weekly wages are frequently earned in the latter part of one month and paid in the first part of the following month. It is, of course, possible to enter these prepaid and accrued items in making monthly reports, but it is doubtful if their inclusion justifies the additional effort required. It may be desirable, however, to note on monthly statements the fact that certain large items have been prepaid or are accrued.

When the trial balance has been obtained at the close of the first month's business and the desired statements have been prepared, entries and postings for the succeeding month may be made in the manner outlined for the first month.

The monthly trial balance proves only the accuracy of the amounts posted and not necessarily that the postings were made to the proper accounts. The Bank account as shown in the general ledger should be reconciled with the monthly statement received from the bank. Each of the control accounts in the general ledger may also be proved for accuracy by balancing with the individual accounts in the corresponding subsidiary ledger.

The balance of the Cash account in the general ledger at the end of each month should by all means be verified with the amount of cash that was on hand by actual count on that date, even though a daily check on the accuracy of the cash on hand was made.

### *Reconciling the Monthly Bank Statement and the Bank Account*

The balance of the bank account as shown by the books of any firm at the end of any month is the amount of money that would be on deposit if all checks issued to that date were cashed at the bank. However, this balance will seldom be the same as the balance shown on the bank statement as of that date. This is especially true with respect to cotton-gin associations during the active ginning season when numerous checks are being issued each day.

The true bank balance, then, is the amount as shown by the bank statement less the amount of outstanding checks as of that date. If a record of all deposits and withdrawals has been properly made, this true balance will agree with the balance subject to check, as shown by the books. If these balances do not agree it is evident that some items have not been recorded or that an error has been made. In most instances the bank statement will be found to be correct.

As soon as the monthly bank statement has been received the canceled checks should be arranged by check number. If there is a large number of these checks the arrangement by number can usually be facilitated by first sorting them in groups of tens (1 to 9, 10 to 19, 20 to 29, and so forth) and then arranging by number within each group.

The next step is to determine the checks that have been issued but not cashed at the bank at the time the statement was made out. This may be done by checking the canceled checks against the record of the checks issued as shown in the journal in which the checks have been recorded consecutively by the check number, payee, and amount. A check mark (√), preferably with a colored pencil, or some other simple notation, should be made beside the figure showing the amount of each check which has been paid by the bank.

As soon as all the canceled checks have been accounted for, it will be possible to turn through the book in which the checks were recorded and make a list, by number and amount, of the checks issued but not cashed. The total amount of these checks subtracted from the balance, as shown by the bank statement, should show the true bank balance as of the date of the statement.

Usually, however, other items make the procedure a little more complicated. Banks sometimes make charges for items such as interest, exchange, and returned checks. That is, the bank will charge the account with these items and place in the statement a "charge" or "debit" slip which is paid and canceled in the same way as a regularly issued check. The only difference is that these charges will not have been recorded on the books of the association; therefore, they will have to be subtracted from the balance of the bank account as shown therein. They should also be recorded in the same manner as regularly issued checks except that the notation "bank debit" is used instead of the check number.

Another frequent occurrence which may cause difficulty is a deposit made on the last day of the month, and recorded on the books as deposited in that month, but not entered by the bank on the customer's account until the first day of the following month. In reconciling the bank statement, this amount must be added to the balance as shown by the bank.

The above may be illustrated by the following example: At the end of a certain month the association's bank balance, as shown by the books, is $1,215. The bank statement is received the following day and shows a balance of $1,000. In addition to canceled checks there is enclosed with the bank statement a debit slip for $15 for a returned check. There is also a deposit for $500 which was made on the last day of the month and recorded on the books as deposited, but which was not entered on the statement for this month by the bank. After arranging the canceled checks by number, it is found that checks to the amount of $300 have been issued and recorded on the books but not cashed at the bank.

In order to reconcile the books with the bank statement, the following memoranda may be attached to the bank statement for future reference:

| | |
|---|---|
| Bank balance as shown by bank statement | $1, 000. 00 |
| Add: Deposit made on last day of month but not entered by the bank until the following month | 500. 00 |
| Deduct: Outstanding checks at the end of the month | 300. 00 |
| True bank balance (as of the bank's monthly statement) | 1, 200. 00 |
| Bank balance as shown by the books | 1, 215. 00 |
| Deduct: Debit slip paid by the bank but not entered on the books | 15. 00 |
| True bank balance (in the association's books) | 1, 200. 00 |

In this case the $500 deposit will already have been entered in the books of the association. Since the item will be shown on the bank statement for the following month no additional entries in the books are necessary. The $15 charge slip, however, must be entered in the books in order that the bank account therein will show the same items paid out as have actually been paid by the bank. This entry may be made either during the same month in which it was paid by the bank, or in the record for the following month. Such items may be entered in the books just as a regularly issued check is recorded. As stated above, this entry may be distinguished from that of a check by writing "bank debit" in the column in which the check number is ordinarily recorded.

The most important considerations are (1) to see that every item paid by the bank, in addition to checks which have been issued, is recorded in the books, and (2) to see that all items entered in the books have been, or will be in the regular course of business, entered on the account at the bank.

The list of outstanding checks which has been made should also be attached to the bank statement for future use. When the bank statement for the following month is received, those checks outstanding at the beginning of that month may be checked (√) off this list rather than from the journal, making it unnecessary to search back through the journal in which the checks are recorded, beyond the current month.

14977—36——5

In order to reconcile a bank statement for any given period, whether one month or several months, the book balance and bank statement balance (less outstanding checks) will have to agree at the beginning of the period. In case more than one month is being reconciled at one time, the balance as shown by the last bank statement is the only one that is used in arriving at the reconciliation. However, a careful check should be made of the canceled checks returned with each monthly statement for any debit slips that may have been paid by the bank and not yet recorded in the books.

### *Proving Subsidiary Ledgers Against the General Ledger*

As stated previously all subsidiary ledgers, such as the Patrons' ledger, Accounts Receivable ledger, Accounts Payable ledger, Stock Ownership ledger, Notes Receivable ledger, Notes Payable ledger, Dividends Payable ledger, etc., are each only a subdivision of one total or control account in the general ledger. For example, the total of all the individual accounts in the Accounts Receivable ledger will exactly equal the Accounts Receivable account in the general ledger. That is, as indicated above, there is really only one ledger—the general ledger—and each subsidiary ledger is only a subdivision of some one account in the general ledger.

These control accounts in the general ledger are charged and credited periodically, usually once a month, with totals only of certain columns in the journal. The individual accounts in the subsidiary ledgers are charged and credited with all items from these journal columns, in the order in which the transactions appear in the journal. Obviously, the balance as shown by the control accounts at the end of any given period when all posting to that date has been completed, will be the same as the sum of the balances of the individual accounts in corresponding subsidiary ledgers.

A convenient practice followed by many bookkeepers is to make a list of the individual accounts in each subsidiary ledger each month, showing the balance in each account, before any debits or credits for the succeeding month are posted. The sum of these individual accounts should be exactly equal to the balance of the corresponding control account in the general ledger at the end of any month. Only the control account will appear in the trial balance of the general ledger.

If the trial balance shows the general ledger to be in balance and yet one or more of the subsidiary ledgers is out of balance with its corresponding control account, some mistake has been made either in posting column totals to the control accounts in the general ledger, or in posting items to individual accounts in a subsidiary ledger. Where a control or total expense account is used, the individual expense accounts may be proved for accuracy against the control account in much the same way as individual accounts in subsidiary ledgers are balanced against the control sheet in the general ledger.

## ADJUSTMENT ENTRIES PRIOR TO CLOSING THE BOOKS

THE PREPARATION of monthly reports does not necessitate closing the books at the end of each month. It is necessary, however, to close the books at the end of each business year in order that certain adjustment entries may be made to show the income or loss during the fiscal year. The books should be closed on the same date each year. The closing date selected should be late enough in the ginning season for all of the crop to have been ginned.

Prior to making the closing entries, certain adjustment entries such as the following should be recorded: (1) Inventories of products and supplies on hand that have not been sold or used during the past season; and (2) certain accrued and prepaid items of expense. The recording of these items differs from that of the ordinary business transactions in that the information for making these adjustment entries does not originate on the auxiliary memorandum records in the same way as daily transactions originate; that is, the inventories must be determined by inspection and valuation; the accrued and prepaid expense items must be estimated or calculated, and then entered in the journal with both debit and credit entries to the proper accounts. It should be emphasized again that these entries, like the routine entries from day to day, should be first recorded in the journal and then posted in the general ledger.

The inventory of products and unused supplies on hand should be by actual count and should be valued at cost price or present market price, whichever is lower. As an illustration, suppose the following inventory has been taken:

| | |
|---|---|
| 5 bales cotton (2,500 pounds at 10 cents per pound) | $250.00 |
| 2 tons cottonseed (at $35 per ton) | 70.00 |
| 3 tons fuel coal (at $10 per ton) | 30.00 |
| 50 patterns bagging and ties (at 70 cents each) | 35.00 |

These inventories should be entered in the journal as follows.

JOURNAL

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| Bale cotton inventory | $250.00 | | Adjusting inventory, 5 B/C | Cotton purchases | $250.00 |
| Cottonseed inventory | 70.00 | | Adjusting inventory, 2 tons C/S | Cottonseed purchases | 70.00 |
| Fuel-coal inventory | 30.00 | | Adjusting inventory, 3 tons coal | Fuel, power, light, water | 30.00 ✓✓ |
| Bagging and ties inventory | 35.00 | | Adjusting inventory, 70 patterns bagging and ties. | Purchases of bagging and ties | 35.00 |

Each of the above entries should then be posted to designated accounts in the general ledger. Attention is called to the two check marks (✓✓) beside the credit to fuel-coal expense. These two postings are necessary only when a control, or total-expense account, is carried in the general ledger in addition to the individual expense accounts. Such double posting is not used when items are regularly charged (or debited) to an expense account, as expenses debit in the journal has a separate column from which each item of expense is posted to individual expense accounts, and the total of this column is posted monthly to the Expense Control account in the general ledger. These adjustments are necessary for certain expense accounts at least once each business year, in order to show the true expense of that year's business.

Any interest which is due and unpaid on mortgages or notes at the end of the business year should be shown as an expense for that year just as if paid. The corresponding credit entry is similar to that for any other due and unpaid account and is made in the liability account, accrued interest payable. Taxes, wages, salaries, and similar items due and unpaid should be handled in a similar manner. When a check is written within the succeeding year to pay any of these amounts, the charge or debit should then be to this accrued or liability account rather than to the particular expense account.

As an illustration, assume that the following accrued expenses are due and unpaid at the end of the year:

| | |
|---|---|
| Interest to date due and unpaid | $600.00 |
| Last half of taxes due and unpaid | 200.00 |
| Manager's salary due and unpaid | 150.00 |

These items will be entered in the journal prior to closing the books as follows.

JOURNAL

| 4 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Expense debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| Interest and exchange | $600.00 | Mar. 31 | Interest due and unpaid | Accrued interest | $600.00 |
| Taxes | 200.00 | | Taxes due and unpaid | Accrued taxes | 200.00 |
| Manager's salary | 150.00 | | Manager's salary due and unpaid | Accrued manager's salary | 150.00 |

These postings from the journal to the general ledger should be made in the same manner as any other regular entry.

Certain other items of expense, such as insurance premiums, are frequently paid several months in advance at the time the books are closed. In such cases these expense accounts are carrying charges beyond those applicable to the year's business. The amount of such a prepaid expense is an asset at the time the books are closed and may be adjusted accordingly by debiting the proper asset account with a corresponding credit to the particular expense account in which the prepaid item has been entered.

For example, assume that the annual premium of $600 on an annual insurance policy is paid for 4 months beyond the date when the books are closed. This means that one-third of that premium, or $200, is properly chargeable to the following year's business. The entry in the journal prior to closing the books will be as follows:

JOURNAL

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| Prepaid insurance | $200. 00 | Mar. 31 | Prepaid insurance | Insurance expense | $200. 00 |

Depreciation is perhaps the most difficult adjustment entry since it is at best only an estimate. The annual depreciation rate should be determined by the expected life of each asset.[11] If new gin machinery may be expected to last 20 years, the annual depreciation should be 5 percent of the original cost, assuming no scrap value; if the expected life is only 10 years, the annual depreciation should be 10 percent of the original cost. Likewise, if second-hand gin machinery is bought, that is expected to last only 5 years, the proper annual rate should be 20 percent of the cost. In other words, the intent of depreciation is to build up during the life of the particular asset a reserve sufficient for replacement when this becomes necessary.

The credit entry corresponding to the depreciation debited as an expense each year would be to a reserve-for-depreciation account for each asset depreciated rather than to the credit side of the asset account. For example, the Building account should always show the original cost of the buildings. The amount charged (debited) as an

[11] U. S. Treasury Department, Bureau of Internal Revenue. DEPRECIATION STUDIES. B. I. T. Prelim. Rept., 34 pp. 1931.

expense each year for estimated depreciation on buildings should be credited to the account called "Reserve for Depreciation—Buildings", rather than to the Building account in the general ledger. As an illustration, assume that the following amounts of depreciation have been calculated using the original-cost values and the proper rate:

| | |
|---|---|
| Gin buildings | $300.00 |
| Machinery and equipment | 1,200.00 |
| Office furniture and fixtures | 30.00 |
| Truck | 150.00 |
| Total | 1,680.00 |

The above figures will be entered in the journal as follows:

JOURNAL

| 4 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Expense debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| D 22 | $1, 680. 00 | March 31 | Depreciation on buildings | Reserve for depreciation—buildings | $300. 00 |
| | | | Depreciation on machinery | Reserve for depreciation—machinery | 1, 200. 00 |
| | | | Depreciation on office furniture and fixtures | Reserve for depreciation—furniture and fixtures | 30. 00 |
| | | | Depreciation on truck | Reserve for depreciation—truck | 150. 00 |

In many instances the rate of depreciation used by those auditing for cooperative gin associations has been too high. That is, the reserves for depreciation against the fixed-asset accounts equal the cost of the asset several years before the asset is worn out. Obviously, when the book value of an asset has been entirely depreciated no more depreciation can be charged as an operating cost.

No rate of depreciation can be fixed arbitrarily for use in depreciating gin machinery as the life of machinery depends on many variable factors; such as, volume ginned, variety of cotton ginned (long or short staple), local method of harvesting (whether snapped or picked), the care and consistency with which repairs are made, the ability of the ginner, and many other unmeasurable factors. The same is true in part with regard to buildings, office fixtures, and other assets.

## CLOSING THE BOOKS

WHEN THE adjustment entries involving inventories, depreciation, and the accrued and prepaid expenses have been made, the balances of all of the revenue and expense accounts are ready to be closed into an Income and Expense account. It is possible, of course, to close the accounts first by departments; that is, show in the general ledger accounts the amount of net income or net loss resulting from sales of cotton, cottonseed, other sales, and ginning proper; then close only these balances to the Income and Expense account. Since the Income and Expense statement will give that information in detail, fewer journal entries and postings to the general ledger are necessary if the balances of all revenue and expense accounts are transferred directly to the Income and Expense account after the adjusting entries have been made. In making these closing entries, the balance of each account in the general ledger should be posted to the corresponding side of the Income and Expense account. Assuming that each of the trading and expense accounts has a balance, the closing entries in the journal should be as follows:

JOURNAL—CLOSING ENTRIES

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| | | | SALES AND REVENUES TO INCOME AND EXPENSE | | |
| C 1 | $0. 00 | | Bale-cotton sales | Income and expense | $0. 00 |
| C 2 | 0. 00 | | Sales of seed-cotton products | | |
| C 3 | 0. 00 | | Cottonseed sales | | |
| C 4 | 0. 00 | | Sales of coal, feed, etc. | | |
| C 5 | 0. 00 | | Miscellaneous income | | |
| C 6 | 0. 00 | | Revenue—ginning and wrapping | | |
| | | | PURCHASES TO INCOME AND EXPENSE | | |
| Income and expense | 0. 00 | | Bale-cotton purchases | C 7 | 0. 00 |
| | | | Seed-cotton purchases | C 8 | 0. 00 |
| | | | Cottonseed purchases | C 9 | 0. 00 |
| | | | Purchases of coal, feed, etc. | C 10 | 0. 00 |
| | | | Purchases of bagging and ties | C 11 | 0. 00 |
| | | | EXPENSE ACCOUNTS TO INCOME AND EXPENSE | | |
| Income and expense | 0. 00 | | Expense of handling cotton | D 1 | 0. 00 |
| | | | Expense of handling cottonseed | D 2 | 0. 00 |
| | | | Expense of handling coal, feed, etc. | D 3 | 0. 00 |
| | | | Fuel, power, light, water | D 4 | 0. 00 |
| | | | Wages | D 5 | 0. 00 |
| | | | Repair labor | D 6 | 0. 00 |
| | | | Repair material | D 7 | 0. 00 |
| | | | Supplies and tools | D 8 | 0. 00 |
| | | | Lubricating oil and grease | D 9 | 0. 00 |
| | | | Manager's salary | D 10 | 0. 00 |
| | | | Manager's expense | D 11 | 0. 00 |
| | | | Directors' fees and expenses | D 12 | 0. 00 |
| | | | Office salaries | D 13 | 0. 00 |
| | | | Office supplies and postage | D 14 | 0. 00 |
| | | | Telephone and telegraph | D 15 | 0. 00 |
| | | | Insurance and bond premiums | D 16 | 0. 00 |
| | | | Auditing and legal fees | D 17 | 0. 00 |
| | | | Advertising and dues | D 18 | 0. 00 |
| | | | Drayage—gin only | D 19 | 0. 00 |
| | | | Taxes (except Federal income) | D 20 | 0. 00 |
| | | | Loss from bad accounts | D 21 | 0. 00 |
| | | | Depreciation | D 22 | 0. 00 |
| | | | Interest and exchange | D 23 | 0. 00 |

It may be desirable to show individual debits and credits of each of the several income and expense accounts in the Income and Expense account in the general ledger instead of the group totals as illustrated above. Separate postings of the balances of each of these accounts to the Income and Expense account will enable the bookkeeper to make out the Income and Expense statement (form 3) by referring only to the Income and Expense account and the inventory accounts in the general ledger.

When this stage in the closing transactions has been reached, all of the revenue and expense accounts will be balanced out leaving only the asset, liability, net worth (the balance sheet accounts), and the Income and Expense account with a balance. This balance in the Income and Expense account should then be transferred to the Surplus account, as illustrated below. If an operating loss has been sustained, the entries to these two accounts as shown should be reversed.

JOURNAL

| 1 | | 9 | 10 | 21 | |
|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | |
| Account | Amount | | | Account | Amount |
| Income and expense | $0. 00 | | To transfer balance in Income and Expense account to Surplus account | Surplus | $0. 00 |

It is at this time that the Income and Expense statement for the season just closed, and the statement of assets and liabilities as of the end of the business year should be presented for the information of the board of directors. It then becomes the duty of the board of directors to give the bookkeeper instructions for the disposition of the undivided savings (income), if any, as shown by the Surplus account. If State laws require that 10 percent of the net earnings be set aside in a special surplus reserve, or if the board desires to make a similar reservation of profits even though not required by State law, this reserve should be set aside by debiting Surplus and crediting a 10-percent reserve. Other necessary reserves out of income should likewise be set aside at this time.

The board may then authorize the balance remaining in the Surplus account to be paid to the stockholders, members, or patrons depending on the dividend policy of the association. As an illustration, assume that $5,000 is available for stock and patronage dividends after all necessary reserves have been set aside. Assume also that the board desires to pay an 8-percent dividend on $15,000 capital stock, or $1,200; and to distribute the remaining $3,800 to the patrons at the rate of $1 per bale for 3,800 bales ginned. The following journal entries will be made:

JOURNAL

| 1 | | 9 | 10 | 21 | | | | |
|---|---|---|---|---|---|---|---|---|
| Sundry debit | | Date | Name and explanation | Sundry credit | | Credits to the accounts of each member in Dividends Payable ledger | | |
| Account | Amount | | | Account | Amount | Patron's name | Amount of stock dividend | Amount of patronage dividend |
| **Surplus account** | $5,000 | | Balance Surplus account to Dividends Payable | Dividends payable | $5,000.00 | A | $0.00 | $0.00 |
| | | | | | | B | .00 | .00 |

From this journal entry the total, or $5,000, will be posted to the debit of the Surplus account and to the credit of the Dividends Payable account in the general ledger. In addition the amounts of both stock and patronage dividends indicated in the journal for each member will be posted to the credit of the individual accounts in the Dividends Payable subsidiary ledger. The stock and the patronage dividends should be posted separately. If these dividends are paid later in cash, one or two checks may be issued, as convenient. The total amount of the dividend check (both stock and patronage) will be debited to the Dividends Payable account with a corresponding credit to Checks Issued (Bank account). Each individual member's dividend account in the Dividends Payable subsidiary ledger should be debited with the amount of the check or checks issued.

Finally a report should be made up for the annual meeting of members. This report should contain at least an income and expense statement for the season ended and a balance sheet (statement of assets and liabilities) as of the end of the business year. Forms 3 and 4 are suggested for the presentation of these reports. Other subsidiary reports will be necessary showing: (1) The reconciliation of the bank statement and the Bank account; (2) a list of accounts receivable; (3) a list of notes receivable; (4) a list of notes payable, and similar itemized lists of practically every control or total account shown in the assets or liabilities for which subsidiary ledgers are kept.

The assistance of the auditor is frequently desirable in making the adjustment entries. It is usually advisable to have his assistance with all of the closing entries. If possible, all bookkeeping, including the monthly postings to the general ledger, as well as the adjustment and closing entries, should be made at the gin office, since a general ledger that is kept away from the gin office is of little value to a cooperative organization beyond its use in making necessary State and Federal reports.

## THE MANAGER'S COMMISSION

SOME COOPERATIVE gin associations pay their managers a commission based on the total net income, in addition to a fixed salary. When such agreements or contracts are made "total net income" should be clearly defined. For example, in determining the net income the following are some questions which may arise: (*a*) Is interest on notes and mortgages, whether paid or accrued, to be considered as an expense; (*b*) is depreciation on fixed assets to be considered an expense, and if so what is to be the rate of depreciation used; (*c*) will replacements and/or additions to buildings or machinery be considered as expenses or as additional investments and (*d*) will the manager's commission itself be considered as an expense in arriving at the net income on which to base the commission?

Assuming that an agreement is reached regarding interest, depreciation, and replacements, there are still two methods of calculating the amount of the manager's commission. For example, if the net income as outlined above is $5,000 and the manager's commission is to be 5 percent, is the commission to be 5 percent of the $5,000 before the amount of the manager's commission is deducted, or 5 percent of the $5,000 less the amount of the manager's commission?

It is obvious that the amount of the commission will be more in the first case than in the second case. The commission in the first case would be 5 percent of $5,000 or $250. In the second case the amount of the commission may be computed as follows: Divide the income ($5,000) by 105 (100 percent plus the percentage commission), and then multiply by 100. The result ($4,761.90) is the income remaining after the commission is deducted. The amount of the commission may then be obtained either by subtracting $4,761.90 from $5,000 or by taking 5 percent of $4,761.90—both calculations give as a result $238.10.

The above illustration is based on the assumption that the association has either obtained exemption from income taxes or has agreed to base the manager's commission on the amount of the income before any income taxes have been deducted. The problem of determining the amount of the manager's commission becomes more complex if it has been agreed that Federal and/or State income taxes and possibly the commission also are to be deducted in determining the income on which the commission is based. That is, each of these three items may constitute a percentage of the income remaining after the other two (and in some cases the first also) have been deducted.

The graduated scale of income-tax rates and the variations in income-tax regulations of different States make it inadvisable to attempt explicit illustrations of these problems. When both income taxes and managers' commission are paid, the problem of determining the amount of the commission is simplified and essentially the same amount in dollars obtained if a relatively lower percentage rate of commission is agreed to and the commission computed and deducted from income before income taxes are considered.

## RELATIONSHIP OF NET INCOME, RESERVES, SURPLUS, AND DIVIDENDS

COOPERATIVE cotton-gin associations do not make profits in the same sense as other ginning concerns. The aim of the cooperative is to supply adequate service and at the same time effect savings for its members. Since these savings are distributed to the members and/or patrons on the basis of the business contributed by each, the cooperative organization is actually operating at cost. A proper conception of just what constitutes savings is essential before the amount available for distribution as dividends can be correctly determined.

The amount of cash which a cooperative organization has on hand at the end of the business year is not necessarily an indication of the savings effected, or of ability or right to pay dividends. This is especially true of cooperatives that have a relatively large investment in commodities or merchandise for sale, or in land, buildings, or equipment. Legally, dividends may be declared only out of surplus or net savings. If an association has no accumulated surplus—that is, undistributed savings—a dividend should not be paid. When dividends in excess of surplus are paid as patronage dividends, or dividends on capital stock, the original assets, or the assets originally invested by the members in the cooperative, are being returned to members, in addition to earnings. If this practice is continued the organization will necessarily cease to operate; in fact, such a dividend cannot be paid legally except on liquidation or on permission from the proper State authority. The surplus does not necessarily consist of cash on hand; it is the amount by which the total assets exceed the sum of the liabilities and the capital originally supplied by members. A part of it may be represented by inventories, accounts, or notes receivable or other assets.

The net income is determined each year after all actual cash expenses and certain other accrued and estimated expenses have been deducted from the gross income. Interest and taxes, for example, due and unpaid at the end of a year are just as much a part of the expenses of that year's operations as if paid in cash before the end of the year. Likewise, depreciation on buildings and equipment is an expense of operation (which is paid not in cash but in fixed assets), since the buildings and equipment are less valuable at the end of a year than at the beginning. These estimated amounts must be deducted from the gross income along with other expenses, to determine the correct net income.

Unless the cooperative association has obtained exemption from income taxes, Federal and/or State income taxes should be determined and payment provided for before any dividends are declared. An income tax is as much an expense of operating a business as a property tax or any other expense, from the standpoint of determining the net savings available for declaration as dividends.[12]

When the net income has been determined, it becomes the duty of the board of directors to decide on the disposition to be made of these

[12] A fuller statement of the conditions for exemption from certain Federal taxes will be found in KNAPP, J. G. COOPERATIVE PURCHASING OF FARM SUPPLIES IN THE UNITED STATES. Farm Credit Administration Bull. 1, 92 pp., illus. 1935; and HARRISON, B. F. INCOME TAX PROBLEMS OF FARMERS' COOPERATIVES. Current Farm Economics—Oklahoma 8 (3): 58–63. 1935.

savings. The cooperative laws of several States specifically require that before any dividends are declared a certain proportion, usually 10 percent, of the net savings from each year's business be set aside in a special surplus until this reserve equals 50 percent or more of the outstanding capital stock. Some such reservation of a portion of each year's savings should be made, by all means, until an adequate reserve has been created, even though not specifically required by State law.

One of the purposes of setting aside a portion of the net savings each year in a special reserve, such as the 10-percent reserve, is to prevent distribution of all the accumulated savings as patronage dividends, thus leaving the association handicapped, perhaps, for operating capital. Another purpose of such reserves is to offset possible operating or capital losses. For example, if the association incurs an operating loss of $1,800 and the 10-percent-reserve account on the books has a credit balance of $2,000, the $1,800 loss or deficit may be balanced out by taking that amount from the special 10-percent-reserve account. In this illustration there would still be a $200 credit balance in the 10-percent reserve, as only $1,800 would be needed to offset the operating loss or deficit.

To illustrate the above principle further, assume that a cooperative gin association has an income of $5,000 for a certain year, after all cash expenses, including taxes, have been paid, and beginning and ending inventories have been taken into consideration; and then, in addition, $1,500 for depreciation and $500 for accrued interest is deducted. The net income will be only $3,000 even though the association may have the $5,000 cash in bank. After all necessary or desired reserves have been set aside, any balance of this $3,000 net income is available for dividends. Thus if the board of directors decides to retain 10 percent of the $3,000 (or $300) in the business, there will remain only $2,700 available to be declared as dividends. When these dividends have been declared and paid, the association will have $2,300 in the bank.

It may be that even less than $2,700 will be needed to pay these declared dividends. If any members (or other patrons sharing in the dividends) are indebted to the association at the time a cash dividend is declared, it will be good business on the part of the association and equitable to the members, to deduct the amounts of these past-due obligations before paying the dividends; that is, to credit the account or note which the member owes and charge his dividend account, rather than pay him the total amount of the dividends in cash. In the case of a nonmember, or a member who has not paid for a share of stock or membership in full, the Bureau of Internal Revenue (in

14977—36——6

decisions regarding tax-exempt status) has recognized these credits on a share of stock or a membership as true patronage dividends.[13]

The payment of dividends on capital stock is somewhat similar in effect to the payment of interest on borrowed money. From the standpoint of Federal income tax, however, interest paid on indebtedness is deductible in determining the taxable net income, while dividends paid on capital stock in proportion to investment is not deductible. It is entirely fair that a cooperative association pay a reasonable rate of return or dividends on the capital invested in stock or membership certificates.[14] Dividends on capital stock tend to produce equality among the shareholders or members since some may have contributed more than others to the establishment of the association. The payment of patronage dividends results in equitable distribution of savings according to the business contributed by each patron.

On the other hand, it may be that a cooperative association has a legal right to pay and desires to pay patronage dividends, but at the time has no cash on hand. To use the illustration shown above, assume that the entire $5,000 at the end of the year has been used to pay off a mortgage on the plant. In this case the cooperative association should make some definite disposition of this "patrons' equity" or surplus of $2,700 as recognition that this amount belongs to the members or patrons in proportion to the amount of patronage which each one has contributed.

The board of directors can declare a dividend and specify that it is to be paid in additional shares of capital stock. If any of the authorized common stock is unissued, such stock may be used in paying each member up to the amount of the stock each is permitted to own under the provisions of statute or bylaws. Some associations have successfully used preferred stock in lieu of cash for paying dividends during the period that earnings are being applied on indebtedness. Generally, preferred stock has no voting rights and is subject to retirement at the will of the association when repurchased in cash by the association. In paying cash dividends, it is proper to set off past-due accounts owed by members against cash dividends due and to make remittance of the balances. But this practice should not be followed where dividends are paid in stock or other paper of the association. In such cases, the stock, or other paper, should be credited to the member but held by the association subject to lien for the member's indebtedness until such indebtedness has been paid in cash or in the same manner as payments by other members.

If no cash funds are available to pay dividends, and it is not desired to issue any additional common or preferred stock, any surplus earn-

[13] U. S. Treasury Department, Bureau of Internal Revenue. EXEMPTION OF FARMERS' AND OTHER COOPERATIVE MARKETING AND PURCHASING ASSOCIATIONS. B. I. T. Coll. no. 3886 IT:E:RR. 1931.

[14] HULBERT, L. S.—LEGAL PHASES OF COOPERATIVE MARKETING, U. S. Dept. Agr., Bull. 1106, p. 3. 1929.

ings or undistributed savings may be transferred to a Patrons' Equity account in the general ledger. At the same time a Patrons' Equity subsidiary ledger should be set up in which each member or patron is credited with his proportionate share of the amount set aside, based on his contributed patronage.

The purpose of setting up a Patrons' Equity account in the general ledger, with its associated subsidiary ledger, is to indicate an allocation of interest in these surplus earnings to patrons in proportion to the contribution made by each. The association need not even intend to pay these accounts in cash or in stock. The board of directors may, however, decide later to pay all or part of this equity in stock or in cash as funds become available. To illustrate how funds might become available to pay these membership equities in cash, assume the following conditions:

(1) An association has issued $10,000 in capital stock for cash.
(2) The association has bought the necessary buildings and equipment for $14,000, paying $10,000 cash and giving a $4,000 mortgage due in annual installments of $1,000 each.
(3) The association has operated 4 years, with a net income of $1,000 each year, after paying interest and allowing $1,200 for depreciation.
(4) The association has set aside 10 percent of this $1,000 net income each year, in reserves.
(5) No operating or capital losses have been sustained, and no other assets such as inventories, accounts, or additional fixed assets are on hand at the end of the 4 years.

At the end of the 4 years the situation is as follows:

(1) In determining the net income over the 4 years, a total of $4,800 has been estimated as depreciation. This is evidenced on the books as a credit in the Reserve for Depreciation account.
(2) The $1,000 annual net income less the 10-percent special surplus reserve ($100) each year has resulted in a total of $3,600 credited to the Patrons' Equity account.
(3) The 10-percent surplus reserve account has a credit balance of $400.
(4) The total amount of net savings realized during these 4 years is $4,000.
(5) This $4,000 savings plus the $4,800 depreciation reserve during the 4 years has resulted in an increase of $8,800 in cash assets.
(6) The $4,000 mortgage has been paid leaving $4,800 in cash.
(7) The $3,600 Patrons' Equity can now be paid in cash and still leave $1,200 in cash assets.

(8) At the end of the fourth year the plant has a book value of $9,200, which is equal to the original cost of $14,000 less the $4,800 reserve for depreciation.

(9) The original contribution of the members, the $10,000 capital stock, and the undivided earnings, the $400 credit balance in the 10-percent-reserve account is represented by and is equal to the book value of the plant ($9,200) plus the $1,200 cash on hand.

On occasions when it is desirable to credit surplus earnings to patron's equity accounts rather than distribute them in cash or in stock, it will not be logical or equitable to collect past-due accounts, notes, stock subscription notes, accrued interest, or other obligations of a member by crediting that obligation and charging a corresponding amount to his patron's equity account. In effect such a procedure constitutes payment of a dividend to that member in cash without payment of a similar dividend to other members. In addition to being improper and inequitable, this policy tends to encourage slow payments as a means of obtaining cancelation of obligations. From the standpoint of new members, however, such a practice if in accord with the bylaws of the association, is justifiable until one share of stock or a membership is acquired.

In order to avoid giving these new members too great an advantage over those who have paid for shares of stock or a membership in cash, it is desirable to have the par value of stock or membership at a relatively low figure; for example, shares worth $25, or even less, are to be preferred to $100 shares. It would be even more equitable to require these new members to give notes for their stock, the note to be canceled against the patronage credits at such time as the board declares a payment of certain of these equity accounts to all members and/or patrons in additional stock or in cash.

In the event that an operating loss is sustained, it will be entirely logical and equitable to charge this loss to the Patrons' Equity account in the general ledger (provided such an account has been set up), and at the same time prorate the loss by debiting the members' or patrons' individual equity accounts in the corresponding subsidiary ledger. If such accounts are used to indicate interest in the surplus, it should be remembered that these accounts do not represent a declared liability of the cooperative, as does a dividend formally declared. A patron's equity account is merely recorded evidence of interest in undivided earnings. The payment of these equities depends entirely on the will of the board of directors, and is not subject to payment on demand of any member. Losses, therefore, may be prorated logically and equitably to the individual equity accounts on the basis of patronage.

If no special reserve account, Patrons' Equity account, or any other form of surplus has been set aside out of previous earnings, and an operating or capital loss is sustained, the original assets invested by the stockholders or members will be reduced by the amount of the loss.

In the case of nonstock organizations, the initial membership fee, as differentiated from the annual dues, should be shown as an item of net worth in much the same way that outstanding stock is shown for a cooperative having capital stock. Any additional surplus should likewise be set up year by year to the Patrons' Equity account of the members or patrons, in order that the ownership of this surplus may be established. If the entire amount is left in free surplus as undivided savings, there will be no satisfactory means of determining the equity of each member in the assets of the cooperative, in the event that the records of the volume of business with patrons for past years are incomplete, lost, or destroyed.

When the total of all paid-in membership fees is less than the net assets of the cooperative, there may be a considerable surplus account, which, without evidence to the contrary, belongs to each member equally. This surplus, however, is the accumulation of net income from previous years' operations which was not distributed as dividends, and, from the standpoint of patronage, does not belong equally to all of the members. It should be borne in mind, however, that if there is no provision in the statute, charter, bylaws, or agreements of an association with reference to the manner in which assets of the association may be divided, all members of a nonstock organization are entitled to equal treatment. This illustrates the importance of having the interests of each member of such an association evidenced by proper papers.

The existence of depreciation reserves, or any other reserves, is no indication that an association has parted with any amount of the assets produced from the income represented by these reserves; but, on the contrary, means that this portion of the assets produced from income has been retained in the business, rather than paid out in dividends, and may be used by the cooperative in much the same manner that any other asset may be used. Depreciation reserves, reserves for losses on doubtful accounts or notes, and similar items, differ from reserves such as a 10-percent reserve of the annual income, in that reserves for depreciation and reserves for loss on doubtful accounts are recognized as expenses in determining the net income, while special reserves out of income, such as a 10-percent reserve, for example, are determined and set aside after the net income has been ascertained and before any dividends are declared.

## APPENDIX

### Combining the Accounts Receivable and Patrons' Ledgers

BOOKKEEPERS with considerable training and experience in accounting should be able to eliminate much of the duplication of records in the procedure outlined in this bulletin. For example, the recording of each scale ticket in the journal is a duplication of the information entered in the Patrons' ledger; likewise the Accounts Receivable ledger duplicates much of the information in the Patrons' ledger. It is possible by following the method suggested below to combine the Patrons' ledger and Accounts Receivable ledger in one book, and also to eliminate the necessity for listing individual ginning scale tickets in the journal. No additional printed forms are necessary.

The principle involved may be summarized as follows: The patrons' or customers' account is charged with everything received from the association, and credited with everything received by the association. That is, all transactions with patrons and customers are handled through accounts receivable by posting directly to these individual accounts from duplicate copies of the memorandum or auxiliary records.

The following memorandum record forms will be needed in duplicate or triplicate:

(1) Ginning scale tickets.
(2) Sales invoices or tickets.
(3) Purchase invoices.
(4) Cash receipts.
(5) Checks (only one form for all purposes).

#### *Ginning Scale Tickets*

Scale tickets are made out for each bale ginned, in the customary way. Entries are made from the duplicate copies of the scale tickets at the end of each day, or for units of 50 or 100 bales, to the individual accounts in the Accounts Receivable ledger; that is, each patron's account is debited with the charges for ginning and wrapping; and is credited with the value of the cottonseed bought by the association, by posting directly from the scale ticket.

It will then be necessary to enter the sum of charges for ginning and wrapping as one total in the Accounts Receivable Debit column of the journal, with a corresponding credit entry to Ginning, Bagging, and

Ties. Likewise, the total value of cottonseed bought, as determined from the several ginning tickets which may be involved, will be entered as one total in the Accounts Receivable Credit column with an offsetting debit to Cottonseed Bought.

The total cottonseed bought from patrons and the total ginning charges may be determined by adding directly from the duplicate tickets. Greater accuracy may be obtained, however, if all desired information is listed from the scale tickets on columnar forms. The following form, which need not be printed, is suggested:

| Bale no. | Pounds S/C | C/S bought | | Charge for ginning, bagging and ties | Amt. due patron | Amt. due association |
|---|---|---|---|---|---|---|
| | | Lbs. | Amt. | | | |
| 1 | 1, 500 | 900 | $18. 00 | $6. 00 | $12. 00 | |
| 2 | 1, 600 | | | 6. 25 | | $6. 00 |
| 3 | 1, 400 | 800 | 16. 00 | 5. 75 | 10. 25 | |
| 4 | 1, 600 | 1, 000 | 20. 00 | 6. 25 | 13. 75 | |
| Total | 6, 100 | 2, 700 | 54. 00 | 24. 25 | 36. 00 | 6. 00 |

The name of the patron need not be entered on this form. The only purpose of this record is to obtain the total quantity and cost of cottonseed bought, and the total charges for ginning and wrapping. The last two columns are merely for balancing to prove the accuracy of copied figures, and are not entered in the books.

Totals of cottonseed bought, and charges for ginning and wrapping as determined by the above working sheet may be entered in the journal, daily, weekly, or in units of bales, by making the following entries in the proper columns:

| | | |
|---|---|---|
| Accounts Receivable, debit | $24. 25 | |
| Ginning, Bagging and Ties, credit | | $24. 25 |
| Cottonseed Bought, debit | 54. 00 | |
| Accounts Receivable, credit | | 54. 00 |

All four of the above entries, together with the weights of seed cotton ginned, and of cottonseed bought may be entered on one line of any columnar journal sheet similar to form 1.

*Sales Invoices*

A sales ticket or invoice is made out for every item sold to patrons or customers. From the duplicate of each sales invoice the amount of the sale is posted to the debit of individual accounts in the Accounts Receivable ledger. Sales invoices should then be summarized by products, either by adding the items direct from the invoices on a machine, or recording them first on columnar work sheets as illustrated on the following page.

| Ticket no. | Total sales | Oil and gasoline | Coal | Meal and hulls | Ferti-lizer | Miscellaneous | |
|---|---|---|---|---|---|---|---|
| | | | | | | Item | Amt. |
| 1 | $1.00 | $1.00 | | | | | |
| 2 | 15.00 | | $15.00 | | | | |
| 3 | 10.00 | | | $10.00 | | | |
| 4 | 8.00 | | | | $8.00 | | |
| 5 | 2.00 | | | | | C/S 100# | $2.00 |
| Total | 36.00 | 1.00 | 15.00 | 10.00 | 8.00 | | 2.00 |

The totals of these items should be entered in the journal in appropriate columns:

| | | |
|---|---|---|
| Accounts Receivable, debit | $36.00 | |
| Sales of oil and gasoline, credit | | $1.00 |
| Sales of coal, credit | | 15.00 |
| Sales of meal and hulls, credit | | 10.00 |
| Sales of fertilizer, credit | | 8.00 |
| Sales of cottonseed, credit | | 2.00 |

*Purchase Invoices*

A purchase invoice is made for each product bought from customers; that is, bale cotton, seed cotton, cottonseed other than from regularly ginned bales, and similar items. From the duplicates of these purchase invoices the amount of each purchase is posted to the credit of individual accounts receivable. These purchases are then summarized as illustrated for sales. The purchase account of each product is debited with a total offsetting credit to Accounts Receivable, in the proper journal columns.

*Cash Receipts*

A cash receipt is prepared each time cash is received from a customer, whether for ginning, feed, coal, or other items, and regardless of whether or not the money is received by the association at the time the sale is made or at some later date. That is, the customer should be given a specific cash receipt, of which a duplicate is kept by the association, every time cash is received. These cash receipts are entered in the journal consecutively by name, number, and amount—debiting Cash Receipts and crediting Accounts Receivable. Items from the credit columns of the journal are then posted to the credit of the individual accounts in the Accounts Receivable ledger. It would, of course, be possible to post to the individual accounts from the duplicate copies and summarize the cash receipts each day, or periodically, on columnar working sheets as was done for scale tickets, purchase invoices, and sales invoices. If the latter method is used it will be necessary to make one entry in the journal, debiting Cash Receipts and crediting Accounts Receivable, for the total amount of the cash receipts involved, with explanation such as "Cash receipts Oct. 7, 1935, tickets 1 to 20."

*Checks Issued*

Each check should be entered in the journal by name of payee, number, and amount of the check in detail. The credit entry will be in the Checks Issued column. If issued for the purchase of any product from customers, such as cotton, or seed cotton, or as a rebate on the value of cottonseed above charges for ginning and wrapping, the debit will be in the Accounts Receivable column, and will be posted from there to the individual accounts. The debit entry for checks issued for expenses would, of course, be made in the expense column and for certain other purposes in the Sundry Debit column. In order to make the proper debit entry it will be necessary for the purpose of each check to be indicated on the carbon or stub. A summary of checks issued will not be needed, since a consecutive list of checks issued by name, number, and amount is necessary in reconciling the bank statement and the Bank account and this consecutive record can be made as easily in the journal as on a temporary work sheet. Only one form of check will be needed for all purposes.

*Other Journal Entries*

Sales of cottonseed, cotton, and any products sold other than to patrons are entered in the journal in the usual manner. Bank deposits also are entered in the journal in the regular manner.

*Sheets for Accounts Receivable Ledger*

Numerous variations are possible as regards the size and arrangement of ledger sheets to be used for this combined Patrons' and Accounts Receivable ledger. Three possible methods are described below:

1. Standard ledger sheets having debit, credit, and balance columns may be used. All explanations, such as bale number, weight of seed cotton, weight of seed, check number, ticket number, or invoice number, may be made for each entry in the regular explanation column. For example:

Name *John Smith*

| Date | Item | Folio | Debit | Credit | Balance |
|---|---|---|---|---|---|
| Oct. 6 | Bale #75. S/C 1,600 lbs. C/S 800 lbs. Ticket | 75 | $6.75 | $14.00 | |
| 7 | Rebate on C/S, Ck. No. 95 | J16 | 7.25 | | |
| 7 | 1 ton coal-Sales Inv. No. | 22 | 12.00 | | |
| 7 | Cash Receipt No. | 51 | | 12.00 | |
| 9 | Bale #90. S/C 1,500 lbs. C/S caught Ticket | 90 | 6.60 | | |
| 9 | Cotton bought Wt. 500 @10¢. Purchase Invoice No. | 35 | | 50.00 | |
| 9 | Check No. 99 | J17 | 43.40 | | |

2. The regular journal sheet may be ruled as follows:

Name *John Smith*

| Date | Ginning | | Seed | Bale cotton | | Miscellaneous sales | | Folio | Debit | Credit | Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bale no. | Lbs. S/C | Lbs. | Bales | Lbs. | Item | Quantity | | | | |
| Oct. 6 | 75 | 1, 600 | 800 | | | | | Scale ticket 75 | $6. 75 | $14. 00 | |
| 7 | | | | | | | | J 26 | 7. 25 | | |
| 7 | | | | | | Coal | 1 ton | Sales invoice 22 | 12. 00 | | |
| 9 | | | | | | | | Cash receipt 51 | | 12. 00 | |
| 9 | 90 | 1, 500 | caught | | | | | Scale ticket 90 | 6. 60 | | |
| 9 | | | | 1 | 500 | | | Purchase invoice no. 35 | | 50. 00 | |
| | | | | | | | | J 17 | 43. 40 | | |

3. A special Accounts Receivable sheet may be printed, having several debit and several credit columns for amounts of money as well as descriptive information.

The principal difficulty of attempting to handle all transactions with patrons through accounts receivable is that mistakes in posting will probably be made and the individual accounts may get out of balance with the control account. To avoid this difficulty, it will probably be found desirable to insert a marker in each account as the items are posted and then prove the accuracy of each day's posting by adding on the machine the items from the several individual accounts indicated by the markers in order to determine if the sum is the same as the amount entered in the corresponding control account through the journal. This will mean, for example, that as soon as the debits and credits to individual accounts have been posted from duplicates of the selected scale tickets, an adding machine tape will be run for the debits to these accounts to verify the total of ginning and wrapping tolls entered as a debit in the Accounts Receivable column of the journal, and a second tape of the credits to individual accounts to verity the total of Cottonseed Bought entered as a credit in the Accounts Receivable column of the journal. Other postings from sales invoices, purchase invoices, and cash receipts to individuals should be proved against corresponding totals as soon as posted. A few minutes' time to prove each step frequently saves hours later on.

# INDEX