reptile, and as he had promised to bring us a rattlesnake skin he wanted to make good. We objected to dealing in a strange art; we wanted the skin without the snake. He enjoyed his joke and satisfied with the explanation, he took the snake home, killed, skinned and prepared the fat and, having caught another in the interim, we had an option on two with rattles in place, complete on both, as well as the fat, or so-called rattlesnake oil. Our old lady friend got the skin she wanted, paid the price and we hope she was cured.

Incidents *ad infinitum*, serious, comic and otherwise, might be incorporated in this historic paper. It has been extended sufficiently, I feel sure, and, I trust will suffice to make good my promise to our friend, the chairman.

THE FINANCIAL AND ACCOUNTING SIDE OF THE DRUG STORE.*

BY E. FULLERTON COOK, P.D.

Bookkeeping in a retail drug store is not a popular subject because there is usually enough other work to be done which forces itself upon those in the store and shows immediate results, while accounting is looked upon by many as a luxury and not a real necessity.

Furthermore, the proprietor of the usual drug store, who would have to keep his own books, feels that the kind of bookkeeping which will give the facts so often talked about to-day, *i. e.*, percentage relations between sales, "first cost," expenses and net profit, "overhead," gross profit, etc., is too complicated for his use.

Bookkeeping naturally falls into two distinct divisions: First, that which provides the necessary records for the accounts of credit customers; and, secondly, that which is specifically for the benefit of the proprietor of the store.

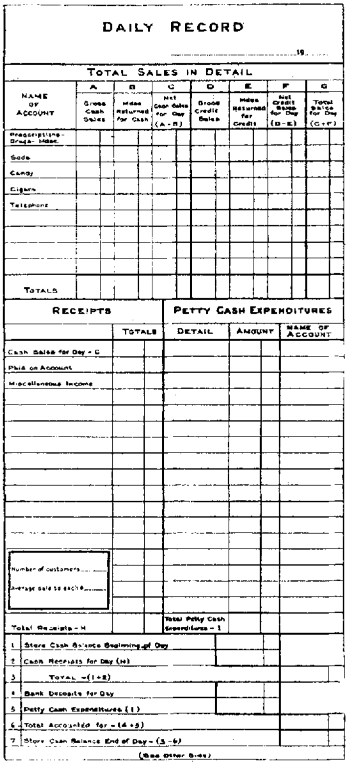
Every store which does any credit business is compelled to carry on the first type in a more or less perfect fashion, but it is the second type of accounting that I especially wish to discuss, and urge the adoption of.

Double entry methods are generally those recommended for securing these guiding facts for business, but fifteen years of teaching double entry has demonstrated the futility of expecting its adoption in the average drug store. This condition stimulated the development of an accounting scheme which would not involve a large amount of work or special training, and yet would yield figures and facts comparable in value with those from double entry books.

This plan requires a daily record, for which a special form was devised (See Fig. 1). Here are recorded the daily cash and credit sales, either in total or classified as desired; also the petty cash expenditures of the day, each followed by a classifying word, such as "Lemons 40 cents, soda" (the "soda" to indicate that the lemons are charged to the soda supplies), and at the bottom of the sheet a simple form for determining the theoretical "cash balance" for the day.

The bank account is kept on the opposite side of the sheet (See Fig. 2), the checks drawn being recorded here in detail instead of on the check book stub, as is usually done. Through this plan the record becomes a part of the books of accounts, while the bank balance is determined each day and with less work than

* Read at the meeting of New Jersey Pharmaceutical Association, 1917.



DAILY RECORD

19

TOTAL SALES IN DETAIL

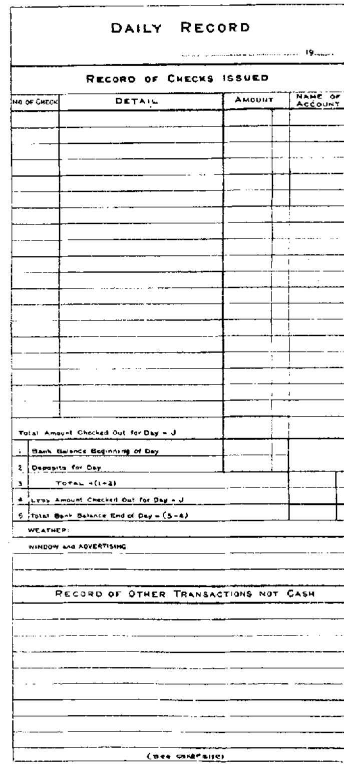
NAME OF ACCOUNT	A Gross Cash Sales	B Mdse. Returned for Cash	C Net Cash Sales for Day (A-B)	D Gross Credit Sales	E Mdse. Returned for Credit	F Net Credit Sales for Day (D-E)	G Total Sales for Day (C+F)
Prescriptions-Drugs-Mdse.							
Soda							
Candy							
Cigars							
Telephone							
Totals							

RECEIPTS	TOTALS	PETTY CASH EXPENDITURES DETAIL	AMOUNT	NAME OF ACCOUNT
Cash Sales for Day = C				
Paid on Account				
Miscellaneous Income				
Number of customers..... Average sale to each				
Total Receipts = H		Total Petty Cash Expenditures = I		

1	Store Cash Balance Beginning of Day		
2	Cash Receipts for Day (H)		
3	Total = (1+2)		
4	Bank Deposits for Day		
5	Petty Cash Expenditures (I)		
6	Total Accounted for = (4+5)		
7	Store Cash Balance End of Day = (3-6)		

(See Other Side)

FIG. 1



DAILY RECORD

19

RECORD OF CHECKS ISSUED

NO. OF CHECK	DETAIL	AMOUNT	NAME OF ACCOUNT
Total Amount Checked Out for Day = J			

1	Bank Balance Beginning of Day	
2	Deposits for Day	
3	Total = (1+2)	
4	Less Amount Checked Out for Day = J	
5	Total Bank Balance End of Day = (3-4)	

WEATHER:

WINDOW and ADVERTISING

RECORD OF OTHER TRANSACTIONS NOT CASH

(See Other Side)

FIG. 2

was required in the old check book, since the figures are all in one column for addition and only one subtraction is required.

Here again after each check recorded a word is added, such as "light," "rent," "mdse.," "insurance," etc., to give the necessary classification.

Weekly, or whenever desired, these daily sheets, each complete in itself, may be entered upon the monthly sheets, where columns are provided for all important records, and a space for each day of the month. On these sheets the only entries are figures, thus reducing the physical labor to a minimum.

Another form (see Fig. 3) is provided for a record of invoices as received from the various supply houses. Here is recorded the party to whom the amount is due, the date of the bill and date for payment for discount. The original is filed below the record on a Shannon file. When the invoice is paid the date of payment and number of check are entered, whereby all unpaid invoices may be seen at a glance and also the date when they are due.

The totals for each month are afterwards transferred to similar sheets, arranged for a year's figures (See Figs. 4 and 5), and here all facts may be compared by months and the final yearly figures made up, showing net and gross profit, etc.

The advantages of classified columnar records in monthly or yearly summaries, in comparison with the ordinary bookkeeping systems, becomes strikingly apparent when the business man desires to analyze the facts concerning his business. If his records are kept by the double entry system, or by another plan which is less comprehensive than double entry, in order to arrive at comparisons and the analysis of the business, it is necessary to secure totals from the various books, assemble them in a statement and then draw deductions. To secure this statement all books must be closed and their accuracy proven. Even though a bookkeeper is employed, the conditions in the ordinary drug store are such that this bookkeeper will have other duties. When the end of the month arrives there will be bills to get out, and other records to complete before the time will be taken to make such a statement. It is admitted by many who have tried to secure such records that the excuse will constantly come up that time has not yet been found to close the books, but that it will be done as soon as possible, which usually means some indefinite future date, and the longer it is postponed is the less likely to materialize.

INVOICE RECORD

Day to Pay for Discount	Purchased from	Date of Invoice	Gross Amount of Invoice	Discount	Net Amount Paid	Date Paid	No. of Check	CLASSIFICATION: Drugs Prescriptions Mdse.	Soda	Candy	Cigars

FIG. 3

In columnar records this is entirely changed. The figures come in from day to day. When they are in their proper column they are ready at any time for study and comparison. Less opportunity is afforded for manipulation, if the bookkeeper should desire to do so, as the books are readily checked up.

What are the advantages of having such figures? First, from month to month they give the proprietor a comparison with the business of the same month last year, and indicate the advance or falling off in the business—a desirable bit of information.

SHEET C — YEARLY SUMMARY 19

CASH RECEIPTS

Month	Prescriptions Drugs - Mdse. Cash Sales (1)	Prescriptions Drugs - Mdse. Received on Account Credit Sales (2)	Soda Sales (3)	Candy Sales (4)	Cigar Sales (5)	Telephone (6)	Misc. (7)	Mdse. Returned for Cash (8)	Total Cash Receipts 1+2+3+4+5+6+7−8 (9)
Jan.	1134 30	28 24	48 60	183 65	75 10	18 45			1488 34
Feb.	1170 10	25 72	36 40	195 50	62 80	20 10			1510 62
Mar	1031 90	22 16	32 15	202 75	78 70	19 05			1386 71
Apr.	1136 28	23 08	38 90	240 12	55 15	22 50	2 10		1518 13
May	1085 82	24 72	50 20	230 50	85 50	25 75			1502 49
Jun.	935 51	22 50	190 65	260 70	92 60	31 60			1533 56
Jul.	808 01	15 41	285 30	282 18	101 30	35 15			1527 35
Aug.	796 47	18 82	310 75	301 65	115 80	40 20			1583 69
Sep.	1014 65	25 40	142 10	275 10	72 10	28 40	1 50		1559 25
Oct	1111 14	30 95	65 35	261 18	82 15	21 70			1572 47
Nov.	1161 42	21 45	46 70	275 45	75 85	23 15			1604 02
Dec									
Year									

Month	Credit Sales Prescriptions Drugs Mdse. (10)	Mdse. Returned for Credit (11)	Total Sales 9−2+10−11 (12)	CASH PAID OUT — Supplies Purchased: Prescription Drugs Mdse. (13)	Soda (14)	Candy (15)	Cigars (16)	Total Supplies Purchased (13+14+15+16) (17)	Month
Jan.	30 10		1490 20	913 12	18 21	190 65	50 18	1172 16	Jan.
Feb.	20 25		1505 16	790 15	15 16	85 15	43 20	933 66	Feb.
Mar	26 40		1390 95	791 82	14 75	112 82	52 84	972 23	Mar
Apr.	18 20		1513 25	810 38	15 80	95 40	38 60	960 18	Apr.
May	15 60		1493 37	734 61	18 12	132 12	50 50	935 35	May
Jun.	16 14		1527 20	691 80	75 45	105 62	61 26	934 15	Jun.
Jul.	18 60		1530 54	660 10	108 60	151 00	72 40	992 10	July.
Aug.	25 65		1590 62	620 75	132 95	162 81	75 63	992 14	Aug.
Sep.	28 75		1562 60	770 65	50 18	141 95	60 75	1023 53	Sep.
Oct	34 18		1575 70	775 40	25 30	120 15	51 45	972 30	Oct.
Nov.	42 55		1625 12	855 92	20 55	142 18	35 68	1054 33	Nov
Dec									Dec.
Year									Year

PERCENTAGES

	Prescriptions Drugs Merchandise	%	Soda	%	Candy	%	Cigars	%	Total	%
Total Annual Sales		100		100		100		100		100
Total Cost of Goods										
Total Expense										
Net Gain										

REMARKS:-

PROFIT FOR YEAR ENDED 19

a	Total Sales (Column 12)		
b	Inventories End of Year		
c	Total (a+b)		
d	Inventories First of Year		
e	Total Purchases (Paid & Unpaid) ※		
f	Total (d+e)		
g	Gross Profit (c−f)		
h	Total Expenses (Column 32)		
i	Net Profit (g−h)		

※ Deduct any Payments made on Previous Year's Purchases

FIG. 4

Secondly, having determined the relationship maintained during the preceding year between expenses and sales, the proprietor can determine each month whether this ratio is being continued. If it changes materially, especially if the percent for expenses begins to increase to any marked degree, he is warned in time

SHEET D — YEARLY SUMMARY 19

CASH PAID OUT (Continued)

Month	Rent 18	Salaries 19	Insurance 20	Light 21	Heat 22	Office Expenses 23	Advertising 24	Telephone 25	Hauling 26	Soda 27	Taxes 28	Misc 29	30	31	Total Expenses Add 18 to 31 inc. 32	Interest 33 (Other Expenditures)	34	Total Cash Paid Out 32+33+34 35	Month
Jan	60 00	210 00	49 00	24 30		16 05	15 60	6 00	88	1 65	43 00	15 60			441 98	578 90		1993 04	Jan
Feb	60 00	210 00		25 16	29 00	9 20	20 00	6 00		2 14		17 25			378 75			1312 41	Feb
Mar	60 00	210 00		30 12		10 40	16 20	6 00	1 20	1 55		13 20			346 67			1320 90	Mar
Apr	60 00	262 50		20 61	14 50	9 50	40 12	6 00	40	1 85		15 10			430 58			1390 76	Apr
May	60 00	210 00		19 52		14 00	30 50	6 00		2 50		16 50			358 82			1294 17	May
Jun	60 00	250 00		17 40		9 50	15 25	6 00	75	4 20		13 10			376 20			1310 35	Jun
Jul	60 00	302 50		18 63		10 10	20 15	6 00	25	5 62		14 25			437 50			1429 60	Jul
Aug	60 00	*338 00		20 15		8 40	18 60	6 00	60	5 40		13 15			470 30			1462 44	Aug
Sep	60 00	*282 50		21 25		9 20	12 50	6 00		3 10		15 35			409 90			1433 43	Sep
Oct	60 00	210 00		23 72	29 00	9 80	10 40	6 00		2 05		16 20			367 17			1339 47	Oct
Nov	60 00	210 00		24 32		10 10	14 60	6 00	1 40	2 35		14 20			342 97			1397 30	Nov
Dec																			Dec
Year																			Year

STATEMENT OF RESOURCES & LIABILITIES YEAR ENDED 19

RESOURCES		LIABILITIES	
Cash		Accounts Payable (Unpaid Invoices)	
Inventories: Stock			
Fixtures		Notes Payable	
Soda Fountain			
Buildings			
Customer's Unpaid Accounts		Total Liabilities	
Notes Receivable		Capital Invested	
		Net Profit	
TOTAL RESOURCES		TOTAL	

MONTHLY SUMMARY OF CASH ACCOUNT

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov.	Dec
Cash Balance First of Month	1185 84	681 14	879 55	945 16	1072 55	1280 65	1504 06	1601 81	1723 06	1848 28	2081 88	
Total Receipts (Column 9)	1488 34	1510 62	1386 71	1518 13	1502 49	1533 76	1527 35	1583 69	1559 25	1572 47	1604 02	
Total Cash	2674 18	2191 76	2266 26	2463 29	2575 02	2814 41	3031 41	3185 50	3282 31	3421 55	3685 90	
Less Total Paid Out (Col 35)	1993 04	1512 41	1320 90	1390 76	1294 17	1310 35	1429 60	1462 44	1433 43	1339 47	1397 30	
Cash Balance End of Month	681 14	879 55	945 16	1072 55	1280 85	1504 06	1601 81	1723 06	1848 88	2081 88	2288 60	

REMARKS:— * Extra help during Vacations... Four weeks at $22.00.

Ten weeks Soda boy at $10.00 per week, during July, August and September.

FIG. 5

of a serious menace to the profits of the year. This will at once suggest a study of the detail which is spread before him on the sheets. It means that sales have decreased or that expenses have exceeded the normal.

If expenses are increasing he can see, through the analyzed record, exactly where this increase occurs. If it is light that is costing more than last year for the same month, he can take the necessary steps to correct this loss. It may be that some one is allowing the cellar lights to burn unnecessarily, and he can install a small light by the desk or prescription counter which will always burn when the current is turned on in the cellar, and indicate unnecessary waste of light; or perhaps he can replace a number of small lamps with one large lamp, and thus save unnecessary expense.

If, on the other hand, he finds that the expenses are not increased, but the percent is larger only because of decreased sales, several causes may be suggested and can possibly be remedied. The first thought is that perhaps some employee is pocketing the cash, or perhaps sales have actually lessened and need stimulation from efficient advertising. The use of this relationship between sales and expenses to suggest theft in a store is being used by many business men. Of course, it will not show the taking of a cigar, or a dollar bill, but would quickly indicate any theft that would prove a serious loss.

If the percent relation last year was:

Sales	100 percent	
First cost of goods	65 percent	
Expenses	25 percent	
Net profit	10 percent	
Then if the inventory Jan. 1st was		$ 7,000.00
And goods bought since Jan. 1st, cost		3,000.00
The total value would be		$10,000.00
Now the sales since Jan. 1st are	$4,600.00	
and goods sold cost 65 percent of $4,600.00, or		$ 2,990.00
Therefore, the present inventory by calculation (using the law of averages) would be		$ 7,010.00

Third, these figures may be used at any time as the basis for a calculated inventory. If an actual physical inventory has been taken at some date within a reasonable time and the relationship between the cost of goods and sales for the preceding year has been determined accurately, by now adding to the inventory the cost of goods bought since the inventory was taken, and subtracting from it the estimated cost of goods sold since the actual inventory, the result will indicate approximately the present value of stock. The illustration on p. 724 will show the possibility of such a calculation.

Therefore, it will be seen that, even without drawing any other conclusions at the end of the year or other definite period, records of this type are of great value to a business man, in enabling him to control his business. However, it is possible to arrive at other very definite conclusions which every business man should know at stated intervals.

First: What is the actual net profit obtained from a business of any one year? This is arrived at theoretically by subtracting the cost of the goods bought from the total sales, thus ascertaining what is called the gross profit. From this must then be subtracted the total expenses, the resulting figure indicating the net profit from the business. Sometimes the expenses exceed the gross profit, when the business man must face the fact that he has conducted the business at a loss during the period covered by the figures.

The statement just given concerning the method of arriving at net profit is slightly complicated by the necessity of introducing inventory figures to show the value of goods on hand at the beginning of the period covered by the records, and at its close. By this means the cost of goods sold is corrected to make an allowance for any increase or decrease in the stock on hand when the books are closed. If this correction was not applied the stock might be greatly depleted and a false showing of profit indicated, or, on the other hand, a loss might be shown when in reality the profits of the year had been consumed by an increased stock.

Now, having determined that there is a definite net profit, or perhaps loss, it is necessary to prove that this is true. If the books show a $2,000.00 profit after all expenses have been paid, how is the proprietor to know that this is true? It may be that there is only $500.00 cash in bank, and he may have a number of obligations unpaid. It now becomes necessary, therefore, to assemble all the resources at his command, and also every liability standing against him, and thus show by actual assemblage of the facts that his resources do exceed his liabilities by the sum indicated on his books as profit.

He, of course, first considers any cash on hand, either at the store, or in bank, as resources. Then his inventory must be taken into account. First: Stock of merchandise; or any other salable goods; then his fixtures, including soda fountain, if this is in the store. Then any stock of coal, office supplies, such as bill heads, envelopes, letter paper, etc., any paid-up insurance policies or other securities he may hold. Good-will is also at times considered among his resources, although it is not believed to be a desirable asset to consider among definite resources, because it is not possible to realize any cash upon this asset until the owner of the store has actually sold his good-will for cash.

This brings up the question of depreciation. Depreciation should be allowed on fixtures, the soda fountain, buildings, good-will, etc. This is in accordance with conservative and approved business practice. A depreciation of five percent yearly may be estimated on fixtures until the value is reduced to a point which becomes relatively permanent, and for which the fixtures could be sold, even though twenty years old. The justice of this custom is based on the fact that fixtures which are bought for a certain sum could not be sold the next year for as much as the original purchase price, and, therefore, it would be a false basis for resources if carried at the full cost. Each year the depreciation becomes greater, and the five percent basis is arrived at from an estimate that within at least twenty years new fixtures must be installed. In the case of the soda fountain ten percent depreciation is allowed, based upon a new soda fountain in ten years. This depreciation figure, which comes out of the profit, each year could wisely be put into a sinking fund, so that if new fixtures are to be furnished, the money will be on hand without calling for new capital.

Depreciation in "good-will" is open to argument and difference of opinion. A twenty percent depreciation each year for five years is based upon the belief that the good-will of any former proprietor, for which you may have paid a definite sum, will have entirely disappeared within five years. Therefore, the extra business because of his good-will—for which you have paid cold cash—should be great enough in the five years following the purchase to pay back the amount given for the good-will.

You may say that as his good-will disappears yours will increase and the good-will valuation is maintained at its original value, but this is not a tangible asset. A serious mistake in the store, causing the death of a customer, would wipe out this asset over night. It is considered to be a conservative management that does not estimate the good-will as an asset until it is actually sold and the money secured. It may then be a pleasant surprise, and of course the man selling the store should endeavor to obtain the highest possible price for his good-will.

In addition to the resources already named, all customers' unpaid accounts, and any notes receivable, or promissory notes given by debtors or any other value held by the business, such as delivery wagons, motorcycles, bicycles, etc., should be included. This total value is added and represents the total resources. With reference to customers' unpaid accounts, if any of these are uncollectable, they should be assembled and considered as an expense of that year's business, and must be deducted from the gross profits.

The liabilities are now assembled. The most important ones are unpaid invoices for merchandise or stock purchased and any notes which you may owe, either to parties from whom money was borrowed to start business, or to the wholesale house, or any other obligations. The sum of these represents the total liabilities.

Now it will be possible to prove the accuracy of the net profit indicated by the books. If the total liabilities, plus the capital at the beginning of the year, plus the net profit indicated for this year, exactly equal your total resources, the books are proven to be correct, and you can show to the bank or any creditor, or any mercantile agency or the income tax collector, an exact and authentic statement of facts concerning your business, which, if creditable, should do much to establish your standing as a business man.

Now, having determined these important facts about the year's business, another statement should be prepared. This consists of an analysis of the relationship between the goods sold for the year, the cost of goods that year, the total expenses, and the net gain.

The total sales are taken from the records kept. The net profit is that indicated on the profit statement. The total expenses have also been assembled, and the figures are placed in this new statement. If now the expenses and the net profit are added, and this total subtracted from the annual sales, the difference will indicate the cost of goods sold that year. The sales are now shown as 100 percent, and *this is the only basis for satisfactory calculation,* because on this basis it is possible to arrive at definite relationships for the annual business, which can be compared from day to day throughout the entire succeeding year, the sales and expenses always being definite figures which may be known daily. This basis for calculation and percent is almost universally adopted to-day in the business world.

The relationship now of the first cost of goods to sales is determined on the percentage basis; then the relationship of expenses to sales; and, lastly, the relationship of net gain to sales. Ideal figures for most businesses are believed to be an average of about 65 percent for first cost of goods; 25 percent for expenses, and 10 percent for net profit. If the figures for any one year do not show something like this relationship the business man may take the necessary steps to bring about a more satisfactory ratio.

If the net profit is greater than indicated here, of course there is no need for concern. The proprietor is very fortunate. However, if the expenses are much higher in their percent relationship to sales, and net profit much lower, the proprietor has the necessary evidence to stimulate his efforts towards readjustment. It means that he will have to reduce expenses if that is practicable. A study of these may show him where some expense is excessive. On the other hand, he may find that the expenses cannot be reduced. Then he has the alternative of increasing the sales, which would materially reduce the percent relationship of the expenses, if he was not compelled, because of the increased sales, to add proportionally to the expense of the business. In almost every business, up to a certain point, more goods could be sold without greatly increasing the expense because most of the fixed costs would remain the same, such as rent, light, heat. There would probably be some increase in advertising, and possibly in salaries.

Of course he may improve the situation by eliminating goods which are showing small profit, or even loss, and replace them by more profitable merchandise; or perhaps, he is not closely watching the cost of regular goods, and that by more careful buying, or buying under different conditions, he may largely increase the margin of profit between first cost and the selling price, the latter being often fixed by the buying public and trade conditions, and not easily changed.

He is also in possession of figures which indicate to him the exact value of every sale. He is awakened to the fact that many articles that he has been selling freely have actually been passing over his counter at a loss. If wise he will endeavor to curtail such sales, only permitting those which are actually necessary to please customers, and will, on the other hand, select merchandise which gives a reasonable profit, and advertise and sell these in preference to the less profitable lines.

He will also recognize the importance of adding an adequate profit to the cost of professional work. In other words, by knowing these figures, the proprietor will gain a control of his business, which had not been possible heretofore, and which he will utilize to insure definite and dependable profits, and actually know from month to month whether the business is profitable or otherwise.

In determining the percentage relationship of sales, total cost of goods, expenses, and net gain in any one department, such as the soda fountain, candy sales, or cigars, the ordinary retail drug store is somewhat handicapped because of the difficulty of appropriating properly the general expenses. Purchases, of course, can be kept separate, and some expenses will be assigned definitely to a special department, such as laundry, or special clerks, but the division of rent, light heat, etc., among the several departments calls for good judgment and some study in each store. The floor space required for each department is usually the basis for this division of expenses. The front part of the store must bear the larger percentage. Of course, many stores to-day are introducing attractive features which compel the customer to visit the rear of the store. A sub-station post office in the back of the store, or telephone booths are especially effective.

Sometimes the front of the store, back one-fourth, would be expected to bear at least one-half the general expenses. The second fourth of the sales room would carry one-fourth of the expenses, while the last half of the sales room would be expected to pay the remaining expenses. Thus if the soda fountain was in the front of the store it would be expected to pay its share of the expenses in the ratio indicated. If half-way back, though occupying no smaller space, it would pay much less. Of course, this ratio must be determined by each man, and upon this the actual net profit in any one department determined.

Finally, it has been demonstrated by ample experience, that facts, such as these here referred to, concerning a business, if available, give a satisfaction and control to the proprietor which amply justify the comparatively small amount of labor required, and changes the business from a guess to a definite profit-making machine, the control of which is in his hands to manipulate almost as he will.

While special forms are here suggested the principle they represent may be applied by a business man through the use of columnar record books which may be bought at any stationer's.