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.

YEARLY SUMMARY 19																																	
Month	Per cent	Sales	Insurance	Light	Heat	Office Expenses	Telephone	Trucking	Slide	Taxes	Wash	Total Expenses	Interest	Total Cash Paid Out	Total Cash Paid In	Balance	Month	Per cent	Sales	Insurance	Light	Heat	Office Expenses	Telephone	Trucking	Slide	Taxes	Wash	Total Expenses	Interest	Total Cash Paid Out	Total Cash Paid In	Balance
Jan	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Jan	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Feb	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Feb	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Mar	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Mar	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Apr	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Apr	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
May	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	May	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Jun	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Jun	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Jul	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Jul	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Aug	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Aug	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Sep	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Sep	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Oct	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Oct	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Nov	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Nov	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Dec	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00	Dec	60.00	210.00	40.00	24.00	10.00	15.00	6.00	1.00	1.00	4.00	1.00	44.00	1.00	45.00	1.00	1.00
Year																	Year																

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.