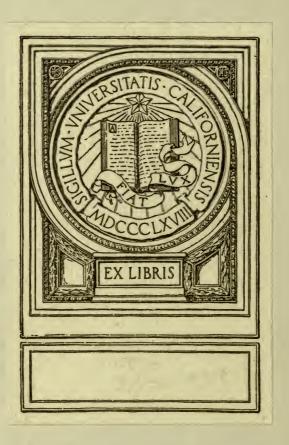
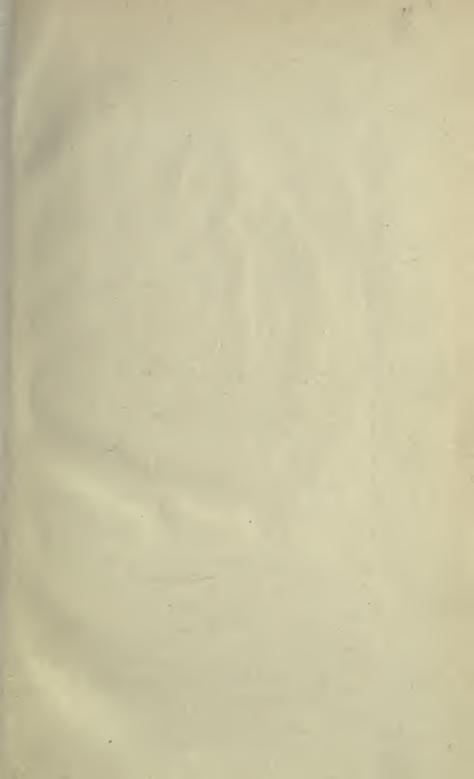


PER STANFORD

FINISL/IETHODS





Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation

Farm Accounting and Business Methods

A TEXT-BOOK FOR STUDENTS IN AGRI-CULTURE AND A MANUAL FOR HOME-STUDY

BY

J. A. BEXELL, A.M.

DEAN SCHOOL OF COMMERCE
OREGON AGRICULTURAL COLLEGE



THE HOME CORRESPONDENCE SCHOOL Springfield, Mass., U. S. A.

HF 5686 A5 B3

COPYRIGHT 1909 By J. A. BEXELL

COPYRIGHT 1911
BY THE HOME CORRESPONDENCE SCHOOL

Mplacoment

Ruled Blank Books

with printed headings for use in writing out the exercises, or for practical use on the farm, may be obtained from stationers generally or from The Home Correspondence School, Springfield, Mass.

	PAGE
	7
	13
ntry	37
	56
	70
PART II. COST ACCOUNTS AND SPECIAL RECORDS.	
Chapter VI. Cost of Production	91
Chapter VII. Special Cost Records	98
ALDER VIV. D	D
PART III. Business Organizations, Correspondence, and	FORMS.
Chapter VIII. Business Organizations	115
Chapter IX. The Business Letter	123
Chapter X. Business Forms	141
PART IV. USEFUL TABLES	149
Index	4.00

CORRECTIONS AND SUGGESTIONS

NOTE TO THE STUDENT: - Make all corrections and read suggestions before beginning work.

Under written work, after the word "illustrations," add: April 1, Page 30. Cash on hand, \$170.00.

34. Line 4, Surrey, should be \$165.00 (not \$130.00); Light Buggy, \$85.00 (not \$50.00).

66 47 and 48. The illustrations should be dated 1910. 6 6

Total Stock, in illustration, should be \$4421.77; Profit, \$452.74. The "Net Worth last Year" for both Statements No. 3 and 4 is 48. 6.6 50.

taken from the Net Worth in Statement No. 2.

53. March 30, strike "Personal column."

66 55. Third line. The Productive Investment is \$6,265.54 (not \$6,265.64).

6 6 59. 66 63.

80.

April 17, Laundry 95 cents (not 97 cents).

March 1, Tea (not Codfish) 35 cents.

June 18, 250 (not 25) bu. Corn @ 74 cents.

June 22 10 tons Timothy @ \$15.50 (not \$15.00).

June 23, Collection and Exchange \$3.50 (not \$3.40). 80. 6.6 80.

6.6 83.

Paragraph 3, third line, June 1 (not July 1).
The Corn Inventory is too large by 525 bushels, if you deduct the 66 85. sales from the purchases, but the 748 bushels should be used to get the results given on pages 82 and 86.

The Net Gain, with the given inventories for each partner is \$29.75. Richard (not Robert) Morris, Henry Simmons, and Western Produce 86.

Co. should be placed in the left column, (Resources).

By J. A. BEXELL

COPYRIGHT 1911

BY THE HOME CORRESPONDENCE SCHOOL

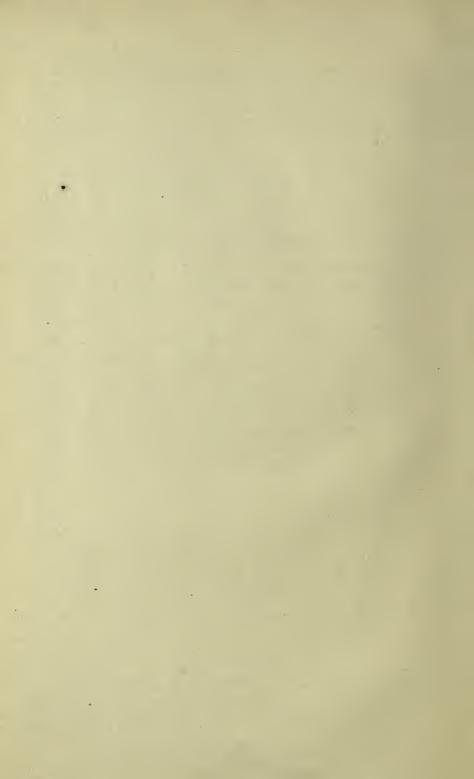
Mplacement

Buled Blank Books

with printed headings for use in writing out the exercises, or for practical use on the farm, may be obtained from stationers generally or from The Home Correspondence School, Springfield, Mass.

TABLE OF CONTENTS

Cha	apter	I.	Introductory	PAGE 7
PART :	I. Fi	NANCL	AL ACCOUNTS.	
Cha	apter	II.	First Method—Single Entry	13
Cha	apter	III.	Second Method—Modified Double Entry	37
Cha	apter	IV.	Household Accounts	56
Cha	apter	v.	Third Method—Full Double Entry	70
PART :	II. C	ost A	CCOUNTS AND SPECIAL RECORDS.	
Cha	apter	VI.	Cost of Production	91
Cha	apter	VII.	Special Cost Records	98
PART	III. I	Busin	ess Organizations, Correspondence, and Forms.	
Cha	apter \	VIII.	Business Organizations	115
Cha	apter	IX.	The Business Letter	123
Cha	apter	X.	Business Forms	141
PART I	ıv. ı	Jsefu	L TABLES	149
Ind	lex			160



PREFACE TO THE FIRST EDITION

There are a number of works on Farm Accounts now on the market, but I have found none adapted to the class room. An arithmetic would be useless as a text without problems for solution; a text on Farm Records is likewise useless in the class room without exercises for practice.

My aim has been to make the exercises as practical and simple as possible, but no attempt has been made to limit the illustrations to actual experience on any particular farm. Hence, both prices and results will probably vary considerably from actual practice, a fact which will not reduce their illustrative value. The forms suggested contain many new and labor-saving features, conforming with the best modern business practice. A resourceful teacher will be able to supplement the exercises to any extent to suit the time available and the needs of his class.

The increasing interest shown in this subject warrants the belief that it will be introduced into the public schools in the near future, and surely there is no subject more worthy of attention or more sadly neglected. Suggestions and criticisms from farmers and teachers interested in the subject will receive careful consideration in a future edition.

J. A. BEXELL.

Oregon Agricultural College October 1, 1909

PREFACE TO THE SECOND EDITION

A large number of inquiries from schools of all grades have confirmed my conviction that there is a growing demand for a text-book in Farm Accounts. Such a text-book must be teachable. Without a well graded set of exercises to place before the student it would be as useless in the class room as an arithmetic without problems. Many new exercises have been suggested by readers of the first edition and it is believed that the present volume offers a fairly satisfactory course. Ruled and printed forms have been provided for the exercises in bookkeeping and these forms are also suitable for actual bookkeeping on the farm. Chapters have been added on Business Forms, Business Correspondence, and Business Organizations—subjects of the utmost importance to every student; and it is hoped that the added chapters will make the book more valuable as a business manual.

The fundamental principles of accounting being the same in every business, it has been found that the exercises are equally adapted to classes in Mechanic Arts, Domestic Economy, etc., so that the special exercises for this class of students have been omitted.

A syllabus of instruction sheets has been prepared for students who desire to pursue the study at home, which is also available to schools giving correspondence courses.

I take this opportunity of thanking all who have contributed in any way toward the improvement of this effort to help the farmer. Special acknowledgment is due Mr. E. B. Moore for his excellent chapter on "The Business Letter."

J. A. BEXELL.

Oregon Agricultural College October 1, 1910

FARM ACCOUNTING AND BUSINESS METHODS

CHAPTER I

INTRODUCTORY

It is a truism to say that the financial side of farming is of the utmost importance. But the fact remains that this side of the world's greatest industry is almost entirely neglected by both the farmer and the schools. Professor Bailey says on this subject: "In visiting practically every farm in one of the counties of the state (N. Y.) we did not find one man who knew how much it cost him to produce milk or to raise any of his crops."

Prosperity of the Farmer

The Secretary of Agriculture, in recent Year Books, points out the remarkable prosperity of the farmer; that the export of farm products is vastly in excess of all other exports combined; that a million agricultural debtors have been transformed during the last ten years into the same number of surplus depositors; that "contrary to his reputation, the farmer is a great organizer, and he has achieved remarkable and enormous successes in many lines of economic co-operation in which the people of other occupations have either made no beginning at all or have nearly, if not completely, failed." He points out that most farmers live better than the average merchant or mechanic.

Causes of Success

It is doubtless true that the farmer is becoming a factor to be reckoned with in the business world; that the average farmer knows vastly more about scientific farming than his father did; he understands more thoroughly the value of proper cultivation, of fertilization, of rotation of crops, and of diversified farming; but it cannot be said that he owes his success to improved business methods. He has been successful, rather in spite of his ignorance in this respect, and because of the lavish generosity of mother nature.

Two Phases of Farming

The business of farming assumes two distinct phases: the productive phase and the exchange phase. The one aims to extract the treasures from the soil; the other, to place them in the hands of the consumer. It is important not only to raise abundant crops, but also to sell the products to advantage.

Importance of the Exchange Phase

The importance of the exchange phase is often lost sight of. A farm may be forced to yield to its maximum capacity, labor may be managed properly and waste reduced to a minimum; and yet the net result may be a loss at the end of the year. As a general economic proposition, it might be said that large crops often result in serious loss to society as a whole. If the net value to the consumer is less than the labor and capital expended on the crop, society is the loser by the difference. Hence the importance of a thorough understanding by the farmer, as well as by the merchant and manufacturer, of the laws and methods of exchange or commerce.

Farming a Paying Business

That farming is a science has been emphasized so much that the fact that it is also a business is often lost sight of. It is a real business, and one which pays the United States close to eight billion dollars annually. It has been demonstrated repeatedly that no legitimate business pays better than farming. It may be a little more uphill work at the start, since most farmers begin business with small capital, but it is incomparably safer in the long run, and will insure a competence for old age with greater certainty than any other occupation. But let it ever be borne in mind that the condition for success is that farming must be conducted on business principles.

Importance of Keeping Accounts

Accurate records and accounts are absolutely necessary in the management of every business enterprise, great or small. No business can be successful in the long run unless its condition can be determined at any time, and no conservative business man will fail to prepare a financial statement at the end of his fiscal year. He must determine how he stands, not only with others, but with himself.

One object of keeping accounts is to assist in accumulating property. Another important object is to record a continuous history of business transactions for future guidance. Not only is this profitable, but it is a source of real pleasure and satisfaction to know our standing with those with whom we deal as well as the profits and losses in our business enterprises.

What the Records Should Show

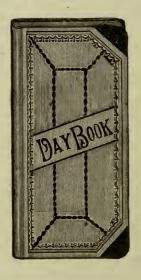
A complete system of farm records should enable the farmer to tell at any time how his business stands with himself and others; the cost of production of staple crops and live stock, and the periodical results of both the productive and the exchange phase of his operations. The records should also show personal and household expenses, and finally a comprehensive history of the various phases of the enterprise, including plots of crop rotation, fertilizing, etc.

Difficulties of Farm Bookkeeping

Numerous systems of farm bookkeeping have been proposed, but the trouble with them all is that they are either too complicated or altogether unpractical. Professor Bailey says: "The entire subject of farm accounting must be attacked in a new way. The ordinary bookkeeping will not apply." reason is obvious. Farming is a much more complicated business than most people suppose. A farmer is both a producer and a dealer. He needs financial records as complete as those of the average merchant and cost records as accurate as the manufacturer's. But the records must be adapted to the business in hand. The farmer is usually a very busy man. His chief difficulty is neither ignorance nor indolence: He has little time for fancy bookkeeping and still less for "red tape." What he wants is a plain, simple, straightforward history of his business, so arranged and classified as to require the minimum effort to keep it up. It may be interesting for his children to learn the conventional use of red ink, rulings, closing of books, the intricacies of journalizing, etc., but all this is not necessary to a proper understanding of farm bookkeeping.

Methods of Bookkeeping

In the following pages I suggest three methods of farm bookkeeping whereby the yearly profit or loss may be determined and compared from year to year. The first is extremely simple Single Entry; the second method is a comprehensive, but very simple, Modified Double Entry, by which the financial standing, the cost of production, profits and losses, etc., can be ascertained at any time; the third is a system of complete Double Entry, generally used in enterprises doing an extensive credit business. Any farmer with average intelligence will be able to master either method with small expenditure of time and labor.





PART I FINANCIAL ACCOUNTS

FIRST METHOD

Being the simplest form of single entry, employing only one book, which may be purchased anywhere. (See page 10.)

FINANCIAL ACCOUNTS

CHAPTER II

SINGLE ENTRY, THE SINGLE-BOOK SYSTEM

The Day Book

The most important record in this method of bookkeeping is the Day Book, or what might properly be called the History of the Farm. This should be written in the form of a diary, without attempting a close classification of the entries. Always bear in mind, however, that it is safer to give too much rather than too little information in the records. The Day Book should contain any memoranda which might prove valuable for future reference. Conditions of the weather, time of planting, breeding, division of fields, sales, purchases, loans, attendance at conventions, valuable recipes, etc., are proper subjects for entry. Though it is advisable to keep the book as neat as possible, it is unnecessary to spend much time for that purpose. It is more convenient to jot down items in lead pencil as they come along, and then, as time allows, classify them under their respective heads.

The Day Book and Cash Book Combined

In the form on page 19, the Day Book and Cash Book are combined. The ruling is that of an ordinary stock Day Book. In the left-hand column are entered all sums received and in the right-hand column all payments.

While the combined Day Book and Cash Book has the advantage of extreme simplicity, it is often more satisfactory to devote a part of the Day Book, or a separate book, exclusively to cash transactions. Where this plan is followed, it is unnecessary to record all the cash items in the Day Book. The left-hand page is used for cash receipts and the opposite page for payments.

Bill and Receipt File

A very important part of the farm records is the Bill and Receipt File. A part of the Day Book can be devoted to that purpose, but it is better to provide a separate book. In it should be securely pasted all bills for machinery, implements, tools, live stock, nursery stock, furniture, etc., which will be subject to inventory, but not bills for supplies, feed, table expenses, etc.; also receipts for the payment of money, canceled notes, certificates of pedigree, important clippings from periodicals, and any other matter of interest. This will prove an invaluable record for future guidance. (See illustration, page 24.) Many prefer the Pocket File, illustrated on page 16.

The Inventory

The inventory may be considered the foundation of the farm records, because without it no results at all can be obtained. It should be taken at such a time as will give the most accurate results with the least expenditure of labor. This differs widely in different localities. January 1st seems the most natural beginning of the fiscal year, but the objection is that at this time there is apt to be a large quantity of feed and supplies on hand. April 1st would be a better date so far as the stock on hand is concerned, but inconvenient in many localities on account of the pressure of spring work. Whenever it is taken, it should be accurate. No guesswork should be tolerated. Weigh and count; do not estimate. Then assign the actual market value to the property, taking due account of depreciation.

Depreciation

Neither an old wagon nor an old horse is worth as much as new ones. The same holds true with very few exceptions of all equipment, animals, houses, and improvements. The question as to what rate shall be charged off annually, so as to create a sinking fund with which to renew the depletion, has been an open question with accountants since time immemorial. It is particularly difficult to determine the depreciation of live stock, work horses, and depletion of the fertility of the soil. Without entering into a discussion of the subject, I

give below the experience and opinion of the best authorities on the subject. The thoughtful farmer will find no difficulty in adjusting these rates to suit his conditions. For the purpose of general estimates, the following rates on the cost or market value are fairly accurate:—

Buildings (including insurance and repairs) 5	per	cent.
Horses, above 5 years10	per	cent.
Milch cows (after 3d year)	per	cent.
Machinery and tools10	per	cent.

How to Determine the Profits

The all-important question at the end of each year is: Has the work for the year been a financial success or failure? To determine the profits or losses is, therefore, a problem to be solved each year. As a matter of fact, it is a very simple problem, and it becomes easier the oftener it is done.

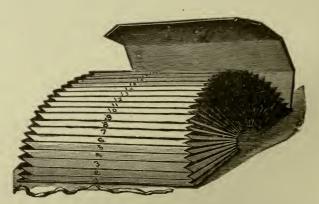
Let us assume that heretofore you have kept no books whatever, but you have now decided to make a start. You have procured a simple, substantial Day Book (may be purchased at any stationery or drug store) and, after listing all your property, you are prepared to make the entries shown in the illustration. April 1st is selected as the beginning of the fiscal year, because on that date the supplies, grain, feed, etc., are usually low, and the average farmer has considerable time to spare. Of course, this varies in different localities, and any other date may be adopted to suit the farmer's convenience. The proper opening entries, including the inventory, are shown on page 18.

A Year Later

At the end of the year we are ready to determine the result of the year's work. If we have kept only memoranda in the Day Book, the best we can do is to take another inventory exactly similar to the last one. It is evident that the difference between what we are worth now and our net worth last year will be the net gain. The second financial statement and the statement of Profit and Loss are illustrated on page 20.

Net Earnings

The net profit shown in the illustration, page 20, includes the interest on the investment and the wages of the members of the family. To find the net earnings of the proprietor, the value of the household goods, life insurance, cash, and the cost of the dwelling should be deducted from the last year's Then find the interest on the remainder at a fair inventory. rate; this deducted from the profit gives the earnings of the family. It can be apportioned in any way the proprietor sees This is illustrated further in Lesson 11. If members of fit. the family, engaged in productive work, receive regular pay before the statement is made, the final result is the net profit above wages and interest. The question might be asked: why deduct the value of the dwelling before the interest is taken? The reason is that the dwelling is not a productive investment. It is apt to be more or less valuable than the average standard. according to the taste and ability of the owner. Amounts drawn for personal use should, of course, be added to the net earnings.



ALPHABETICAL BILL FILE

Cant	inuad	Index	tories		
Itens	nued Memo.	Ap. 1, 08	Ab.1.09 A	b.1.10	Ab.1,'11
Farm, 160 A.	Market Jal.	Ap. 1, 08	Ap.1.09 A		
Gorn		100	825a		
Octs		6750			
Wheat			22011		
1/		170	/30		
Hay +//		50	750		
Vegetables Total	7 (50750	54786		
Horses	Produce				
1707565	See special schedules	600	750		
60W5	Schedules	800	924		
Steers	η	132	182		
Heifers	М	55	44		
Heifers Hags Sheep		72	66		
Sheep	~	300			
10/0/	Stock	1959	1966		
Mack of Impl. Supplies Household Good		3 3 25	100		
Mack of Impl.		625	849		
Subblies		25	30		
Household Gran	6	350	650		
Life Insuran	e Ail uh	96436	107340		
Gash		170	12604		
July 1			1779 27		
T+12					
Total Re.	ources	1265411	1396230		
Labor Accounts Payable Dills Payable		12515	85		
Accounts Payable		12515	34232		
Bills Payable		3000	3200	HH	
	1/4				
Total Lias	ifilies	320015	362732		
Net Wort	4	948396	1033498	1 3	
,					

CONTINUED INVENTORIES

Day Book, April 1, 1908		
- Vay 000K , Sipre 1 1, 1908		
Sit upon and today It		
chared my present form investing cash \$6000.00. Hollowing is an		
Call bloom of the ll		
tach 10000.00. voltouring is an		
perty and a statement of my pro- affairs as they stand to day		
perly and a glatement of my		
affairs as they sland to day		
Financial Statement No 1 Hornes.	Taras	
april 1, 1908		#
Resources		
Farm, 160 A. (market value)		8000
Produce:		
200 hu Com 50		
150 bu Oats .45	6750	
200 bu Wheat 85	170	
20 tous Hay 600	120	
20 tous Hay 600 Potetoes and Vegetable	150	50750
Stock.		
	600	
6 Horses, average 100 = 20 Coys " 4000	800	
11 Steers " 1200	132	
5 Neifers " 1100	35	
12 Hoge " 6"	72	
200	300	1959
Remainder of Resources omitted Life Sprenance (Part up value)		108325
Sil I want of Contract of the		96436
Cash		170
Total		1268411
Total		7260777
Leabilities		
Labor impaid	125	
avor impaid	12515	
account Payable	3000	320015
Marigage due april 1, 1910	2000	010013
Met Worth		948396

OPENING ENTRY AND INVENTORY

Day Book, april, 1908.		
	Received	Paid
Mond I Cash on hand	170	
1 1/2 1		
1 Hegy rain storm Shot Cap and Mand 2 tous Coal		3
2 tous Coal		8
Tues 2. attended Dreeders Convention		
Tues 2 attended Druders Convention at fariland. Program and repor		
tiles 16. Espences		840
Wed 3 Pais growing bill at Murdocks		1140
Vill on file, p. 16		
Thurs 4 Jought mulch cow of & C. Smith		40
I altended concert of the Souton		2
Fris 5 Sols call to P. a. anderson		150
Sat. 6 Dought for cach 1941= Hanner 45d, Marls sod		195
Went to Partland to select		2.
Sens 7 Dr. E. Hamelton preaches on Cive Honor Collection		26
		25
Tues 9 Shoes for Tedde		2
Forwarded	177	8750

DAY BOOK

tinancial Statement No. 2, april	11,	1909	
Resources.			
Farm, 160 A (market value)			8620
Produje.	- 1		
Gram. 150 bu, Com	ى تى .	8250	
175 bu. Oata	,43	7525	11 3 1 1 1
1/3 Du. Galg		22011	
253 bu, wheat	.87	220//	
Hay 20 tong Clover	6,50		130
Patatoes y Vegetables			40
Stock.			
6 Horses average	100,00	600	
1 3- year ald Horse Jun.		150	
22 Cows average	42.	924	
14 Steers	13.	182	
11 Herfers "	11.	44	
11 Hlogs	6.	66	1966
Poultry:			17711
165 Chickens	0.10	74/25	
	,45	18 73	
25 Tyrkeys	.75	18 73	
10 Geeck	.70	117	100
	- (
Cash & Bank Resources omitte	2		260240
			12604
Liabilities			1396230
Liabilities			
Labor (unkaid)		85	
accounts Payable		14232	
Martines due abril 1 1910		3000	
Martgage, due april 1, 1910		200	
Sul on Piano		200	362732
Met Worth		700	1033498
worm			700770
Statement of Profit & Lass			
Met Worth last year Met Profet		103349	
Met Worth last year		9483 90	- Carlo
Met Profit			85/02

SECOND FINANCIAL STATEMENT

Personal Accounts

A farmer frequently retails his products to his neighbors or to townspeople, if he lives near town. In such cases it often happens that he can sell to better advantage by running an account with steady customers, collecting by the week or month. If this phase of the business is extensive, as is the case in truck farming, dairy, poultry, and the like, it would pay the farmer to provide tickets or coupons and sell five or ten dollars' worth in advance even at a small discount. But generally an account with each customer, kept either in a separate book of in part of the Day Book, will be found satisfactory. However, most farmers sell their products for cash, or exchange for merchandise, which is equivalent to cash sales. It is, therefore, unnecessary to enter into an elaborate discussion of keeping such accounts.

Some farmers, very unwisely, attend to the personal business of their hired help, even to the extent of buying their smoking tobacco. There is absolutely no excuse for such a practice. Rather pay your help in installments and let them settle their own bills.

Accounts with persons we owe are generally unnecessary. Most merchants furnish either a pass book in which the account is shown in detail, or an itemized bill is furnished with each purchase. These bills should be pasted or filed in the Bill File and checked off when paid. In the great majority of cases this will prove more satisfactory than ledger accounts.

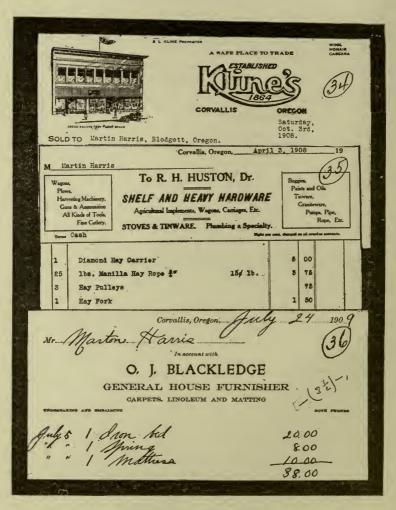
A special ledger can be provided, or separate pages of the Day Book devoted to special accounts. This classification is made either daily, weekly, or monthly, as time and circumstances allow.

Others Owe Us		
Others Owe Us Mrs. Richard King	Debit	Credit
May 1 Dalance	380	TITLE
1 1 lb. Dutter	20	
3 2 dog Eggs	30	
5 / Chesten	30	
12 2 lb. Dutter	40	
182 gt. Strawberries	30	
25 10 gt. Gream	20	
31 1 lb Sytter	20	
31 Cash		5-
	570	115
June 1 Dalance due	70	THE
1		1111
June 4 5 by Potatoes Merchantile Co.		
June 4 5 by Potatoes	375	
8 60 bunches Ornous	2	
10 dg Sweet Corp	2	
15 8 Crates Strawbernes		650
15 8 Crates Strawbernes	14	
20 dg. Eggs 1 S.D. Jbr William	3	
1 Sell Ihr William		13
	2475	1950
July 1 Dalence due	525	
	1 11:1 11	111

PERSONAL ACCOUNTS

1908	Owe Others Frank Johnson	Dekit	Cudit
1908 abril	20 Wages for aboil		130
DV.	CIII		1
may	5 Order Javor C.W. Goddans		
	3 Order Javor C. W. Goddans	720	
	10 Cashy	115	
	20 Caph	3	+++-
	31 Wages for May		30
		2520	60
June	1 Dalance.		348
	1.65		
1908) glaves variety "" "		++++
July	1 Sought 3-year ols house Jun"		
	on partial payments of 123		
-	pel youth		150
aug.	1 Cach	25	++++
Sep.	/ "	25	
det.		25	
nor	/ 3 "	25	
		100	150
Sec	1 · Dalance		
·	Jacoure		-199
			+
	The state of the s		
			-+++

PERSONAL ACCOUNTS '



BILL AND RECEIPT FILE

See also p. 16

Continued Inventory

The illustration on page 17 shows a very convenient form of a continued inventory. The items are written only once in as many years as there are money columns. Besides saving space and labor, it avoids the possibility of omitting important items, if the first list of items is correct. The prices will also be more accurate, since they may be easily compared from year to year. Two or three blank lines should be left under each heading for new items which may appear in the next inventory. The ordinary trial balance book, for sale at any stationery store, is a good form, or additional columns may be ruled in the Day Book or Journal.

Banking

The enormous increase in bank deposits in rural communities is the best evidence that the farmer is beginning to appreciate the value of better system in his finances. It is claimed that fully ninety-five per cent. of the country's business is done by credit currency, such as checks, drafts, money orders, notes, and the like. Many good business men keep only their bank book, and this is far more satisfactory than no bookkeeping at all, especially if bills and receipts are filed for reference. The bank account may be carried entirely independent of all other records.

Banking carries with it many advantages. Important among them are:—

- 1. The depositor's credit and influence are measured largely by the size and regularity of his bank account.
- 2. A tendency to economize by a desire to increase the bank balance.
- 3. The banker becomes your bookkeeper and business counselor.
 - 4. Security against fire and robbers.
- 5. Indorsed checks are both records and receipts of payments.
- 6. A benefit to the community by keeping the money in circulation.
 - 7. Convenience in making change.

Martin H	farris in account	with	Gitize	ns'Nat.	Bank
Date 1908 No	Payee			Checks	Dal.
april Depos	ct-		9835		
1 350 Mrs A	arris			30	
1 Odell	Seed fo.			10	5835
				150	0000
2 2 Cum	a Johnson	-1		150	
	of Pickett	-4		13	+++-
	ick		70		
5 4 Salem	Implement 6			20	10385
1 1 1 1 16	Lucase			65	
A & bis	E Lumber G			375	
6 7 Count	P			11/	1111
6 Count	Recorder	7		13	++++-
Depos	it of		90		
8 8 Carle	4 Cockett	-		80	4210
9 Farms	ye' Supply Co.	-1		1540	
9 360 Frank	Johnson	_		10	
1 Gold	in Hardware 6			350	
2 Mis J				30	
Dipos				130	
			4050		
3 Crown	Fertilizer C.	-1		640	
40. N. S.	with I			1580	
13 Depos	L		125		
of County	Treasurer			3040	
IN.	el Livery 6			1	
· · · · · ·	Swell				++++-
7 Drown	4 Picket			250	111
	leon & Son			15	6360
9 Harn	ing & Boxon			10	
23 370 - Crawle	Flaglivace Co.			1050	
Brown	& Pickett			1330	2980
	Troot:				
Dalan	/ -		2980		
1 + 2	tinding:		7700		
valse	Jn 11.				
	14.361		350		
	366		15		
	369		10		
Bolas	ne as per Pas Sook		5830		
	732 = -100				

BANK ACCOUNT

8. The bank will always loan to a good depositor in preference to one who is not a depositor.

There are only two operations in banking which need discussion here—depositing and checking. The banker will give all necessary directions regarding both, except as to keeping the individual account. This is illustrated on page 26, and will be thoroughly understood after Lesson 5 has been worked out. The special column Cash Book, pages 44 and 45, is an excellent form for keeping the bank account. If all cash is deposited and all payments made by check, the difference between the total columns represents the bank balance. As to deposits, it is preferable to deposit all cash, and then draw out for personal use as needed.

The method of handling checks is as follows: Record the payee, number, and amount, as illustrated under Cash Receipts, page 44. The checks are satisfactory receipts, but the itemized bills should be pasted in the Bill File and bear the same number as the checks. The bank will usually furnish all necessary stationery free of charge. The bank balance is considered a part of the cash on hand, so that no special account except the check stubs and pass book need be kept with the bank. The bank balance is proved each month as follows: Arrange the checks returned numerically. List the checks not returned; add the outstanding checks to the balance shown in the check register; the sum should agree with the balance in the pass book. It is often convenient to keep a special check register. Following is a convenient form, showing the method of proving the balance at the bottom of the page.

A WORD TO THE READER

The real aim of this book is to improve the business methods on the farm which the reader owns now or expects to own in the future. Merely reading the book will, doubtless, create a vague conviction that the subject is important, but it adds but little to the reader's knowledge of accounting and correct busi-This is accomplished only by working out ness method. problems typical of the actual experience of the average farmer. In the process of such exercises the conviction will become strong that the business phase is of such importance that no farmer who aspires to success can afford to neglect it. It is suggested that a systematic study of the Illustrative Lessons be taken up in each family, especially where there are boys and girls advanced far enough to profit by the study, and that actual accounts of the home be started wherever it is practicable. For instance, it will be found exceedingly interesting for the boys to take an actual inventory of the homestead after having worked out Lesson 1, and the girls will find Lessons 12 and 13 especially helpful and interesting. It will be found that each lesson will contain suggestions which will prove valuable to every reader, whether he is engaged in farming or in any other occupation.

It is an excellent practice for farmers to come together occasionally to exchange views on any subject pertaining to their common interests. Why not organize a Farmers' Commercial Club and enjoy good fellowship as well as the benefit of each other's experience? One important number of the permanent program could be a discussion of business methods. A leader should be appointed to conduct a regular class for several weeks. An outline for such a course is found on page 161. The publishers will be glad to furnish the necessary material for working out the exercises or for practical use on the farm.

Illustrative Lessons

LESSON 1

THE INVENTORY

I. General Instructions.

In preparing these lessons, the student should use great care as to neatness and form. It is not necessary to use the printed forms provided for the purpose, but better work will be done with good stationery. All the work should be done with ink, if practicable. Do not pass by anything that is not clearly understood. Ask questions. The amounts given are totals in all the lessons, unless the word "at" precedes the price. Hand in each lesson when completed for approval.

II. Written Work.

- 1. Use three-column Journal paper found in your account book. This lesson is illustrated on page 18.
- 2. Write at the top of page 1 of your Day Book: Monday, April 1, 1908. Then copy the following opening statement. All work must be done neatly in ink.

Opening Statement

Six years ago to-day I purchased my present farm, investing cash, \$6,000. Below is an accurate inventory of all my property, and a statement of my affairs as they stand to-day.

3. Skip one line, then arrange the following statement of Resources and Liabilities exactly as illustrated on page 18.

Inventory, April 1, 1908

Resources: Farm, 160 A., market value, \$8,000. Produce: 200 bu. Corn @ 50c.; 150 bu. Oats @ 45c.; 200 bu. Wheat @ 85c.; 20 tons Hay @ \$6.00; Potatoes and Vegetables, \$50.00. Stock: 6 Horses, average \$100.00; 20 Cows, average \$40.00; 11 Steers, average \$12.00; 5 Heifers, average \$11.00; 12 Hogs, average \$6.00; 100 Sheep, average \$3.00. Poultry: 150 Chickens @ 45c.; 21 Turkeys @ 75c. Implements: 1 Binder, \$125.00; 2 Plows @ \$10.00; 2 Harrows @ \$12.50; 1 Mower, \$40.00; 1 Hay Rake, \$15.00; 1 Grain Drill, \$50.00; 2 Wagons, together, \$110.00; 2 Sets Harness, together, \$90.00; 1 Buggy, \$100.00; Tools, \$50.00. Supplies, \$25.00. Household Goods,

\$350.00. Life Insurance (paid-up value), \$964.36. Cash, \$170.00.

Liabilities: Labor (unpaid), \$75.00. Accounts Payable, \$125.15. Mortgage, favor Iowa Trust Co., \$3,000.00.

Your work, if correct, will be exactly as shown on page 18, except that you will fill in the omitted part of the illustration.

LESSON 2

DAY BOOK AND CASH BOOK

I. General Instructions.

Use three-column Journal paper. This lesson is illustrated on page 19. The Day Book should contain a complete history of the business. Here the cash account is carried in the two money columns. It is often convenient to carry this account on special pages.

II. Written Work.

Copy the following entries in the Day Book on the next page after the last statement. Head the pages and columns the same as in the illustration. Apr. 1, (ash on head, \$170.60.

- (1) Heavy rain storm. Shod "Cap" and "Maud" at Scowscroft's; paid \$3.00. Bought 2 tons of Coal @ \$4.00 per ton.
- (2) [Skip a line between each date.] Attended Breeders' Convention at Portland. Program and report on file. Paid expenses, \$8.40.
- (3) Paid Grocery bill at Murdock's, \$11.40.
- (4) Bought Milch Cow of J. C. Smith; paid cash, \$40.00. Attended concert of the Boston Jubilee Singers, with family; paid expenses, \$2.00.
- (5) Sold one Calf to P. A. Anderson for cash, \$7.00. Bought 1 pr. Gloves, \$1.50.
- (6) Bought at La Fount's for cash: 1 Ax, \$1.00; 1 Hammer, 45c.; Nails, 50c. Went to Portland to select farm implements; expense, \$3.00.
- (7) Attended church with family. Dr. E. Hamilton preached on "Civic Honor." Collection, 25c.

- (9) Bought Shoes for Teddie, \$2.00.
- (10) Bought 5 bu. Tested Seed Corn @ \$2.00 per bu.
- (11) Rain all day. Fannie dropped calf.
- (12) Sold 3-year-old Horse, "Cap," for \$125.00.
- (13) Bought one Studebaker Top Buggy; price, \$135.00; discount, \$15.00; net amount paid, \$120.00.
- (14) Attended church with family. Our pastor preached on the "Prodigal Son." Collection, 25c. Paid quarterly dues, \$10.00.
- (15) Mother took sick suddenly. Dr. Brown considers her case very serious.
- (16) Hired Frank Johnson for six months @ \$30.00 per month and board. Mother is better.
- (17 to 28) [Student will insert at least one imaginary entry for each date. Try to use good judgment as to what might happen and what might be purchased and sold during the remainder of the month. Be careful not to pay more money than you have received.]
- (29) Paid the following bills: Skinner Bros., Dry Goods, \$14.50; Murdock's, Groceries, as per bill on file, \$15.60. Sold Murdock's 20 doz. Eggs @ 20c.; 12 Dressed Spring Chickens @ 30c.
- (30) Received Cream check. See Statement on file, \$45.30. You will now balance the cash. Add the two columns; find the difference and enter it on a new page, as shown on page 19.

LESSON 3

PERSONAL ACCOUNTS

I. General Instructions.

Use three-column Journal paper. This lesson is illustrated on pages 22 and 23. Read carefully page 21.

II. Written Work.

Prepare two sets of accounts, one entitled "Others Owe Us" and the other "We Owe Others."

(a) "Others Owe Us."

1. Mrs. Richard King, a neighbor, has been buying dairy and poultry products on account. Her ac-

count is illustrated on page 22. Prepare her account with the following entries:—

May 1. There was a balance due from April, \$3.80; 1 lb. Butter, 20c.

May 3. 2 doz. Eggs @ 15c.

May 5. 1 Chicken, 30c.

May 12. 2 lbs. Butter @ 20c.

May 18. 2 qts. Strawberries @ 15c.

May 25. 1 qt. Cream, 20c.

May 31. 1 lb. Butter, 20c.; paid cash, \$5.00. [Balance the account as illustrated.]

2. In a similar manner prepare an account with the Adams Mercantile Co., with whom we are trading and who are buying produce from us. The entries are as follows:—

June 4. 5 bu. Potatoes @ 75c.

June 8. 60 bunches Onions @ 40c. per doz.; 10 doz. Sweet Corn @ 20c. On the same date we bought goods as per their bill on file, \$6.50.

June 15. 8 crates of Strawberries @ \$1.75; 20 doz. Eggs @ 15c. On the same date we bought a Suit for William for \$13.00. [Prepare this account; rule and balance the same as Mrs. King's account. The balance due is \$5.25.]

- 3. In a similar manner prepare three additional original accounts of not less than ten entries to each.
- (b) "We Owe Others."
 - 1. Frank Johnson, one of the farm hands, has requested that his wages be left on account, and that he be allowed to draw as he needs from time to time. The following items enter into his account. [Prepare it exactly the same as the five preceding accounts.]

April 30. Wages for April, \$30.00.

May 1. Cash, \$10.00.

May 5. Bought Clothing for him at Goddard's, \$7.20.

May 10. Cash, \$5.00.

May 20. Cash, \$3.00.

May 31. Credit Wages for May, \$30.00. [Rule and balance as heretofore.]

2. July 1. Bought a 3-year-old Horse, "Jim," for \$150.00, on condition that it was to be paid for at the rate of \$25.00 per month. Four payments have been made on the first of each month, beginning August 1st. [Write up the account. Rule and balance as heretofore.]

LESSON 4

STATEMENT No. 2

I. General Instructions.

We have now arrived at the end of the year and we are ready to prepare the second financial statement. Use three-column Journal paper. This lesson is illustrated on page 20. Read carefully pages 15 and 16.

II. Written Work.

Step 1. Take inventories of all your property, listing and placing a fair valuation on it, same as in Lesson 1.

Step 2. Go through your personal accounts, balance them as illustrated in Lesson 3, and extend the amounts under the various headings in the inventory—Grain, Stock, etc.

Step 3. If you own any notes, stock, or other valuables, list them under Bills Receivable. Be sure not to omit anything you own or owe.

The above directions merely indicate how an inventory is taken. The following inventories are assumed and you will prepare a statement exactly as heretofore. Compare the values and find totals. See page 20.

Inventory, April 1, 1909

Resources: Farm, \$8,620.00. Produce: 150 bu. Corn @ 55c.; 175 bu. Oats @ 43c.; 253 bu. Wheat @ 87c.; 20 tons Hay @ \$6.50; Potatoes and Vegetables, \$40.00. Stock: 6 Horses @ \$100.00; 1 3-year-old Horse, "Jim," \$150.00; 22 Cows @ \$42.00; 14 Steers @ \$13.00; 4 Heifers @ \$11.00; 11 Hogs @ \$6.00. Poultry: 165 Chickens @ 45c.; 25 Turkeys @ 75c.; 10 Geese @ 70c. Implements: 1 Binder,

\$120.00; 2 Plows @ \$9.00; 2 Harrows @ \$11.50; 1 Mower, \$40.00; 1 Hay Rake, \$13.00; 1 Grain Drill, \$45.00; 2 Wagons, \$40.00 and \$60.00; 1 new Wagon, \$100.00; 2 Sets Harness, \$25.00 and \$65.00; 1 Surrey, \$130.00; 1 Light Buggy, \$50.00; Tools, \$50.00. Supplies, \$30.00. Household Goods, \$350.00; Piano, \$300.00. Life Insurance, \$1,073.40. Cash and Bank, \$126.04.

Liabilities: Labor (unpaid), \$85.00. Accounts Payable, \$142.32. Mortgage, favor Iowa Trust Co., \$3,000.00. Note, favor Western Lumber Co., \$200.00. Due on Piano to Smith Bros., \$200.00.

Having completed the statement of Resources and Liabilities, you will now determine the profit for the year. Skip one line and write the following statement, inserting the net worth in Statement No. 1 and what you find above.

'	Statement of Profits and Losses
Net worth	now\$
Net worth	last year (Statement No. 1)
Net	profit (or loss)\$

Your result will agree with the illustration on page 20, if correct. Dividing the gain with last year's net worth, we find that you have made a gain of about nine per cent. on your investment and labor.

LESSON 5

THE BANK ACCOUNT

I. General Instructions.

Study the remarks on banking on page 25. You are supposed to have opened an account with the Citizens' National Bank and to have performed the transactions given below. The bank has given you a pass book in which the teller will enter the deposits as they are made, and the checks, when they are returned once a month. You have kept a private account with which you check monthly.

II. Written Work.

1. Enter the following on a sheet of Journal paper, as

illustrated on page 26. Extend the balance after Nos. 351, 354, 358, 368, and 371.

Deposits: April 1, \$98.35; (3), \$70.00; (6), \$90.00; (9), \$40.50; (13), \$125.00. The checks drawn, beginning with No. 350, are as follows: April 1, Mrs. Martin Harris, \$30.00; Odell Seed Co., \$10.00. (3), Emma Johnson, \$1.50; Brown & Pickett, \$3.00. (5), Salem Implement Co., \$20.00; E. Skidmore, \$65.00; Empire Lumber Co., \$3.75. (6), County Recorder, \$3.00. (8), Earle & Crockett, \$80.00; Farmers' Supply Co., \$15.40. (9), Frank Johnson, \$10.00; Goddard Hardware Co., \$3.50; Mrs. Martin Harris, \$30.00; Crown Fertilizer Co., \$6.40; O. N. Smith, \$15.80. (13), County Treasurer, \$30.40; Kimball Livery Co., \$15.00; Brown & Pickett, \$2.50. (20), C. J. Olson & Son, \$15.00; Horning & Bacon, \$10.00; Crawford Hardware Co., \$10.50. (23), Brown & Pickett, \$13.30.

- 2. At the end of the month add the checks and deposits and find the difference. The resulting balance should be \$29.80.
- 3. The bank has returned your pass book with the canceled checks. You have arranged them numerically and find that all are returned except Nos. 361, 366, and 369. In other words, the bank has paid all except these checks. By adding the outstanding checks to your balance you find that the bank balance ought to be \$58.30, which you find agrees with the pass book. The canceled checks should be filed numerically and kept for future reference.

SECOND METHOD

A system of modified double entry in which the special column Journal, or Cash Book, is the basis. It is the most satisfactory and labor-saving system in a cash business, where personal accounts are few and where accurate results are desired. The personal accounts are to be carried exactly as in the first method, if such accounts are kept at all.

CHAPTER III

MODIFIED DOUBLE ENTRY, THE SPECIAL COLUMN CASH BOOK

Not many generations ago it was considered sufficient for the average manufacturer merely to record his cash receipts and expenditures and to keep a tolerably accurate check on the cash balance. In many instances the left trousers pocket served as the debit side and the right as the credit side of the "Ledger." Modern business methods and sharp competition have changed these notions until to-day it is necessary to know the cost of production in advance to the smallest detail. Ancient business methods prevail yet, very generally, on the farm. The wonderful progress of the American farmer is due to marvelous natural resources, labor-saving inventions, and natural ingenuity, rather than to wise and prudent management.

Necessity of Careful Accounting

In certain respects, a farmer must combine the methods of the manufacturer and the merchant. He must learn, not only how to increase production, but also how to facilitate the profitable exchange of his products. He must reduce the cost of production to the minimum by increasing the quality and the quantity of his products, and by getting full value out of labor. He must manage so that his working force, farm hands, children, horses, all, are constantly employed. This requires most skillful management in the rotation of crops, in the division of labor, in selecting seeds, fertilizers, and stock; and, above all, it requires general prudence in purchasing equipment and supplies, and in marketing products. Progressive farmers require a variety of records to assist in the proper management of their business. A first-class set of books is just as indispensable to them as to the banker or to the manufacturer.

Superiority of Double Entry

A careful comparison of the results obtained in the last chapter with the balance sheet given on page 47 will convince the reader of the superiority of double entry. It will be observed that the only result obtained by a comparison of inventories was the net profit or loss. The source or causes of these results cannot be obtained by this method. The method suggested in Chapter II has this advantage: There is not a farmer so busy or so ignorant that he cannot adopt it and derive great benefit from its use. But the ambitious, progressive farmer will not be satisfied with this primitive method any more than a wide-awake merchant will be satisfied with single entry bookkeeping. He will adopt a system which will give him at any time reliable information as to his financial standing, cost of production of crops, live stock and poultry, household expenses, etc., and by which he can prove that his work is correct.

Single and Double Entry Compared

The distinction between single and double entry is unimportant for our present purpose, but it may be a satisfaction to the student to know that the method we are now to consider is double entry. The important distinction between the two methods is that in double entry accounts are kept with persons, property, and allowances, while in single entry accounts are kept with persons only. In double entry there is a corresponding debit for every credit; the total debits and credits must therefore be equal, and must balance at any time. This becomes clear by referring to the Cash Book, page 44. In the first entry, the amount is entered in both the Total and in the Sundries column; and the same is true of all the succeeding entries. Hence the sum of columns four to ten inclusive must equal the total in column three. You will find the same to be true of the Payments, and of the Household Accounts.

Additional Books Needed

Very important books in double as well as in single entry are the Day Book and the Bill File. They are to be kept in exactly the same way as suggested under single entry, except that no cash entries are recorded in the Day Book. It is used only as a diary. The important consideration now is to adopt additional records that will furnish the necessary informa-

tion in systematic and tabular form requiring the minimum amount of labor.

The Cash Book

The Cash Book is the basis of classification. A very convenient form is given on pages 44 and 45. The special columns take the place of a Ledger. All money columns except the total column will be referred to as distribution columns. They are in reality separate accounts, and this form might, therefore, properly be called a combined Ledger and Cash Book. The form suggested has the important advantage of being self-balancing. A trial balance can be taken at the end of each page, month, or year, as illustrated on page 57. The process of preparing a financial statement becomes extremely simple by this method. A few observations regarding equipment and supplies, improvement and repairs, will be of assistance in using the distribution columns.

Equipment and Supplies

In accurate accounting, the question often arises: What shall be considered equipment, and what supplies? Supplies are defined as expendable or consumable materials, which are incapable of being used more than once; while equipment is of more permanent character, articles which can be used repeatedly. Fuel, lubricating oil, cotton waste, feed, etc., are supplies; while machinery, furniture, and apparatus of all kinds are equipment.

Improvements and Repairs

The distinction between improvements and repairs is not always clearly understood. An improvement adds value to the property, in the shape of equipment, buildings, drains, fences, and the like, while repairs merely keep up the property. A coat of paint on an unpainted building is an improvement; repainting is classed under repairs. This distinction is very important in making an inventory. Improvements are added to the inventory, repairs are not.

T

Cash Balance and Sundry Columns

The	e cash balance is found as follows:—
Cotal	receipts
Cotal	payments 578.80

\$74.34

Balance.....

Note that the totals of the distribution columns equal the total of column on both sides of the Cash Book. The Sundries column contains all entries which do not fall under the special columns. At the end of the year the items are segregated under various titles. The segregation for the month of April is as follows:—

Sundry Receipts Column

Balance	126.04
Labor	10.00
Wood	22.40
Total	3158 44

Sundry Payments Column

Interest	. \$22.00
Taxes	. 33.40
Accounts Payable	. 15.80
Insurance	. 35.10
Total	£100 20

Improvements and Repairs Column

	1 mprocomores	area recp	racio	Countri	
Improvemen	its		• • • • •		. \$80.00
Repairs					34.60
Total					\$114.60

Trial Balance

In the language of the accountant, a trial balance is a test of the equality of the debits and credits in a set of double entry books. Our trial balance is much simpler; it is simply a test of equality of the total columns and the distribution columns. In the Cash Book, merely add the distribution columns on each side and note that their sum equals the respective total columns. The Household accounts are balanced in the same manner.

The Ledger

With a special column Cash Book, the Ledger can be dispensed with in most cases. The further classification of the Sundry columns can be done at the end of the year, as illustrated on page 46, and a few pages of the Day Book can be devoted to "What We Owe Others" and "What Others Owe Us." Where a special Ledger is found necessary, the form shown on pages 77 or 82 can be used.

The old-style Ledger possesses some advantages over any other form. The debit appears on the left and the credit on the right side on the same page. It is used either in double or single entry. The difficulty of keeping the Ledger in balance prevents the use of the double entry Ledger to a very large extent. This is especially true if an attempt is made to use the ordinary Journal.

Direct entries into either the double or single entry Ledger present less difficulties, and the method is recommended where the classification of accounts is such as to make the combined Cash Book and Ledger unpractical. This need scarcely ever be the case, however, because if ruled sheets cannot be obtained without headings, a blank sheet may be ruled with any number of columns and headed with titles to suit. For example, an orchardist would head his Receipt columns Apples, Prunes, Peaches, Small Fruits, etc.; while an exclusive stock farmer would devote special columns to the different kinds of stock.

The advantage of the Ledger method is that each account is more condensed, while the self-proving and labor-saving features are important in the special column Cash Book. Preparing a trial balance and balance sheet, and closing the Ledger properly, though very simple for the experienced accountant, requires a proficiency in bookkeeping that few farmers possess.

On page 77 is an illustration of the ordinary form of direct entry Ledger, showing the entries for April 1st. Compare these with the first entries on pages 44 and 45, and note the similarity of results. In the form follow the arrows and note that there is a debit for every credit, and vice versa. In the column marked (a) is entered the Day Book page, if the entries have been previously made in that book.

The Annual Statement

The annual statement exhibits in a condensed form the financial operations for a given period. It shows the resources and liabilities, the cash receipts and expenditures, the profits and losses, the net profit or loss, and the net worth. It enables the proprietor to analyze his business with considerable accuracy and to trace the sources of profits and losses. There are various forms of statements, but the illustration on page 47 seems best suited to the farming business. Statement No. 3 shows the results of a month's business only. The inventories are obtained from separate schedules and the cash receipts and expenditures are the totals found in the Cash Book. The profit and loss accounts are fully analyzed after Statement No. 4.

Illustrative Lessons

LESSON 6

CASH RECEIPTS, SET 1

I. General Instructions.

Use Forms 2 and 3. This exercise is illustrated on page 44. The result of your work will be exactly as illustrated on that page, if correct. Do not merely copy page 44, but compare your work with the illustration after you have done your best. Before beginning your written work read very carefully pages 37 to 42. This should convince you that double entry is far superior to single entry.

II. Written Work.

- 1. Turn to Form 2 in your Cash Book and enter the following items in the proper columns:—
 - April 1, Balance forwarded, \$126.04 (Total and Sundry columns); 2 tons Clover @ \$6.00; 80 bu. Corn @ 65c.
 - (3) 12 Cabbages @ 10c.; 25 lbs. Butter @ 25c.
 - (6) 2 Steers @ \$40.00; 20 Spring Chickens @ 45c.; Hauling Coal, 1 day, \$5.00.
 - (9) Jersey Calf, \$10.00; 2 cords Wood @ \$4.00; 5 bu. Potatoes @ \$1.00.
 - (12) Heifer, \$25.00; 10 lbs. Butter @ $28\frac{1}{2}$ c.
 - (13) 75 bu. Corn @ 65c.; Work on County Road, \$5.00; 4 bu. Apples @ \$1.50.
 - (15) $20\frac{1}{2}$ doz. Eggs @ 20c.; 36 lbs. Butter @ 25c.; 2 tons Clover @ \$6.00.
 - (17) 100 Apple Trees @ 20c.; 1 Steer, \$37.00; 12 Cedar Posts @ 20c.
 - (19) 6 Spring Chickens @ 40c.; 95 bu. Corn @ 60c.; 3 tons Hay @ \$6.00.
 - (20) Jersey Calf, \$10.00; 50 bu. Oats @ 35c.
 - (23) 1 Turkey, \$1.40; 1 bu. Clover Seed, \$1.50.
 - (26) 18 lbs. Cheese @ 15c.
 - (29) 3 cords Wood @ \$4.00; 10 bu. Barley @ 40c.; 4 tons Timothy @ \$5.50.

			F	RΕ	CEI	P-	rs	_	Ab	ri	/		19	08				
DATE	ITEMS		101	4	GRAI	4	MAY		GAR	APD,	\$100	*	DAH	17	POUL	24	SUNOR	nts
1	Balance FORWAR	RDED	126	04								П					126	04
	2 tons Gloder		/2				12										120	
	80 bu. Gorn	,65	50		52													
3	1 doz. Gabbage		/	20	1				/	2.0								
	25 Pb. Butter	.25	6	25									6	25	-			
6	2 Steers		80								80							
	205bring Chickens	.45	9												9			
	Hawling Goal Iday		3														3	
9	Jersey Galt		10								10							
	2 Gords Wood		8														8	
	5 bu Potatoes		5						5									
12	1 Heifer		25								25							
		.28/2		85									_2	85				
18	75 by. Gorn	.65	48	75	48	75												
_	Work on Gounty Road		_5							_							5	
_	4 bu. Apples		6						6									
15	201/2 doz. Eggs	.20	4	10											4	10		_
	3616. Butter	.25	9							_			. 9				-	_
	2 tons Gloder		12				12											_
17	100 Apple Trees 1 Steer		20		_				20	-							-	_
_	1 Steer		37							_	37							_
	12 bedar Posts			40								1	_	-				40
19	6 Spring Chickens		معص	40								H			_2	40	-	<u>_</u>
	95 bulGorn	.60	57		57				_			H					-	-
	3 tons Hay		18				18			_				\square				-
20	gersey Galf		10							_	10							_
	50 bu. Qats	.35	17	50	17	50										_	-	-
23	Turkey			40	-									-		40		-
	1bu, Glover Seed		_/	50				50					_	-				-
26	18 tb. Cheese 3 Gords Wood	.15	أنصصب	70				=					_2	70		-		-
			/2					=									12	-
	10 bu. Barley	C -	4		4		-			-								-
_	4 tons Timothy	5.50					22											
30	Produce for Household		18	05	-				3	25				50	_6	30		-
										-								-
									-									
																		_
-																		-
-					-								-					-
-																		
_	in FORM	WARDED	653	14	170	25	65	50	37	45	162		27	30	23	20	158	44

GENERAL FARM

PAYMENTS

TE.	ITEMS	C#	10	TAL	HOUSE PERSO	HOLD	988 #E#71%	DS, ZEPS	HIRE LABO	0	GEN'L MARKE	EXP.	310 FEI	oK,	IMPLES	etuts	MP'P REPA	PTS,	SUND	#1E
	FORWARDED																			I
/	Household Expenses	42	30	2	30															I
	12 Du. Seed Wheat 83/3	43	10	2			10													1
3	12 Du. Seed Wheat 83/3 Labor 150, Shoeing 300		4	150					/	50	3									1
5	Interest, M. P. Go	44	20	0															20	0
	Gersey Gow.	45	6	+									65	+						1
	Latts & Shingles	46		75													3	75		Ι
6	Garden Seeds			60			/	60						L						1
	Road Tax	47		2																3
8	Addition to Darn	48	80	,													80			1
	Grates + Dags	49	13	140							1.5	40		Γ.						T
9	Wages to Johnson .	50	10						10											İ
	Steel Frame Grend Stone	51	ن	50											3	50				T
12	200 ft. Lymber, 10 per M.		2	00													2	00		T
^	1 Shove			25												25				I
/2	Household Fybouses	52	30	,	30															Ī
Ť	Household Expenses John Smith , 2 days		_	50					2	50										t
	Stables		_^	35						-								35		t
1	Takes	53	.30	40															30	t
,	· Personal Ex	73			3	50											_		-	1
Ť	1 Rep Saw			50											1	50				t
▔	ince on a			1									_							t
	1 Xo 1 Xed																			t
	16th 22md onetted										i			-	П					t
	10 21 0																			t
	•								_											t
3	Trees y Shrubs	/-	25	100			25	-0.		Н		=	-			=		\vdash		t
Ť	Alfalfa Seed	60		20				20	-								-		-	H
	2. Dos Leghorn Eggs	61		80									.5	80			_		_	ŀ
4		62	2				_					=		00					2	H
		63	10										10						_~	ŀ
	Private Incidental Ex	-	5		5		_		_				70	=	=	Н	=			H
-	6. Gobber Trabs	۲			0	\dashv			-				-	-			_			H
1		64	13	30	-			-	-		_		-		/	50	73		100.000	H
.6			10			-	-				_				10	-	13	30		H
	2 Geese	63	3					-					.3		10	00		-	-	-
/	Wages to Johnson	66		=					10				-			-		1		-
	Apple DoLes	06		75			-		10		2	75				- +				-
	Butter Wrappers		_3	13		-		-	-					-		-		-	-	-
0	Julier Hrappers	1	_/	75			-			-	_/	75		-	-			-		
	Produce for Household	67	35		10	-		-				-	-	-		-	-	-	35	1
	FORWARDED FORWARDED	_			18,			-				_		-		-	-	60		

CASH BOOK

- (30) Produce for Household Use, Orchard, and Garden, \$5.25; Dairy, \$6.50; Poultry, \$6.30.
- 2. Add the columns. The correct results are as follows: Total, \$653.14; Grain, \$179.25; Hay, \$65.50; Orchard and Garden, \$37.45; Stock, \$162.00; Dairy, \$27.30; Poultry, \$23.20; Sundries, \$158.44.

Note that the total of the distribution columns equals the total column.

3. The Sundry column contains the following items:-

Balance, April 1st\$126.0)4
abor 10.0	00
Vood 22.4	10
	_

Total\$158.44

Verify Step 3 by setting down each item under its appropriate head and adding. Arrange your work as shown above.

LESSON 7

CASH PAYMENTS, SET 1

I. General Instructions.

See Lesson 6. You will fill in the items between the 15th and 23d, omitted in the illustration. If payments are made by check and the bills filed for reference, the items need not be entered in the Cash Book. The payee, the amount of the check, and the distribution are sufficient entries.

II. Written Work.

- 1. Enter the following expenditures for April on Form 3. (See page 45.)
 - April 1, on Household Expenses, \$30.00 (Total and Household columns); 12 bu. Seed Wheat @ 83\frac{1}{3}c.
 - (3) Labor in Garden, \$1.50; shod "Cap" and "Maud," \$3.00.
 - (5) Interest M. P. Co., \$20.00; Jersey Cow, \$65.00; Laths and Shingles, \$3.75.

Financial Statement, Year Ending May. 31, 1908 Cash Receipts and Payments RECEIPTS. PAYMENTS. 12604 Household & Personal Grain Hay... Orchard and Garden..... Orchard and Garden. Stock... Dairy Products... Poultry... Sundries... Machine and Implements... Hired Labor... Stock Machines and Implements... Farm (improvements) Repairs SUNDRIES:-Life Insurance ... Personal Expense Accounts Payable . Interest..... 60. Balance on hand Total.... Total.... Resources and Liabilities. LIABILITIES. RESOURCES. \$9070 00 27.1 96 1.36 80 1948 50 168 75 168 75 35,00 Farm (market value) 20000 Cash and Bank Life Insurance (Paid up value)... Hay* Orchard and Garden* Dairy Products* 10055 Poultry* Machines and Implements* Household Goods General Supplies Net Worth W/ 424 74 81479476 Total.... Total..... · As per Inventory Statement of Profit and Loss. Gain for the year Less 6% Int. on Indestment Net Earnings

ANNUAL STATEMENT

Accounts Showing Profit or Loss, Year Ending Mar. 31 1948 (Amounts are taken from Inventories, Cash Book, and Special Records.)

	GRA	AIN	
Cost.		RETURNS.	
	\$ 377 86 440 00 184 80	December Townstown	8.380,00
Inventory last year	\$ 000	Present Inventory	2/2//3
Labor	7.51100	Receipts from Sales	1.1.2.43
Inter. ton value of Land	1.07.00	Fed to Stock	712 43
Inter ton Value of Land.	1.29.1.	Fed to Poultry	
Net Profit	780 13	• • • • • • • • • • • • • • • • • • • •	
Net Pront			
Total	\$19.12 50	Total	\$19.12.50
10681	91.7.1.2.10	10681	*1.7.2×19.8
	oro	OV	
_	STO		
Cost		RETURNS.	1-
Inventory last year	8.1966 00	Present Inventory	\$ 1948 50
Labor	38500	Receipts from Sales	130000
Grain	77007	Receipts from Dairy	1.0.18 1.2
Hay	77407	Labor (Cash Receipts	15513
Interest on Inventory last yes	11796		
Pasturage on Land	13500		
Gash.outlay	445 20		
	/		
Net Profit	55274		
		•	1/50/
Total	\$45.21.77	Total	8452177
	ORCHARD A	ND GARDEN	
Cost.		RETURNS.	
*		D	
Inventory last year	\$	Present Inventory	\$
Labor and Marketing		Receipts	
Interest on Land			
Net Profit			
1106 2 10116		***************************************	
Total	\$	Total	\$
	***************************************		*************
	HA	Y	
Cost.	111	RETURNS.	
C061.	120 - 0	IUDIUM.	110.0
Inventory last year	\$. 130 00	Present Inventory	8168,75
Labor	63 00	Receipts	204:20
Interest on Land	63.00	Fed to Stock	1.4.9.80
N D 04	00000		
Net Profit	299 75		
Total	8.5.22.75	Total	8.5.22 7.5
10081	0.52.20 M./.D.	10181	v. c. 22 1.0
(A	.ccount)		
Cost.		Returns.	
	\$	***************************************	\$
• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	
• • • • • • • • • • • • • • • • • • • •			

			•••••
Total	\$	Total	\$
AU604	V	200424	*************

ANNUAL STATEMENT

- (6) Garden Seed, \$1.60; Road Tax, \$3.00.
- (8) Addition to Barn (contract), \$80.00; Crates and Bags, \$15.40.
- (9) Wages to Johnson, \$10.00; Steel Frame Grindstone, \$3.50.
- (12) 200 ft. Lumber @ \$10.00 per M.; 1 Shovel, \$1.25.
- (13) On Household Expenses, \$30.00; John Smith, labor, \$2.50; Staples, 35c.
- (14) Taxes, \$30.40.
- (15) Cash for personal use, \$3.50; Rip Saw, \$2.50; paidO. N. Smith in full, \$15.80.
- (17) Pruning Orchard, \$2.50; Chicken Feed, \$5.00.
- (19) Manure from Kimball Livery, \$15.00; Horse Shoeing, \$2.50; Trip to Ames, \$4.50; Patent Fertilizer, \$6.40.
- (20) Leghorn Pullet, \$2.10; Plastering and Paper Hanging, \$15.00; 2 Halters @ 90c.; Wages to Johnson, \$10.00.
- (23) On Household Expenses, \$30.00; Trees and Shrubs, I. N. C., \$25.80; Alfalfa Seed, \$3.20; 2 doz. Leghorn Eggs, \$5.80.
- (25) Interest on Binder note, \$2.00; Angora Goat, \$10.00; Private Expenses, \$5.00; ½ doz. Gopher Traps, \$1.50.
- (26) Repairs on Horse Stalls, \$13.50; 1 Keystone Dehorner, \$10.50.
- (29) 2 Geese, \$3.00; Wages to Johnson, \$10.00; Apple Boxes, \$3.75.
- (30) Butter Wrappers, \$1.75; Life Insurance Premium, \$35.10; Produce for Household, \$18.05.
- 2. Add the columns. The correct results are as follows: Total, \$578.80; Household and Personal, \$116.55; Seeds and Fertilizers, \$62.00; Hired Labor, \$36.50; General Expenses and Marketing, \$30.90; Stock and Feed, \$90.90; Machinery, Implements, and Tools, \$21.05; Repairs, \$114.60; Sundries, \$106.30. Your distribution columns may not agree with the totals given, but note that the total of the distribution columns equals the total column.
- 3. By going through the Sundry column we find that it contains the following:—

Interest	\$22.00
Taxes	
Accounts Payable	15.80
Insurance	
Total	\$106.30
4. Classify the Improvements and Repairs column definition of improvements and repairs, page 39.) Trect result is as follows:—	
Improvements	

5. Balance the cash by taking the difference between the total receipts and the total expenditures. The correct difference is \$74.34.

LESSON 8

FINANCIAL STATEMENT No. 3

I. General Instructions.

Under ordinary circumstances a financial statement should be made out only once a year, but for additional practice you may prepare a statement covering the first month. As will be observed on page 47, this is a condensed statement of cash Receipts and Expenditures as they appear in the different columns of the Cash Book; a statement of Resources and Liabilities; and, finally, a statement of Profits and Losses. Your Balance Sheet will be exactly like the illustration except as to amounts. The new inventories are as follows: Farm, \$8,700.00; Cash and Bank, \$74.34; Stock and Feed, \$2,145.00; Grain, \$105.00; Hay, \$55.00; Orchard and Garden, \$35.20; Dairy Products, \$26.30; Poultry, \$122.80; Machinery, Implements, and Tools, \$870.05; Household Accounts, \$650.00; Life Insurance, \$1,136.80; General Supplies, \$25.00; Hired Labor, \$85.00; Bills Payable, \$3,200.00; Accounts Payable, \$326.52.

II. Written Work.

- 1. On a statement blank (Form 12) enter the cash Receipts and Payments under the respective titles. The Sundry columns were segregated in Lessons 6 and 7.
- 2. Enter the Resources and Liabilities and check with the illustration. Then find the Net Worth and Profit or Loss. In this case there is a loss of \$1.01, due to the fact that April is naturally an unproductive month for the farmer.
- 3. The detailed statement of the profits or losses on Grain, Stock, etc. (Form 13), will not be taken up until at the end of the year (Lesson 11).

LESSON 9

CASH RECEIPTS, SET 2

I. General Instructions.

The next set is similar in principle to Set 1, and is given for additional practice. The same forms are used. For the purpose of completing a year's work in the next balance sheet, we assume the amounts to be forwarded for eleven months, March being the last month of our fiscal year.

II. Written Work.

Enter as in Lesson 6.

- March 1. Forwarded: Total Receipts (to be entered horizontally under the proper headings on Form 2), \$3,644.34; Grain, \$591.93; Hay, \$134.95; Orchard and Garden, \$277.95; Stock, \$1,110.50; Dairy, \$997.07; Poultry, \$246.14; Sundries, \$285.80.
- (1) 2 Pigs @ \$6.25.
- (3) 20 bu. Apples @ 65c.; 50 bu. Potatoes @ 45.
- (7) 3 tons Clover @ \$6.50; 1 Veal Calf, \$9.00; 40 bu. Oats @ 45c.
- (9) 25 lbs. Dressed Chicken @ 20c.
- (10) 10 doz. Eggs @ 15c.; 1 Cow, \$45.00.
- (12) 1 ton Clover, \$6.50; sold old Wagon, \$10.00.
- (15) Hired out Team and Buggy, \$4.00; Labor on County Road, \$5.00.

- (16) 50 bu. Corn @ 60c.; 95 boxes Strawberries @ 15c.; 10 lbs. Butter @ 25c.
- (19) 3 tons Timothy @ \$5.75; 3 days' Labor for Johnson & Co. @ \$1.60; 14 doz. Eggs @ 15c.
- (21) 2-year-old Colt, \$75.00; Strawberry Plants, \$4.60; 18 lbs. Butter @ 25c.; 4 qts. Cream @ 15c.; 4 Calves @ \$12.00.
- (24) 50 bu. Oats @ 40c.; 10 Dressed Chickens @ 30c.
- (28) 50 bu. Corn @ 65c.; 3 tons Timothy @ \$5.00; sold 1 set Harness, \$32.40; 2 tons Clover @ \$5.50.
- (30) 50 bu. Barley @ 40c.
- (31) Produce used for Household, \$13.90 (Orchard and Garden, \$2.80; Dairy, \$6.45; Poultry, \$4.65).
- (31) From Phœnix Hotel, \$7.00 for Cream.

Add all the columns and prove. The correct total is \$4,174.24.

The Sundry column is segregated as follows:—

Cash Balance forwarded	.\$126.04
Implements, sales	. 60.81
Labor for others	. 155.15
Total	.\$342.00

LESSON 10

CASH PAYMENTS, SET 2

I. General Instructions.

In principle same as Lesson 7.

II. Written Work.

Enter as in Lesson 7.

- March 1. Forwarded: Total, \$3,513.63; Household and Personal, \$1,028.90; Trees, \$99.66; Hired Labor, \$386.00; General Expenses and Marketing, \$269.49; Feed and Stock, \$427.85; Machinery and Tools, \$172.31; Improvements and Repairs, \$513.20; Sundries, \$616.22.
- (1) On Household Expenses, \$30.00.
- (3) 200 ft. Lumber @ \$10.00 per M.; 20 Posts, \$1.60; 1 Shovel, \$1.25.

- (7) Strawberry Crates, \$4.00; Assessment Farmers' Telephone Co., \$2.00; shod "Prince," \$1.50; $1\frac{1}{2}$ bu. Timothy Seed @ \$1.10.
- (9) 10 bu. Rye Seed @ 60c.; 1 Cultivator, \$25.00.
- (10) Setting Tire on Wagon, \$3.00; half month's Wages to Frank, \$15.00.
- (12) Advertising Garden Products, \$1.20; Membership in Breeders' Association, \$3.00; Incubator, \$20.00.
- (14) On Household Expenses, \$30.00; Insurance, 3 years, \$29.50.
- (15) 1 set Plymouth Eggs, 50c.
- (16) 2 sets Leghorn Eggs @ 50c.; Dehorning Cattle, \$3.25; 100 lbs. Wire @ 3c.
- (17) Labor on Ditch No. 1, \$16.50; Labels for Apple Boxes, \$4.20; Garden Seeds, \$3.40.
- (19) Carpentry Tools, \$2.50; Harness Oil, \$1.00; Bran and Shorts, \$5.60; Subscription to Y. M. C. A., \$5.00.
- (21) 10 lbs. Nails @ 6c.; Blacksmithing as per bill, \$3.00; 40 Apple Trees @ 20c.; 10 Peach Trees @ 25c.; paid Frank on Wages, \$5.00; 5 sacks Phosphate @ \$1.70.
- (24) On Household Expenses, \$30.00; Labor in Orchard, \$2.00.
- (26) Shovel and Hoe, \$1.50; Allowance for James at college, \$20.00.
- (28) 1 Plowshare, \$3.20.
- (29) Balance Wages to Frank, \$10.00; 1 bbl. Salt, \$2.50; 2 Pigs @ \$2.25; Church Subscription, \$5.00; Shingles and Nails, \$1.00.
- (30) Taxes, \$38.60; paid George for keeping books, \$5.00 (Personal column).
- (31) Produce for Household, \$13.90; Labor in Garden, \$1.20.

Add all the columns and prove. The correct total is \$3,902.28.

If you could go through the entire Sundry column for the year, you would find the following items: Life Insurance, \$54.30; Accounts Payable, \$252.32; Insurance, \$29.50; Inter-

est, \$230.00; Taxes, \$38.60; Charities, etc., \$94.60. The Improvements and Repairs column is segregated as follows: Improvements, \$350.00; Repairs, \$174.40. The Household and Personal column would be segregated in the same manner. Arrange the segregation as illustrated on page 50.

LESSON 11

FINANCIAL STATEMENT No. 4

I. General Instructions.

Having reached the end of our fiscal year, we are now ready to make a complete analysis of the business. First, we prepare the financial statement on Form 12, the same as in Lesson 8. Then we analyze the accounts showing profit or loss on Form 13.

II. Written Work.

Complete Form 12 by inserting the amounts in their order. The inventories are as follows:—

Farm\$9,070.00 Cash and Bank..... 271.96 Stock and Feed..... 1.948.50 Grain 380.00 Hay 168.75 Orchard and Garden..... 45.00 Poultry 100.55 Machinery and Implements..... 953.00 Household Goods 682.40 General Expense and Marketing...... 37.80 1,136.80 Life Insurance Total Resources..... \$14,794.76 Hired Labor..... \$35.00 3,200.00 Bills Payable 90.00 Accounts Payable 40.00 Gifts 3.365.00 Total Liabilities..... The Net Worth is.....\$ (?)(?)The Net Profit is.....\$

If you deduct from last year's inventory the value of Household Goods, Life Insurance, Cash, and \$2,220.00 as the value of the dwelling house, the productive investment is \$6,265.64. Deducting 6 per cent. on this investment, the proprietor's earnings are \$718.85. To this should be added the amount drawn for personal use.

Accounts Showing Profits or Loss

Consult illustrations, pages 47 and 48.

It is assumed that special labor and feed records (Forms 6 and 9) have been kept during the year, and we are now ready to analyze our leading accounts showing profits or losses. The first of these accounts is Grain. We must debit this account with all the elements that enter into the cost of its production, and credit it with the returns. The first item of cost in last year's inventory (Financial Statement, No. 2; Lesson 4) is \$377.86; Labor (Horse and Man, from Labor Record), \$440.00; Interest on the value of Land devoted to Grain (56 acres @ \$55.00 per acre), 6 per cent., \$184.80; Seeds and Fertilizers (Cash Payments), \$129.71. The returns are: Present Inventory, \$380.00; Cash Receipts, \$712.43; Fed to Stock (Feed Record assumed), \$770.07; Fed to Poultry, \$50.00. From this we obtain the net profit, \$780.13.

In a similar manner we consider the Stock account and the Hay account. The illustrations, pages 47 and 48, show the figures supplied from each account. Complete the statement and find the profit or loss of each account.

It should be borne in mind that this exercise in cost accounting is only suggestive. The principles are fundamental and correct, but their application in practice may vary greatly. Thus, some farmers will charge live stock a certain amount for housing, perhaps also for the use of utensils, machinery, and the like; others will insist on deducting the cost and care of the dwelling from the annual farm inventory, since this is not capital invested in the business. For a full discussion of this subject, see Bulletin 73, Bureau of Statistics, U. S. Department of Agriculture. The interpretation and use of the results obtained is a subject far too extensive for this treatise.

CHAPTER IV

HOUSEHOLD ACCOUNTS

It will be seen that no provision has been made in the general Cash Book for separate items in the household accounts. This is left for the housekeeper. The fact that her field is somewhat limited from a business point of view is no argument in favor of loose and careless methods of accounting.

Most housekeepers prefer to receive a fixed allowance for household expenses, whenever it is practicable. For our present purpose we will suppose that the following agreement has been entered into between the farmer and his wife. She is to receive the following:—

Monthly Allowances for Household and Personal Expenses

For proprietor and wife	.\$25.00
Board for hired help	. 15.00
For four children	. 32.00
Sundries	. 18.00
Total	00 002

In addition to the cash allowance, vegetables, poultry, and dairy products are furnished from the farm at market price. The proprietor gives his wife an allowance of \$90.00 each month either in one or in several payments, and enters it in his cash expenditures. His wife, in turn, enters her allowance in her record. Bills for furniture, clothing, and utensils are pasted or filed in a Bill and Receipt File in the same manner as in the farm accounts.

Note that the items entered in columns one or two are also entered in columns eight, nine, or ten, since they are purchases from the farm. Because they are entered both as receipts and payments, they do not affect the cash balance.

At the end of the year the proprietor enters the totals of columns one and two in his cash receipts under the proper

headings, and at the same time they are entered as cash payments in the Household column. (See page 44, under April 30th.) Thus, the farm will receive full credit for what it sells to the household as well as to others.

It is suggested that the housekeeper open a private bank account and pay large items by check. (See April 13th, 29th, and 30th.) There are numerous advantages in keeping a bank account. (See page 25.) A bill for furniture, utensils, and improvements should always be taken and pasted in the Bill File. It is convenient to number the bills the same as the checks, as suggested in column six. Since indorsement by the payee constitutes receipt, it is generally unnecessary to require a receipt when payment is made by check.

Page 60 shows a convenient form of a combined household Cash Book and Ledger. A summary of the receipts and payments is prepared at the end of the year; as shown on page 62.

Trial Balance

The accuracy of the work is tested at the end of each page or each month as follows:—

Groceries	\$13.05
Meat	11.80
	22.00
Dairy and Poultry	12.40
Clothing	16.85
Furniture and Utensils	22.05
Help and Laundry	11.60
Library	6.65
Light and Fuel	6.10
Gifts	2.35
Personal	1.25
Travel and Recreation	3.00
Incidental	2.65
Physician and Medicine	1.50
Telephone Rental	1.50

Observe that this total agrees with the total given on page 61.

Illustrative Lessons

LESSON 12

HOUSEHOLD ACCOUNTS, SET 1

I. General Instructions.

See illustration, page 60. The columns are used exactly as in Lesson 6. Use Forms 4 and 5. Note that produce taken, from the farm is entered in both the receipts and expenditures, since no cash is paid out. The farm will be credited with the produce at the end of the month or year in the farm accounts.

If payments are made by check, and the bills filed, the items need not be entered in the Cash Book. The payee, the amount of the check, and the distribution are sufficient entries.

II. Written Work.

1. Enter the following Household Receipts and Expenditures for the month of April, 1908. (See illustration, page 60.)

- April 1. Balance forwarded, \$15.40; on Allowance, \$30.00; Shoes for Mabel, \$3.00; 2 Vests, \$1.00; 10 yds. Muslin @ 10c.; 4 yds. Gingham @ 15c.
- (3) Sugar, \$1.00; Raisins, 25c.; Subscription to Successful Farming, \$1.00; Subscription to Ladies' Home Journal, \$1.75.
- (5) Collection, 25c.; Ladies' Aid Society, 25c.; 2 doz. Eggs, 40c.; Medicine, 50c.; Stove Polish, 10c.
- (6) Doctor, \$1.00; Ella, 25c.; George, 50c.; Necktie for Jim, 25c.; 5 bu. Potatoes @ 40c.; Skillet, 50c.
- (8) 5 Cabbages, 25c.; Bread Knife, 40c.; Meat, 50c.; Parlor Lamp, \$3.00.
- (9) 3 lbs. Crackers, 25c.; Peanuts, 10c.; Eggs, 50c.; to boys for ball game, 50c.; Starch, 10c.; Relief Society, 50c.
- (12) Collection, 35c.
- (13) Rocker, \$7.00; Prunes, \$1.00; on Allowance, \$30.00; Coal, \$5.00; Vegetables, 40c.
- (14) Suit for William, \$6.00; Hat for George, 75c.; Concert, \$1.00; 2 yds. Ribbon, 40c.; 1 doz. Plates, \$2.20; \(\frac{1}{2}\) doz. Cups and Saucers, 90c.

- (15) Schoolbooks and Stationery, \$2.40; Kerosene, 75c.; Ham, \$1.35; Sociable, 50c.; Shoe Strings, 10c.
- (17) Kitchen Cabinet, \$6.50; 2 Chairs, \$1.30; Laundry, 97c.; Toilet Soap, 25c.; 3 lbs. Físh, 45c.; Towel Rack, 25c.
- (19) Collection, 25c.
- (20) 6 yds. Toweling, 60c.; Tacks, 10c.; 1 gal. Vinegar, 30c.; Matches, 25c.; White House Cook Book, \$1.50; Carbolic Acid, 10c.
- (23) Telegram to M. F. & Co., 50c.; Telephone Rental, \$1.50; Mrs. Sloan for Dressmaking, \$2.50; Madrid and return, \$2.00.
- (25) 1 pr. Rubbers, 75c.; Stockings for Ella, 50c.; Flowers for Mrs. Knox's funeral, \$1.00; Allowance, \$30.00; Laundry, 65c.; Lamp Wicks, 10c.
- (26) Collection, 25c.
- (29) Meat, City Market, as per bill on file, \$9.50; Groceries at Murdock's, as per bill on file, \$4.40; Help for the month, \$10.00.
- (30) Vegetables for the month, \$2.60; Poultry, \$5.40; Milk, Cream, and Butter, \$6.50.
- 2. Add all the columns. (Use lead pencil until you have proved your work.) If your work is correct, you will find the following totals: Receipts.—Cash, \$105.40; Produce, \$5.25; Dairy and Poultry, \$12.80. Payments.—Groceries, \$12.65 (see correction, page 61); Meat, \$11.80; Dairy and Poultry, \$12.80; Clothing, \$16.85; Furniture and Utensils, \$22.05; Help and Laundry, \$11.60; Library, \$6.65; Medicine and Physician, \$1.50; Light and Fuel, \$6.10; Gifts, \$2.35; Personal, \$1.25; Traveling and Recreation, \$3.00; Incidental, \$4.15.

LESSON 13

HOUSEHOLD ACCOUNTS, SET 2

I. General Instructions.

Use Forms 4 and 5. In principle this is exactly like Lesson 6.

HOUSEHOLD ACCOUNTS

		RE	CEI	PTS					1	•
Dair	14	PPODL	JC E	CAS	н		TOT	AL	QAIE	ITEMS
				_	40			5 40		Balance FORWARDED
				30			30	0	1	On allowance for april
										Shoes for Mabel B300, 2 Vests, 100
						П	П	1		10 ydb Muslew 100; 4 ydo Gengham God
	_		1		1		H		3	Sugar 100; Raisins 254
		-	+		+	₩	H	+	-	Sell to S. N. 9 175: to Successful Farming 1-
	\vdash		-	-	\vdash	Н	Н	+-	-	
	-		-		-	Н	Н	-	5	Collection 25\$, Ladies and Society 25\$
*	40		-		L	Ш	Ц	40		2 day Eggs 40 + (P), Modique 50t, Store Polish 10
							Ш		6	Doctob 1°, Ella 25d, George 50d, Nechtie 254
		2				11	Ш	2		5 bu. Potatoes 200; Skillet 504
			2.5			Н		25	8	5 Cabbages 25t, Dread Kule 40t
	1		-			Ħ	П	1	-	Meat 504, Parlor Lands 300
-	-				-	Н	H	50	9	
	50	-	1		-	₽		130	17	
	-		-		-	⊩	Н	+	-	Doys 50\$, Com Starch 10\$, Rellef Socy 50%;
	<u> </u>						Ц	1	12	
	_			30		L	30	2	13	On allowance; Rockey 7°; Coal 500
			40				Ш	40		Prunes 1º: Vegetables 404
									14	Sur for William 600, Hat for Gro. 75%
									1	Conclet 100; 24ds. Rebbon 402
					1	Н	H	1	_	1 Dogo Plates 220; /2 dog Cups & Saucers 90\$
	-				-	Н	Н	+	15	School Dook & Stationery 2 to Neroseul 754
	-	_	Н	_		Н	н	+	13	Harry 135; Sociable 50%, Store Strings 104
	-		1	-	-	Н	Н	+	-	Harry 135; Sociable 504; Space Strings 104
	-		Ш		-	Ш	Щ	-	17	Ketchen Cabinet 650; 2 Chairs 134
						Ш		1		I area dad 950 : In late South 25d
						Ш				3 lb. Figh 454; Towel Rack 254
						П	П		19	
						П			20	
						Н		+	20	Tagl Vinegal 304; Matches 25d
	-		1-			Н	H	-	-	White House God Dook 150, acid 104
			-	-	-	Н	H	+-	-	
	-			_	-	Н	+	+-	2,3	Telegram 50¢; Telephone Kental 150
			\vdash			Ш	4	-	-	Dreas Making 250, Madred & Return 200
						Ш		_	25	
				30			30	0		allowance, Landay 65%. Land weeks 10%
									26	
						П			29	City Mest Market
			Н			Н	H	+-	7	Murdock Grocery Go
			-				+	+	20	Help for the month
	-		1	-		Н	H			
		-2	60			H		260	-	Regalables, not entered
5	40							540	_	Houlton Eggs Melh Calda & Dutter
6	50						6	50	_	Melk! Colon & Dutler
10	80	-	100	105	+1/0	1	2	2/1/5	-	FORWARDED

^{*}Entered both as receipt and payment because it is taken from the farm.

HOUSEHOLD

							FC	P	TI	HE	١	10	NT	'н	0	F	9	br	u	2				19.	00	8						
													PAY	ME	NTS																	
ex.	,	OTAL	ROCE	RIES	ME	AT	POUL	RV TRY	CLOT	HING	FURN	TURE	L AUN	i P	1/88	APT	LIG	HT	GIF	TS	Phi ¥M	451	Per	Sona	/			1	Tra v	e/	INCIB	2.6
-	Т				-	_																-			_	Т			1	**	T	-
-	+			-		-		-	-	-	-							Н	_	•						-	-			+	-	_
	+		-		_			Н		<u> </u>	-	-			_	-								Н		-	-	-		-	-	_
-	+	160	-	-		-	_		4			-		-			_	H							_	-	-	-			\rightarrow	_
-	+		_			-			_/	60		-		-										\vdash		-			-	-		_
	+	125	1	25		-	_	-		-		-								-		_	_	Н		-		\vdash		-	-	_
	4	275				_	_			<u> </u>	-	_	_		_2	75							_		_	-				_	-	
-	1	50				_				_										50		_										
			*	40						_								Ш				50			_							10
	1	2								25	-										1	_		75		_					_	
		250	2									50										_										
	T	65		25								40																				
	Т	350				50					3																					
		85		35				50																								
	T	110		10																50				50		F						
	\dagger	135					_													35		_										
35	†	12							-	1	~						3								-							
76	$^{+}$	140		40	=					1	7						-			-			-			\vdash		=			\dashv	_
-	+	675		40		-		Н	-	1				-			_	H			_	-	_	Н	_	-	-				-	
-	+	140	-		=	-	-	Н	6	75	-	-	-					Н				-	-	Н	-	-	-				-	
-	+		-		=	-	-	H	-	40	-	-		-	-	=	_	-			=	Н	-			+	-	Н	-4		-	_
-	+	310	-		-	-	_	H	-	-	13	10	-		4		-					-	-		-	\vdash	-	Н	-			_
-	+	315				-	=	Н	_	-	H	-		-	4	40		75				-				\vdash	-		-	-		_
-	+	195	-			35		-	_	10	-	-						ш		50		-		Н		+-	-				-	
-	+	780	-	-		-		Н	_	-	7	80	-	-	_		_			-		-	-	Н	_	-	-	Н	_	\dashv	-	
\rightarrow	+	1/20	-		_	_			_	┡		-	_	95							_	_		Н		-	ļ					25
\rightarrow	+	70	_			45	_			-	_	25					_				_	L	<u> </u>	Н		-	_					-
\rightarrow	+					L	_	Н	_	┡		_	_					Ш		23	_	_	<u></u>		_	-	_			-		_
\perp	1	70				L				_		L										_	_			_						70
	1	53		30		L				L		L						25				L										Ĺ.
	<u>l</u>	160													1	50										L						10
	1	2																													2	
		450							2	50																			2			
	I	2 25							1	25																L					_/	
	T	7.5	-											65				10														
	T	23																		25						Г						
77		950			0	50																										
28	1	440	4	40	1	-				1																			1			
79	1	10	7	1									10												-							
17	1	260	1	60								-	1													1					-	
	1	540		-			-	40																		1						
	1	650	-				6	50											-												-	
	1																					-			-							
-	1	1275	13	0.5	11	80	12	40	16	85	22	0.5	11	60	6	65	6	10	2	35	1	50	7	25	-				3		4	15
=	-	177	1	-	-7	-		1/3	10	-		-			Ť				-		_		É	-42	-	1	-					

^{* 40}c. should be classified as Poultry.

CASH BOOK

						ei i		4 D	vo	E	101	eri	101	D .	N C C	· OI	NITO	. ,	m		- 1	0	3/	,	10	09.
-	79	0 4	_	-		30	_		1 0	FF	100				ACCOUNTS			7		_						-
Accounts	19	10.	F	b.	March		April A		May		June		July		August		Sept.		Oa.		Nov.		Dec.		Tot	al
RECEIPTS	9	de	9	35	- //		10	80	. 8		- 10	6.5	-11	4	9	80	8		10	4	//	50	8	4	12	100
Sundries	3	35	13		2	00		25	1		.0			80		05				60	3		4	00		790
Produce				40	~	80	.5		4	30									71				-			441
Cash	_	00		00			105			00	90		90		90		90		90	-	90	-			09	
Total	104	80	101	75	103	90	/23	45	102	85	107	05	107	25	105	85	103	75	105	00	103	30	103	33	47	430
PAYMENTS Sunding																										
Incidental	1	40	2	40	ک ت	45	2	65	5	30	3	70	2	40		05	3	00	1	15	3	20	11	40	4	310
Tradely Re.			1	CO	2	00		00	1	60					3	20			2	00			5	20		850
Personal	1	25	2	80		3,0	. ,	2.4	9	00	1	50	2	00	.2	40		50	2	4		50		00		995
Gita	-	50		00	11	35	2	14	- /	25	- 5	00	6	30	1	50	2	60	-	75	2			40		000
	1	5		20			1			00	1			60		20	~	04		10	1	30		20		520
Light, Find		20				20	6	10			7	20			7	_					0	7				205
Library	_	75		40				65		90			3	35				75					1	20		1
Help Laundry	13	80	14	50	17	30		60			/2	00	_		78	60			10		_//	20	/2			290
Furniture Utensile	-	-	18	00	7	60	22	05	1	30			عنت	40			15	_	3	20	-	-	9	60	8	4.15
Clothing	11	50	20	00	29	00	16	85	7	30	23	25	13	20	7	50	8	40	28	50	5	50	32	40	20	340
Dairy	5	50	5	40	7	20	6	50	4	50	6	00	5	10	6	10	4	45	5	5	6	25	- 4	65	6	720
Poultry	3	95	4	80	4	65	5	90	4	05	4	65	6	35	3	70	4	10	4	85	5	25	3	75	5	600
Ment	6	30	5	20	13	70	11	80	10	40	11	30	12	20	11	40	8	30	2	20	6	20	10	30	11	4/80
Croceries	12	35	-//	30	12	75	13	05	25	30	16	85	19	30	18	40	15	35	13	40	14	70	19	50	19	223
SPECIAL ACCOUNTS				75		50		50						40				25	_		2	00		52		71/1
1/1/		50	-	50			-		-	20	-	6	-			6		50					4			740
Musicaless	-	1	1		-	50	-	50	-	75	-	50		00	-4	50				75		50		00		950
/	b	100	3		-			-	-		-						5			00		00	J	00	1 1 3	000
Davings	aus	-	2	00	-		-	-	20	00	18	00	-		12	00	5	00	15	00	20	00			8	500
	-	-	-	-	-		-	-	-		-				-				-							-
-	- 3	-		-	-		-	-			-		-						-	-					H	-
	-	-	-	-	-	-			_										-							-
Balance	_	-	-	_	-	-	-		-																	290
Total	71	00	107	75	1/2	60	112	75	101	15	98	45	99	20	95	55	89	10	106	75	90	60	156	40	127	430

SUMMARY OF HOUSEHOLD ACCOUNTS

II. Written Work.

Enter as in Lesson 12 the following Household Receipts and Expenditures:—

March 1. Amount forwarded, \$21.60.

- (1) Oranges, 25c.; James, 35c.; Codfish, 35c.; Allowance, \$30.00; Coffee, \$1.00; Bacon, 50c.; Shoe Laces, 10c.; Fish, 25c.; Veal, 10c.; Whalebone, 10c.; Stove Polish, 25c.
- (3) Jardinière, 25c.; Collars, 25c.; Tacks, 10c.; Collection, 25c.; Buttons, 10c.; Toothbrush, 25c.; Talcum Powder, 25c.; Stamps, 25c.; Oranges, 25c.; Thread, 15c.; Meat, 50c.; Crackers, 25c.
- (7) Help, \$1.00; Roast, 55c.; Delineator, 10c.; Pepper, 15c.; Comb, 25c.; Oatmeal, 25c.; Meat, 40c.
- (9) Collection, 25c.
- (10) Gloves for Ella, 75c.; Postage, 25c.; Starch, 10c.
- (12) Chops, 25c.; Beans, 25c.; Mustard, 20c.; Soap, 30c.; Borax, 15c.; Pattern, 45c.; Muslin, 50c.; Music, 20c.; Gasoline, \$1.20; Picture Frames, \$3.45.
- (14) Starch, 25c.; Help, \$1.00; Laundry, \$1.00; Allowance, \$30.00.
- (15) Coffee, 35c.; Music, 25c.; Collection of Poems, \$1.50.
- (16) Collection, 25c.
- (17) Telephone Rental, \$1.50; Steak, 30c.; Rocker, \$3.75; Suit for George, \$15.00; Skirt Cleaned, 75c.; Cheese, 50c.; Tongue, 25c.; Thread, 10c.; Toothpicks, 10c.; Sugar, \$1.00; Medicine, 50c.
- (19) Lemons, 20c.; Lace, 15c.; Telegram, 60c.; Scissors Sharpened, 10c.; Flour, \$1.20; Graham, 25c.; Rock Candy, 10c.; Coal, \$5.00; Powdered Sugar, 25c.; Granulated Sugar, \$1.00; Piano Tuned, \$5.00; Oranges, 25c.; Birthday Present to Mother, \$5.00.
- (21) Laundry, 55c.; Help, 75c.; Pens and Pencils, 10c.; Hat, \$4.00; Hooks and Eyes, 10c.; Collar, 35c.; Sugar, \$1.00; Crackers, 10c.; Cheese, 25c.; Mustard, 10c.
- (23) Collection, 25c.
- (24) Braid, 45c.; Fish, 15c.; Coffee, 45c.; Picture of Baby,

- \$1.50; Asbestos Pad, 15c.; Roast, 45c.; Oranges, 20c.; Allowance, \$30.00.
- (26) Help, \$2.00; Tailoring, \$1.45; Pepper, 10c.; Needles, 10c.; Trip to Boone, \$2.00; Hats for George and James, \$3.50.
- (28) Ella, \$1.00; Shoes Repaired, \$1.25; Flower Seed, 25c.; Braid, 15c.; Thread, 10c.
- (29) Help for month, \$10.00; Laundry, \$1.00.
- (30) Collection, 35c.
- (31) Butter, Milk, and Cream for month, \$6.45; Poultry for month, \$4.65; Vegetables for month, \$2.80.

Add all the columns. The results should be: Receipts.—Cash, \$111.60; Garden, \$2.80; Dairy, \$6.45; Sundries, \$4.65. Expenditures.—Groceries, \$12.75; Meat, \$3.70; Poultry and Dairy, \$11.85; Clothing, \$29.00; Furniture and Utensils, \$7.60; Help and Laundry, \$17.30; Books and Education, \$2.05; Physician and Medicine, 50c.; Light and Fuel, \$6.20; Gifts, \$6.35; Personal, \$1.35; Incidental, \$13.95. Balance as before.

LESSON 14

CONTINUED INVENTORY

I. General Instructions.

Where the farmer keeps only a bank account and a detailed inventory, it is advisable to keep the inventories in the continued form, illustrated on page 17. It is well, also, to use the first column for memoranda of dates of purchase, births, etc. The ordinary Trial Balance Book, which may be purchased in any stationery store, at a very reasonable price, is the best book for the purpose.

II. Written Work.

Prepare a continuous inventory from Statements Nos. 1, 2, and 4 similar to the illustration on page 17.

Supplementary Exercises

To be assigned at the discretion of the instructor.

1. ORIGINAL FARM ACCOUNTS

In order to gain additional practice and confidence in your work, you may now prepare an original set similar to the ones already worked out. Study over the work already completed, and if you have any suggestions and criticisms of the system of accounts, talk them over with your instructor. If your suggestions are acceptable, you may embody the changes in this set, otherwise you will follow the preceding sets very closely. The complete set must have at least five entries in each column, and the totals should not be far from those in the sets already completed. A higher grade of work is expected than heretofore.

Directions.

- 1. Prepare an inventory similar to the one shown on page 17. The amounts should be close to the results given in Lesson 1.
- 2. Write two months' imaginary entries as close to actual experience as possible. Students from the farm should secure the material from home or from farmer friends.
- 3. Complete the year's work by taking estimates for the remaining months.
 - 4. Prepare a closing inventory for the end of the year.
- 5. Prepare a statement similar to the one given on page 47.
 - 6. Hand in your work with suggestions and criticisms.

2. ORIGINAL HOUSEHOLD ACCOUNTS

Prepare an original household record on the same plan as the original farm record. The totals should conform approximately with one of the months in the household summary.

Hand in your work for approval.

3. ORIGINAL BALANCE SHEET

Prepare a balance sheet of the work done in the two preceding lessons, exactly like the one you prepared last, and hand in for approval.

4. SHOP ACCOUNTS

Farm and shop bookkeeping do not differ in principle. They differ only in titles of accounts. The books used are the same as in the farm accounts, except special records adapted to the needs of the shop. The labor record need not differ at all. Taking the Cash Book furnished in your set, note that the number of columns and the arrangement are exactly the same as in the farm accounts. Only the titles of the columns are different. The titles given below are self-explanatory. except the Merchandise and the Supply column. A large number of shops and mills carry a small stock of merchandise which is sold at retail. Where this is done, it is preferable to keep it strictly separate from the manufacturing end of the business. The shop should buy from the store at regular prices, and charge it with any supplies furnished for sale. Where it is found impracticable to keep a separate set of books, a column is provided for receipts from merchandise sold and one for payments for merchandise purchased. Taking into account the inventories at the beginning and end of the year, these columns give the result of this branch of the business. In the Supplies column is entered only consumable material used in the process of manufacture, such as oil, cotton waste, sandpaper, files, and the like. The Sundries column is used for all items which do not fall under any special column. For instance, if interest is paid on a note, it is entered in the Total Payments column and also in the Sundries column. is frequently necessary to show hospitality in closing deals in which a shop of any consequence is interested. Such entertainment expenses would be entered in the Sundries column.

Directions.

- 1. Head all the columns in the Cash Book as follows: Under Receipts—Merchandise, Manufacturing. Under Payments—Hardware, Lumber, Supplies (Machinery and Tools), Repairs, (Buildings and Improvements), Labor, (Freight and Express), Office, (Light, Fuel, and Power), Merchandise.
- 2. Prepare an imaginary inventory of a planing mill, with \$10,000.00 capital, having a merchandise inventory of

\$2,000.00 consisting of house fittings, light hardware, etc. Use the form illustrated on page 18.

- 3. Write up an imaginary month's business of receipts and payments, taking care that there be at least two entries illustrating each column. Follow the plan illustrated on pages 44 and 45.
- 4. From the above figures prepare a probable estimate of the year's business.
- 5. Prepare a statement similar to the one shown on page 47.
 - 6. Hand in your work for approval and criticism.

LESSON 15

REVIEW QUESTIONS

Write the following questions and their answers on paper $8\frac{1}{2} \times 11$ inches and submit to your teacher for approval:—

- 1. What is the object of keeping books?
- 2. What is the use of the Day Book? Prepare a specimen Day Book page of at least five entries.
 - 3. What entries are properly made in the Day Book?
 - 4. Describe the Bill and Receipt File and explain its use.
 - 5. How is an inventory taken? Of what does it consist?
 - 6. What are Resources? Liabilities? Profits? Losses?
 - 7. What are Accounts Receivable? Accounts Payable?
- 8. Prepare a specimen Account Receivable and also a specimen Account Payable.
- 9. What should determine the time of the year when the farm balance sheet is taken?
 - 10. What are the disadvantages of single entry?
- 11. Prepare a specimen of each of the special records suggested on pages 102 to 105.
- 12. Which is the principal book in the second method (modified double entry)?
- 13. What is the value of the special column provided in the Journal? Suggest columns that might be added.
 - 14. How is each side of the Cash Book balanced?
 - 15. How do you find the cash on hand?

- 16. If a bank account is kept, how do you find the cash on hand?
 - 17. Describe how household accounts are kept.
- 18. What allowance for household besides cash? Why are these allowances both debited and credited at the time they are entered? How are these allowances entered in the general Cash Book?
- 19. How is the cash on hand found in the household accounts?
 - 20. Describe how the Sundry columns are itemized.
- 21. Of what three principal headings does the financial statement consist?
- 22. State the steps necessary in preparing the financial statement.
 - 23. State some of the advantages of banking.
- 24. What is meant by depreciation? What are the rates commonly used?
 - 25. How may land be said to depreciate in value?
- 26. Describe three methods of finding the profit, or loss, from live stock. From different crops.
- 27. What is the principle difference between farm and shop accounts?
- 28. How may a large crop prove to be a loss to the community?
- 29. Write a paragraph pointing out the importance of records for the farmer.
- 30. Write a paragraph of general review of the system of bookkeeping you have now finished, and point out its merits and defects.
- 31. In finding the actual net gain or loss on accounts of production, what corrections must be made?
- 32. Give the rule for finding the profit or loss in the balance sheet.
- 33. What is the distinction between equipment and supplies?
- 34. What is the distinction between improvements and repairs?

THIRD METHOD

A system of double entry, best adapted to a business having a large number of personal accounts. The Ledger is the basis of the system; the Journal is a modification of the Day Book, containing the original entries, the cash account, and the classification of entries.

CHAPTER V

DOUBLE ENTRY

In a credit business, where the titles of accounts are numerous and where goods are bought and sold on account, it is necessary to use a Ledger instead of special columns in the Cash Book. The two methods are often combined by carrying the details of certain accounts in special columns in the Journal and Cash Book and posting only the totals into the Ledger. The Ledger is practically always used in commercial bookkeeping. The only essential difference between commercial and farm bookkeeping lies in the titles of accounts. The chief sources of the farmer's profit are generally shown under crops, live stock, dairy, etc.; that of the merchant under merchandise; those of the banker under interest, discount, and so on. The principles of accounting are the same in all cases.

Books and Accounts

The double entry Journal and Ledger will be employed in this method. Since it is designed to illustrate a variety of titles, the expense account has been divided into freight, interest, discount, and general expense, while the trading account is divided into grain and feed, and produce. The accounts are further discussed in Lesson 17.

The Journal

The Journal is a book of record in which entries are arranged under debits and credits in a convenient form for posting. The simplest form has two money columns, one for debits and the other for credits, but it is often convenient to use special additional columns for accounts having frequent entries, such as cash, etc., as illustrated on page 78.

The Ledger

The Ledger is a book of record in which entries are classified under separate heads or titles called accounts. The left

side of the account shows the debits and the right side the credits. (See page 77.) A Ledger account is balanced by deducting the smaller side from the larger, as shown on page 82. A double entry Ledger must be in balance at all times; that is, the debits must equal the credits.

Terms and Definitions

One object of this set is to familiarize the student with terms frequently used in business. The following list of terms should be learned thoroughly in connection with Lessons 16 and 17.

Account.—A collection of debits and credits under one title, such as cash, produce, merchandise, John Jones, etc.

Accounts Receivable.—Amounts due the business from others.

Accounts Payable.—Amounts due others from the business.
Allowances.—Amounts paid for the use of money or services, such as interest, discount, taxes, etc.

Assets.—The property or capital of the business.

Balance Sheet.—A formal statement of the results of a business for a given period, usually shown under resources and liabilities, losses and gains, net worth or net insolvency.

Balance.—The difference between the debits and credits in an account.

Bank.—A market for money and credit; an institution for the safe keeping of money.

Bills Payable.—Signed obligations due others.

Bills Receivable.—Signed obligations due the business.

Bookkeeping.—A record of business transactions.

Business Transaction.—Exchange of values or services.

Capital.—The amount invested in a business.

Cash.—Money and negotiable papers payable at sight, used as money, such as checks, bank drafts, money orders, etc.

Cash Book.—A record of cash receipts and payments.

Credit.—A statement of obligations by the business, of a gain, or of goods parted with.

Debit.—A statement of obligations to the business, of a loss, or of goods received.

Discount.—An allowance paid for the advance of money or for payment of bills in advance of due date.

Double Entry.—A system of bookkeeping in which the debits always equal the credits, and in which accounts are kept with persons, things, and allowances.

Draft.—An order of one party on a second to pay money to a third party.

Drawee.—The party who pays a draft.

Drawer.—The party who issues a draft.

Expenses.—Costs of conducting the business.

Good Will.—An amount which a business is assumed to be worth above the net property assets. It depends on the earning capacity of the business.

Insolvency.—The net amount by which the liabilities exceed the assets.

Interest.—The amount paid for the use of money.

Inventory.—A statement of the assets and liabilities of the business.

Invoice.—An itemized statement of goods bought or sold.

Journal.—A book in which entries are arranged under debits and credits in a convenient form for posting.

Ledger.—A book in which entries are classified under separate heads or titles called accounts. The left side of the account shows the debits and the right side shows the credits.

Liabilities.—Accounts and obligations due others from the business.

Merchandise.—Goods bought and sold for profit.

Payee.—The party to whom payment is made.

Posting.—Entering debits and credits under the respective accounts in the Ledger.

Principal Books.—Books from which or to which posting is done.

Present Worth.—The excess of assets above liabilities.

Resources.—Same as assets.

Single Entry.—A system of bookkeeping in which accounts are kept with persons only.

Trial Balance.—A comparison of the debits and credits of the Ledger in order to ascertain their equality.

Voucher.—A written statement or evidence of a business transaction.

General Principles

(1) In the ordinary Journal and Ledger method of double entry bookkeeping there are one or more debits and one or more credits involved in every transaction, and the debits always equal the credits. (2) In double entry accounts are kept, not only with persons, but also with property and allowances.

ILLUSTRATIONS

(a) Smith buys a Jersey cow for which he pays cash, \$65.00. Here Live Stock is debited because it comes into our possession, and Cash is credited because it goes out of our possession. (See illustration, page 77.)

(b) Smith hands his wife \$30.00 for household use. Here Household is debited because it was the cause of an outlay, and Cash is credited because it went out of our possession. The \$10.00 expended on crops, page 77, is treated in a similar

manner.

(c) Smith sold 80 bu. Corn for \$52.00 cash. Here Cash is debited because it comes into our possession and Crops are credited because corn goes out of our possession. Grain might have been used as the title of the account instead of Crops; Hay, Seed, Fruit, Vegetables, etc., are other titles which might be used, according as the farmer desires minute classification or more general accounts.

General Rules for Journalizing

Debit (always left side)

1. Things that come into our possession.

- 3. *Persons* who get into our debt, or when we get out of their debt.
- 5. Allowances, when allowed to others.

CREDIT (always right side)

- 2. Things that go out of our possession.
- 4. *Persons* who get out of our debt, or when we get into their debt.
- 6. Allowances, when allowed to us.

The General Law of Debit and Credit

The foregoing rules may be stated in the form of a general law, as follows:—

Debit whoever or whatever causes an outlay or a decrease in assets.

Credit whoever or whatever *causes* an income or an increase in assets.

EXERCISE

Suppose we have the following transactions during the month of April, 1909, and we decide to record them in a Journal and Ledger:—

- April 1. Bought 12 bu. Seed Wheat for cash, \$10.00; sold 2 tons Clover for cash, \$12.00; paid \$30.00 for Household Expenses; sold 80 bu. Corn @ 65c.—\$52.00.
- (5) Bought 1 Jersey Cow for cash, \$65.00.
- (6) Sold 2 Steers for cash @ \$40.00.
- (7) Sold 100 bu. Corn to J. N. Smith on account @ 65c.

Prepare the journal entries. Study the form on page 75 and apply the rules for journalizing.

Posting

Posting is the transferring of debits and credits from other books into the Ledger under individual titles called accounts. Since all the debit items are found in the left money columns in the Journal and all the credit items in the right columns, it is evident that they should occupy the same columns in the Ledger. Trace the above entries into the Ledger on page 77.

4 april 1	1000		•
		Dr.	Gr.
12 Crops 1 14	Bought 12 bu seed	10	
2 Cash	Dought 12 bu seed wheat for cash , \$ 100		10
2 Cash Se Se Crops	els 2 tono dove	12	
2 Coops	Log Cash, 1/200		12
2 Househols.	Pais 1 30 = for household expenses	30	
2 Cash	forcel 15 chence		30
	,		
2 Cash D	Sols 80 bu Com	.53	
2 Crops	e 654 , 152°		53
5	_		
2 Stock	Bought blessey com	65	
2 Cash 1	wash, 1650		65
1/			
2 Cash	als 2 Steers for Cach	80	
2 Stock	0 \$40 °°		80
1. 7			
3 J. M. Smith	Sols 100 be. Com to	65	
2 Crops	J. M. Smith on acet		65
	at 65£		

COMMON DOUBLE ENTRY JOURNAL

Illustrative Lessons

LESSON 16

JOURNALIZING

I. General Instructions.

Journalizing is arranging debits and credits in a convenient form for posting. Use four-column Journal paper. If this is not furnished in your outfit of blanks, rule additional columns to correspond with the illustration, page 17. Follow the directions and rules given on page 73. Skip one line between each entry, placing the date on this line, as illustrated on page 78. All cash is entered in the first two money columns, and all other amounts in the next two columns. Copy the opening paragraph in the explanation column. The Day Book part is written first and the Ledger titles immediately below, as illustrated. Many bookkeepers post without journalizing, directly from the invoice or Day Book, but for the beginner it is preferable to use the Journal.

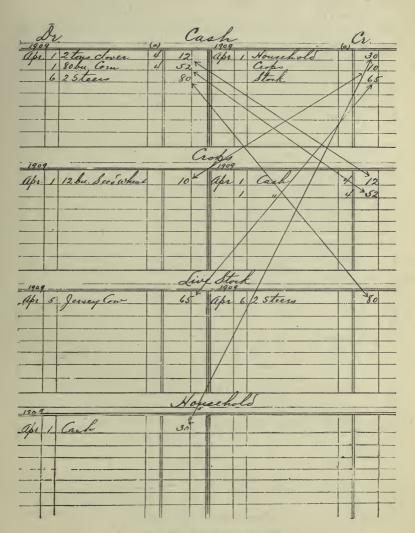
II. Written Work.

Following are extracts from your Day Book, as produce merchants, which you will now journalize:—

JUNE 1, 1910.

Student (write your name) and Edward Harvey have this day formed a copartnership under the firm name of Student & Harvey, for the purpose of conducting a feed and produce business at Auburn, Ill. Each partner invests \$3,000.00 cash. The profits and losses are shared equally. The student is to receive \$100.00 a month for his services and Mr. Harvey \$80.00 a month. The student is a skilled accountant and will have general charge of the office. (Write the opening entry in the Journal as illustrated on page 18.)

(1) Each partner has paid his investment. (Dr. Cash; Cr. each partner. Rules 1 and 4, page 73.) Deposit \$6,000.00 in the First National Bank. Keep a special bank account, as illustrated on page 26. No entry of deposits is required in the Journal.



DOUBLE ENTRY LEDGER

June 1, 1910	Gash	Other than Gash
L. Fot. Items + Titles (Copy, opening statement	Rec's (Dr) Paide	Dr. Gr.
(Copy, opening statement	8-111-11111	
Each partner has		
paid his investment		
Cash 1+	6000	
Cash Student		3000
1 Edward Harry		3000
Dought store and		
fighties of Wen Nayword		
Olda FLat \$2000 Frem		
4 Fit 1500, Pais 1000;		
gave our note due		
in 60 days for belance		
1 Real Etate		2000
1 7 + x 5. H		500
Carl Carl		
3 Dillo Payable	1000	1500
13		
Rentes store room		
Mr. 9 Canal st for		
140.00 a mysth. Par		
one, month		
3 Expense		40
3 Expense Cash	40	
Dought of Willand John		
ate, etc.		
(at the end of month e	ter:)	
Dalance for , nest page	193867	
	695512 695512	
The second secon	المساورة الم	

DOUBLE ENTRY JOURNAL

- Deposit all cash as it comes in and make all payments by check.
- (2) Bought store and fixtures of Wm. Hayward & Co., 110 W. Green St.: Building and Lot, \$2,000.00; Furniture and Fixtures, \$500. Paid (check No. 1) \$1,000.00; gave our note, due in 60 days, for the balance. (Dr. Real Estate, and Furniture and Fixtures; Cr. Cash and Bills Payable. Rules 1 and 2, page 73.)
- (3) Rented store room, No. 9 Canal St., for \$40.00 a month. Paid one month in advance. (Dr. Expense; Cr. Cash. The expense account is sometimes divided into Rent, Salaries, Light and Fuel, etc., but here the expense account includes all such items.)
- (4) Bought of Willard Johnson, Ames, Iowa, on account: 20 tons Timothy Hay @ \$15.00; 25 tons Prairie Hay @ \$12.00. (Dr. Grain and Feed; Cr. Willard Johnson.) Paid freight on above, \$85.00. (Dr. Freight; Cr. Cash.) Sold to Richard Morris, 340 W. 10th St., on account: 10 tons Timothy Hay @ \$18.00. (Dr. Richard Morris; Cr. Grain and Feed.)
- (5) Sold to John Rollins, 432 E. 5th St., on account: 5 tons Prairie Hay @ \$15.00.
- (6) Paid Willard Johnson for invoice of June 4. Bought of Winkle Elevator Co., Bancroft, Iowa: 1 car Wheat, 997 bu. @ 97c.; 1 car Barley, 830 bu. @ 51c.; 1 car Corn, 1,073 bu. @ 69c. (Freight prepaid; Dr. Grain and Feed; Cr. Winkle Elevator Co.)
- (8) Received cash of Richard Morris, on account, \$100.00.
- (9) Sold to Star Milling Co., Detroit, Mich., on account: 500 bu. Wheat @ 99c. Received of John Rollins his note, due in 10 days, payable at Citizens' National Bank, in full of his account; interest, 6 per cent.
- (10) Bought of Horton, Brown & Co., Spring Valley, Iowa, on account: 1,500 doz. Eggs @ 21c.; 500 lbs. Butter @ 27½c.; 100 lbs. Y. A. Cheese @ 15c. Paid

- Freight on above, \$3.50. Paid Cramer & Co. for Office Supplies, \$15.00. (Dr. Expense; Cr. Cash.) Sold to Hotel Emery, on account, 90 doz. Eggs @ 25c.
- (11) Accepted Horton, Brown & Co.'s draft on us in favor of Richard & Lytton, at 3 days' sight, payable at Citizens' National Bank, for amount of invoice of June 10. (Dr. Horton, Brown & Co.; Cr. Bills Payable.) Sold to Western Produce Co., Chicago, on account: 900 doz. Eggs @ 25c.; 300 lbs. Butter @ 29c.
- (12) Paid Winkle Elevator Co., on account, \$1,000.00.
- (13) Sold to Chicago Malting Co., on account, 415 bu. Barley @ 60c. Received remittance from Star Milling Co., in full of invoice of June 9.
- (15) Paid our acceptance of June 11, due to-day. Gave Winkle Elevator Co. our note at 30 days, payable at First National Bank, for balance of account.
- (16) Gave Edward Harvey a check of \$100.00 for his private use. (Dr. Edward Harvey; Cr. Cash.)
- (17) Sold to Empire Livery, on account, 300 bu. Corn @ 75c.
- (18) Sold to G. W. Gardner, for cash, 25 bu. Corn @ 74c. (Dr. Cash; Cr. Grain and Feed.)
- (19) Received cash of John Rollins for his note due to-day, with interest at 6 per cent. (Dr. Cash; Cr. Bills Receivable and Interest.)
- (20) Sold to Henry Simmons' Sons 300 bu. Barley @ 60c. They paid \$100.00, balance on account. (Dr. Henry Simmons' Sons, \$80.00, Cash, \$100.00; Cr. Grain & Feed, \$180.00.)
- (22) Sold to Condon Construction Co., on their 60-day note: 10 tons Prairie Hay @ \$12.25; 10 tons Timothy @ \$15.00; 300 bu. Corn @ 75c.
- (23) Student renders an itemized bill for small expense items paid in cash as follows: Stationery, \$3.25; Collections and Exchange, \$3.40; Entertainment, \$5.40; Postage, \$3.00; Telegram, \$1.75; total of Check, \$16.90. (Dr. Expense; Cr. Cash.)

- (24) Paid for 6 tons Coal @ \$4.00, for use in store.
- (25) Sold to Hotel Emery, on account: 50 doz. Eggs @ 25c.; 105 lbs. Butter @ 30c.
- (26) Bought of Iowa Produce Co., on account: 100 boxes Gano Apples @ \$2.50; 100 boxes Mo. Pippins @ \$2.25; 50 boxes Winesaps @ \$3.50; 25 crates Pineapples @ \$1.75. Paid Freight on above, \$11.30.
- (27) Prepaid our note in favor of Wm. Hayward & Co., given June 2, for which they allow a discount of 6 per cent. to maturity—35 days. (Dr. Bills Payable; Cr. Cash and Discount.)
- (29) Sold to H. E. Johnson, 27 Canal St., on account: 25 doz. Eggs @ 25c.; 50 lbs. Cheese @ 17c.
- (30) Credit each partner with his salary as per articles of copartnership. (Dr. Expense; Cr. each partner.)
 Paid monthly dues and expenses as follows: Telephone Rental, \$3.00; Commercial Club, \$5.00; Pay Rolls for June, \$150.00; Water Rent, \$4.00. (Dr. Expense; Cr. Cash, four checks.)

Now add all the columns of the Journal and see if the sum of the two debit columns equals the sum of the two credit columns. The cash balance should be \$1,938.67.

LESSON 17

POSTING

I. General Instructions.

As explained on page 72, posting consists of transferring debits and credits from other books into the Ledger. The left half of the Ledger page is devoted to the debits and the right half to the credits. Every amount found in the Journal debit columns must be found on the debit side of the Ledger (either in individual items, or in totals) under the appropriate account; and all credit items in the Journal must be found on the credit side of the Ledger. It is, therefore, evident that since the Journal balances, the Ledger will also balance, if the work is correct.

2	£	Irai	···	4 T	Les				
	J.F.						J.F.		
Jun at 10	2	600		Jun	4	10	2	180	
6	3	2/30	76		5		3	75	_
Jun et 10 30 Gain (res)		537			9		3	495	
					13		6	249	1
·					17	•	7	225	<u>+</u> _
					18		7	185	Ł
					20		7	180	
					22		8	502	5
					30	Inventory (res)	1_	1176	8
		3268	36			/ -		3268	34
Jul 1 Inventory		1176	86						
		-	1				-		Ļ
				ces			-		_
Jun 10 10	4			Jun		10	4	22	5
26	9	693	75		11		5	1	-
Jun 10 10		50	73		25		8	-	4_
					29		9		17.
					30	Inventory (and))_	818	
		1211	98					1211	92
Jul 1 Inventory		818	73						
/									L
		El	pe	us	2		6	Page	3
Jun 3 10	2	46		Jun	30	10 Loss (NS)		437	19
23	4		- 6	7			_		Ĺ
	8	16	90						
24	8	24	/					ļ	
30	10	180						-	L
30	10								
		437	90				_	437	9
		+		-	1.		-		-
0 16. 10	9	Mer	al	-9 d	les	count	1	Pagie	3
Jum 30 Jain (Nes)	-	8	87			10	7		1:
		-	-		27		9	8	7
		1							

DOUBLE ENTRY LEDGER

II. Written Work.

- 1. Study very carefully page 82 and note how the titles are written. Note that the cash items in the Journal are not posted separately, but only the totals at the end of the month.
- 2. Take three sheets of Ledger paper and number the pages from 1 to 6. On the first page give one fifth page to each of Student, Edward Harvey, Cash, Real Estate, and Furniture and Fixtures; page 2, give equal space to Grain and Feed, and Produce; page 3, equal space to Bills Receivable, Bills Payable, Expense, Freight, Interest and Discount; pages 4 to 6, one fifth page to each personal account as they occur.
- 3. You are now ready to post. Place the Ledger to your right and the Journal to your left. Turn to Student's account and in the date column write July 1, 1910; in the folio column. 1 (meaning that the entry is found on page 1 in the Journal); in the amount column, \$3,000.00. Now write 1 to the left of your name in the Journal, indicating that the amount is posted on the first page of the Ledger. This is very important. Next turn to Edward Harvey and post this item in the same manner. In the same way proceed with all the credit items. The last item to be posted is the total credit of cash. \$5,016.45, under June 30. The numbers in the folio columns will be the same until new pages are turned. The number opposite the entry in the Journal is always the page of the Ledger on which the account appears. Add the totals of the Ledger accounts and observe that the grand total equals the total of the credit columns of the Journal.
- 4. Proceed in exactly the same manner with posting the debit entries and prove your work the same as the credits. If the debit and credit postings are equal, your work is probably correct, though amounts may have been posted to the wrong account. Such errors could not be detected except by checking.
- 5. Observe that several accounts balance, such as Horton, Brown & Co., Willard Johnson, and others. Draw a red line across the money columns under the last amount on both sides of all accounts which balance. Accounts having a number of entries on either or both sides should be totaled and the

amount written under the respective columns in very light pencil figures. You are now ready to take the trial balance.

LESSON 18

THE TRIAL BALANCE

I. General Instructions.

The trial balance is taken for the purpose of discovering whether the Ledger is in balance or not; that is, if the debits equal the credits. It may be taken either by using the totals of the debits and credits of each Ledger account or by taking the difference between the two sides. The latter method has several advantages. Both methods should be used if there is any difficulty in getting the balance. The only satisfactory rule for discovering errors in the trial balance is the following: *Check all the work*.

II. Written Work.

Take a sheet of Journal paper and write the page, title, and balance of all the accounts in the Ledger, except those which balance, as follows:—

	TRIAL BALANCE, JUNE 30, 1910	
1	Student	?
1	Edward Harvey	?
1	Cash?	
1	Real Estate?	
	etc., etc	
	Total\$7,913.38	\$7,913.38

LESSON 19

THE BALANCE SHEET

I. General Instructions.

The balance sheet consists of two statements: one showing the losses and gains, the other showing the resources and liabilities. These statements consist of the items found in the trial balance and of the inventories. Having completed the trial balance and inventories, the books are not needed further in preparing the balance sheet. Losses or gains are generally found in accounts of allowances and property in which we deal, or which show a rise or fall in value; resources and liabilities are generally found in accounts representing property and persons. Resources appear on the debit side; liabilities and gains, on the credit side.

II. Written Work.

CDAIN AND EFFE

1. The first step is to take an inventory. This consists of property on hand, including Grain and Feed, Produce, Furniture and Fixtures, and Real Estate. Going through the stock we find:—

GRAIN AND FEED	TRODUCE
748 bu. Corn @ 69c.	435 doz. Eggs @ 21c.
115 bu. Barley @ 51c.	95 lbs. Butter @ $27\frac{1}{2}$ c.
497 bu. Wheat @ 97c.	50 lbs. Cheese @ 15c.
10 tons Prairie Hay@ \$12.00	25 crates Pineapples @ \$1.75
	100 boxes Ganos @ \$2.50
	100 boxes Pippins @ \$2.25
	50 boxes Winesans @ \$3.50

Real Estate and Office Fixtures at cost value. Prepare the inventory as illustrated on page 20.

2. Going through the trial balance we find that the following accounts represent losses or gains (fill in the amounts):—

	TA GAGGOTT	U GAINS	
Expense	?	Grain and Feed (2).	?
Freight	?	Produce (2)	?
Student (1)	?	Int. and Discount	?
Harvey (1)	?		
- TD - 1	9		9
Total	- :	Total	:

- (1) The difference between the two sides, usually written in red ink; (2) is found by subtracting the amount in the trial balance from the inventory.
- 3. Since the loss and gain account is made up only at the end of the balance period, it should always be closed and the balance transferred to the proprietor's accounts.

4. The resources and liabilities are as follows (insert the figures and total):—

RESOURCES	ANI	LIABILITIES	
Cash	?	Robert Morris	?
Real Estate	?	Henry Simmons Co	?
Fur. and Fixtures	?	Western Produce Co.	?
Grain and Feed (In-		Bills Payable	?
ventory)	?	Iowa Produce Co	?
Produce (Inventory)	?	Student	?
Bills Receivable	?	Edward Harvey	?
Chicago Milling Co	?		
Empire Livery	?		
Hotel Emery	?		
H F Johnson	9		

LESSON 20

Total\$7.964.01

CLOSING THE LEDGER

I. General Instructions.

Total\$7,964.01

The object of closing the Ledger is to balance the loss and gain accounts and to bring the final net gain or net loss into the partners' accounts and thus leave only the accounts showing resources and liabilities open for the next balance period. The balance sheet furnishes a perfect guide as to the accounts to be closed. All the accounts represented in the loss and gain statement must be closed. Accounts showing resources and liabilities are not closed, but any account may be balanced if it contains a sufficient number of entries to justify it. Balancing an account consists of canceling equal amounts from both sides of the account, ruling it, and bringing down the balance on the proper side below the ruling.

II. Written Work.

With the balance sheet before you, turn to the Grain and Feed account in the Ledger. Enter the inventory on the

credit side, as illustrated on page 82. The difference between the debits and credits is now \$537.60, or the gain on this branch of the business. Enter this on the smaller, or debit, side, then rule the account as illustrated on page 82. (The ruling may be done in red or black ink as desired.) Note that the ruling appears on the same blue line on both sides of the account, even if there are more entries on one side than on the other. The single line crosses the money column only; the double line crosses all except the explanation columns. Next bring down the inventory on the debit side below the ruling. The reason for this is that having entered it on the credit side temporarily, in order to show the proper gain, it must also be entered on the debit side in order to restore the balance of the Ledger. Proceed in the same manner with the remaining loss and gain accounts, except that where there is no inventory the account is closed as it stands in the Ledger. Next enter half of the net gain, shown in the loss and gain statement, on the credit side of each partner's account. Close the account as illustrated on page 82 and bring down the present worth. This completes closing the Ledger.

Note carefully the steps leading up to closing a set of books:—

- 1. The trial balance.
- 2. The balance sheet.
- 3. Closing the Ledger.

Never rule an account until the trial balance and balance sheet are known to be correct.

LESSON 21 (Optional)

ORIGINAL ENTRY LEDGER

I. General Instructions.

It was stated on page 76 that it is not necessary to journalize, but that it is very helpful in order to avoid mistakes. Most business men prefer the Journal and Cash Book for the original entries. The difficult thing to carry out in practice without journalizing is to post every entry twice, on both the debit and the credit sides. Thus, when a sale of grain is made

for cash, cash is debited and grain is credited, according to the rules of journalizing. Since the full explanation is written in the Ledger, it is best to use the ordinary Day Book form as illustrated on page 22 and used in Lesson 3.

II. Written Work.

On two-column Journal paper open the same accounts as in Lesson 3 and post the transactions in Lesson 16 directly into the accounts, as illustrated on page 22. The result will be exactly the same as given in Lesson 17. It will, therefore, be unnecessary for you to prepare the statements and close the Ledger. The trial balance must be taken, however, same as heretofore.

PART II COST ACCOUNTS AND SPECIAL RECORDS



COST ACCOUNTS AND SPECIAL RECORDS

CHAPTER VI

COST OF PRODUCTION

Too often a good farm is compelled to carry unprofitable experiments and the whole business is pronounced a failure without an adequate attempt to find a remedy. In addition to the foregoing records (Second Method), Mr. Harris has kept accurate cost accounts of the main branches of his business. In cost accounting there are four principal elements to consider: Cost of material, labor, interest, and depreciation. The cost records are independent of all the rest and may be kept of every branch of the business, if desired, or limited to one or more phases. In this instance cost records have been kept of live stock, grain, hay, dairy products, and improve-The Agricultural Experiment Stations are always willing to give the farmer important advice and assistance regarding the stock, grain, fruit, etc., best adapted for different localities and purposes. But conditions frequently arise where it is important for the farmer to carry on his own experiments. Your own Experiment Station will doubtless be glad to coöperate and suggest methods for carrying on such experiments even to the extent of furnishing necessary blanks and material. Important bulletins on the subject may be had for the asking from the Department of Agriculture, Washington, D. C.

The following announcement in the Crop Reporter for May, 1908, indicates what the government is doing in this direction:—

"Cost of Producing Farm Products"

"The Bureau of Statistics is making an investigation of the cost of producing farm products in different parts of the United States. Blank forms have been printed upon which

to make reports, and this Bureau desires to receive the names of such farmers as have kept records of cost of producing crops, or are well informed upon the subject of cost of crop production in their locality, in order that blank schedules may be sent to them to fill in. Individual reports will not be published—only the average of many reports. Names should be sent to the Bureau of Statistics, Department of Agriculture, Washington, D. C."

Every farmer should avail himself of this important free service. "Keeping posted" is one of the characteristics of the progressive and successful farmer. There are three exceptionally valuable bulletins on the subject which ought to be in the library of every farmer: U. S. Department of Agriculture, Bureau of Statistics, Bulletin No. 48, and University of Minnesota, Agr. Ex. Station, Bulletins Nos. 73 and 97.

Cost of Live Stock

Either of three methods may be employed in finding the cost of live stock:—

First Method.—Ascertain exactly the total amount of grain, hay, and roughage on hand at the beginning of the year, and produced during the year. From this subtract the quantity sold, including amount used by household and for seed, and the amount on hand at the end of the year. The difference is the quantity used for live stock. The value at market prices is the expenditures of feed for live stock.

Find the total amount received for dairy products, including amount used by the household. The difference between the cost and the receipts is the gain. The disadvantages of this method are that no account is taken of individual animals nor of different kinds of stock. The herd as a whole may be a paying investment and still there may be individual animals carried at a loss. It is desirable that such records be kept, at least occasionally, as will enable the farmer to eliminate unprofitable animals.

Second Method.—The following actual record of a dairy herd of twelve cows illustrates a much more satisfactory test than the preceding. Individual record was kept of the milk produced by each cow, but the feed was weighed for the entire herd, and the average cost charged to each animal at market prices.

Tests of Dairy Herd for March, 1909 Lbs. Milk for Mo. No. Cow. *Test. Lbs. Fat. Val. at 36c. Cost of Feed. Net Profit. 4.5 1 465 20.93 \$7.53 \$6.21 \$1.32 2 372 5.0 18.60 6.70 6.21 .493 620 5.0 31.00 11.16 6.21 4.95 4 372 7.0 9.37 26.04 6.21 3.16 5 496 4.8 23.80 8.57 6.21 2.36 6 682 4.7 32.05 11.54 6.21 5.33 7 558 4.4 24.55 8.44 6.21 2.23 8 620 4.1 25.42 9.15 6.21 2.94 4.2 9 496 20.83 7.50 6.21 1.29 4.9 651 31.90 11.48 10 6.215.2711 5.0 27.90 10.04 558 6.21 3.83 12 589 5.0 29.45 10.60 6.21 4.39

Feed for the Month of March

Hay, 4,900 lbs. @ \$9.00 per ton\$22.05
Kale, 9,600 lbs. @ \$2.50 per ton
Bran, 1,800 lbs. @ \$30.00 per ton
Shorts, 900 lbs. @ \$30.00 per ton
Total

\$74.55 divided by 12 equals \$6.21, average cost of feed.

With this average before him, a careful feeder will be able to make mental corrections for each individual animal, accurate enough for most practical purposes. The milk record has been kept, as illustrated on page 102.

Third Method.—The difference between the second and third methods is that in the latter accurate records are kept of individual feed rations, while in the second method an average is taken. The error resulting from averaging the feed between all the animals in a large herd may be such as to unduly favor certain animals and do injustice to others. The only absolutely accurate method is to keep an account with each animal,

^{*}These figures were obtained by the Babcock test, which is described in every modern work on dairying. It may be seen in any creamery,

at least with such animals as show a tendency to be unprofitable. Page 97 shows an individual account with one of the milch cows on the Harris farm. It is arranged on the regular Ledger form. Opposite pages of the Day Book may also be used. The detailed information regarding feed, milk, labor, etc., is found in the respective records, illustrated on pages 102 and 103. Similar accounts are kept of each animal, tested preferably during the entire lactation period. It is only in this way that the careful farmer can determine whether each animal is kept at a gain or a loss. The weeding out of one or two unprofitable animals a year will pay for the labor of keeping the cost records many times over.

Extension Bulletin No. 3, Iowa State College, says on this subject:—

"There are a variety of different methods used among successful dairymen for securing records of their cows. When accurate records are imperative it is necessary to weigh and sample each cow's milk at each milking. For all practical purposes, however, it is not necessary to weigh and sample the milk from each cow oftener than twice a day for three days of each month. Usually samples are taken on the first, tenth, and twentieth of each month, thereby making six milk weights on the record sheet and six separate samples of milk which have been placed in a sealed jar bearing the cow's name.

"Directions.

- "1. Arrange the scales, milk sheet, sample jars, and sampler in a convenient place behind the cow stalls.
- "2. Put at least one preservative tablet in each jar intended for a composite sample. Be sure to place the remaining tablets where children cannot get them, as they are poisonous.
- "3. Weigh the milk from each cow separately and record the amount on the record sheet.
- "4. Use a reliable sampler, or if one is not at hand use care in mixing the milk by pouring from pail to pail before taking out a sample with a small dipper. This is important.

"5. Keep the bottles where the children cannot get at them, as the preservative is poisonous.



"COMPUTING THE MONTHLY YIELD FOR A COW

"After summing up the weights of milk from one cow for the three days of the month you have the total pounds of milk for an average three days. Divide the sum by 3 and you have the average for one day, which multiplied by the number of days in the month will give the monthly yield. It is not expected, nor is it essential, that these records be accurate to a pound in ordinary dairy herds. When the milk is tested with the Babcock machine the result is read as per cent. of butter fat,—as 3.7 per cent. or 4.3 per cent. This indicates that there are 3.7 pounds or 4.3 pounds of butter fat in 100 pounds of milk. Multiplying the weight of the cow's milk for the month by the test the result indicates the pounds of butter fat which the cow has produced for the month. At the end of the year

it is a simple matter to add together the twelve monthly records of butter fat. Multiply the sum of these weights by the price per pound and the result indicates the value of the product. The record for each member of the herd can be thus worked out. A study of these records shows the comparative value of the various cows in the herd.

"In order to know whether the cow is paying a profit or not the owner must have a definite idea of how much feed she has consumed in making this product. Knowing this, the actual values of all the cows are easily determined. On dairy farms where the hand separator is used it is safe to charge a cow for food only while in milk. The skim milk will usually pay for the cow's board while dry, and the calf and manure should more than pay for the labor it takes to care for her. Why not milk fewer cows and make more money?"

Cost of Crops

The principles laid down in respect to the cost of animal products hold true also for the cost of farm crops. Two methods suggest themselves: Accounts with the various crops and accounts with the different fields. Either method requires detailed records of the labor, seed, fertilizer, etc., expended on the crop and of returns not only for cash sales, but for products used by the household and for feed. On page 97 is illustrated an account with the wheat crop in 1908.

			7	0	n!	,	Daing Cow!	
190	9							
961	1 Market value	-			apr	1	Value now	45
7.	ayear ago		50				Well produced	6750
	Feel for the year		42	20			Call	6750
	Jees ja che year		4	20			cay	1 -
-	care		-7					
	deharning			50				
	Doctor		2					
	Interest on 50.	27	3	50				
	1 1 4 1	1						
	Incedental Net Law	1-1-	2			-		
	Net Gam		13	20				
	-		117	50				11750
-				-				
-								
		1 11			II	٠		
					_			
				14		/	,	
C 145			9	Uh	ea	1		
190	8	20	4	Wh	ea 5 th	1	crop .	
190 ap	1 Value of Land			Uh	ea 5 th	1	Crop Value of Land more	1078
190 ap	1 Value of Land at year ago		1100	Wh.	ea 5 th	1	Crap Talue of Landons (Sen 2 Ho for over	1078
190 ap	1 Value of Land		1100		ea 5 th	1	Talue of Land min Value of Land min	1078
_190 ap	1 Value of Land		1100		ea 5 th	1	Table of Sans and (See 2 Ho for over	1078
190 af	Value of Land at year ago Sateust, 7%		1100		ea 5 th	1	Table of Sandam Gen 2 16 for our Croffing 418 bu Wheat	
190	I Value of Land at year ago Interest, 7% Labor & Time Seg S, 3g bu		1100 77 30		ea 5 th	1	Take of Landson Chan 2th for our, Croffedy 418 less Wheat @ 75 d	31350
190	I Value of Land at year ago Interest, 7% Labor & Time Seg S, 3g bu. Threating		1100		ea 5 th	1	Talue of Law Sour (Lew 2th for over Croffely 418 bu Whent 2 75 4 Straw	
190 af	I Value of Land at year ago Interest, 7% Labor & Time Seg S, 3g bu. Threating		1100 77 30		ea 5 th	1	Table of Land min (Sees 2 Ho for over Croffedy 418 bu Wheat Q 75 g Straw	31350
190 ap	I Value of Land at year ago Sutenst, 7% Labor & Time Says, 3g bu. Threshing Marketing		1100 77 30		ea 5 th	1	Talue of Sansan (Sees 2 Ho for over Cropping 418 bu Wheat @ 75 d Straw	31350
1900 ap	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 77 63 30 29	25	ea 5 df	1	Table of Sandam (See 2 16 for one, Croffing 418 bu Wheat @ 75 d Straw	31350
1900 ap	I Value of Land at year ago Sutenst, 7% Labor & Time Says, 3g bu. Threshing Marketing		1100 773 30 29 8	25	ea s th	1	Talue of Law Sour (Lew 2th for over, Croffely 418 bu Whent @ 75 \$ Straw	3/3 50 /5
190 ap	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 77 63 30 29	25	ea sik af	1	Talue of Land min (Sees 2 H) by over Croffed of the over 418 by Wheat Q 75 d Straw	3/3 50 /5
190 ap	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	ea 5 th 4		Table of Sansan (Sees 2 Ho for over Croffed y 418 In Wheat @ 75 d Straw	31350
190	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	ea 5 th 4		Table of Land min Can 21/2 for our, Cropping 418 bu Wheat @ 75 d Straw	3/3 50 /5
190	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	ea 5 ik		Talue of Law Sour (Lew 2th for over, Croffely 418 bu Wheat Q 75 \$ Straw	3/3 50 /5
190 af	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	ea 5 d		Confidence of Sans min (See 2 Ho for over Croffed of the or over Croffed of the or over 10 0 0 5 d Straw	3/3 50 /5
190 Up	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	ea of		Talue of Sansan (Sees 2 Ho for over Croffedy 418 In Wheat Q 75 d Straw	3/3 50 /5
190	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	ea 5 th		Trap Palue of Law Sour (Lew 21th for ove, Cropping 418 bu Wheat @ 75 d Straw	3/3 50 /5
190	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		Talue of Law Sour (Lew 2th for over, Croffely 418 bu Wheat @ 75 \$ Straw	3/3 50 /5
190	I Value of Land at year ago Sutenet, 1 % Labor & Time Sast, 3g bu. Threshing Marketing Fertilians		1100 773 30 29 8	25	leas site		Confidence of Sans min (See 2 H) for over 418 by Sheat & Straw	3/3 50 /5

COST ACCOUNTS

CHAPTER VII

SPECIAL COST RECORDS

There are several convenient special records which ought to be adopted besides those I have illustrated. It is not necessary that expensive printed books be provided. A plain sheet of paper may be ruled with little trouble and pasted in the Bill File. In fact, this is in many respects preferable to printed forms, because the forms can then be changed from year to year to suit conditions. I illustrate only the following:—

Labor Records

The best form of a labor record is illustrated on pages 102 and 104. In one, account is kept with the object upon which labor is expended; in the other, with the laborer. For ordinary purposes, page 102 is the most convenient, but where several men are engaged on a project Form (a), page 104, is preferable.

Milk Records

Two milk records are illustrated on pages 102 and 104. Each possesses certain advantages over the other. The weekly record need not be so large and admits of larger spaces, while the monthly record exhibits the entire month's result on a single page. The weekly record is more appropriate for filing, being less liable to soiling. Whichever form is used, it should be tacked to a board in a convenient place for the milker. A spring scale, graduated to hundredths, should be hung near the record, far enough from the wall for the pail to hang freely. (See illustration, page 95.) The original records should be filed for at least a year. If a daily time book is kept, it may also be adapted for the milk and poultry records.

Poultry Records

Practically the same form as the milk record can be used conveniently for the egg record, and it is not deemed necessary to enlarge further on the subject.

The methods of improving the poultry stock, and other useful information regarding the poultry business, are found in numerous books and bulletins on the subject.

Duplicating Sales Book

It is often convenient to retain a duplicate of sales, orders, receipts, etc. It will be found very helpful to the farmer and to the dealer alike, if the farmer prepares a bill of the produce he brings into town for sale. This will often avoid misunderstanding, and may save money. This is especially true if the produce is sent in by children or by some one not connected with the family. On page 104 is illustrated a very convenient book which is kept in stock in most stationery stores. Where this system is used, it is advisable that *every* sale be recorded, and then listed as shown on page 103. In entering in the Cash Book, the sale number should be inserted. All sales to merchants should be considered as cash, even if the produce is exchanged for merchandise. If sales are made on time, note the fact on the bill, and enter it into the personal account, as illustrated on page 22.

The Farm Plot

There is one more record which I cannot urge too strongly. I refer to the yearly plots. This record will prove to be one of the most valuable and interesting parts of the farm history. A plot is easily made by first drawing a square on a blank piece of paper and then sketching the fields. It is, of course, unnecessary to draw this to scale. A close approximation is all that is necessary. (See the illustration, page 105.)

A Practical Work Report

The excellent work report shown on page 101 is used on the Beachview Farm, operated by Griffiths & Sons of Seattle. I quote from their letter on the subject:—

"Our trouble has been to arrive at some satisfactory method of obtaining the cost of production of the various crops and kinds of stock. We are attempting to solve this in two ways:—

"First, as to labor, by the weekly work report which the

foreman is instructed to fill out, one for each man on the place, by quarters of a day. The bookkeeper can then apportion the operating expenses, including labor, to the various accounts.

"Second, we have found it more difficult to apportion the produce raised on the farm to the various stock accounts. This can be done without much difficulty with the grain, but with the hay, for instance, when cattle and horses are fed in the same barn, from the same loft, but by different men, it is a difficult matter to charge the various stock departments with the amount used to even an approximation of correctness." (See page 101.)

Office Methods

Talk about office methods on the farm! Why not? Why should not the average farmer enjoy at least a comfortable desk and neatly printed stationery? Every boy loves "to do business." Surround him with a business atmosphere on the homestead and he will stay by you and succeed you in your old age; continue in your slipshod methods and he will move to town and become a cheap clerk instead of a landed proprietor. Encourage your children to assist in your business; make them feel that they are intimately associated with you. Take them into your confidence and, as they grow older, into your counsel, especially when you are considering your annual balance sheet, and a greater prosperity, wider influence, and a more contented family will be your reward.

Work Rep															
Account	Mon.	Tue.	Wei.	Thu.	Fri.	Sat.	Total	Remarks							
Crops, Roots	lx						/	Cultivation							
Crops, Grain	2	\mathcal{J}_{x}			2		7	"							
Crops, Hay			4x				4	Hauling							
Cattle	/						/								
Hogs															
Horses		/					/								
Poultry					/		/								
Grinding Feed					/		/								
Manure				2			2								
Land Clearing															
Ditching															
Fonces, New						4	4								
Fances, Rep.															
Repairs to Bldg.				2			2								
Mood				~			-								
Hauling to town															
Harvesting															
Filling Silo															
Haying															
	To	tal				4	124								
x quarters of	lad	ay					6 d	ay o							

WORK REPORT

MILK RECORD

				W	eek	endii	ng	J.	u	e	5	_		84	009	7
Test	NAMES	1	oday	Mor	nday	Tue	sday 0	Wedn	esday	Thur	sday	Fri	day	Satur	day	Total
4.5	Kate	Mor 12	EJ.	12	11	10	/3	//	13	12	11	//	12	12	12	- 162
5.0	authra	13	13	13	14	12	13	12	13	14	13	14	12	/3	11	190
7.0	Diget	7	8	8	7	8	9	8	8	10	8	10	8	9	9	117
4.8	Lady	11	12	10	11	10	12	- 10	11	11	10	12	11	11	11	153
4.7	Beauty	11	11	11	10	11	13	14	12	12	-//	12	12	- 13	11	164
4.4	Glenco	12	13	11	12	11	12	10	12	10	11	11	11	12	10	158
									_							
							_									
Real Property lies		_		-	L	L	1				1					

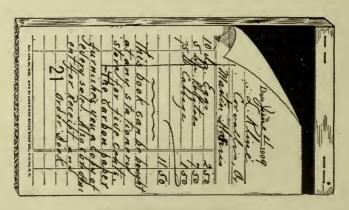
Veight	Name or No.	12	23	43	3/6	78	19	10	1/2	13	14	316	17	18	19 20	2/2	222	24	25/26	27	82	930	3/	Total	Va	lue	Remark
0	Kate war				I				T			T		1	T	П	T	П	T	П	I						
800	Male (a) Grain		+	Н	+	+	╁	Н	+	₩	-	+	Н	+	+-	Н	+	H	+	Н	+	Н	4	115	١.,	1.0	Walla
	4	1	+	H	+-	+	Н	-	+	Н	H	+	Н	+	╁	H	+	H	+	H	╁	Н	-1	1420	_	2/5%	ayaya
	1.1	8			$^{+}$	\top	т	Н	$^{+}$			+	Н	,	+	H	$^{+}$	H	+	H	$^{+}$	++	H	224	1		
975	anthia	80										5		11				\Box	T	\Box	1	П		2420	3	38	
	1			щ	Ļ	4	1		1	1	U	44	Ц		T	П		П		П	I	П					
1460	Dedant .	1	+-	Н	+-	Н	Н	110	4	Н	04	4	Н	+	+	₩	+-	₩	+	Н	+	+-	4	175	-	1.0	
700	wanger	1/00	+	H	+		Н	H	+	Н	H	+	Н	+	+	H	+	H	+	Н	+	++	+	2840	_	18	
	6	8	+		+		П	H	1	Н	П	+	Н	7	+	H	+	H	+	H	+	H	Ħ	230	1	1-1	
1120	Lady	95	1		T	\blacksquare			T					#		П		П						2630		12	
) /	11-1	+	Н	+	Щ		Щ	1			1		4				Ц	Т	П	I						
830	Doguti	11/4	+-	\vdash	+	н	н	1	1	Н	-	+	Н	4	+	Н	+	H	4	Н	+	ш		118	L	\downarrow	
100	0	164	+	Н	+	H	Н	H	+	Н	+	+	Н	+	+	Н	╁	Н	+	₩	┿	₩	4	2040	_4	32	
	41	12	1	H	+	H		H	+	+	+	+	Н	+	+	H	+	H	+	+	t	++	-1	180	1		
1440	Menco	110						П				+	Н	7	+	\vdash	+	11	+	11	+	++	=1	3020		47	

account	/	2 3	4	5		7 8	9	10	1/	2	3	4	5/1	17	18	19	202	1/2	223	24	25/2	42	725	29	30	31	Hrs	Rai	Æ,	An	,4	Rêma
Com					4	19	9	9													I						36	30	,	10	80	Man 4.
Live Stock	Ц	1	L	Ц	1	L	L	Ц		1	1	1	1	L	4		1	L	L		1		8	L	ı		12	30	,	3	60	
Orchans	Ц	3	L		1		L	Ц				2		L	L				1								6	13	1		90	
Improvements	Ц		L	Ц	4	4	L	Ц	1	4		1		L	L	3	1		L		2	L					13	13	5	_/	95	
Machinery Which	1/			2							1	j,	1	1	1		1	3					L		I	I	7	13	4	/	05	

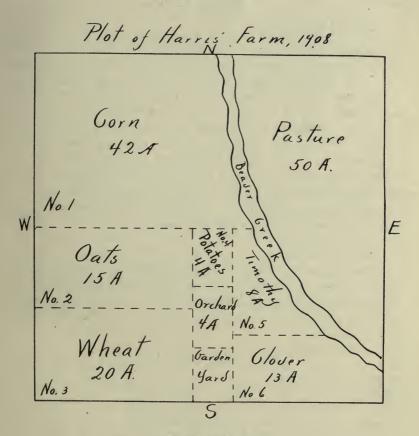
		1.	_	FEE	D REG	CORD	2				
	Kind of Stock	Dainy.	Cowo			Week ending	une	5,	1909		
Live	Weight NAME OF	R NUMBER	raio will May	Grain Bell	WOLDDAY W	PEDNEADAY THURSD		Grain Sel	Bay Oral	DAY N	rotal
80	o Kate		4 64	4 63	3/2 63		1. 1	3/26.		64	275.443
********										.	
										-	
}					H						1-1-
			Stock	k Re	cord,	Harris.	Far	m			
No.	Animal	Breed	Birti	Mark Golor	How disp's of	Buyer	2	ate	Weight	Pri	ce
35	Cow	Jeries Fannie	1904 Feb 1	1	50/8	J. P. Smi	th 19.	7.	1000	80	
	Steer		1 1			John Win	11	-			
	Horse	1 -			Dies)	,	-	7.2		-
2/		77,000		1007							
1	2	3	4	5	6	7		8	9	1	9
		7			70	,					
		5	reed	0		ord, 190					
No.		nima			Date	Sire	Foo	0	uner	Rem	arks
110.	Horse 11/2 mo	Gow 9 1/2 mc	Ho 4n	9 B	red Due Di	ropid	1,66				
1	Mand			4	15414	5 Prince	1500	Hop	Skins	Non	nal
2		Loutta		/	5 1020 10	23 Paul	700	Sm	ith	Suc	all
3			10.0	5 12	20 4 20 4	17 Red	1	Se	elf	5 h	led.
′		2			3	4	5		6	7	
		5-	1-	P		1000					
		Va	105	/! @	coro	, 1909.					
Da	te No. 7	To who	m		Ari	ticles		Pa	id Gh	arge	Page
Nou	4 14 %	. A		124	of Eggs	4: 5 lb Sut	ter 125	3	65		
		shu El.		34	o bu.	Com		170	1		
		very &		120	vu. Po	laloes			50		
		L'Smi				tatoes				250	
	27/8/C	hicas ,	Mark	ex 5.	Steers	5462 11		191	20		

SPECIAL RECORDS

	(a) Improdements, Horse Farm TIME BOOK for the NAME. 12345 1 10 15 10 13 13 13 13 13 15 15 10 15 10 13 13 13 13 13 13 13 13 13 13 13 13 13	May alsa be adapted for Methodoxida series and series for series and series for series and series for series series and series for series seri
--	--	--



TIME AND SALES BOOK



THE FARM PLOT

Illustrative Lessons

LESSON 22

MILK RECORD

I. General Instructions.

The milk record illustrated on page 102, Form 10, is kept for the purpose of ascertaining the profitable and unprofitable cows. As explained on page 94, it need not be a continuous record, but should be kept for a week or a month whenever the information is desired. It is very important, however, that this "weeding-out" process be performed regularly once a year. The success or failure of the dairy farmer is likely to depend, to a very large extent, on this practice. Let us take for illustration a herd of fifteen cows. Form 10 is tacked to a board and hung in a convenient place in the barn. A spring balance, graduated to tenths of pounds, is suspended near the record, as illustrated on page 95.

II. Written Work.

Following is the record of a mixed herd for the week ending June 5, 1909, representing an actual Oregon herd. The figures in the first column under each day represent the morning milking; those in the second, the evening. Record the following data on Form 10:—

	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Test.
Kate,	12-10	12-11	10-13	11-13	12-11	11-12	12-12	4.5
Anthia,	13-13	13-14	12-13	12-13	14-13	14-12	13-11	5.0
Digit,	7-8	8- 7	8-9	8-8	10-8	10-8	9- 9	7.0
Lady,	12-11	10-11	10-12	10-11	11-10	12-11	11-11	4.8
Beauty,	11-11	11-10	11-13	14-12	12-11	12-12	13-11	4.7
Glenco,	12-13	11-12	11-12	10-12	10-11	11-11	12-10	4.4
Pet,	12-10	11-10	13-12	12-11	11-12	13-12	12-11	5.1
Bess,	10-11	11-11	10-12	11-10	11-12	11-10	11-12	4.6
Cynthia,	12-13	11-12	12-11	12-12	11-12	13-12	11-11	4.9
May,	9-10	10-10	10-9	9- 9	9-11	11-10	10- 9	5.4
Gertie,	10-11	10-9	10-12	10-10	9-10	11-12	11-10	5.8
Alta,	12-12	13-14	13-12	14-13	13-13	12-13	13-14	4.7
Ruby,	8- 9	7- 9	8-9	7-8	8-8	9- 9	9-10	6.2
Pauline,	14-15	14-14	14-13	14-15	15-15	14-15	15-15	4.3
Princess,	16-17	16-16	17-18	17-17	16-17	16-18	17-17	4.4

Find from the record:

- 1. The total weight of milk.
- 2. The total weight of butter fat.
- 3. The weekly income from each cow, assuming that butter fat is worth 31c. per lb. and skimmed milk 25c. per cwt., allowing 10 per cent. for loss of weight in skimmed milk.
- 4. The gain per cow based on the feeding record, Lesson 23. Form 9.
 - 5. How can the result in (3) be proved correct?

LESSON 23

FEED RECORD

I. General Instructions.

The feeding record, page 102, Form 9, is a companion to the milk record, Lesson 22. One is not kept without the other. Both are kept for the purpose of checking up the profits of the dairy cows. Three methods are fully discussed on pages 92 and 93. This and the preceding lessons have reference to the third method. Suppose that Form 9 is tacked to a board and hung in a convenient place in the dairy barn. Below is the feed record of the herd in the last lesson.

II. Written Work.

Enter the following results in the respective columns. Only the last six cows were fed hay.

Kate, weight, 800 lbs.; Sunday, grain, 4 lbs.; soiling, 64 lbs.; Monday, 4-63; Tuesday, $3\frac{1}{2}$ -63; Wednesday, 4-65; Thursday, $4\frac{1}{2}$ -64; Friday, $3\frac{1}{2}$ -62; Saturday, 4-64.

Anthia, 975 lbs.; 8-80, 8-80, 8-80, 8-80, 7-80, 7-82, 7-81.

Digit, 1,460 lbs.; 6-92 daily.

Lady, 1,120 lbs.; 8-90 daily.

Beauty, 830 lbs.; 4-68 daily.

Glenco, 1,440 lbs.; 6-100, 6-110, 6-110, 6-100, 6-100, 6-100, 6-110.

Pet, 950 lbs.; 7-80 Sunday, Monday, Tuesday; 7-83 Wednesday, Thursday, Friday, Saturday.

Bess, 1,000 lbs.; 6-86 daily.

Cynthia, 1,270 lbs.; 8-100 daily.

May, 850 lbs.; 5-65 Sunday, Monday, Tuesday, Wednesday; 4-60 Thursday, Friday, Saturday.

Gertie, 900 lbs.; 6-70 daily. Alta, 1,375 lbs.; 8-100 daily.

Ruby, 1,050 lbs.; 24 lbs. hay, $4\frac{1}{2}$ grain, 42 soiling; 25-4-43, 23-5-45, 24- $4\frac{1}{2}$ -44, 25-4-43, 25- $4\frac{1}{2}$ -45, 23-5-43.

Pauline, 1,300 lbs.; 27-6-45 daily. Princess, 1,350 lbs.; 30-7-48 daily.

Find from the record:-

- 1. The total feed per cow and enter the result in the proper column.
- 2. The weekly cost per cow when the grain mixture is worth 95c. per cwt., soiling \$1.05 per ton, and hay \$10.50 per ton.
 - 3. What changes should be made in the herd?

LESSON 24

LABOR RECORD

I. General Instructions.

As explained on page 98, a labor record may be prepared monthly or weekly. The monthly form, illustrated on page 102, has many advantages. In the first column may be listed either the various accounts to which the labor is to be charged, as in this exercise, or a sheet may be devoted to each account and the names of the laborers listed in the first column. The latter plan is preferable in large enterprises. Sundays fall on May 6, 13, 20, and 27. Mark "S." above those dates and avoid placing any figures in the Sunday columns.

II. Written Work.

1. On Form 6 prepare the following pay roll for the month of May, 1910, as illustrated on page 102:—

Labor on Corn, Man and Team, May 7, 8, 9, and 10, 9 hrs. each @ 30c. per hour.

- Live Stock, Man and Team, 18, 4 hrs.; 28, 8 hrs. @ 30c. per hour.
- Orchard, 3, 3 hrs.; 14, 2 hrs.; 23, 1 hr. @ 15c. per hour.
- Improvements, 7, 4 hrs.; 12, 4 hrs.; 19, 3 hrs.; 25, 2 hrs. @ 15c. per hour.
- Machinery and Implements, 1, 1 hr.; 5, 2 hrs.; 15, 1 hr.; 22, 3 hrs. @ 15c. per hour.
- Wheat, 4 and 5, 9 hrs. each; 16 and 17, 9 hrs. each, Man and Team, @ 30c. per hour.
- Onions, 1 and 2, 9 hrs. each; 11, 6 hrs. @ 15c. per hour.
- Potatoes, 21, 9 hrs.; 24, 6 hrs.; 25, 5 hrs., Man and Team, @ 30c. per hour.
- Hay, 11, 3 hrs.; 14, 6 hrs.; 15, 4 hrs.; 18, 3 hrs., Man and Team, @ 30c. per hour.
- Oats, 26, 29, and 30, 9 hrs. each; 31, 7 hrs., Man and Team, @ 30c. per hour.
- 2. Add the number of hours under each account and enter in the hour columns.
- 3. Find the amount under each account, and, finally, the total labor.

LESSON 25

THE FARM PLOT

Read the suggestions regarding the farm plot on page 99. On Form 11 draw to scale any farm with which you are acquainted, preferably your own farm, if you own one. Lay out the various fields and mark the crop and the acreage, as shown on page 105. Draw it first in lead pencil, then in ink.

Supplementary Exercises (Optional)

1. THE INVESTMENT

The census for 1900 gives the following apportionment for land and improvements, buildings, implements, machinery, and live stock for every \$10,000.00 invested:—

Division. Total.	Land and Impr.	Buildings.	Imp. and Mach.	Live Stk.
N. Atlantic States\$10,000	\$5,737	\$2,567	\$606	\$1,090
S. Atlantic States 10,000	6,661	2,720	332	1,362
N. Central States 10,000	6,055	825	500	2,620
S. Central States 10,000	4,114	1,114	373	4,356
Western States 10,000	4,463	693	593	4,251
Total\$50,000	\$27,030	\$7,919	\$2,404	\$13,679
Average\$10,000	\$5,406	\$1,584	\$481	\$2,736

Compare the above with two or more typical farms with which you are acquainted.

2. PRIVATE ACCOUNTS

The student will find it a valuable exercise to keep account of his personal receipts and expenditures on a form similar to No. 2. The columns may be headed as follows: Receipts—Earnings, From Home; Payments—Fees (Books and Stationery), Board, Room, Clothing, Recreation. A semester's record of the student's actual expenses will be given special credit. Whether submitted for credit or not, all students are urged to keep an accurate record of their personal expenses.

3. AGRICULTURAL STATISTICS

It is desired to obtain accurate data on farm management, and you are required to write to two or more farmer friends for certain information. Copies of a letter will be furnished by your teacher. (A copy of the proposed letter will be furnished any teacher by the author.) Tabulate the result and prepare a report to be discussed by the class.

4. COST RECORDS OF CROPS

As illustrated on page 97, prepare a cost record, showing the net profit or loss of two crops, from information secured from reliable sources. Any local crop may be taken, such as potatoes, wheat, oats, hay, etc. Two months will be allowed for the work.

Hand in your work with a letter of explanation of the system.

5. COST RECORDS OF STOCK

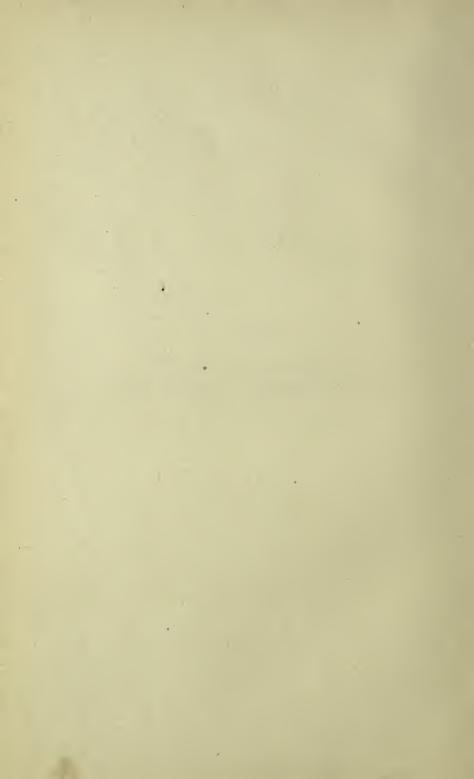
According to either the second or third method outlined on page 92, prepare a statement of the net profit or loss of not less than five milch cows. Your information may be drawn from any farm, from the college department of dairying, or from agricultural bulletins. The records required are: Labor, milk, feed record, and the individual Ledger account of each animal. Two months will be allowed for this work. Use Forms 1, 6, 9, and 10.

Hand in your work with a letter of explanation of the system.



PART III

BUSINESS ORGANIZATIONS, CORRESPONDENCE, AND FORMS



BUSINESS ORGANIZATIONS, CORRESPONDENCE, AND FORMS

CHAPTER VIII

BUSINESS ORGANIZATIONS

The tendency of to-day in all important business enterprises is toward organization and coöperation. What would be impossible for an individual to accomplish becomes a comparatively easy task when the resources of a number of persons are combined. While no business organization should be effected without the assistance of competent legal counsel, it is important that the parties should understand the nature of the organization and the necessary steps required for their promotion and the form of contracts in common use. This is all that will be attempted in this chapter. The legal aspects of each organization must be studied under commercial law. The most important among business organizations are Partnerships, Joint Stock Companies, and Corporations.

Partnership

Two or more individuals competent to make contracts under the law may combine their labor and capital in any lawful business enterprise. When this is done without any legal formality it is called a partnership. The agreement is called the Articles of Copartnership and should always be in writing and prepared by a competent attorney. Any name may be adopted which cannot be shown to cause an injury to another's business. Each partner is personally liable for all the debts of the partnership unless it is clearly held out before the public that another agreement exists between the partners. This liability extends to the personal property of each partner as well as to the partnership assets,—one of the subjects most often misunderstood by the layman. Nor does the liability

depend on the amount invested or the service rendered by each partner. So long as the business is solvent, the profits or losses are divided according to the articles of copartnership, but if the business fails and only one partner is able to pay, he is responsible for all the debts of the firm.

Following is a standard form of articles of copartnership:-

Articles of Copartnership

THIS AGREEMENT WITNESSETH, That John Doe of Auburn, Illinois, and Edward Harvey of Auburn, Illinois, have this day agreed to associate themselves together as a copartnership, for the purpose of engaging in the business of buying and selling for profit Feed and Produce, at Auburn, Sangamon County, Illinois, under the firm name of Doe and Harvey, the term of said copartnership to continue five years from and after the first day of June, 1910, unless sooner dissolved.

The investment contributed by the aforesaid partners is to be as herein set forth, to wit: John Doe contributes \$3,000.00 in cash, and Edward Harvey contributes \$3,000.00 in cash.

The profits or losses of said partnership business are to be shared equally.

With respect to the time and services given, and the compensation to be received, it is agreed that both parties shall give their entire time to the business. John Doe shall be allowed a salary of One Hundred Dollars (\$100.00) per month, and Edward Harvey Eighty Dollars (\$80.00) per month, unless otherwise agreed between the parties.

It is also agreed that aside from the profits and compensations heretofore mentioned, neither partner is to withdraw from the business any money or other property, except with the written consent of the partners.

It is especially agreed that neither of the parties to this contract shall sign or indorse any bank note, draft, or commercial paper, nor sign any official or other bond, nor do any other act to create a financial liability or obligation, without the written consent of his copartner.

At the expiration or sooner determination of said copartnership, the business and property of said firm may be closed out by sale; and, after all debts and liabilities are paid and discharged, the amount remaining shall be divided between the partners in the ratio of their respective interests; or, if the parties so agree, the copartnership may be continued for such further time, and upon such terms, as the members thereof may be able to agree upon.

Witness our hands this first day of June, 1910.

Witness: { F. W. Brown, E. R. Johnson,

JOHN DOE, EDWARD HARVEY.

EXERCISE 1

Write articles of copartnership for any firm with which you may be acquainted, using the articles on page 116 as a model.

Joint Stock Companies

A joint stock company differs from a partnership in its organization and membership only, not in the liability of the members. Its organization is like the corporation: the liability of its members and its formation are like the partnership. No legal steps are necessary to form a stock company. The capital is usually divided into shares like the corporation. and, in voting, a member of a stock company has but one vote regardless of his interest in the business, while in the corporation the voting power depends on the amount of stock held. The stock company has power of succession, but has no seal. A suit must be conducted in the name of all the stockholders and not in the name of the company through its officers. The advantages of a stock company over a corporation are: (1) less formality in organization; (2) less publicity; (3) not affected by the corporation tax; (4) no public reports required.

EXERCISE 2

Write a paragraph pointing out how the Hood River Apple Growers' Union could be changed into a joint stock company. (See Articles on page 119.)

Corporations

Because of its adaptability to a large variety of conditions, the corporation has become the favorite form of business organizations. Many corporations have stockholders in all parts of the world, but the organization is represented in its sphere of business and before the law by its officers and directors. Thus a corporation may be defined as an artificial person, created by law, either under special enactment or under general statute, to act as one person, through its officers, in its business capacity and before the law.

The formation of a corporation should be thoroughly understood by every citizen, but it is extremely inadvisable to organize without the assistance of a competent attorney. It is not safe to lay down many general rules governing the organization of corporations, since the laws differ materially in the several states. Reliable information can be obtained free of cost from the Secretary of State in each state of the Union.

The corporation differs from the partnership in several important respects. (1) It is created by law; that is, no corporation is recognized before the law unless it is organized exactly as set forth in the statutes of the various states. (2) The liability of the stockholder extends only to the amount of his stock, unless otherwise provided in the articles of association. (3) A corporation can sue and be sued in its own name through properly qualified officers. (4) It has the power of succession; that is, the organization is not affected by the death or disability of any stockholder. (5) The interest of a stockholder may be transferred without affecting the organization. (6) The voting power of each stockholder is proportional to the amount of his stock.

From a careful study of the constitution and by-laws given below, it will be seen that the articles of association must set forth (1) the intention of forming a corporation; (2) the corporate name; (3) the purpose of the organization; (4) the place of business; (5) election of officers; (6) powers and duties of officers; (7) amount and division of stock, etc.

The advantages of the corporate organization are many and important. By it the coöperative spirit is fostered; in union is strength. The small means of a large number are collected and effective capital is secured for large enterprises; members may enter or withdraw without disturbing the organization; through organization, special talents are utilized to best advantage; waste of material, labor, and capital are reduced to

a minimum; the publicity required by law has a wholesome influence against corruption and dishonesty.

It is not out of place to give a word of caution to the uninitiated in the subject. Schemers often promote corporations for fraudulent purposes and hide their own designs behind innocent stockholders. Do not rush into incorporating; a majority of the corporations formed are failures. If you wish control of the corporation, you should control at least fifty-one per cent. of the capital stock.

Every stockholder should be provided with a copy of the constitution and by-laws and also with the annual report. See to it that the minutes of the board of directors and all books of account are carefully kept. Every stockholder has the right to inquire into the business methods of the corporation.

The legal aspects of stock issue, kind of stock, dividends, surplus, etc., are subjects for commercial law.

The constitution and by-laws of the Hood River Fruit Growers' Union is given below as a model:—

Constitution and By-Laws of the Hood River Apple Growers' Union

ARTICLE I

The name, place of business, capital stock, and purposes of this corporation are set forth in the articles of incorporation, which are referred to as part of these by-laws.

ARTICLE II

The membership of this corporation shall be confined to actual growers of fruit of Hood River Valley and vicinity.

ARTICLE III

The board of directors shall consist of nine members, four of whom shall hold office for more than one year. They shall be elected annually and shall serve until their successors are elected and qualified. They shall qualify as directors within ten days after their election, and within ten days thereafter they shall elect from their number a president, vice-president, and secretary. They shall also choose a treasurer, who shall be required to give bonds, with surety in such sums as they

may deem ample. They may choose a bank as treasurer without bonds. The annual meeting shall be held on the first Saturday in April in each year.

ARTICLE IV

The directors shall have the power to levy and collect assessments on the capital stock not to exceed fifty per centum of the stock subscribed at any one time and not oftener than every sixty days, the same to become delinquent in thirty days from date of notice of such assessment in the local newspaper. The directors shall sell shares of stock to actual fruit growers only.

ARTICLE V

The directors shall employ such agents or other employees as are necessary to do the business of the corporation, and shall fix their remuneration; provided, that the board of directors shall receive no salary for acting as directors. They shall have daily account sales rendered to the members of the union each day, as received by them or their agent, giving a statement by whom sold, gross sales, commission, freight, or express, and amount due members of the union; also giving condition of fruit, if there be any complaint.

ARTICLE VI

The directors may refuse to receive for shipment, under the brand of the union, any package of fruit not considered prime from any cause. They shall refuse to receive for shipment fruit from any person not holding stock.

ARTICLE VII

This organization through its board of directors shall have the exclusive and unqualified power to market all apples grown by any of its members. A contract between each member and the board will be required.

ARTICLE VIII

The duties of the secretary shall be to keep a record of the proceedings of the meetings of the stockholders and directors. He shall keep the corporate seal of the association and shall

be custodian of all deeds, articles of agreement, and other valuable instruments of writing belonging to the association. He shall keep all books of the issuance and transfer of stock and shall countersign all certificates of stock and affix the seal of the board of directors and stockholders, and shall keep, or cause to be kept, all books of account necessary to the transaction of the general business of the association. The manager of the union shall be placed on a flat salary.

ARTICLE IX

The board of directors shall provide the necessary means for carrying out the purposes for which the association is formed by reasonable charges and commissions for the service rendered by the association to its members and customers.

ARTICLE X

The duties of the treasurer shall be to receive all moneys due or paid to the association and deposit the same as the directors may instruct; to pay out said funds upon the written order or check of the president, first vice-president, or general manager, when countersigned by the secretary.

ARTICLE XI

All notes or other evidence of indebtedness of the association shall be signed by the president and countersigned by the secretary of the board of directors.

ARTICLE XII

The president shall instruct the secretary to call a meeting of the stockholders whenever in his judgment the necessities of the union require it, by giving one week's notice through the local newspaper and send each a notice on a postal card.

ARTICLE XIII

No union label shall be placed on a box of fruit except by the manager of the warehouse just before shipping.

ARTICLE XIV

Each packer will be held responsible for his own work by a

system of fines. No fruit will be received unless put up by a packer employed by the union.

ARTICLE XV

The union will have no packing house foremen except those employed by the union.

ARTICLE XVI

A majority of the stock subscribed, upon which all legal calls or assessments have been paid in full, shall constitute a quorum at any stockholders' meeting, and no vote shall be counted which is not represented by one share of the stock upon which all calls or assessments have been paid.

ARTICLE XVII

These by-laws may be amended by vote of the majority of the stock upon which all calls or assessments have been paid, at any regular or called meeting, provided that notice to amend the by-laws shall have been given in the call for a special meeting.

ARTICLE XVIII

Any member desiring to dissolve his connection with this corporation may do so by surrendering his stock to the secretary thereof or by transferring it to any member in good standing on the secretary's books.

EXERCISE 3

Write a letter to your instructor describing in detail how you would organize and incorporate a creamery. Point out the peculiarities of the incorporation laws of your state. (You can secure a copy of these laws free from the Secretary of State.)

CHAPTER IX

THE BUSINESS LETTER

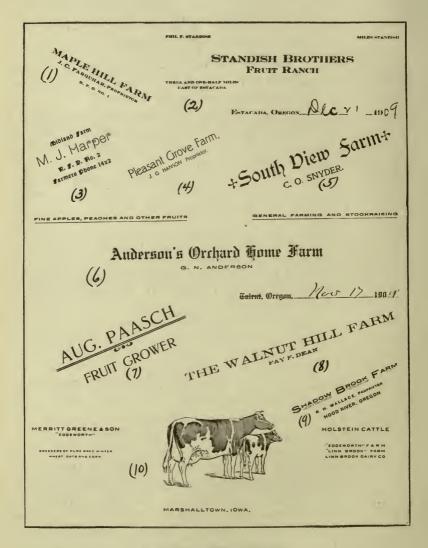
In this age of complex business activity, where a large volume of the business of the country is done by letter, it is essential that the farmer, as well as the merchant, be able to write a correctly-arranged, direct-to-the-point business letter. Therefore, the purpose of this chapter is to set forth in as clear and concise a manner as possible the customary forms and arrangement of business letters.

Business letters include all correspondence relating to the writer's financial, professional, or official dealings with other people, and should clearly set forth the subject matter of which they treat.

In order for a mechanic to do good work he must have suitable material and good tools with which to work. In order for the writer of letters to do good work and create a good impression he should use a good grade of paper and pens, and ink that flows freely.

We judge people largely by their surroundings and the associates they choose. The writer of a letter is judged largely by the general arrangement, wording, and neatness of his letter, and by the quality of stationery used.

The preceding paragraph brings us to another important matter emphasized elsewhere in this text. Every farm, no matter how small, should have a suitable name. In fact, the importance of selecting a name for your farm cannot be overestimated. It not only lends value to your farm and dignity to your community, but it is a source of satisfaction to have neatly-printed stationery bearing the name of your farm, the name of the proprietor, and in some instances a sketch or small photograph indicating the products of the farm. (See models on page 124.) It is well, however, to bear in mind that crowding too much on a letter head detracts from rather than adds to its value. Your post office address, including your box or R. F. D. number, should also appear on



MODEL LETTER HEADS

the letter head, correctly arranged, so that in writing the heading of the letter all that is necessary to do is to fill in the date.

Skeleton Letter

Before taking up the discussion of the various parts of a letter, a skeleton letter is presented herewith, with the different parts lettered for the purpose of reference. Study the skeleton form very closely, not only with a view to noting how and where the heading is arranged, the uniformity of the indentations, and the complimentary close and signature, but also notice how balanced the letter appears in the page.

	(a)	
		(b)
$(c) \dots$,	
(e)		
	$(f) \dots \dots \dots$	
	(g)	,
Key to s	skeleton letter:—	(h)

- (a) First line of the heading.
- (b) Second line of the heading.
- (c) Name and title of the person to whom you are writing.
- (d) Address of the person to whom you are writing. (In some cases the address should occupy two lines. See model, page 126.)

Incorrect Form. If formed I the 1910 Gentlemen i See the add of the hulitin on farm records, for toots in Stamps inclosed pleas find too ets in Stamps for which pleas send me the bulletin and oblige:
Gorrect Form.
1 A. F. D. 5, Blank, Ohio, 2 Feb. 1, 1910.
4 Oregon Agricultural College, 5 Convallis Oregon.
8 in stamps for which please send
Enclosed find two cents in stamps for which please send Professor Detell's bulletin on Farm Records. Respectfully yours,
12 John Doe.

THE FORM

- (e) Salutation, as Dear Sir, Gentlemen, My dear Mr. Smith, etc.
- (f) The beginning of the body of the letter. Strictly speaking, the salutation is a part of the first paragraph; however, for the sake of uniformity, it is well to begin the first paragraph of the body of the letter as far to the right of the left-hand margin as succeeding paragraphs. Note that all paragraphs are uniformly indented.
 - (g) Complimentary close, as Yours truly, etc.
- (h) The writer's signature. Note that the signature begins as far to the right of the complimentary close as the second line of the heading (b) begins to the right of the first line (a).

The Heading

The heading of a letter includes the address of the writer and the date. It may occupy one, two, or three lines, depending on the length of the address.

The following forms illustrate one, two, and three line headings:—

Form 1

Form 1 shows a one-line heading begun far enough from the left-hand margin to fill the remaining space to the right. Should it be necessary to begin a heading to the left of the center of the body of the letter, in order to get it on one line, a two-line heading should be used. It is not good form for the heading to extend to the left of the middle of the sheet.

Observe carefully the punctuation of the heading.

		Form 2			
	(a)) 68 Sixth Str	eet,		
		(b) Portla	nd, Ore., J	July 5, 1	910.
$(c) \dots					
$(e) \dots \vdots $					()

Form 2 shows a two-line heading, the first line begun at or a little to the right of the middle of the page, and the second line begun as far to the right of the first as the second line of the introductory address (d) is begun to the right of the first line of the introductory address (c).

Form 3 shows a two-line heading with the post office address occupying one line and the date the other.

Form 4 shows a two-line heading where it is desired to give the rural route.

Form 4 might also be arranged as follows:-

R. F. D. No. 3, Corvallis, Oregon, July 25, 1912.

The models on page 126 illustrate incorrect and correct forms of a business letter. Note the arrangement of the heading, lines one and two. The R. F. D. or box number or street number should always be written in connection with the heading. Also note that line three has been skipped. This is done for the purpose of lending balance to the letter head.

Punctuation

The heading of a letter may be separated into distinct parts for the purpose of punctuation. A comma should follow each

part of the address except the last, which should be followed by a period, as shown in the models.

EXERCISE 4

Write, punctuate, capitalize, and correctly arrange the following headings:—

- 1. Albany Oregon March 29 1888
- 2. Vancouver Washington may 3 1912
- 3. bloomington indiana 821 Fifth street october 1 1910
- 4. 321 seventh Street peoria illinois May 4, 1911.
- 5. 1907 Oregon agricultural College Sept 25 corvallis Oregon
- 6. Write headings for four or more places with which you are familiar.

Introductory Address and Salutation

The introductory address of a letter is made up of two parts, (c) consisting of the full name and title of the person addressed, (d) consisting of his street number, P. O. box, and post office address, or such other information as the person to whom you are writing may designate.

The salutation is the term Dear Sir, Dear Madam, Gentlemen, etc., and should begin on a line with the body of the letter, that is, flush with the left-hand margin.

Custom as well as courtesy requires that some title be used with the name. Individual titles generally used are Miss, Mrs., Mr., Dr., Rev., Esq., Prof., and Hon., depending on the rank or profession of the person addressed. When a partnership or corporation requires a title, Messrs. may be used. A title should not be used if the name of the firm begins with "the." Only one title should be used, and it should be placed before or after the name, as Mr. John H. Brown, or John H. Brown, Esq., not Mr. John H. Brown, Esq.

Models

The following are good models showing the heading, introductory address, salutation, and complimentary close, the body of the letter being omitted. The line after the complimentary close indicates the position of the signature.

130 BUSINESS ORGANIZATIONS, CORRESPONDENCE, FORMS

Form 1

Aurora, Ill., March 10, 1912.

Montgomery, Ward & Co., Chicago, Illinois.

Gentlemen:-

Yours truly,

Form 2.

67 Wabash Avenue, Chicago, June 24, 1910.

Mr. A. P. Robinson, 211 Globe Block,

Seattle, Washington.

Dear Mr. Robinson:-

Sincerely yours,

Form 3

Michigan University,
Ann Arbor, Michigan,
June 14, 1911.

Dear Frank:-

Sincerely,

To Mr. Frank Huntington, Beloit, Wisconsin.

Form 4

The Ideal Farm,
McMinnville, Oregon,
October 12, 1914.

Mr. Silas Blank,

212 Second Ave.,

Portland, Oregon.

Dear Sir:-

Yours truly,

Punctuation

Carefully observe the arrangement and punctuation of the models. Notice that each part of the introductory address is

followed by a comma, except the last, which is followed by a period. The salutation should be followed by a colon and the complimentary close by a comma. The writer's signature should be followed by a period.

Capitalization

Every sentence should begin with a capital letter, and every important word of the address should be capitalized; also observe that all titles are capitalized and that the first and last word and every noun in the salutation should begin with a capital.

EXERCISE 5

Write the following headings and introductory addresses, arranging and punctuating them according to the models given:—

- 1. Wise Virginia June 15, 1910 Mr. F. B, Goshen Clintwood Virginia Dear Sir
- 2. Berkeley Calif April 11 1910 Mrs. James P. Hadley Eugene Oregon Dear Madam
- 3. Raymond Washington 821 Fourteenth street July 18 1909 Mr. T B Stidham 321 Railroad Ave Doty Wash
- 4. 821 Second Avenue Seattle Washing May 4 1910 John P Randolph Esq 741 I street Tacoma Washington
- 5. Ames Iowa, Dec 23 1908 The Pure Food Grocery Co City gentlemen
- 6. Kalispell Mont Nov 8 1911 The Home Lumber Co Fargo N Dak gentlemen

The Body of the Letter

The mechanical arrangement of the heading, introductory address, salutation, body of the letter, and complimentary close can be mastered in a short time by any one who is careful and painstaking. However, the composing of the letter proper is an entirely different matter, and by far the most difficult part of letter writing, and a good style can be acquired only by careful and painstaking effort.

It is not the purpose of this chapter to give you certain forms of letters, worded in a specific way, for the various subjects about which it may be necessary for you to write. But it is rather its purpose to give you suggestions which will be of assistance to you in the writing of your business letters, and that will enable you to put into your letters your own originality in a clear, forceful, convincing manner.

Some reference should always be made to the letter which is being answered, but in order to secure the best effect this reference should be made incidentally. Such opening phrases as "Your esteemed letter of the 10th inst. is received and in reply would say" are overworked and should be avoided. They are used by those who have fallen into a rut, or by those who lack originality. It would serve your purpose better to open your letter somewhat as follows: "The suggestion contained in your letter of the 15th inst. meets with my entire approval," or some similar opening that would be in conformity with the letter to which you are replying.

It is an inexcusable mistake to fail to date a letter. Without the date a letter is, in many cases, of no value. Especially is this so should it be necessary to bring the letter into court for the verification of some transaction about which the letter may have been written. The heading, including the date, should be written before taking up the body of the letter.

A letter should always contain the complete address of the writer, even though you are corresponding with those who may reasonably be expected to know your address. This precaution often saves time and money, and preserves friendship.

A business letter should be as brief as the nature of the subject about which you are writing will permit. If you are ordering goods by letter, you should clearly set forth the nature of the articles you desire, the way you wish to have them shipped, whether by express or freight, or whether they should be sent by mail. (See model on page 133.) If you are a regular customer of the firm, and have an account with them, you should clearly state the terms on which you desire to make this particular purchase. However, should it be your first order, you should either make sufficient remittance to cover the amount of the order or give some responsible person as reference.

Should you be seeking information by letter, ask for that information in much the same way as though you were talking

to the person. At all times be courteous, but do not try to overdo it. In writing to a person about a subject in which he is not directly interested, you should inclose a self-addressed stamped envelope for his reply.

Remittances and Orders

Remittances in the form of currency should never be sent through the ordinary letter. This is not only unsafe, but the sender has no evidence that the amount in question was sent or that the person to whom it was sent received it. You should choose as the safest and most convenient way of making a remittance one of the following methods: Postal money order, express money order, registered letter, check, or bank draft. Probably the most convenient method to those who live in rural districts would be the postal money order.

In making a remittance, no matter how small the amount, you should state in your letter accompanying the remittance for what it is intended, the exact amount, the nature of the remittance, whether it is a check, money order, or otherwise.

Model Order

Sterling, Illinois, June 15, 1910.

Ginn & Company, Publishers,

2301-2311 Prairie Avenue,

Chicago, Illinois.

Gentlemen:-

I inclose herewith postal money order for \$4.72, for which please send me, by prepaid express, the following books:—

The Working Principles of Rhetoric, by John F. Genung, 12mo, cloth, price \$1.40;

Lockwood and Emerson's Composition and Rhetoric, 12mo, cloth, price \$1.00;

Library of Anglo-Saxon Poetry, Vol. I. Beowulf, 12mo, cloth, price \$1.12;

Allen and Greenough's New Latin Grammar, 12mo, half leather, price \$1.20.

I should like to have these books reach me not later than the 20th inst., as I expect to use them in my summer school work beginning on the 21st.

Yours truly,

Inclosure.

Student & Company.

Where more than one item is ordered in a letter, as in the foregoing model, it is better to write them in a line or column, that is, assigning to each item a separate paragraph, followed with a complete description of the item, including the price, number, size, color, weight, and any other information that would insure your securing just what you wanted.

Taste and Neatness

As suggested elsewhere, the writer should throw his own originality into his letters; but it must be steadily kept in mind that this must not be done in a haphazard, careless manner. One of the purposes of a letter is to get action. In order to do this the writer must, if possible, put himself in the place of the receiver of the letter and, having done this, carefully consider just what it would be necessary for some one else to do or say to get the desired action from himself. It would be quite impossible to lay down definite rules as to just how this should be done, but I am sure all will agree that the letter should be free from misspelled words, ink blotches, grammatical errors, slang, undue criticism, sweaty or dirty finger prints, or any other similar defects that would be unpleasant to the eye.

A business woman writing to a stranger should never neglect to prefix to her signature the title Miss or Mrs. in parenthesis. It is embarrassing to both the writer and the person who receives the letter, should a woman be addressed as Mr. In case a letter is received where it is evident that the writer is a woman, but she has merely signed "Mary Jones," omit the title and address her: "Mary Jones, Cedar Rapids, Iowa, Dear Madam:—"

It is not supposed that those for whom this is intended would have the time to go into the real science of letter writing, as do the great majority of the large manufacturing concerns of the country who conduct extensive advertising campaigns, and for this reason our suggestions cover merely those points it is thought would be of assistance to the majority of those who are pursuing this course.

The letter should be arranged artistically on the page. You should endeavor to arrange the letter so that there will be an

equal blank space at the top and at the bottom of the page. If the letter is short, wider left and right hand margins should be allowed so that the letter will occupy more vertical space, and thus avoid a stringy appearance.

If letter paper is used, size $8\frac{1}{2} \times 11$ inches, the indentations for introductory address and paragraphs should be deeper than when note paper, usually about $8\frac{1}{2} \times 5\frac{1}{2}$ inches, is used. When letter paper is used, the indentations should be about three fourths inch; when using note paper, the indentations should be about one half inch.

Paging

If more than one page is required for a letter, each page, except the first, should be numbered in the order in which it is written. Before the letter is inclosed in the envelope the pages should be arranged in the order in which they should be read.

The Paragraph

A series of connected sentences treating of a single topic make what is called a paragraph. In letters, as in other forms of composition, the change from the discussion of one topic to another should be indicated by an indented line, which catches the eye of the reader and tells him that another topic is to be considered.

The Postscript ,

The postscript is an afterthought or a statement added for emphasis after the body of the letter has been finished. The postscript should be indented the same as paragraphs, and should begin on the second line beneath the signature. It should be preceded by "P. S." and followed by the initials of the writer.

Study the arrangement of the following letter:—

Corvallis, Oregon, July 15, 1910.

The Home Real Estate Co.,

Forest Grove, Oregon.

Gentlemen:-

In accordance with our agreement of June 15th, I am sending you attached hereto my personal check, No. 68, on

136 BUSINESS ORGANIZATIONS, CORRESPONDENCE, FORMS

the First National Bank of Corvallis, for \$42.43, to be applied as follows:—

\$40.00 in payment of the first monthly installment due on residence lot No. 6, Block E, Wilkinson's addition to the City of Forest Grove, Oregon; \$2.42 in payment of the interest on the remaining eleven monthly installments of \$40.00 each.

Kindly send me credited coupon for the first installment and interest.

Yours truly,

Inclosure.

EXERCISE 6

- 1. Make up and write the heading, introductory address, salutation, and complimentary close for five different letters, referring to the models, if necessary, for the correct forms.
- 2. Write a letter, dated at your home, ordering five different articles of merchandise.
- 3. You were at your county seat several days ago and ordered your local paper. You have not yet received a copy. Write a courteous letter to the editor requesting him to investigate the delay and to send the paper to your address regularly until notified to discontinue it.
- 4. In the early part of the harvest season you purchased farm implements of a hardware dealer of your city, amounting to \$175.50. It is now nearing the time that you agreed to make the second payment of \$75.00. Your grain yield has not been as large as you expected, and, owing to certain other obligations you must meet, you have found it necessary to ask for an extension of time on at least half of the amount. Write him a letter explaining your situation and ask for the extension of time.
- 5. Your hardware dealer has agreed to accept \$40.00 and to grant an extension of thirty days on the balance. Write him a letter thanking him for the extension and inclose your check for \$40.00. Call attention to the remittance.

FOLDING THE LETTER.

Paper

There are two sizes of business letter paper, namely, letter size, $8\frac{1}{2} \times 11$ inches, and note size, usually $8\frac{1}{2} \times 5\frac{1}{2}$ inches,

though the size of note paper varies. The larger size is generally used by business houses.

Folding

The following is the correct method of folding letter paper: (1) Turn the lower edge up to within a half or quarter of an inch of the top, then crease the fold, being very careful that the side edges of the paper are exactly even. The reason for not allowing the bottom and top edges of the paper to be even is to make the unfolding of the letter easier, and without loss (2) With the creased edge of the letter toward you, fold over the right edge a little less than one third, being careful to keep the creased edges of the first and second folds (3) Fold over the left edge a little less than one third, overlapping the second fold. The second and third folds should be of equal width. The middle fold should be a little narrower than the envelope into which the letter is to be inserted, and a little wider than either the right or left hand fold.

Inserting the Letter

The letter is now ready to be put into the envelope. Take the envelope in the left hand with its back up and the flap opening toward the right. Take the letter in your right hand with the folded edges up. Insert first the edge folded last.

In opening a book the left-hand cover is usually opened first. Through the unconscious training of years you do this without apparent thought. Why? Because it is the natural way. The letter should be folded and put into the envelope in accordance with the preceding instructions in order to enable the person who receives it to unfold it and begin reading without loss of time.

In large business houses where hundreds of letters are received daily, the letters are usually placed on a table, back uppermost, and opened by inserting a paper knife beneath the closing fold and slitting all the way along the top edge.

In folding note paper, first fold the bottom edge up a little less than one third, then fold the top edge down a little less than one third, overlapping the bottom fold. With the envelope held in the same position as when inserting the larger 138 BUSINESS ORGANIZATIONS, CORRESPONDENCE, FORMS

size paper, with the folded edges of the letter up, insert first the edge folded last.

The Envelope

Great care should be exercised in writing the directions on the envelope. In the first place, the name of the person to whom you are writing should appear in the introductory address of the letter just as he is accustomed to spell it, then it should be written on the envelope just as it is in the introductory address, followed in the order named by the street and house number, post office, and state. Should the name be followed by more than one title, they should be separated by commas.

The Return Card

Every letter you mail should bear your return card in the upper left-hand corner of the envelope. If the envelope bear your name and address only, the letter should be returned to you at the end of thirty days, provided it is not called for within that time. If it is desired to have the letter return to you within a specified time, provided it is not called for, the words "If not called for within — days, return to," followed by your name and address, will insure its return to you in case it is not called for. Should the envelope not bear your name and address, and remain uncalled for for thirty days, it will be forwarded to the dead letter office.

The Stamp

The stamp should be placed in the upper right-hand corner of the face of the envelope. It should be firmly attached and the edges of the stamp should be about one eighth of an inch from, and parallel to, the edges of the envelope.

The following are good models:-

Mr. Karl L. Goodall,

Corvallis,

Oregon.

Armour Packing Company,

Chicago, Illinois.

(2)

Gregg Publishing Company,

151 Wabash Avenue,

Chicago, Ill.

Mr. Harvey H. Burnham,
Cottage Grove,
Oregon.

140 BUSINESS ORGANIZATIONS, CORRESPONDENCE, FORMS

EXERCISE 7

Write the following envelope addresses, using blank slips of paper the size of a regular business envelope— $3\frac{1}{2} \times 6\frac{1}{2}$ inches:—

- 1. Mr. R. P. Smith, Logan, Utah.
- 2. Mrs. Raymond H. White, 728 Seventh Street, Lewiston, Idaho.
 - 3. Miss Gertrude Hamilton, Beaver Creek, Oregon.
 - 4. Henry H. Lathrop, Thacker, West Virginia.

The punctuation marks are omitted in the following in order to give the student practice in inserting them:—

- 5. Rev James R Hamilton Pastor First M. E. Church Spokane Washington.
- 6. Hon. J. H. Ackernan State Supt of Schools Salem Oregon
- 7. Prof G. H. Patterson Care Willamette University Salem Oregon
- 8. Mr Geo W Mathews Association Hall University of Wisconsin Madison Wisconsin
 - 9. The Home Correspondence School Springfield Mass
- 10. Mr. Frederick M. Bollinger Transient St Paul Nebraska.

Note.—In writing to a person who is stopping in a city only temporarily where the free delivery system is in operation, the word "Transient" or "General Delivery" should be written in the lower left-hand corner of the envelope.

CHAPTER X

BUSINESS FORMS

Every farmer, mechanic, and professional man should understand the ordinary business forms in daily use. It is often a matter of humiliation to persons of superior ability in other lines to acknowledge that they are ignorant of the proper form of a simple business paper. The purpose of this chapter is to give models and explanations of the forms likely to be used by every business man.

The Invoice

An invoice is an itemized statement of goods bought or sold. It should contain detailed information regarding date, parties, quantity and description of the goods, prices, dis-

Marshalltown Jowa. Nov	C.,
748 by. Com .69 516 115 by. Bapley .51 58 497 by. Wheat .97 482 10 tons Hay 12.00 120 Received payment Nov. 15, 1910 Merritt Greene 76	

MODEL INVOICE

142 BUSINESS ORGANIZATIONS, CORRESPONDENCE, FORMS

counts or terms, how the goods are shipped, by whom packed, etc. If paid, it should be properly receipted.

EXERCISE 8

Write invoices for all the sales in Lesson 20. Use Journal paper, or rule the required form.

The Statement

A statement is an abstract of the debits and credits of an account. It should contain the items as they appear in the Ledger, arranged so as to show at a glance the condition of the account. The statement is often confined to the balance due, but this form is seldom satisfactory. (See page 143.)

EXERCISE 9

Write statements of all the open accounts receivable after closing the Ledger in Lesson 20. Use Journal paper or rule the required form.

The Receipt

No.24 Evayoville Ins. 9/12,1910.

Received of Samuel D. Donver Jung hundred fifty and med Dollars

Infull payment for house "fin".

\$25000 your Sinsmore

A receipt should always be taken when a payment is made, unless it is made by check, in which case the indorsement constitutes receipt. It should give the name of the parties, the amount paid, when and for what it is made. A duplicating receipt book should be used when a large number of receipts are given.

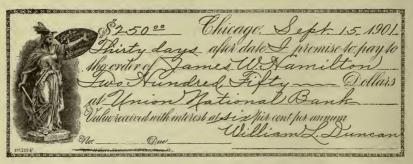
	Marshalltown, lowe Uprate Account with MERRITT GREENE "EDGWORTH" FARM, "LINN BROOK DAIRY CO	& SC	w.	.190.9	
Jan 1	8 as per bill rendens	32	40		
3	/ /	18	70		
Jeb. 1	5	50	30	>	
				101	40
Max	, Cy.			50	
Mar	Hald -			51	To
	- a. and	(01	70
	Less satisfacto	-11	7	ee.	
		1/		~	
ap.	I Sal. due			51	40
	'				

MODEL STATEMENT

EXERCISE 10

Write receipts for all the cash received in Lesson 20, using slips 3 x 6 inches.

The Promissory Note



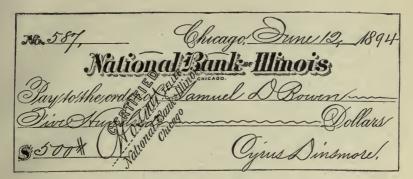
A promissory note is a written contract for the payment of a specified amount at a given time and place, with or without interest. When it is made to the order of the payee, it becomes a negotiable paper. The parties to a note are the maker (Duncan), who obligates himself to pay; the payee (Hamilton), in whose favor the note is drawn; and the indorsers, who transfer the note to other parties. The first indorser is always the payee. The law relating to negotiable instruments is very important and should be thoroughly understood by all who use them. It is too technical and extensive to be discussed here. No note should be given unless its terms are thoroughly understood by both parties.

EXERCISE 11

Draw notes for every transaction involving a note in Lesson 20. Use slips of paper 3 x 6 inches. Be sure to fill out the vacant space in the amount line. When this is not done, the amount is often raised by forgers.

The Check

A check is a form of draft by which a depositor draws money from a bank. It has the same parties and the same legal aspects as the draft. The increasing use of the bank by all classes for facilitating business makes this one of the

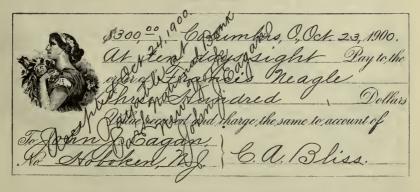


most important of negotiable instruments. The law governing its use should be thoroughly understood. Checks should be written in ink, the amount should be written in both words and figures. All checks should be numbered. It is sometimes desirable for the payee to require a certification from the bank that the check is good. The form of this certificate is given in the model. It has the same effect as the acceptance of the draft. When a check is certified, the bank is responsible for the amount.

EXERCISE 12

Write checks for all the payments in Lesson 20.

The Draft



A draft is a written order by one person on another to pay money to a third person. It is a time or sight draft, according to the time specified for payment. If it reads, as in the illus-

tration, "At ten days' sight," it is payable ten days after acceptance and is called a time draft; if it reads "At sight," it is payable upon presentation and is called a sight draft. It is a bank draft if issued by one bank on another; an individual draft when issued by a firm or individual on another firm or individual. The parties to a draft are: The drawer (Bliss), who orders the payment; the drawee (Eagan), who pays; the payee (Neagle), in whose favor the draft is drawn; and the indorsers, who transfer the draft to others. payee is always the first indorser. The indorsement should be made on the back of the left end of the draft. If merely the name is written, it is a blank indorsement and may be paid to any one upon presentation; if the indorsement reads "Pay to the order of John Doe," the amount can be paid only to the party designated by Doe and is called a full indorsement. The draft is a negotiable paper if payable "to the order of ——" or "to bearer" and is subject to the laws of negotiable instruments. When the drawee signifies his willingness to pay a time draft, he "accepts" it as shown in the model. The acceptance has the same force as the signing of a note. The law of negotiable instruments should be studied very thoroughly by every business man.

EXERCISE 13

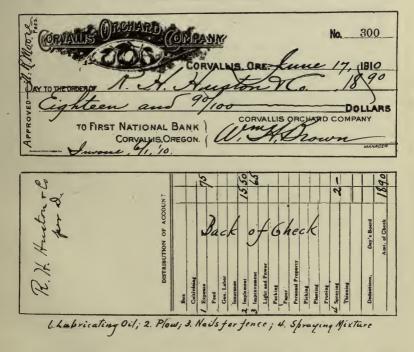
Write the draft called for under June 11, Lesson 16.

The Certificate of Deposit



A certificate of deposit is a receipt issued by a bank for a temporary deposit. It is discussed here only to emphasize the great importance of establishing banking connections. If, for any reason, it is impracticable to open a regular bank account, as discussed on page 25, any money not needed for current use should be deposited on a certificate. If, as in the model, the deposit is allowed to remain for a definite period, interest will be allowed at the current rate. Withdrawals are usually allowed by indorsement of the amount on the certificate, but not by check. A certificate of deposit is usually issued "to the order of ——," and is therefore transferable by indorsement.

The Voucher Check



The voucher check is an exceedingly convenient form, especially in corporate business. By referring to the illustration above, it will be seen that it consists of an ordinary check on one side, with a blank for the signature of the president or some other officer authorized to approve vouchers. The bank should be instructed to refuse payment unless the check is

148 BUSINESS ORGANIZATIONS, CORRESPONDENCE, FORMS

approved or countersigned. The back provides for the distribution of the payments, and from this the entries are made in the records. Space is left for indorsements on the left end of the back. The indorsement shown on the model constitutes a satisfactory receipt in most cases. When a definite invoice or other item is paid, it is well to specify the date or number, as illustrated. Never fail to number your checks consecutively.

EXERCISE 14

Prepare three different forms of voucher checks, modified to suit your own ideas. Let one be similar to the model.

PART IV USEFUL TABLES



USEFUL TABLES

TABLE 1

Six Per Cent. Interest Table

	Time	\$1	\$2	\$3	\$4	\$5	\$6	\$10	\$20	\$50	\$100	\$1000
1	1	0	0	0	0	0	0	0	0	1	2	17
	2	0	0	0	0	0	0	0	1	2	3 5	34
	3	0	0	0	0	0	0	1	1	$\frac{2}{3}$	5	50
	4	0	0	0	0	0	0	1	1	3	7	67
	5	0	0	0	0	0	0	1	2	$\frac{4}{5}$	8	83
	6	0	0	0	0	1	1	1	2	5	10	1.00
	7	0	0	0	0	1	1	1	2	6	12	1.17
70	8	0	0	0	1	1	1	1	3	7	13	1.33
DAYS	9	0	0	0	1	1	1	. 2	3	8	15	1.50
Ą	10	0	0	1	1	1	1	2	3	8	17	1.67
	15	0	1	1	1	1	2	3	2 2 3 3 5	13	25	2.50
1	20	0	1	1	1	2	2	2 2 3 3	7	17	33	3.33
	25	0	1	1	2	2	2	4	8	21	42	4.17
	30	1	1		2 2 2	2 3 3	2 3 3	5	10	25	50	5.00
	33	1	1	2	2	3	3	6	11	28	55	5.50
	63	1	2	3	4	5	6	11	21	5 3	1.05	10.50
1	93	2	2 3	2 2 3 5 2 3	4 6	8	9	16	31	78	1.55	15.50
7	1	1	1	2	2	3	3	5	10	25	50	5.00
	2	1	2	3	4	5	6	10	20	50	1.00	10.00
	3	2	3	5	6	8	9	15	30	75	1.50	15.00
	4	2	4	6	8	10	12	20	40	1.00	2.00	20.00
20	5	3	5	8	10	13	15	25	50	1.25	2.50	25.00
MONTHS	6	3	6	9	12	15	18	30	60	1.50	3.00	30.00
NO	7	4	7	11	14	18	21	35	70	1.75	3.50	35.00
Ĭ,	8	4	8	12	16	20	24	40	80	2.00	4.00	40.00
	9	5	9	14	18	23	27	45	90	2.25	4.50	45.00
	10	5	10	15	20	25	30	50	1.00	2.50	5.00	50.00
	11	6	11	17	22	28	33	55	1.10	2.75	5.50	55.00
	12	6	12	18	24	30	36	60	1.20	3.00	6.00	60.00

Example.—Find the interest on 340.00 at 8% for 8 months and 8 days. Solution : At 6% the interest on

40.00	**	8	days mos.	=	3 4	×	\$4.00 .13 .40 .01	or or	\$12.0 .3 1.6 .0	9
Add ½ to produce 8%,						\$14.00 4.6	8			
				1	\mathbf{a} n	SW	er,		\$18.7	L

TABLE 2

	Dec.	334	303	275	244	214	183	153	199	16	61	30	365
	Nov.	304	273	245	214	184	153	123	92	61	3 2	365	335
	Oct.	273	242	214	183	153	123	92	61	30	365	334	304
	Sept.	242	212	184	153	123	92	62	31	365	335	304	274
ier	Aug.	212	181	153	122	92	61	31	365	334	304	273	243
in Another	July.	181	150	122	91	61	30	365	334	303	273	242	212
Day	June.	151	120	92	61	31	365	335	304	273	243	212	182
o Same	May.	120	83	61	30	365	334	304	273	242	212	181	151
Month t	Apr.	90	59	31	365	335	304	274	243	212	182	151	121
One	Mar.	6C	28	365	334	304	273	243	212	181	151	120	06
	Feb.	51	365	337	306	276	245	215	184	153	123	92	62
	o Jan.	909	334	306	275	245	214	184	153	122	92	61	31
	From	luary	ornary	rch	ril	y	ie	y	gust	temper	oper	vember	ember
	TON	Jal	Feb	Ma.	Apı	Ma	Jun	Jul	Aug	Sep	Oct	Nov	Dec

EXPLANATION. -To find the number of days from January 20 to December 20, follow horizontal line opposite January until you reach the column headed by December, when you will find 334, representing the required number of days, and so on with the other months. During leap year, if February enters into the calculation, add one day to result,

TABLE 3

Interest Table

The following will be found convenient in the absence of extended interest tables. To find the interest on a given sum, for any number of days, at any rate of interest:—

At	5%	multiply	principal	by	number	of	days,	divide	by	72
			principal							
At	7%	multiply	principal	by	number	of	days,	divide	by	52
			principal							
At	9%	multiply	principal	by	number	of	days,	divide	by	40
At	10%	multiply	principal	by	number	of	days,	divide	by	36
At	12%	multiply	principal	by	number	of	days,	divide	by	30
At	15%	multiply	principal	by	number	of	days,	divide	by	24
At	20%	multiply	principal	by	number	of	days,	divide	by	18

TABLE 4

Minimum Weights of Produce

The following are minimum weights of certain articles of produce according to the laws of the United States:—

	Lbs. per Bushel	Lbs. per Bushel
Wheat	60	Dried Peaches33
Corn, in the ear.	70	Dried Apples26
Corn, shelled		Clover Seed60
Rye		Flax Seed
Buckwheat	48	Millet Seed
Barley		Hungarian Grass Seed50
Oats	32	Timothy Seed45
Peas	60	Blue Grass Seed 44
White Beans	60	Hemp Seed44
Castor Beans	46	Salt (see note below).
White Potatoes	60	Corn Meal
Sweet Potatoes	55	Ground Peas24
Onions	57	Malt34
Turnips	55	Bran20

SALT.—Weight per bushel as adopted by different States ranges from 50 to 80 pounds. Coarse salt in Pennsylvania is reckoned at 80 pounds, and in Illinois at 50 pounds per bushel. Fine salt in Pennsylvania is reckoned at 62 pounds, in Kentucky and Illinois at 55 pounds per bushel.

Monthly Wage Table *

TARLES

TABLE 5	
23.1 2.3.1 2.3.1 3.0.3 3	
21.73 22.146 22.128 22.128 22.128 23.658 24.38 25.01 10.23 110.23	
\$1.38 5.27 5.27 5.27 5.27 5.23	
65.00 65	
818. 1.23. 1.2	
8.08 8.03 1.1.2 1.1.2 1.2.3 1.2.3 1.3.	105.00 120.00 135.00 150.00 165.00
	98.00 112.00 126.00 140.00 154.00
## 1.00 1.00 1.00 1.00 1.00 1.00 1.00	91.00 104.00 117.00 130.00 143.00 156.00
23.4.00 24.00 25.03 26.00 27.00	84.00 96.00 108.00 120.00 132.00 144.00
**************************************	77.00 88.00 99.00 110.00 132.00
\$10.00 \$10.00	70.00 80.00 90.00 110.00 120.00
1. Days 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	7 8 10 11

*Six working days in the week.

TABLE 6

Common Measures

LONG MEASURE

12 inches = 1 foot.

3 feet = 1 yard.

 $5\frac{1}{2}$ yards = 1 rod.

320 rods = 1 mile.1 mile = 5,280 feet.

The following are also used:—

1 size $= \frac{1}{3}$ inch.

(Used by shoemakers.)

1 hand = 4 inches.

(Used in measuring the height of horses.)

1 fathom = 6 feet.
(Used in measuring depths at sea.)

1 knot = 1.15 miles.
(Used in measuring distances at sea.)

DRY MEASURE

2 pints = 1 quart.

8 quarts = 1 peck.

4 pecks = 1 bushel.

1 bushel contains 2,150.42 cubic inches or approximately 1½ cubic feet.

LIQUID MEASURE

4 gills = 1 pint.

2 pints = 1 quart.

4 quarts = 1 gallon.

1 gallon contains 231 cubic inches.

1 cubic foot equals $7\frac{1}{2}$ gallons.

SQUARE MEASURE

144 square inches = 1 square foot.

9 square feet = 1 square yard.

 30_4^1 square yards = 1 square rod.

160 square rods = 1 acre.

640 acres = 1 square mile.

An acre is equal to a square whose side is 208.71 feet.

SURVEYORS' LINEAR MEASURE

7.92 inches = 1 link.

100 links = 1 chain.

80 chains = 1 mile.

Gunter's chain is the unit and is 66 feet long.

SURVEYORS' SQUARE MEASURE

10,000 square links = 1 sq. chain.

10 square chains = 1 acre.

10 chains square = 10 acres.

CUBIC MEASURE

1,728 cubic inches = 1 cubic foot.

27 cubic feet = 1 cubic yd.

128 cubic feet = 1 cord.

TABLE 7

Housekeepers' Timetable

*, minutes to the pound. The time given is the general average; the time will vary slightly with the quality of the article. b, boiled; f, fried; bk, baked; br, broiled; s, stewed; r, roasted.

roasted.	***	201
Asparagus, b	Hours.	Min. 15-30
		19-50
Beans, b	. 1	45
Beans with green corn, b		45 *25
Beef, r		
Beefsteak, br. or f		15
Beef, salted, b		35
Bass, fresh, br		20
Beets, young, b		
Beets, old, b		30
Bread, corn, bk		45
Bread, wheat, bk		
Cabbage, b.		
Cauliflower, b		30
Cake, sponge, bk		45
Carrot, orange, b		
Chicken, b		
Codfish, dry and whole, b		*15
Custard (one quart), bk	. 1	20
Duck (tame), r	. 1	30
Duck (wild), r	. 1	
Dumpling, apple, b	. 1	
Eggs, hard b		10
Eggs, soft b		3
Eggs, f		5
Fowls, domestic, r. or b	. 1	
Goose, wild, r		*20
Lamb, b		*20
Meat and vegetables, hashed		30
Mutton, r.		*25
Mutton, br.		20
Onions, b.		30
Oysters, s		5
Parsnips, b		
Pork, r.		*30
Pork, b.		*25
Potatoes, b		30
Potatoes, bk.		45
Potatoes, r		45
Rice, b.		20
		8
Salmon, fresh, b		25
Sausage, f	•	20

USEFUL TABLES

157

	Hours	Min
Sausage, br	Hours	20
Soup, vegetable, b	. 1	_
Soup, chicken, b		
Soup, oyster or mutton, b		30
Spinach, b.		30
Tapioca, b		30
Tomatoes, fresh, b		
Tomatoes, canned, b		30
Trout or salmon, b. or f		30
Turkey, br. or r		*20
Turnips, b		45
Veal, br.		20
Venison steak, br		20

TABLE 8

Weights and Measures in Ordinary Use

3	level coffee cups sifted flour = 1 pound.
2	level coffee cups pulverized sugar = 1 pound.
11	level coffee cups granulated sugar = 1 pound.
$1\frac{3}{4}$	level coffee cups "A" sugar = 1 pound.
$\dot{4}$	scant teacups sifted flour = 1 pound.
2	scant teacups soft butter, packed = 1 pound.
	scant teacups granulated sugar = 1 pound.
$2\frac{1}{4}$	scant teacups brown sugar = 1 pound.
	or 10 ordinary eggs = one pound.
4	teaspoonfuls = 1 tablespoonful, liquid.
4	tablespoonfuls = 1 wineglass or half a gill.
2	wineglasses = 1 gill or half a cup.
2	gills = 1 coffee cupful or 16 tablespoonfuls.
2	coffee cupfuls = 1 pint.
2	pints = 1 quart.
4	quarts = 1 gallon.
2	tablespoonfuls = 1 ounce, liquid.
	tablespoonful salt $= 1$ ounce.
16	ounces = 1 pound or a pint of liquid.
25	drops of thin liquid = 1 common teaspoonful.
	pint of finely chopped meat, packed solidly = 1 pound.

TABLE 9

Gestation or Birth Table

Date of	Mares. 340 Days.	Cows. 283 Days.	Ewes. 150 Days.	Sows. 112 Days.
Service.	Date of Birth.	Date of Birth.	Date of Birth.	Date of Birth.
January 1	December 6	October ·····10	May30	April22
"	11	15	June 4	27 May 2
"16	21	25	"14	" 7
" ······21 ·····26	"26 "31		19	12
"31	January 5	November 4	"24 "29	
February 5	10		July 4	" 27
"15	" ······15 " ·····20	24	" ······ 9 " ·····14	June 1
20	25	"29	"19	"11
March 2	February 4	December 4	24	16
March 2	February 4	"14	August 3	**26
12	14	19	August 3	July 1
17 22	19	" ······24 " ·····29	"13 "18	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
"27	March 1	January 3	''23	16
April 1	" ······· 6 " ······11	"	"28 September 2	21
"11	16	"18	7	"31
"16	" ······21	23	12	August 5
21	26 31	February 2	17	10 15
May 1	April 5	** 7	"27	20
"	"10 "15	$\begin{array}{cccc} & \cdots & \cdots & 12 \\ & \cdots & \cdots & 17 \end{array}$	October 2	" ······25 " ·····30
"16	"20	**22	12	September . 4
21	25	Manch 27	17	9
31	May 5	March 4	22 27	" ······14 " ·····19
June 5	"10	14	November 1	" 24
"10 "15	" ······15 " ·····20	" ······19 " ·····24		October 4
20	25	**29	"16	9
" ······25 " ····30	" ·····30	April 3	21	" ······14 " ·····19
July 5	June 4		December 1	**24
10	14	18	6	29
" 20	19	" ······23 " ·····28	11	November 3
"25	"29	May 3	"21	"13
4 30 August 4	July 9	" ······ 8	26 31	"18 "23
9	: 19	"18	January 5	**28
14		" ······23 " ·····28	" ······10 " ·····15	December · · 3
" ······19 " ·····24	29 August 3	June 2	20	"
29	8	" 7	"25	"18
September · · 3	13	" ······12 " ·····17	February 4	"23
13	"23	" 22	9	January 2
"23 "28	"28 September 2	July 27	14	
October · · · · 3	7	7	"24	"17
" 8	12	" ······12 " ·····17	March 1	22
" ······13 " ·····18		"22	" ······ 6 " ·····11	27 February 1
23	"27	"27	"16	" 6
28 November 2	October 2	August 1	21	11
7	12	"11	31	21
		"16 "21	April 5	"26 March 3
22	27	"26	15	* 8
"27	November 1	September 5	20	··13
December 2	" ······· 6 " ······11	10	·· ······25	"23 "28
12	"16	15	May 5	April 2
17	21	20	"10	12
**27	December 1	30	"20	"17
••31	5	October 5	· · · · · · · · 25	"21
			29	

How to Find the Number of Tons in a Hay Stack.

A fairly accurate rule is as follows: Subtract the width from the over (the "over" is the distance from the ground on one side over the stack to the ground on the other side), divide by two, and multiply by the width, and then by the length. We have now found the number of cubic feet in the stack. To find the number of tons, proceed as follows: For a stack twenty days old, or under, divide by 512; between twenty and sixty days old, divide by 422; over sixty days old, divide by 380.

A more accurate rule for finding the number of cubic feet is as follows: Subtract the width from the over; divide by the height, then multiply successively by the over, the width, the length, and by .225. The tons are then found as above.

INDEX

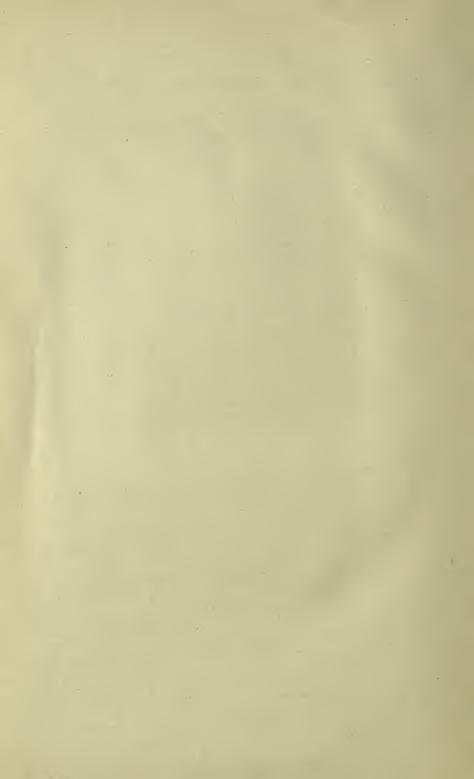
	Page	Page
Accounts,		Improvements, 39
Value of,	37	Introductory, 7
Farm, Difficulties of,	9	Inventory,
Household,	56, 60, 62	Explained. 14
Personal,	21, 22, 23	Illustrated, 17, 18, 20 Continued, 17, 25
Shop,	66	Continued. 17, 25
Agriculture, Statistics of,	110	Investment The 100
Articles of Incorporation,	119	Invoice. 141
Balance Sheet,	47, 48	Joint Stock Companies. 117
Bank Account,	,	Invoice, 141 Joint Stock Companies, 117 Journalizing, 73, 75, 76, 78 Labor Records, 98, 102, 108 Labor Report, 101
Explained,	25	Labor Records. 98, 102, 108
Illustrated,	26	Labor Report, 101
Bill and Receipt File,		I adman 11 70
Explained,	14	Original Entry, Lessons, 29, 43, 58, 76, 106 (See also page 161)
Illustrated,	$16, \overline{24}$	Lessons 29, 43, 58, 76, 106
Blank Books,	2	(See also page 161)
Bookkeeping,		Closing, 20, 86
Difficulties of Farm,	9	Lessons, Illustrative,
Importance of,	8	
Breeding Record,	103	Live Stock, Cost of Production,
Disain and Famma	141	29, 43, 58, 76, 106 Live Stock, Cost of Production, 92, 97
Business Letter, The,	123	Methods of Bookkeeping,
Puginogs Organizations	115	10, 12, 36, 69
Business Organizations,	119	Milk Records, 98, 102, 106
By-Laws, Form of,	19, 44	Note. The Promissory, 143
Cash Books,	19, 44	Milk Records, 98, 102, 106 Note, The Promissory, Office Methods, 100 Organizations, 115
Explained,	13, 39 44, 60	Organizations. 115
Illustrated,	146	Partnership, 115
Certificate of Deposit,	144	Personal Accounts 21 22 23
Check, The,		Phases of Farming, 8
Closing the Ledger,	82, 86	Plot, The Farm, 99, 105, 109
Commercial Accounting,	$\begin{array}{c} 70 \\ 116 \end{array}$	Poultry Records, 98
Copartnership, Articles,	117	Practice Work, 29, 43, 58, 76, 106
Corporations,	91	Posting, 74, 81, 82
Cost of Production,		Profit and Loss Statement, 47, 48
Of Crops,	$\begin{array}{c} 96 \\ 92 \end{array}$	Profits, How to Determine, 15
Of Live Stock,		Prosperity of the Farmer, 7
Dairy Herd, Test of,	93	Questions, Review, 67
Day Book,	10	Rates of Depreciation, 14
Explained,	13	Teacob of Depression,
Illustrated,	10, 18	Receipt, The, Records, What They Should
Deposit, Certificate of,	145	
Depreciation,	14	5110 117
Double Entry,	90 70	101
Books Needed,	38, 70	Dailed Boom, Baptistand,
Compared with Single,	38	Direct direct,
Superiority of,	37	Ding: 0
Draft, The,	144	Special Records, 98 Statement, The. 142
Equipment,	39	
Exchange Phase, Important	nçe of, 8	Financial, 18, 20, 47, 48, 84 Success Causes of 7
Farming, A Paying Busine Feed Record,	ess, 8	Duccess, Causes of,
Feed Record,	103, 107	Dupplies,
File, Letter and Bill,	16, 24	100100,
Hay, How to Measure,		Terms and Definitions, 71
	159	10 104
History of the Farm,	13	Time Book, 10, 104
History of the Farm, Household Accounts, Home Study.		10 104

INDEX TO THE HOME-STUDY COURSE

The Home-Study Course in Farm Accounting and Business Methods comprises fifteen assignments as follows:—

Assign-			Blank Form	
ment I.	Lesson	The Inventory	No. 1*	Page 29
1.	2	The Day Book and Cash Book	1	30
II.	3	Personal Accounts	1	31
11.	3 4	Statement No. 2	1	33
	5	The Bank Account	1	34
III.	6	Cash Receipts, Set 1 (Also Form 14)	2	43
111.	7	Cash Payments, Set 1 (Also Form 15)	3	46
	8	Statement No. 3	12	50
IV.	9	Cash Receipts, Set 2 (Also Form 14)	2	51
14.	10	Cash Payments, Set 2 (Also Form 15)	3	52
v.	12	Household Accounts, Set 1 (Also Forms 16 and 17)	4 and 5	58
	13	Household Accounts, Set 2 (Also Forms 16 and 17)	4 and 5	59
VI.	11	Statement No. 4	12 and 13	54
	14	Continued Inventory	1	64
VII.	22	Milk Record	10	106
	23	Feed Record	9	107
VIII.	24	Labor Record	6	108
	25	Farm Plot	11	109
IX.	. 16	Journalizing	1	76
	17	Posting	20**	81
X.	18	Trial Balance	1	84
	19	Balance Sheet	1	84
	20	Closing the Ledger	20	86
XI.	26	Partnership and Joint Stock Co.,		
		Exercises 1 and 2		117
	27	Corporations, Exercise 3		122
XII.	28	Arrangement of a Business Letter, Exercises 4 and 5	129, 131	
	30	Addresses and Inclosures, Exercise 7		140
XIII.	29	The Business Letter, Exercise 6		136
XIV.	31	Business Forms, Exercises 8 and 9	14	1, 142
	32	Negotiable Instruments, Exercises 10 to 14		43-147
XV.		Final Review and Test.		

^{*}Two or three column journal paper.
**Common ledger paper.





THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

14 DAY USE RETURN TO DESK FROM WHICH BORROWED LOAN DEPT.

This book is due on the last date stamped below, or on the date to which renewed. Renewals only:

Tel. No. 642-3405

Renewals may be made 4 days prior to date due.

Renewed books are subject to immediate recall. auis Law DAN FEB 1 1973 E 1-1,'33 LD21A-40m-3,'72 (Q1173810)476-A-32 General Library University of California Berkeley

rnia

(6889s10)476B

prists.



Charles Sally

45.5 %

